

A SPECIAL REPORT BY



Macro Ops
Target. Deploy. Profit.



THE

FOUR HORSEMEN

OF THE GLOBAL

DELEVERAGING

APOCALYPSE

The Global Deleveraging Apocalypse.

No doubt that title is troubling. As it should be...

Especially if you don't know how to protect yourself from the coming storm.

But that's why we're here. We had a few goals in mind when creating this report.

1. Lay out the current fragile state of the global economy
2. Describe the factors that will contribute to the forthcoming crisis
3. Explain how to not only protect your hard-earned money, but also how to profit from the carnage

The problem with most investors is that they're stuck with their heads down, picking up pennies in front of a steamroller.

Too many have a myopic focus on things like earnings releases while completely missing the bigger picture. Sure they can tell you Google's next year projections, but do they know about China's struggles managing the yuan?

Nope.

And that's because they think these things don't matter. But when the bough breaks half a world away, I can guarantee you that it *absolutely will matter* as every company's earnings across the board are crushed as their stock prices collapse.

This is why our focus at Macro Ops is **global macro**. We spend countless hours scanning the world's markets and analyzing global events to find the biggest factors that have an outsized impact on your investment portfolio. We don't bother with the miniscule, because it's mostly noise. The larger macro forces are what *actually* move markets. Everything else is a *result* of these macro moves.

Our macro research has led us to believe that we're now on the cusp of one of the worst global crises ever recorded. Never has the world been more interconnected, and never have we had higher global debt levels. These factors combine to create an environment primed and ready for a massive deleveraging that will wreck security markets and leave us with depression-like economic conditions over the next decade.

The following pages will describe how we believe this deleveraging will play out and what you can do to protect yourself and profit. The four main factors contributing to this crisis, or the Four Horsemen as we like to call them, are the:

1. Long-Term Debt Cycle
2. Bond Market Bubble
3. Yuan Devaluation
4. Time

Now the first step to understanding how we got into this situation is to learn about the economic machine and the long-term debt cycle. Let's jump right in...

First Horseman: A Neutrino Debt Bomb

Debt... Debt... Debt... Debt... Debt.....Debt. It's been discussed so much over the years that it feels like kicking a debt horse at this point (ehem, sorry).

Here's the thing though... we have to talk about it. Debt is the most important (and misunderstood) dynamic of the economic machine. Debt is the cause of *all* our current economic ills.

Do you want to understand why there's slow growth in the developed world? Well, it's because of debt.

Want to know why inflation has been so elusive? I can tell you... debt.

Are you curious as to why commodities are crashing and emerging markets are grinding to a halt? You guessed it... DEBT!

What about growing income inequality? Is it Piketty's return on capital versus growth ($r > g$) B.S.? Noooo! It's just debt. And it goes on and on...

Of the Four Horseman, debt is the one that drives all the others. And if you can understand the dynamics of debt cycles, then you can take much of the guessing game out of macroeconomics. The macro events above, and much more, become not only unsurprising, but absolutely expected.

My aim in writing this report is to not only inform you about the messy debt situation we now find ourselves in, but to also teach you how to properly view the world (as we see it).

And then of course I'm going to show you practical and actionable steps on how to protect yourself. If you really pay attention, I'll even show you how to make a killing.

I also feel a slight obligation to publicly rebuke the misinformed and asinine commentary by economic talking heads sitting on both sides of the ideological aisle. These are the Keynesians and Austrians.

The Keynesians are the clueless policy makers who run the world. The arrogant ivory tower economists and central bankers whose only answer to slow growth has been more debt spending.

The Austrians are the doomsdayers, the gold bugs, and the establishment haters who've been worse than a broken clock in their calls for a market crash.

Both camps don't understand a lick of how the real world works (though admittedly, I do have a soft spot for Austrians as their logic isn't terrible). And both are bad for a trader's P/L.

Being the dedicated market operators that we are at Macro Ops, we don't care much for trading along conventional thinking or rigid ideological lines. Instead, we search out first principles and universal truths. The validity of our thinking is tested every day in the markets.

Conventional economic "wisdom" fails to understand the long-term secular effects of debt. If it did, then Keynesians would realize that *just* more spending is not the answer. And Austrians would realize that it's way too late to call for *just* a rate hike.

Both parties fail to grasp the larger secular forces at work — deflationary debt dynamics. These dynamics are the logical sequences that comprise debt cycles. They have happened in a similar fashion since the advent of lending and credit.

Now when I say cycles, don't roll your eyes and think I'm some tinfoil hat wearing conspiracy theorist. I don't believe in Elliot Waves or Fibonacci or Pi or that some other *hidden* universal force has set us on a predetermined path of repetition — though I admit, I do look good in tinfoil.

A debt cycle is just the logical progression of large economic sequences that follow a certain order. These sequences arise due to predictable human nature and the inherent structure of our monetary system.

Understanding these cycles won't give you the ability to predict the future. But it will give you the ability to better understand the present and enable you to assign significant probabilities to what's around the corner.

Our view of the world and the dynamics of debt were born out of the work done by Ray Dalio and Bridgewater (the most successful hedge fund of all time). If you're not familiar with their work on "*How The Economic Machine Works*", I suggest you check out [this site](#).

Here's a quick overview of how the economic machine and debt cycles work:

The economic machine starts with money, or more specifically, what we think of as money; which is cash + credit.

Mainstream economics tends to focus solely on physical hard cash. But it's credit that makes up the majority of transactions in the world. In the US, the supply of physical cash amounts to roughly \$3 trillion. But total credit is near \$60 trillion. Most buying (demand) is through credit, not cash.

It's important to know this because though many people mistakenly think of credit as cash, the two actually work very differently. And it's this difference that has compounding second and third order large scale effects.

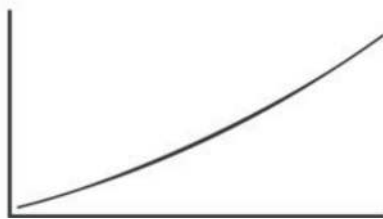
You see, when you buy something with cash, you exchange that cash for a service or good. The transaction is closed. Complete. There is no further obligation between the two parties.

When you buy something with credit, you exchange credit (a promise to pay in the future) for a good or service *now*. That transaction is not complete until the borrower pays off that debt. So in this instance, credit or money is created out of thin air, without the help of the central bank or US treasury. All you need is two willing parties and credit (money) can be created. An asset to the lender is created, as well as a liability to the debtor, that lasts until the transaction is closed by the debt being repaid.

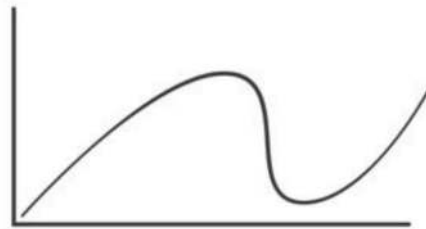
It is this ability to create “money” independently through credit purchases that compounds over time and builds cycles. And it is these credit cycles that drive the economic machine.

There are three primary forces that drive the economy over time. These are:
(Charts via Bridgewater “How The Economic Machine Works”)

1. Long-term productivity growth



2. Long-term debt cycle



3. Short-term debt cycle



Long-Term Productivity Growth

Over time, the economy (real GDP per capita) averages 2% growth. This is the result of efficiency gains born from the accumulation of knowledge — we become more productive over time.

It is this steady build up of knowledge (advancements in our technology and know how) that drives productivity and results in the continuous improvement of our living standards.

Many of us love to be pessimistic about the current state of the world, complaining that “things were so much better back in the day”. But were they? Truth is, we as a society have it pretty good when compared to the generations before us. As Buffett noted in Berkshire’s recent letter:

“Indeed, most of today’s children are doing well. All families in my upper middle-class neighborhood regularly enjoy a living standard better than that achieved by John D. Rockefeller Sr. at the time of my birth. His unparalleled fortune couldn’t buy what we now take for granted, whether the field is – to name just a few – transportation, entertainment, communication or medical services. Rockefeller certainly had power and fame; he could not, however, live as well as my neighbors now do.”

But we are interesting creatures. We’re not satisfied with *just* a 2% average increase in living standards. We base the quality of our lives in comparison to those around us (usually those who are wealthier than us). And in addition to our instinctual pettiness, we’re actually neurologically wired with the propensity to live beyond our means. Jason Zweig explains this phenomena in his excellent book *Your Money and Your Brain: How the New Science of Neuroeconomics Can Help Make You Rich* (emphasis added by me):

*“You would expect logically that the borrowing and spending of money would be emotionally painful to people because having money is intrinsically a good thing, and having less money would have to be worse... Going from more money to less would be painful. **When people borrow and spend money, it’s really the reward centers of the brain that become activated... When you borrow money, you are thinking not about the long-term consequences but the short-term result: You have more cash in your pocket.** The pain you are going to experience down the road of having to pay -- that’s in the future, it’s remote, it’s abstract.”*

So credit is like a drug... we’re addicted to shots of dopamine that we receive every time we purchase something. We are literally programmed to overvalue present rewards and greatly underestimate future costs.

Credit allows us to delude ourselves into thinking we can outpace this 2% trend. **But in the long run we can only consume (spend) as much as we produce (earn).** When we spend more than we earn we create bad debts — debts that will not be repaid.

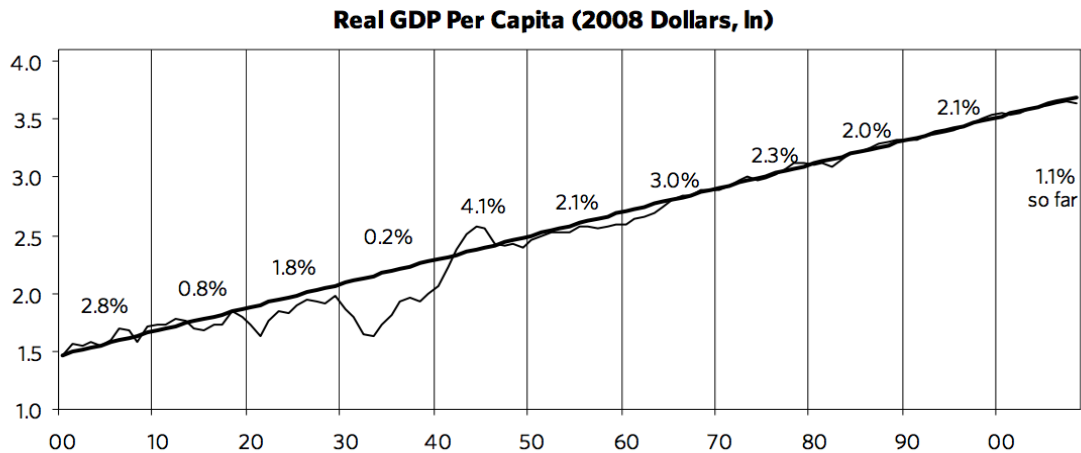
The way we’re wired and the structure of our credit system clashes with the limits of our average long-term productivity growth. This irreconcilable difference creates cycles.

These cycles, that oscillate around the 2% productivity trendline are called debt cycles. They’re comprised of leveragings and deleveragings of debt/credit.

A debt leveraging occurs as we increase our debt spending over time (total debt load relative to income). By doing so we pull future consumption forward while causing temporary increases in productivity above the 2% trendline average.

