THE GREAT

RESET

The Collapse of the Biggest
Bubble in History

Preface

This e-book is an abridged version of everything I wrote about the "Great Reset" in *Thoughts from the Frontline*. I compiled all my findings into this quick-read format for a couple of reasons.

First, without a doubt, these are the most important letters I've ever written. They are the result of decades of closely working with economists and asset managers and analyzing the macroeconomic landscape. But since you joined *Thoughts from the Frontline* just now, you likely didn't have a chance to read them.

Second, the articles reveal the origins of an unprecedented credit crisis that is coming. It will eventually culminate in the "Great Reset," in which the global debt will be "rationalized" via some form of nonpayment.

Whatever you want to call it, a worldwide debt default is likely in the next 5–10 years. We are rapidly approaching the point where there is no simple way to avoid it—the only question now is how we will manage the collapse.

Investigators of transportation disasters, crimes, and terror incidents usually create a chronology of events. We do something similar in economics when we look back at past recessions and stock market crashes. In hindsight, the causes always seem obvious, so why don't people see them coming?

Well, some people *do* see the crisis coming, but no one listens to them. The investing crowd's excessive exuberance and the willful ignorance of policy makers and pundits drown out their warnings.

That's what I have been wrestling with for the last five years. I see this crash coming, and I'm afraid most people will be caught in it unprepared.

People tend to believe the future will play out more or less exactly like the past. But it won't—so we have to restructure our beliefs and portfolios to make sure we get as much of our wealth as possible to the "other side" of this crisis.

Once we've made it through, we will see the greatest bull market of our lives. We just have to get there with our assets intact.

The precise route is uncertain, but the destination is not. Consider this report a kind of "road map" to orient you for the journey.

Corporate Credit Crisis

Key Takeaways:

- The Fed's artificially low rates broke the pattern of economic cycles.
- Today's economy is driven by credit cycles, not business cycles.
- The most likely trigger for the next recession is a collapse in high-yield corporate debt due to a lack of liquidity.
- Dodd-Frank discouraged big banks from making markets in corporate high-yield debt, reducing liquidity.
- Hedge funds filled the liquidity gap, but since they are not market makers, liquidity could quickly disappear.

In 1999, I predicted the tech bubble would eventually spark a recession. Timing was unclear because stock bubbles can blow way bigger than we can imagine. Then the yield curve inverted, and I said recession was certain. I was early in that call, but it happened.

In late 2006, I began warning about the subprime crisis, and shortly afterward the yield curve again inverted, which warranted another recession call. Again, I was early, but you see the pattern.

Now let's fast-forward to today. Here's a quote from my friend Peter Boockvar that drew an enormous amount of interest:

> *"We no longer have business cycles, we have credit cycles."*

Let's cut that small but meaty sound bite into pieces.

What do we mean by "business cycle," exactly? Well, it looks something like this:

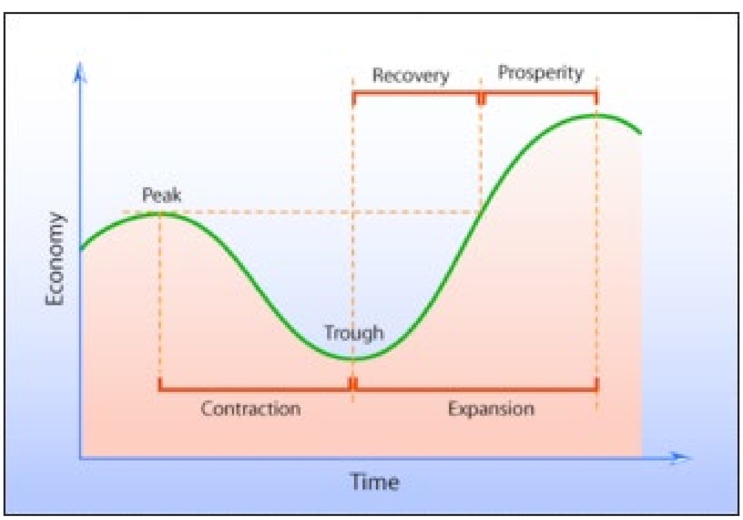


Photo: Wikispaces (Creative Commons license)

A growing economy peaks, contracts to a trough (what we call "recession"), recovers to enter prosperity, and hits a higher peak. Then the process repeats. The economy is always in either expansion or contraction.

This pattern broke down in the last decade.

We had an especially painful contraction followed by an extraordinarily weak expansion. GDP growth should reach 5% in the recovery and prosperity phases, not the 3% (at best) we have seen since 2008.

Peter blames the Federal Reserve's artificially low interest rates. Here's how he put it in an April 18 letter to his subscribers:

> *To me, it is a very simple message being sent. We must understand that we no longer have economic cycles. We have credit cycles that ebb and flow with monetary policy. After all, when the Fed cuts rates to extremes, its only function is to encourage the rest of us to borrow a lot of money and we seem to have been very good at that. Thus, in reverse, when rates are being raised, when liquidity rolls away, it discourages us from taking on more debt. We don't save enough.*

The problem is that over time, debt stops stimulating growth. In the following chapters, you will see that it takes increasing amounts of debt for every point of GDP growth, both in the US and elsewhere. Hence, the flat-to-mild "recovery" years.

Debt-fueled growth is fun at first but simply pulls forward future spending, which we then miss. Debt also boosts asset prices—that's why stocks and real estate have performed so well. If financing costs rise and buyers lack cash, the asset price must fall. And fall it will.

Further, since debt drives so much GDP growth, its cost (i.e., interest rates) is the main variable defining where we are in the cycle. The Fed controls that cost—or at least tries to—so we all obsess on Fed policy. And rightly so.

Now we're entering the much more dangerous reversal phase in which the Fed tries to break the debt addiction. We all know that never ends well.

Corporate Debt Disaster