Eventually these leveragings reach a saturation point where debt servicing costs relative to incomes grow too large. They begin to hamper demand growth. When that point is reached, the economy will begin a deleveraging. In a deleveraging, we fall below the 2% productivity trendline.

The chart below (*again, via Bridgewater*) shows the overlay of all three forces over the last 100 years.



Sources: Global Financial Data & BW Estimates

These leveragings and deleveragings are the result of the long-term and short-term debt cycles.

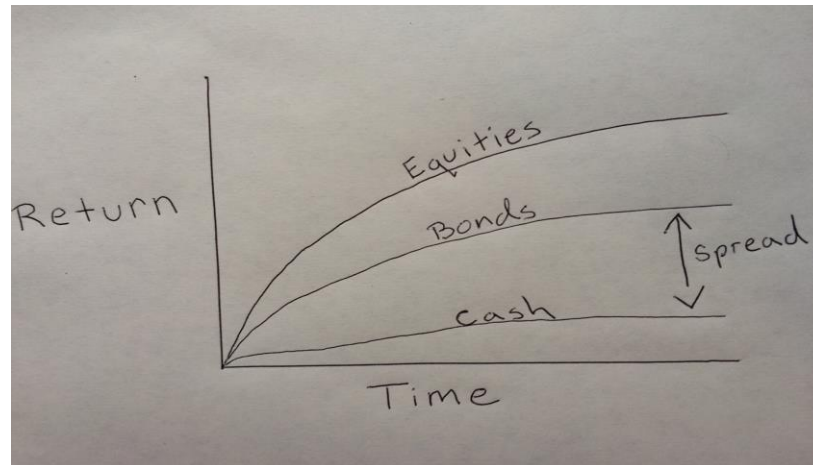
The Short-Term Debt Cycle

The short-term debt cycle (otherwise known as the business cycle) is fairly well understood, since it tends to occur every 5-7 years.

These short-term cycles result from the easing and tightening of money by the Federal Reserve Bank. Here's a quick rundown of what happens when the Fed eases (lowers interest rates).

The three immediate impacts of lower interest rates are:

- 1) New credit becomes more attractive, so people and businesses borrow more money.
- 2) Existing debt becomes cheaper to service, since its interest payments are now lower.
- 3) The discount rate at which businesses and financial assets are valued is lowered (a lower discount rate increases present value, making an asset more attractive). Investors then bid up these assets, moving further out on the risk curve, causing spreads between financial instruments (ie, cash, bonds, equities) to tighten.



The beautifully hand drawn chart above shows the spread between financial assets. When spreads widen (higher interest rates), risk premiums go up and investors get more return for assuming risk. And when spreads tighten (lower interest rates) the risk premiums go down and investors get less return for assuming risk.

Cheaper debt increases borrowing and boosts demand. People and businesses borrow and spend more. And since one person's spending is another's income, incomes rise, further driving demand.

Increasing demand inflates asset prices (ie, homes, business, stocks etc.). When asset prices rise, people's net worth rises, as well as their credit profiles. This allows them to borrow more. And since we're strongly affected by recency bias and myopia, we extrapolate this current income growth into the future. We expect it to continue and borrow even more.

This is a reflexive process. Increased borrowing raises demand which drives up incomes and inflates asset prices. Higher asset prices result in stronger credit profiles which lead to more lending/borrowing. A positive feedback loop is created.

This process goes on until rising demand bumps up against productive capacity and we get demand-pull inflation. Productive capacity is the limit of what an economy can produce. Credit demand can be created much faster than what an economy can realistically support. When this happens, inflation begins to accelerate because there's more demand than what suppliers can handle. Too much money begins chasing after too few goods (which drives up prices). The result is demand-pull inflation.

One of the Federal Reserve's mandates is to regulate inflation. So when inflation begins to rise, the Fed is forced to raise interest rates. Once they do, the feedback loop goes into reverse.

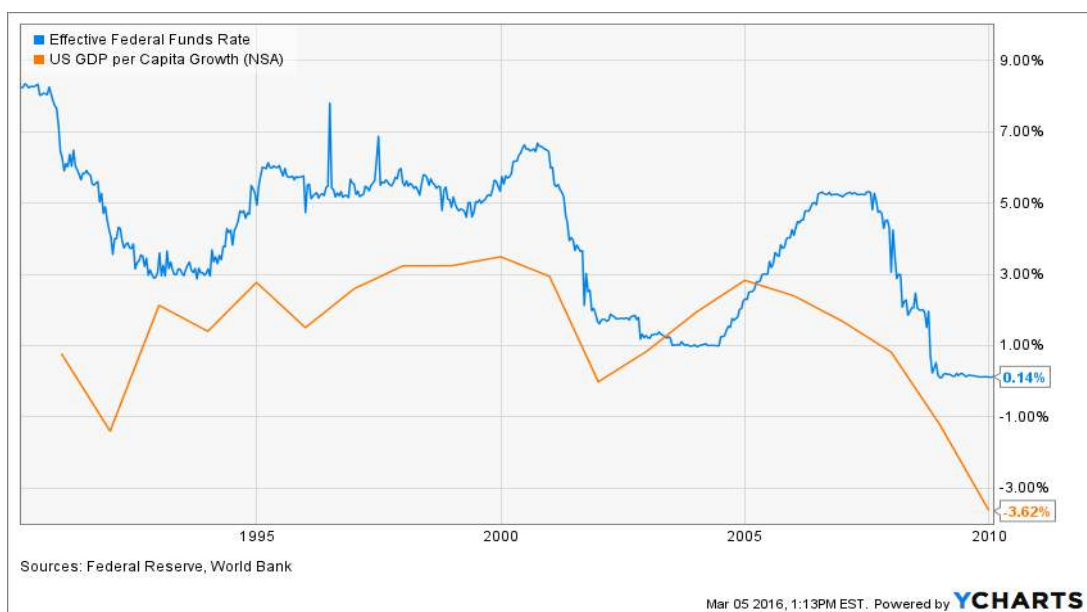
The cost of debt increases due to higher interest rates. This causes money to tighten and demand to fall as people and businesses borrow and spend less. And since one person's spending is another's income, incomes drop, further decreasing demand. The

fall in demand causes asset prices to drop which lowers the credit profiles of borrowers, resulting in less lending. The discount rate rises and widens the spread between financial assets (ie, stocks and bonds sell off and become less attractive)... and on and on it goes.

Until the Fed cuts rates once again.

But this time, since debts are now higher than they were when the Fed previously lowered rates (meaning more income has to go to debt servicing), the Fed has to cut interest rates even lower than they were before.

You can see this logical sequence of events in the chart below. It shows the Fed Funds Rate over two short-term business cycles.



From 99' to 00' the Fed raised interest rates until demand and asset prices started to fall and the economy went into recession. The Fed then quickly cut interest rates to a point *lower* than the previous cycle low.

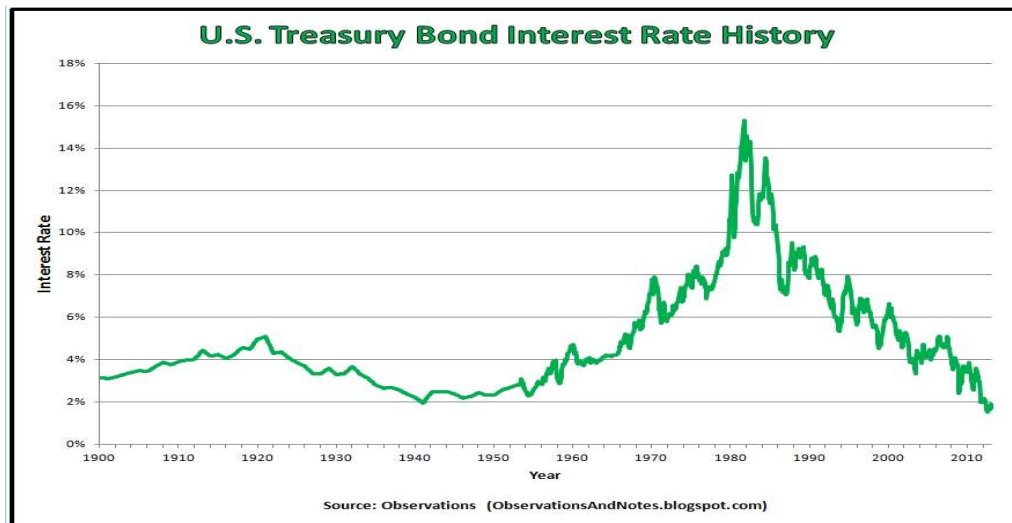
The short-term cycle repeated itself again in 04' to 07', when the Fed raised rates to subdue inflation. But interest rates were raised to a *lower* point than the previous cycle. And then in 08' the Fed was forced to lower them again to fight off recession — and they were dropped to a new secular low.

Short-term business cycles repeat over time. Each time, interest rates move lower. Interest rates *have* to move lower because debt (and the costs to service it) keep on rising, in both the public and private sector.

This sequence continues until rates cannot be lowered any more (they reach zero or negative). This is the point at which a pivot in the long-term debt cycle takes place.

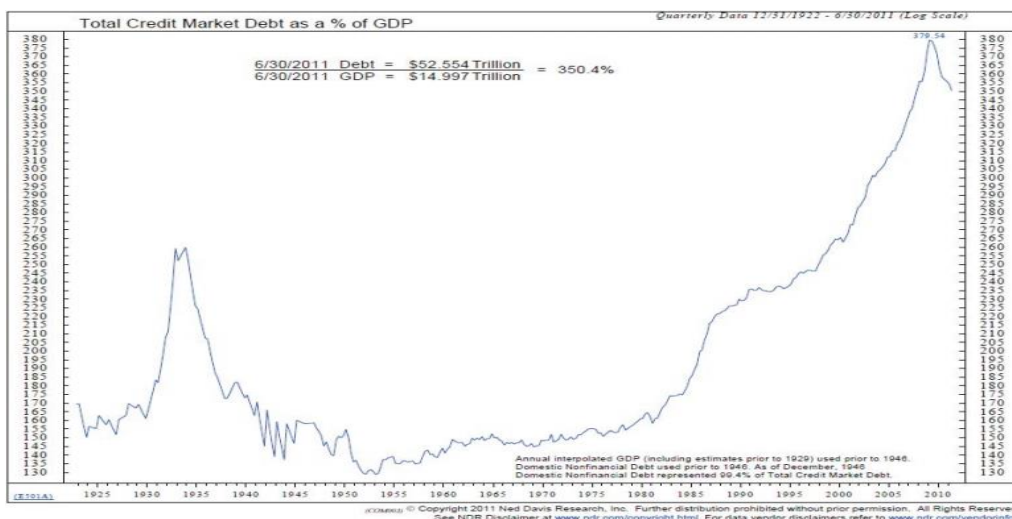
The Long-Term Debt Cycle

Longer term debt cycles are not well understood by the public. This is because they operate on a longer timeframe (hence the name). The cycle only becomes very noticeable at transition points, which generally occur once every generation, about every 25-50 years.



Looking at the chart above, you can see the long-term debt cycle at work. Interest rates peaked in 1920 and then turned over and began trending lower (which led to the roaring 20's). They bottomed out in the 30's - 40's before trending higher again for the next 40 years. In 1981 they peaked again and have been trending lower ever since.

Total debt accumulates over the long-term as shown in the chart below. You can see two debt mountain peaks. One in 1929 where total debt peaked at 260% to GDP. **And then the peak today where debt is at 380% to GDP.**



Most people focus on public debt (debt owed by the government) at the exclusion of private debt (debt owed by households and corporations). This is wrong. Though public debt is important, private debt is the primary driver of debt cycles. Private debt is where the demand comes from that propels the economy. Also, governments can more easily manage their debt by monetizing it away through central banks. Unfortunately, the private side doesn't have this option.

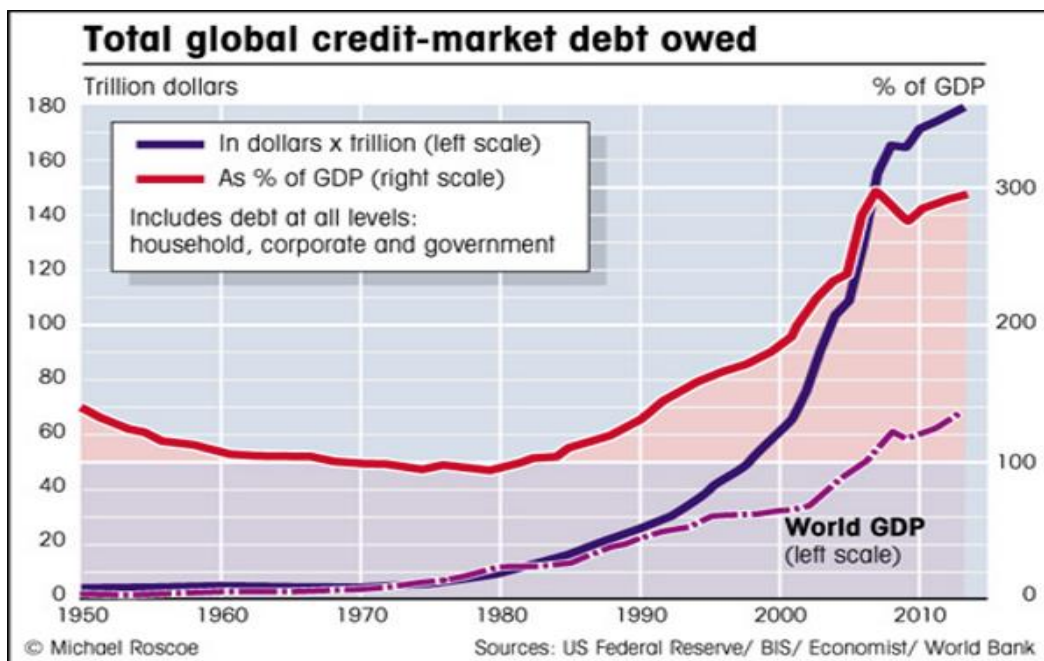
The accumulation of debt cannot go on *ad infinitum*. The reason being that eventually interest rates cannot be lowered any further to keep things going. They reach the zero bound and no amount of credit easing can induce people to borrow and spend more. Accumulated debt levels become too high and the servicing costs too large. The credit system literally becomes maxed out.

And this is where we are now. We're at the turning point of the long-term debt cycle. The last time we were here was in the 1930's... the Great Depression.

Interest rates across the majority of the developed world are now at or below zero. **There is nearly \$12 trillion in negative yielding debt! \$12 trillion dollars!** This is not how a true capitalistic system *should* work. But it's exactly how our current system is *expected* to work.



One thing that *is* different this time around versus the 1930s is that the global economy on a whole is much... much... much more leveraged. In fact, the world has never had as much debt relative to GDP as it does now... not even close.



The deleveraging that everybody thought was happening in 2009 was just kicked down the road to today. This was possible because there was still room for interest rates to fall to squeeze a bit more credit demand into the system.

Now, with rates at zero and the efficacy of quantitative easing maxed out, the can cannot be kicked any further.

Since 2009, both the developed and developing world have seen their debt-to-GDP levels rise on average by 35%. **A report done by Mckinsey last year suggested the world had added an additional \$57 trillion of new debt since 08' — a figure which is undoubtedly higher today.**

In 2009, China and emerging markets were the key to boosting global demand to help stave off a global depression. But this time around they're a *major part* of the problem.

Over the last seven years, China has seen its debt-to-GDP level increase from 160% to over 250%. Their total debt accounts for over half the debt of the developing world. It's estimated that China is adding to this debt at the rate of \$6-7 trillion a year. You may be thinking "well, maybe this credit is being invested in high-return projects", but you'd be wrong. **Our estimates (and those of others) have well over half of China's new debt issuance in the last few years going to pay interest on existing debt!**

It appears the Chinese truly believe in the maxim, "a rolling loan gathers no loss". We'll see how long they can keep that up...

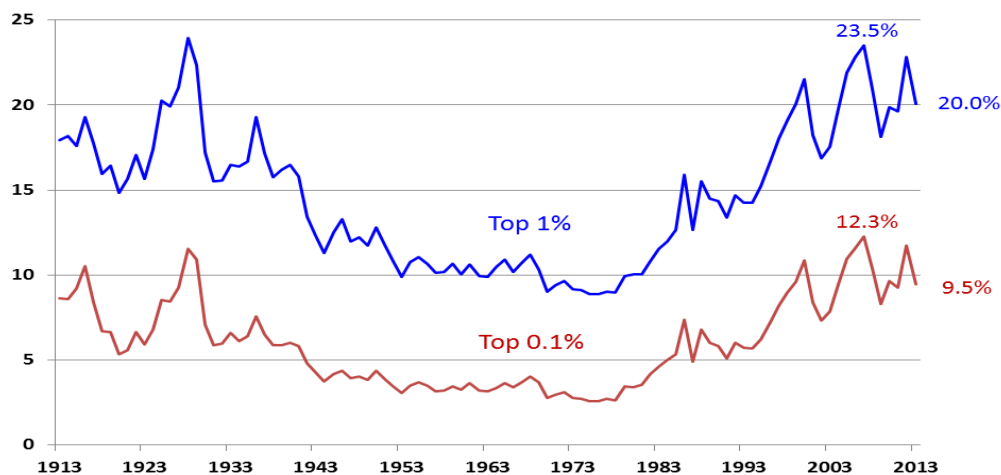
Economist and central bankers have been scratching their heads as to why global growth has been so sluggish and inflation so difficult to create. Well if they just understood the dynamics of the long-term debt cycle as I've described to you here, it wouldn't be such a mystery.

This oppressive level of debt is pulling current demand lower through debt servicing costs. The lower demand combined with an economy that has a capacity glut (built on credit) results in deflation. The kind of deflation that will take a decade to work through.

What about Piketty? Is he right? Are our current woes the result of capitalism being a broken system? Not exactly...

The fuss over income inequality and the strain it puts on our society is a definitely real. Income inequality has been steadily increasing since the late 70's. You can see this on the chart below.

U.S. Income Shares of Top 1% and Top 0.1% Households – Incl. Capital Gains (1913-2013)



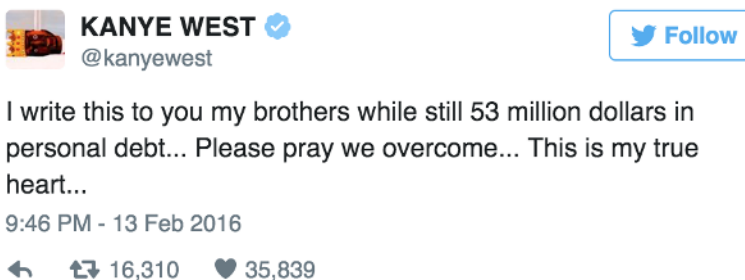
Source: Piketty & Saez – January 2015

But income inequality is not due to return on capital outpacing the rate of growth (meaning the return on invested money outpaces real growth; the rich get richer faster than the overall growth of the economy) as Piketty argues.

This is a correlative link, not a causative one. Return on capital has been outpacing the return on growth over the last 45 years because of the long-term debt cycle and the continuous lowering of interest rates by the Fed. Remember, interest rates have been steadily falling since 1981 (right when income inequality began rising).

The rich are richer because they own (mainly through credit) more assets (ie, financial, property, business etc). These assets have been inflated on the back of credit/debt growth over the course of the leveraging part of this long-term debt cycle.

Knowing this, it should be of no surprise that some of the people we think of as super-rich are in reality not very wealthy at all, meaning their assets don't outweigh their liabilities. They just have access to far more credit than most people. They're drowning in debt... cough... Kanye... cough.



And it's not just Kanye... over the last 35 years, we as a society have pulled a lot of future consumption forward. We've been enjoying the *future* fruits of our labor *today*, by going crazy for those shots of credit induced dopamine. We've mistaken increasing debt for rising prosperity. But now the future is banging on our door demanding we pay our bill.

Bill Gross of Janus Capital commented on this in his recent investors' letter (emphasis added is ours):

*"What readers should know is that the global economy has been powered by credit – its expansion in the U.S. alone since the early 1970's **has been 58 fold – that is, we now have \$58 trillion of official credit outstanding whereas in 1970 we only had \$1 trillion.**"*

A 58 fold increase in credit in just under 50 years is a huge leveraging. This build up in debt is going to have a large impact on the US and the world moving forward. It's going to affect everything from growth, to living standards, to domestic politics (ummm... Trump), and geopolitics (ie, international conflict).

Think of the period following the 30's. We are likely in for some interesting times ahead.

This is what's going to happen going forward

We are at the beginnings of both a secular (long-term) and cyclical (short-term) deleveraging. And this is happening *all* around the globe.

At this point, traditional monetary easing has become equivalent to "pushing on a string"... it's just not working. Negative rates don't work, and in fact, they have a net-negative impact on lending and demand. **Central bank policy aimed at getting**

investors to assume more risk has contracted spreads as tight as they'll go. So we can expect negative real-returns over the next decade.

The only option left for many central banks is the route they've taken **EVERY SINGLE TIME** throughout history when faced with a secular deflationary deleveraging. And that is: unorthodox monetary policy. Otherwise known as straight up debt monetization through haircuts/restructurings and inflation.

Since debt deleveragings are a deflationary force, the central banks need to create enough of an inflationary force to counteract it. They need to monetize the debt (using inflation to devalue it) so nominal asset prices remain somewhat stable as borrowers are relieved of their debt burdens. The goal is to keep nominal GDP growth above nominal interest rates. Keeping nominal growth above the nominal cost of debt allows debt to be properly monetized over time.

This will be accomplished through more quantitative easing and something akin to a "helicopter drop", where the government does a wealth transfer and assumes a lot of private debt. *If* this is carried out perfectly (and that's a BIG "if"), where inflation is created in just the right amount to counteract deflationary pressures, then we'll have what Dalio calls a "beautiful deleveraging".

A beautiful deleveraging is the least-worst option (the others being a deflationary deleveraging and a runaway-inflationary deleveraging like 1930s Weimar Germany).

There is no easy way out of this. A beautiful deleveraging will still be very painful and is not easy to carry out. This is a point that many fail to understand. **You can't just raise interest rates right now. It's too late.** It would result in a deflationary deleveraging — which is the most painful option of all. We have over a generation of debt built up. Much of which is just bad debt. It's worthless and will not be repaid.

This long-term cycle of debt accumulation and then debt monetization is so ingrained and prevalent throughout human history, that even the Bible talks about having a year of "Jubilee" every 50 years, where all debts are all wiped clean.

Well, our global jubilee is upon us. But unlike biblical times, creditors will not willingly forgive debts out of the goodness of their hearts. The debts will be forgiven in the most opaque way possible, so we can all still remain in denial of the reality of our monetary system. The debt will be inflated away through the devaluation of currencies.

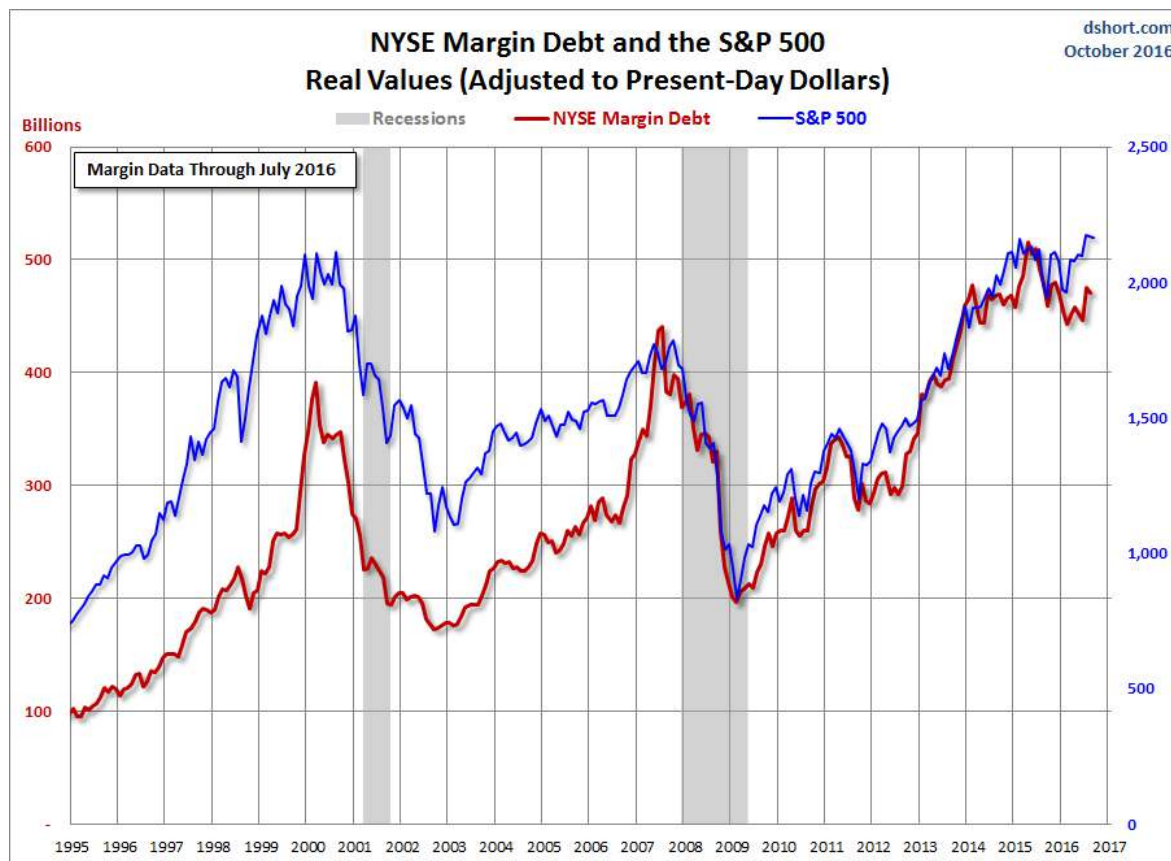
But the inflationary period caused by this devaluation will not start for another couple of years, at least not in the US. There are two primary reasons for this:

1. The Fed does not understand the secular dynamics at work. They're committed to maintaining their credibility by following their planned rate hikes — of which they will be lucky to get even one more in.
2. Because of the Fed's mandate and the current political environment, they will not have the political capital to enact unorthodox monetary policies until things get very... very... bad.



We are at the very start of that very bad part. Despite recent volatility, US financial assets are still near record high levels. Markets are in the beginning stages of rectifying this valuation discrepancy and are about to get knee-capped back down to earth (or their 2008 lows).

The chart below shows the inflation adjusted S&P 500 overlaid on NYSE margin debt. This margin debt (most stock buying is done with debt) is starting to unwind (from record high levels). This has preceded the last two market crashes and is flashing signs of the next one, soon to come.



An interesting side note: It is the buying of financial assets on margin (with debt) that creates massive amounts of instability and liquidity issues within markets. Margin buying increases as markets rise. Players become more leveraged as equity valuations become more unsustainable. When the cycle turns, you have a lot of margin-bought-securities trying to squeeze through a narrow exit at the same time. Selling begets forced selling and so on. *(Pay attention and you'll notice how "reflexivity" as described by George Soros, is a recurring part of the inherent nature of markets and economies.)*

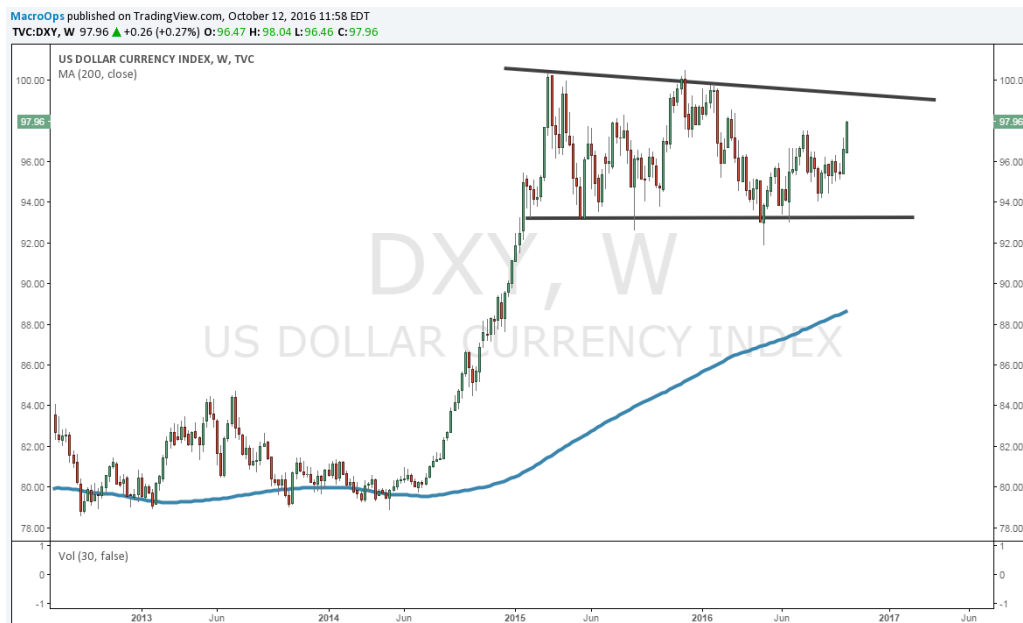
The US dollar will grow stronger during the beginning stages of this global deleveraging.

There is over \$12 trillion in outstanding USD denominated debt held outside of the US. This is the result of a popular carry trade driven by the Fed's loose monetary policy. USD

debt is essentially a short position on the dollar (as the dollar falls, USD debt becomes cheaper to service).

The trade worked well when the dollar was weakening, but now that it's strengthening, companies and other institutions have an incentive to pay off their debt faster than before to avoid rising servicing costs. To pay off that debt, the debtors have to trade their currency for dollars. This boosts demand for dollars, which raises USD value compared to other currencies. It turns into a reflexive process that goes on and on.

We're only in the middle of this dollar move. It's been experiencing an expected and healthy consolidation, but it will get back to its bullish trend soon.



Since the dollar is the reserve currency of the world, a strengthening dollar impacts global assets in interesting ways.

First, all commodities are priced in USD. So when the dollar rises, it acts as a weight on commodities. It is no coincidence that the dollar bull market coincided perfectly with the collapse in oil. **Historically, the dollar accounts for 30-50% of the larger trend in oil.**

It is our understanding of this correlation that allowed us to anticipate and profit from the collapse in oil and other commodities that began in 2014. And it is also this understanding that leads us to believe that the fall in commodities is not yet over.

And for you gold bugs out there, be careful going long too soon. The dollar has macro drivers equivalent to an Atlas-V rocket and liftoff is just beginning. Since gold is priced in dollars, it cannot maintain a bullish rally while the dollar stays strong.

There will be a time to own gold, but that time won't be for at least another year when dollar inflation really kicks in through the "unconventional monetary policy" we discussed before.

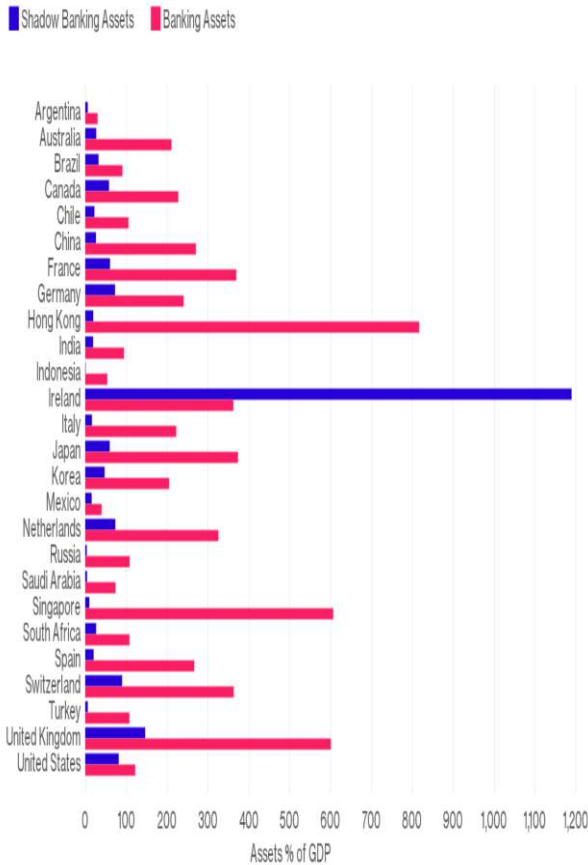
As the world's reserve currency (USD) strengthens, it acts as a monetary tightening on the rest of the system. This is because, as we discussed, the world is net-short dollars since it is a large funding currency. So when the dollar rises, it sucks liquidity away from credit markets around the world. This further spurs deflation, driving asset prices and markets lower (which is why emerging markets have fallen into the crater).

The beginnings of the next global crisis have already been put in motion. It's inevitable and cannot be stopped. It can only be managed.

The crisis will begin in Europe, **where banks have admitted to holding over \$1 trillion in non-performing loans — we believe the actual number to be much higher.** The western European continent is awash in bad debt and saddled with a bloated bureaucracy that is ill-equipped to handle the coming storm. Look at the state of Ireland in the charts below... I mean, Dear God... how did that happen?

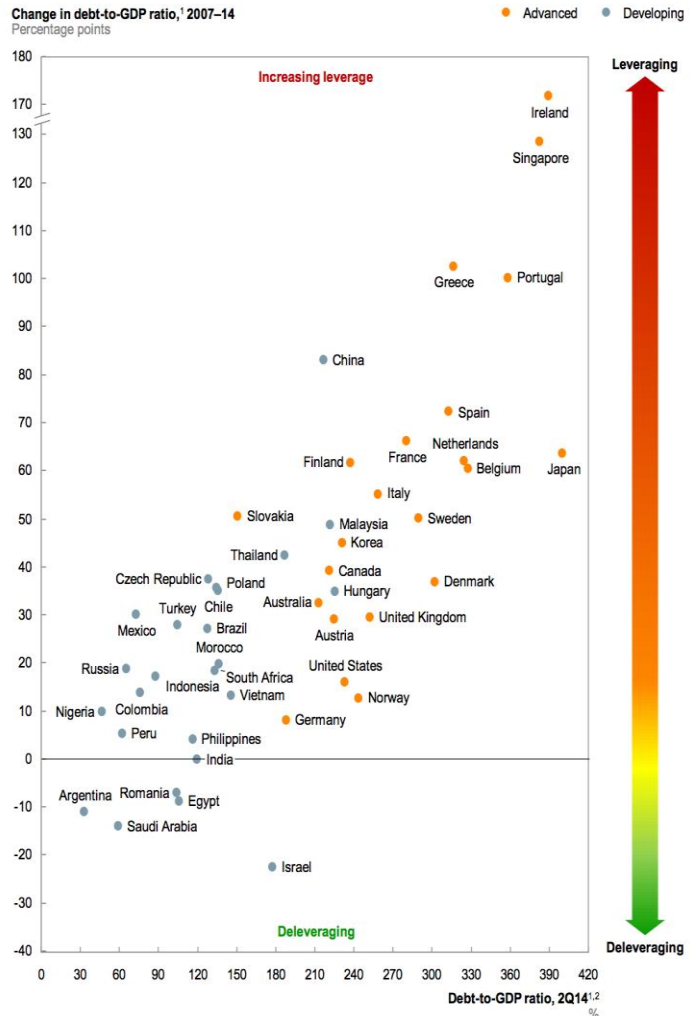
Shadow Bank Boom

Ireland has the highest level of shadow banking assets as a percentage of GDP



The ratio of debt to GDP has increased in all advanced economies since 2007

Change in debt-to-GDP ratio, 2007-14
Percentage points



The coming crisis will lead to the slow fracture and breakup of the European Union as we now know it.

Countries like Greece, Ireland, Italy, Portugal, Spain, and possibly even France (though many believe it impossible) will be found insolvent. The euro will continue to fall which will boost the dollar even more.

This rising dollar will force China's hand into floating the Yuan to manage their exports, bad debts, etc. This contagion will spread across the world, as developing countries from Brazil to South Africa try to do the same. They will likely all lose control of their currencies a la the 97' Asian financial crisis... but this time on steroids.

This will cause the deflationary tidal wave that will crash upon US shores in the coming year.

We predict the US will start a recession in 2017. And the dollar will be significantly higher than it is today by then.

How to profit

First off, passive investing is DEAD. Done. Fuhgettaboutit!

Passive index investing is a sensible system and has performed well over the last 30 years. But it will get hammered in the decade going forward.

The whole premise of passive is based off the belief that US markets rise steadily over time. And this is true over the loooong haul, but it's not practical for investors who need to live off their income in the next two decades.

This is because of the secular shift we're going through. Total real market returns will be negative over the next 10 years. Think Japan over the last three decades. I believe (hope) we will handle this deleveraging a lot better than Japan so it won't last as long. Maybe 10-15 years.

And during this time we'll experience collapsing real-growth and a period of crippling deflation followed by decades of inflation (this is the other side of the long-term debt cycle, think 60's to 80's).

Will we have bull markets during this period? Of course. But they will come with increased volatility and lower real-returns.

This is not a great time to just leave your net-worth to the whims of central banks with passive investing.

All is not lost though. This will be a target rich environment for traders (we're licking our chops) who understand how the economic machine works and remain vigilant and protective of their capital.



Here's what you want to do: over the coming year short risk.

You're going to want to keep your money in the US. The United States is viewed as the world's cleanest dirty shirt. Though our debt-to-income levels are in the higher tier, our institutions are best suited to handle the coming economic crisis when compared to other countries. (This is by no means praise for the efficiency of our government, but rather an admonition of just how bad everybody else's is.)

The rush into the US dollar is going to reignite the dollar bull market, driving the greenback to decade highs. This is also going to crush a lot of commodities (commodities are priced in dollars), so you should stay away from buying any companies that rely on say, higher oil prices. Oil will stay low for the foreseeable future.

You want to be short high-risk assets. Now shorting bear markets can be a very difficult thing. They are extremely volatile and have sharp, short-crushing, bullish retracements. This makes it difficult and sometimes near impossible to play traditional breakouts.

The key is to use retracements as entry points with a strong emphasis on tight stops and a laser focus on capital preservation.

There is no shortage of overvalued risky assets in this market. But you want to make sure to play things that are liquid with low costs to carry (ie, short borrowing costs, dividend costs, interest etc.). If you want to make things real easy, you can just play inverse ETFs, but just know that overtime you will lose a little on the negative compounding built into their structures.

As we've said before, our intent is not to be doom and gloom, but to explain the world as we see it and assign probabilities to what we view as the most likely outcomes. We have been here before in history and we will be here again in another 50 to 75 years or so.

Now onto the second Horseman...

Second Horseman: Bond Bubble Bust

Rarely do we investors get a market that we know is overvalued and that approaches such clearly defined limits as the bond market now. That is because there is a limit as to how negative bond yields can go. Their expected returns relative to their risks are especially bad. If interest rates rise just a little bit more than is discounted in the curve it will have a big negative effect on bonds and all asset prices, as they are all very sensitive to the discount rate used to calculate the present value of their future cash flows. That is because with interest rates having declined, the effective durations of all assets have lengthened, so they are more price-sensitive. For example, it would only take a 100 basis point rise in Treasury bond yields to trigger the worst price decline in bonds since the 1981 bond market crash. And since those interest rates are embedded in the pricing of all investment assets, that would send them all much lower.

Those words are from the most successful hedge fund manager of all time — Ray Dalio.

When Ray speaks, you should listen. He's been pulling money consistently from the markets over the last 30 years and has a long record of being right.

As we've discussed, there is now more than \$13 trillion — that's trillion with a "T" — of global debt that offers investors a **guaranteed loss** if held to maturity.

The philosopher Nietzsche would remark (with some slight adjustments by me) "In individuals, insanity is rare; but in groups, **markets, and economies**, it is the rule."

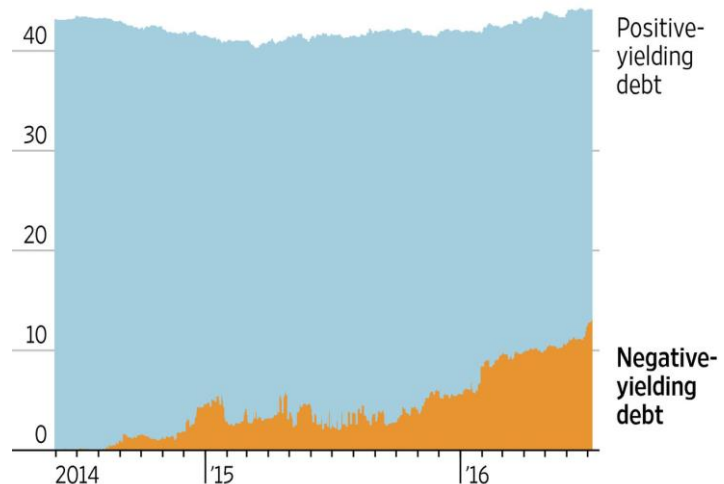
Insanity has to be an element in why "investors" would line up for a chance to pay to lend to a government. Should those who partake in this madness still even be referred to as investors? Is that not somewhat of an oxymoron now? Perhaps they should be called "burners" for all the capital they're destroying?

Anyway, these burners are partaking in what can only be described as the largest game of "Greater Fools" in the economic history of man.

Rising Tide

The pool of global negative-yielding debt is climbing.

\$50 trillion



Source: Bank of America Merrill Lynch

THE WALL STREET JOURNAL.



For those of you not familiar with greater fools theory (GFT), you need to be, because it seems to be the logic (or illogic?) at the foundation of our current bizarro capitalistic world.

Wikipedia defines greater fool theory as when “the price of an object is determined not by its intrinsic value, but rather by irrational beliefs and expectations of market participants. A price can be justified by a rational buyer under the belief that another party is willing to pay an even higher price.”

At Macro Ops, we define GTF as “insanely stupid and endlessly repeated moments in market history when a bunch of idiots start setting their cash on fire because they see other people doing it.”

Or there’s how 19th century editor of *The Economist*, Walter Bagehot, described it when writing about the 18th century South Sea Bubble. GFT is when “a great deal of stupid people have a great deal of stupid money... At intervals, the money of these people — the blind capital, as we call it, of a country, is particularly large and craving; it seeks for someone to devour it, and there is a ‘plethora’; it finds someone, and there is speculation; it is devoured, and there is ‘panic’.”



With over \$13 trillion dollars (which is over half of all Western debt) held by bond owners that are assured to get a lower amount in return than their principal, I suppose we can all agree this is prima facie an example of GTF on a Godzilla scale. Here’s the following *via the WSJ* (bolding is mine):

*The pull to par has become a drag: a buy-and-hold investor is guaranteed to lose money, even before taking inflation into account. **The only way to make money is to find another buyer willing to pay a higher price—but that implies a bigger loss down the road.***

*The crucial thing to understand is that these instruments are no longer bonds—at least not in the traditional sense. **With no income attached to them, they are simply bets on the price another investor is willing to pay.** They will also be more volatile: the long wait for repayment means small changes in yield will have a big effect on current prices.*

And so here we sit... at a peculiar moment in history where the most boring of boring and safest of safest assets, the plain old government bond, that sits at the top of our global financial system and is the foundation on which all other assets are valued, has now been bid well into “stupid” territory and more resembles a Dot Com stock or shares of the South Sea Company than itself.

Well... what does this mean? Where do we go from here?

Good question, so I'll give you a good answer.

Dalio said at the top of this passage that "there is a limit as to how low negative bond yields can go." Those limits have been reached, so naturally that now leaves us with only one direction for rates to go... UP.

To see how we get to a higher rate environment when we're in such a slow growth world, we have to turn to the avant garde of central banking — the Bank of Japan (BOJ).

Japan and its central bank made an interesting change to their monetary policy, which its significance has seemingly gone unnoticed by the mainstream investment community. I'm talking about zero rate targeting for 10-year Japanese government bonds.

Japanese 10-years were trading at negative rates. So by targeting the zero bound, the BOJ is tightening policy. Why would a country that is fighting a losing battle against deflation want to raise longer term interest rates? The answer to this question is where the significance of this move lies.

By adopting a long-term interest rate target, the BOJ is handing over control of its balance sheet to the market. This is because no institution, not even a central bank, can set both the quantity *and* price of an asset. So by setting the price of 10-year Japanese government bonds at zero percent, the bank is effectively saying it will contract or (more likely) *expand* its balance sheet to whatever size necessary to keep prices there.

That in itself is pretty extraordinary, but the reason why the BOJ is doing this may be even more so.

Saddled with over 500% in total debt-to-gdp, Japan has backed itself into a corner in which there's only one way out: inflation... and lots of it. It's coming to grips with this although it has been slow to reach acceptance. But this looks like it's finally changing.

The BOJ, by agreeing to backstop JGBs, and accepting an inflation target higher than 2%, is essentially paving the way for outright monetary financing. We've talked in the past about how Japan will likely eventually issue a perpetual zero coupon bond. This would allow the government to spend freely while also devaluing the yen (by a lot), thus monetizing the country's debt. Well, this is the first step in that direction.

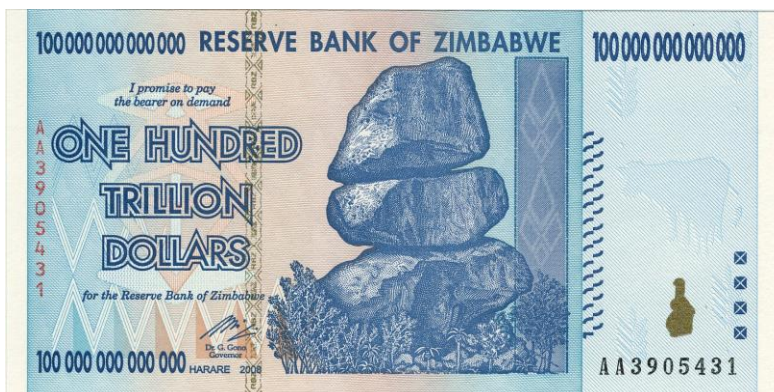
By keeping the long-term rate pegged at zero, the BOJ is allowing the Abe government to conduct large scale fiscal stimulus by issuing unlimited bonds while taking away the risk of triggering a death-spiral in JGBs that would lead to higher interest rates — since the BOJ will just print yen and buy whatever 10-years the market sells.

This printing will cause Japan to finally get its inflation and probably a lot more than it would like.





The yen may look a lot like Zimbabwean dollars in a few years time.



You see, bonds and currencies are inextricably linked. Bonds are just durational assets of a currency. When a currency is debased (meaning it loses its value), the bonds that are held in that currency also lost value. So when governments debase their currencies, they're intentionally devaluing the cost of *their* debt. This is why bonds sell off in inflationary regimes, because that inflation is directly eroding both the coupon and principal on those bonds. This results in investors fleeing from fixed income assets and into things that offer better protection from inflation.

And this fleeing from JGBs causes a rapid feedback loop.

- Investors see the yen depreciating →
- They sell JGBs in response →
- BOJ prints more yen to buy up those JGBs to sustain the zero target →
- Yen depreciates further because of it →
- Depreciation once again causes more investors to sell which starts the loop all over again

It's easy to see how this will get out of control quickly. There's no chance the BOJ can manage a controlled devaluation with this method. Once the feedback loop kicks off, we can expect the value of the yen to be destroyed.

It's important to pay close attention to all of the stupid monetary experiments the BOJ is doing because they are at the fore; where they go, the ECB and Fed will closely follow. And the reason for this is simply because Japan is furthest along in its long-term debt cycle, followed closely by Europe, the US and finally, China.

The coming attempt at a complete takeover of the global capital system by central banks should come as no surprise to any of us. Our noble, infallible and wise monetary leaders have been openly talking about the necessity for more "unorthodox" monetary tools (ie, direct stock purchases, helicopter drops and straight debt monetization).

Intentional currency debasement, like what will occur with this zero rate target, used to be something of a taboo in the elite policy circles, but now it's become a race amongst academic types to devise a more effective and "opaque" way of doing just that.

Apparently the consensus among those who govern and control our monetary system is that the only way to wealth and prosperity for all is through the complete incineration of every viable store of wealth.

Makes so much sense when you “really” think about it... but don’t think about it... just shut up, drink the kool-aid and be thankful for the extreme competence of those running our system.

Enough sarcasm... here’s why this matters and how this plays out.

Sovereign bonds sit at the base of the capital structure. They’re considered risk-free and so they’re the basis for what all other assets (ie, corporate bonds, high yield, equities etc.) are valued off of.

The financial system works off risk premia spreads, which is the difference in expected risk/return between different assets. We’re not going to talk much more about that here, but if you’re interested, you can read [this piece](#) we wrote on the subject. It’s just important to know that when the return on sovereign bonds falls, the risk-premia spread is widened, and riskier assets become more attractive. And the opposite occurs when the return on bonds goes up; the spread contracts and riskier assets become less attractive.

Well when interest rates across the entire western world have hit their lower bound and have only one way they can go, you can see how this becomes an issue for other assets like stocks.

To turn to Dalio again, “that is because with interest rates having declined, the effective durations of all assets have lengthened, so they are more price-sensitive. For example, it would only take a 100 basis point rise Treasury bond yields to trigger the worst price decline in bonds since the 1981 bond market crash. And since those interest rates are embedded in the pricing of all investment assets, that would send them all much lower.”

The vampire bankers over at Goldman Sachs came out with a report not too long ago that showed that holders of US treasuries would lose over \$1 trillion should the Fed raise rates by just one percent.

One trillion dollars.... \$1,000,000,000,000.... That’s equivalent to 1/18th of our annual GDP that would be wiped off the face of this earth in the event the Fed raises interest rates by a measly 1%. That is more than the total realized loss during the Great Financial Crisis that nearly cratered Western civilization.

Oh and that’s just here in the US where we still enjoy nominally positive real rates, unlike our counterparts over in Europe and Japan, who are sitting well below zero. There, a 1% rise in rates would wreak financial destruction on a scale never before seen in human history... and I am in no way exaggerating here. That is an absolute *fact*.

Currency destruction (runaway inflation) is in our near future. Central banks will see to that. But because of the large secular and cyclical debt cycles at work, we’re going to



see deflation threaten one more time before central banks get legislatures to pass over unlimited power to them. And then they'll go to work, doing what they do best... screwing perfectly good things up.

If ole' Bagehot was here, watching this mess, he'd probably just nod his head with no sense of amazement and just say "yep, I've seen this play before... dumb money looking to be devoured."

And now to the third....

Third Horseman: China's Yuan Devaluation

“*Declaring war on China's currency? Ha ha.*” That's the interesting title of an [article](#) published by the People's Daily (official newspaper of China's Communist Party). It serves as a warning to legendary fund manager, George Soros, against shorting the Chinese yuan. (Side note: China's currency has two names, the Yuan and Renminbi, they are interchangeable.)

The piece comes in response to comments Soros made on his bet against “Asian currencies”. While speaking at the World Economic Forum in Davos, he discussed his expectations of a “hard landing” in China.

The People's Daily article went as far as declaring that “*Soros' war on the renminbi and the Hong Kong dollar cannot possibly succeed – about this there can be no doubt.*” Some pretty strong words from the Chinese ruling party.

So why the harsh reaction? Why would the largest country by GDP care about the passing remarks of a retired fund manager?

Either state media is petty and has a lot of time on its hands, or it's a reflection of just how scared the Chinese government is of losing control of its currency... a la 97' Asian crisis style where multiple currency values were cut by 60%.

The evidence suggests it's the latter. A yuan devaluation is not only likely... it's inevitable.

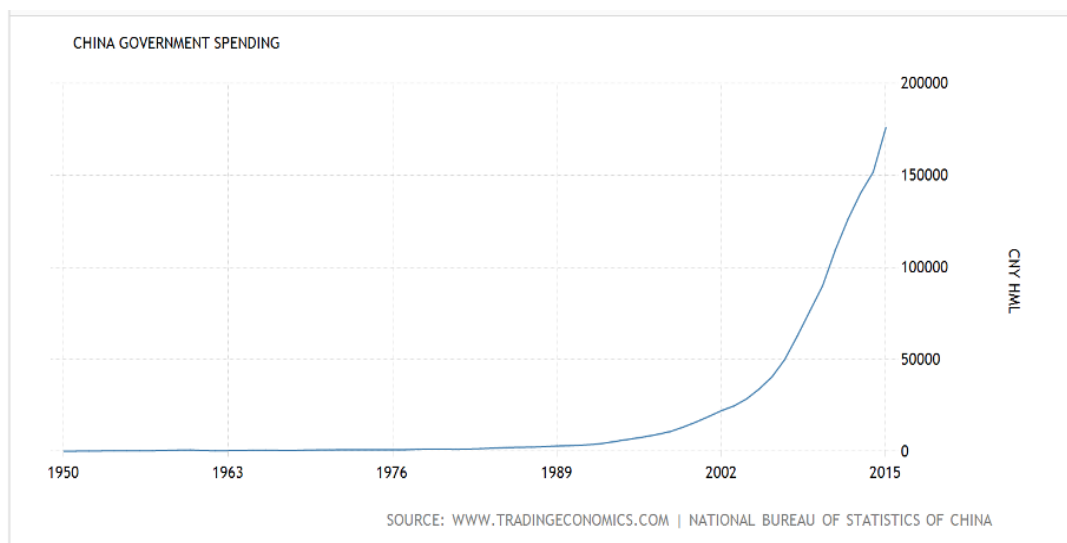
Japan is not the only country on the brink with their currency. China is right there with them and will likely be the first domino to fall to kick off the Currency Wars. The resulting effect on the yen will in turn trigger the feedback loop in JGBs that will destroy Japan's currency too. You'll see below that this yuan devaluation will very likely be the spark that ignites the deleveraging apocalypse.

Why Yuan Strength Is A Big Problem

China's growth story over the last 20 years has been astonishing. It has lifted millions out of poverty, shifted the centers of global trade and power eastward, and built megacities and infrastructure at a scale and speed almost unimaginable. (Fun Fact: From 2011-2014, China used more concrete than the US used in the *entire* 20th century.)

And all of this was done on the back of perhaps the largest credit-induced bubble and most egregious example of capital misallocation....ever.

The two charts below give an idea of the amount of debt spending.



It's easy to have explosive growth when your non-government debt doubles as a percentage of GDP in just 10 years. Not to mention government spending going parabolic too.

But as it always happens, debt spending reaches a maximum saturation point. The time of reckoning eventually comes. And that time has come for China in the form of a deflationary deleveraging, which is why they're worried.

A quick review of deleveragings: A deleveraging is the opposite of a leveraging. A leveraging is just the increasing of debt, which increases demand by pulling future consumption forward. A deleveraging is the reverse. It's the reduction of debt which results in falling demand. The falling demand causes prices to drop, which is deflationary. Large deflationary deleveragings are painful because they generally occur when a maximum debt limit has been reached. The falling

demand and lower prices lead to less income for people to service their built up debt. At the same time, the real value of that debt grows relative to the price of other things. This makes deflationary deleveragings the most painful of economic environments.

The Chinese government's number one focus is social stability. Maintaining the peace and appeasing the public keeps the Party in power. They've accomplished this so far through rapid growth and rising living standards. But a large deleveraging threatens to upend this arrangement and puts the party at risk — a fact the government is very aware of.

Which brings us back to the yuan.

Since the mid 90's, the yuan has been on a steady path of appreciation. It has been set on a crawling peg against the dollar that's been tightly managed by the People's Bank of China (PBoC).

This dependable appreciation, coupled with the government's loose fiscal policy and habit of perpetually rolling over bad loans for state enterprises (SOEs), has created a generation of businessmen, analysts, and policymakers who don't understand credit and currency risk. They essentially fail to grasp the other side of capitalism.

On top of that, there's two decades worth of financial products and business models built on the belief that the yuan always rises over time. This idea has been instrumental in guiding capital structures and lending terms for Chinese corporates.

These realities are just additional tinder for the *soon to be* currency fire.

The pyre on which it sits is China's unavoidable debt deleveraging and the US dollars hulk-like strength.

As the dollar appreciated over the last few years, China's export competitors: Japan, Europe, Korea, and Thailand have all actively devalued their currencies. But the yuan has stayed strong in comparison.

This is a problem because of China's reliance on exports. A stronger currency puts them at a huge competitive disadvantage. With a stronger currency their exports become more expensive and therefore less attractive in relation to their neighbors.

China was able to shoulder a stronger currency in the past because of their strong growth. But now that they've started deleveraging, this currency drag has become too costly.

China Will “Choose” An Uncontrolled Devaluation

China's official GDP growth rate last year was 6.9%. However, those familiar with China know these “official” numbers are about as reliable as a politician's promises. Xu Dianqing, an economics professor in Beijing, was recently cited in a [WSJ](#) article saying

that the GDP is likely “between 4.3% and 5.2%”. Other experts suggest it’s even lower. This is clearly a big decline from the heady days of double-digit growth.

A strong currency has come at the worst time imaginable. China is now stuck between a rock and a hard place. They only have two choices. And both of them are bad.

The first choice is to try and continue defending their currency, keeping it artificially strong. This would involve selling their FX reserves (USD) to buy yuan, creating demand for the native currency and raising its value. If this route is taken, the already crippling deflationary deleveraging will be exacerbated. Real debt levels will stay elevated and exports will continue to flounder. This will cause the economy to slowly grind to a halt.

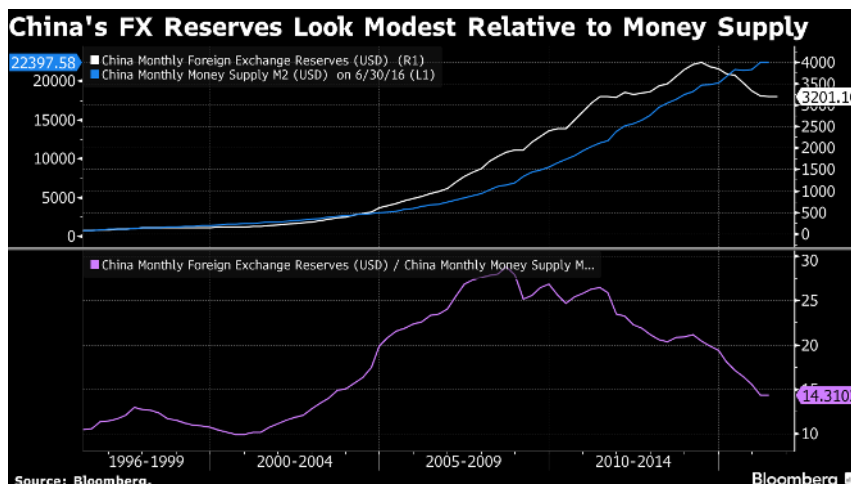
The other option is to drastically weaken the currency. Or in other words, allow a large devaluation that risks hyperinflation. China can weaken its currency to not only increase exports, but also make debt less expensive to pay off. But this comes at the cost of destroying both the value of yuan and the world’s confidence in the Chinese economy.

China claims they won’t choose to devalue. But here’s the key. Throughout history, governments choose inflation over deflation... every... single... time.

The reason being that inflation is simply more appealing politically. Deflationary deleveragings are extremely destabilizing. They make existing debt far more expensive and suck liquidity out of the system. It’s not something you want when you’re leveraged up to your eyeballs.

Many have argued that China is capable of doing a “managed” devaluation of the yuan. They cite the country’s large FX reserves which stand at \$3.2 trillion (the largest in the world). Supporters believe China can use this war chest to depreciate the currency gradually over time to a level they want.

But there’s a few problems with this argument. One, it gives too much credit to China’s leadership. Remember, these are the same people who got China into this debtor’s prison in the first place. And two, it makes the mistake of being “wowed” by the large number of FX reserves (in absolute terms). It fails to view the amount on a relative basis — which is what matters.



Yes \$3.2 trillion is a lot of money, but China is also a very large country. And when you compare China's FX reserves to its M2 money supply, you find it's only worth about 14% of the total amount of cash in the economy — which is a mere pittance.

The M2 money supply can be thought of as an economy's sum total of cash and highly liquid assets that can be quickly converted to cash. With Chinese foreign reserves only being equivalent to 14% of that total money supply, there's clearly a much bigger pool of yuan that can be converted into other currencies than there is foreign reserves to be used to buy up and "defend" the currency. Simple supply and demand dynamics are not in the Chinese government's favor.

To put the FX/M2 amount into perspective, during the 97' Asian financial crisis, most of the Asian tigers had ratios of 20-25%. This was higher than China's, yet still wasn't enough to protect their currencies. China is not nearly as capable of fighting off a run on its currency as is generally thought.

Another important point is the makeup of China's FX holdings. The truth is that China can only readily deploy about a third of its FX reserves, or \$1 trillion. The large majority of its holdings are in illiquid assets that would be difficult to convert to dollars quickly enough to fight runaway capital flight.

Finally, many mention China's ability to lock down its financial borders to prevent currency from leaving the country. Again, this is giving too much credit to the omnipotence of the ruling party. It fails to hold up to the evidence.

It's still all too easy for capital to find ways out of China. Corporates can simply buy USD assets or commodities or even record fictitious exchanges in order to convert their yuan. And the public can buy bitcoins and do web transfers or many other things to move money out. The PBoC spent over \$1 trillion last year fighting this capital flight. And all this spending is before the real party even gets started...

Just wait until the public realizes that the government can't and won't attempt to defend the currency anymore. Then we'll see real capital flight.

Chinese savers have been significantly over-invested in China. Especially in comparison to savers in other emerging markets. They've kept the majority of their savings in their homeland because for the last 20 years, it has been the safest place to be.

Well, that is all about to change, and this crude awakening to Chinese savers will cause a stampede for the exits.

A similar scenario, though brief, happened in 2008 at the height of the financial crisis. There was record capital flight out of China and there was little the government could do to stop it.

These reasons make it clear that China won't be able to control the devaluation of their currency. Either they will try and fail, or realize the futility of trying and give up. Inevitably,

there will be a quick and massive move in the value of the yuan as market forces find a new equilibrium.

China's Posturing Is Just Political Cover

[Last December](#), China announced it would start tracking the value of the yuan against a basket of currencies, instead of just against the dollar. They didn't release the makeup of this currency basket, but we can assure you it will be heavily weighted to their trading competitors.

This move, along with the government's posturing on their intentions to avoid an active devaluation, serve as political cover more than anything else.

China knows they can't prevent a devaluation. But they also know that a devaluation will be met with international political backlash and accusations of currency manipulation. So all the "aggressive" talk from the Chinese party against yuan "short-sellers" and the changing of the currency basket is really just cover for the coming devaluation.

Governments around the world have accused China of manipulating its currency. Multiple times they've called for China to liberalize exchange rates to let the market decide. This of course was said with the belief that markets would strengthen the yuan. So it's ironic that now when China is likely to finally let it go, it will have the exact opposite effect.

The best thing for China to do, and what we think they will do, is to completely stop defending the currency and let market forces quickly devalue it. This is the least worst option. It allows them to devalue from a position of strength, where they can maintain a sizable FX reserves buffer. The buffer will allow them to provide a liquidity boost to markets in the form of increased export attractiveness and debt reduction. This will help temper an otherwise violent devaluation.

The longer they attempt to defend the inevitable depreciation of the yuan, the more FX reserves they blow through and the further they weaken their position. Doing so also maintains the economically destructive strong currency anchor on their nominal growth.

What Does This Mean For Markets?

The average devaluation amongst the Asian Tigers during the currency crisis in 97' was 60%. And we believe that a similar devaluation for the yuan is certainly possible, with a 40-50% depreciation against the dollar most likely.

This is very important to US investors. When a country the size of China devalues its currency by half, it essentially exports its deflation to the rest of the world. By making its products cheaper and more competitive through devaluation, other countries will be forced to follow suit, greatly exacerbating the budding currency war in the global race to the bottom.

The deflationary pressures drive prices lower, which lead to lower incomes and therefore less demand. This again causes further devaluation to try and spur demand to fix the problem. You eventually end up with a deflationary feedback loop that has many other

ugly second and third order effects. This happens until the level of devaluation, which is inflationary, is enough to counter the deflationary pressures of the debt. It essentially works by monetizing away existing debt.

As we've already explained, the US dollar is going to go through the roof. As bad as things are in the US, we're still the world's cleanest dirty shirt. And investors around the world, fleeing their evaporating home currencies, will pile into US dollars and USD equivalents.

This will exacerbate all the effects we've discussed. Commodities, which have already suffered massively over the last year... will get destroyed by the stronger dollar. And as a result, commodity producing countries who are already in a world of hurt, will reach new lows.

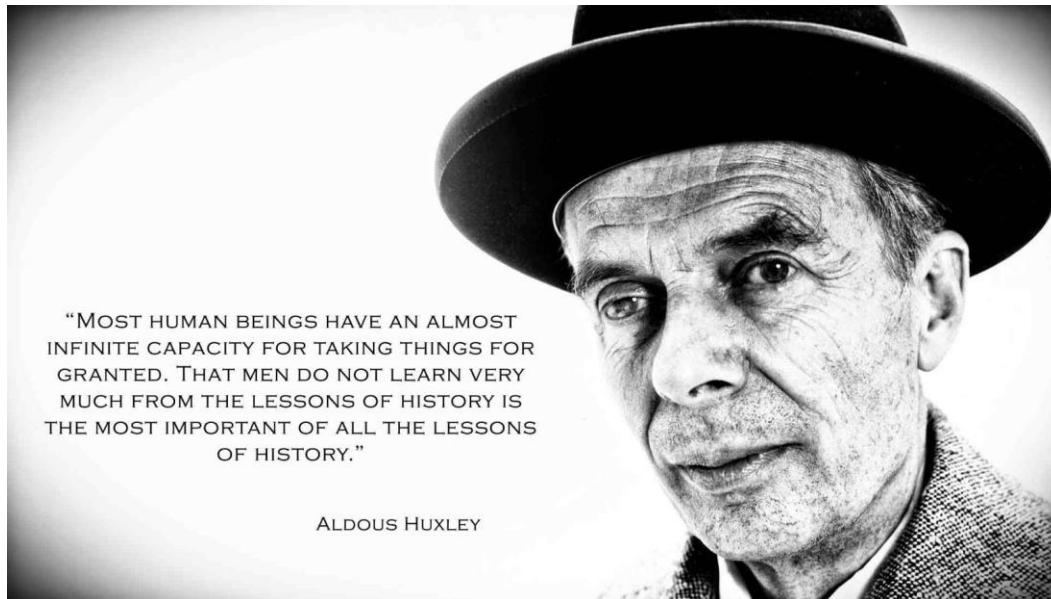
And US markets, which are historically overvalued and appear to be entering a cyclical bear due to a turning business cycle, are going to be crushed. And so will markets around the rest of the developed world.

Don't forget about the bond bubble we just discussed either. Devaluing the yuan will cause Japan to devalue the yen, kicking off the JGB feedback loop. This will in turn wreck global bond markets.

Off to the final Horseman...



Fourth Horseman: Time



Huxley understood the folly of man well, having lived through both world wars and the Great Depression.

I don't think he'd be surprised to see that leaders today seem hell-bent on repeating the mistakes of the past.

As we've explained, we are still in the very early innings of a turning long-term debt cycle. A deleveraging, where governments and consumers will pay the bill for decades of debt spending that brought future consumption forward. These typically last 15-20 years and are always accompanied by an increase in international conflict.

The last long-term deleveraging started in 1929 and culminated in the second world war.

This time around there is significantly more debt and it's not just the West, but the entire world.

Debt has barely begun to unwind and things are already looking shaky. Populist and strongman leaders are gaining power. There's rising tensions and mini-proxy wars being fought between global powers that are at risk of devolving into something larger. And long standing political unions that have kept the peace for the last 75 years are fraying and slowly falling apart.

Because of political disunion, ineptitude and distrust, we're left placing our economic future into the hands of a few central bankers — the very people who helped create the current mess. And though well intentioned, these academics know little of how the world *really* works and are laughably ill-equipped to navigate us through these stormy waters.

But it looks as though they will continue to try until either the ship sinks or sprouts wings and flies...

As a betting man, I have my money firmly on the former.

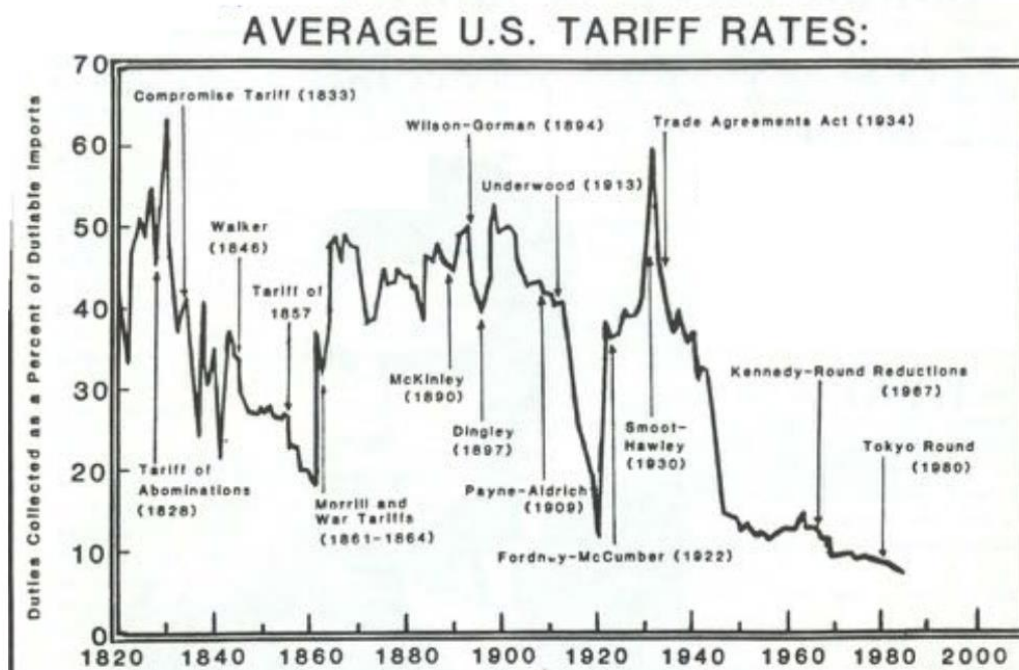
The question investors should need to be asking themselves is not “if” this going to happen, but “when”. And just as hurricanes don’t announce their arrival date months in advance, bear markets don’t let it be known exactly when they plan on occurring. All we can do is identify when it’s hurricane season (and it *is* hurricane season for the markets) and keep a close eye on the horizon.

Going forward, investors will need greater knowledge of both economic and political history. The threat is not just to your portfolio, but also to your ability to store and protect the value of your wealth outside of markets. This is going to become increasingly challenging.

Like in past long-term deleveragings, governments will inevitably enact policies to prevent people from “saving” money. They’ll ban currency alternatives like gold, as they did in the 30’s, and we should expect they’ll do the same with digital money, such as bitcoin.

They’ll tax, re-distribute and inflate. These aren’t possibilities but inevitabilities. We’ve been through deleveragings over and over again throughout history and though they differ in details, the larger forces and policy responses are always the same.

Friedrich Hayek once said he does “not think it is an exaggeration to say history is largely a history of inflation, usually inflations engineered by governments for the gain of governments.” True words, the truth of which we’ll see in the near future.



Source: Armstrong, “The Greatest Bull Market in History”

Internationally, “beggar thy neighbor” policies will dominate. Over the last 75 years we’ve enjoyed a period unmatched in global cooperation; with the lowering of tariffs and opening of borders and markets. As the economic situation deteriorates, we’ll see this trend reverse. Protectionism always follows bad economic times.

Think trade wars, competitive currency devaluations, rising anti-immigration sentiment and increasing nationalistic sentiment. Many of which we’re already seeing the start of...

The bonfire has been stacked high (global debt), the kerosene generously — you could say excessively — poured over the timber (bond bubble), and the torch lit (Chinese yuan devaluation). Now it’s just a matter of putting spark to fire... touching flame to pyre... and seeing the whole world lit up in flames.

As far as the timing for when this global fire begins, I’m reminded of a passage from a book called [Ubiquity: Why Catastrophes Happen](#) (*bolding is mine*):

*In this simplified setting of the sandpile, the power law also points to something else: the surprising conclusion that even the greatest of events have no special or exceptional causes. **After all, every avalanche large or small starts out the same way, when a single grain falls and makes the pile just slightly too steep at one point.** What makes one avalanche much larger than another has nothing to do with its original cause, and nothing to do with some special situation in the pile just before it starts. **Rather, it has to do with the perpetually unstable organization of the critical state, which makes it always possible for the next grain to trigger an avalanche of any size.***

Are you a music fan? Do you know what a crescendo is?

Crescendos are musical repetitions. They build up in tone and pace. Then, all of a sudden... they just stop. Song over.

Think Zeppelin’s Kashmir. That’s a crescendo and a good one.

One of the most famous musical crescendos is [Ravel’s Bolero](#). That one lasts over 15 minutes. It feels like it will go on *forever*.

And therein lies the interesting part about crescendos. It’s that the song stops at exactly the moment when your belief in its durability is at its *highest*.

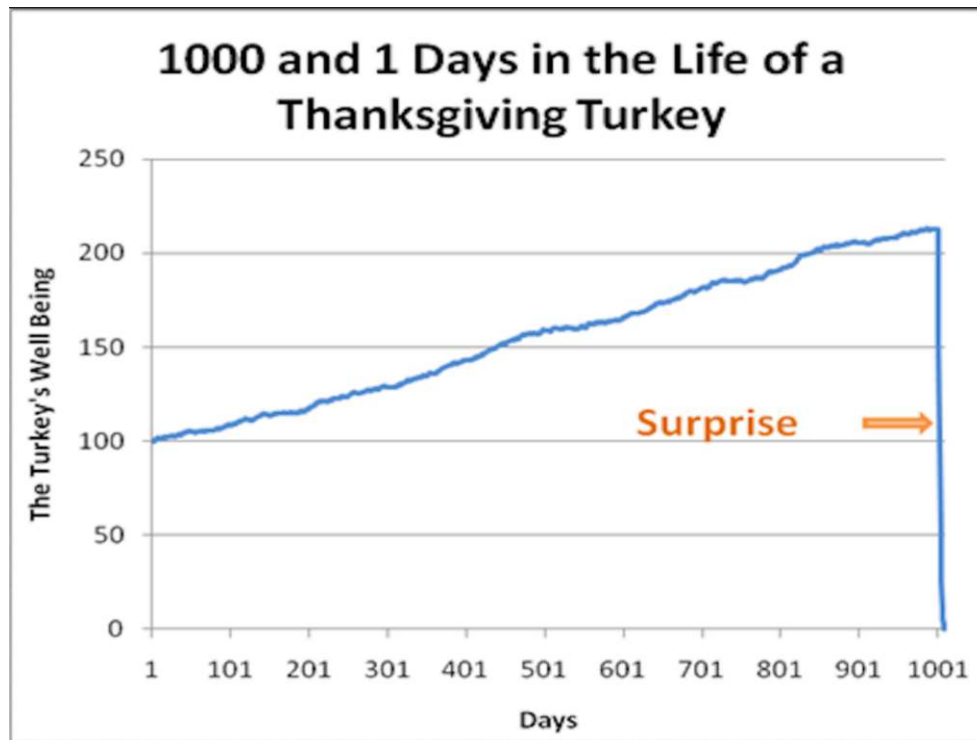
This is similar to the problem of Taleb’s Thanksgiving Turkey. Nassim Taleb is the guy who popularized the term “black swan”, he’s a smart dude.

His story of the Thanksgiving Turkey goes something like this.

Consider a turkey that is cared for by its owners. Every day of the turkey’s life he is fed and sheltered as he grows fatter and healthier.

This continuation of positive events reinforces the Turkey’s belief that he is cared for by his owners and will continue to be so.

This goes on and on, until of course the Wednesday before Thanksgiving rolls around. Then the turkey incurs a rude “revision of belief” and is *snapped* — quite literally — into what was just a day before, an unimaginable reality. And as Taleb notes, “Consider that [the turkey’s] feeling of safety reached its maximum when the risk was at the highest!”



Ravel’s Bolero, Taleb’s Turkey, and this Bull Market. All instances where one would be wrong to extrapolate the recent past into the future. All are where the feeling of “maximum safety” will sync with the moment of “maximum risk”.

A clever man writing under the pseudonym “Adam Smith” wrote in his classic from the 60’s [The Money Game](#):

We are all at a wonderful party, and by the rules of the game we know that at some point in time the Black Horsemen will burst through the great terrace doors to cut down the revelers; those who leave early may be saved, but the music and wines are so seductive that we do not want to leave, but we do ask, ‘What time is it? what time is it?’ Only none of the clocks have any hands.

Feeling of maximum safety = moment of maximum risk.

So maybe the music stops... the axe comes down... and the Black Horsemen arrives... once we all stop asking “when’s this song over/what’re they serving at Thanksgiving/when is this bull market over.”



As Adam Smith would say, it's all in the "time"! Once people stop asking for the *time* because they're too caught up in the party is when the party stops, the pyre is lit, and the Four Horsemen of the Global Deleveraging Apocalypse arrive...

I'll let Johnny Cash take us out:

And I heard, as it were, the noise of thunder. One of the four beasts saying, "come and see." And I saw, and behold a white horse... And I heard a voice in the midst of the four beasts. And I looked, and behold a pale horse, and his name that sat on him was death, and hell followed with him.

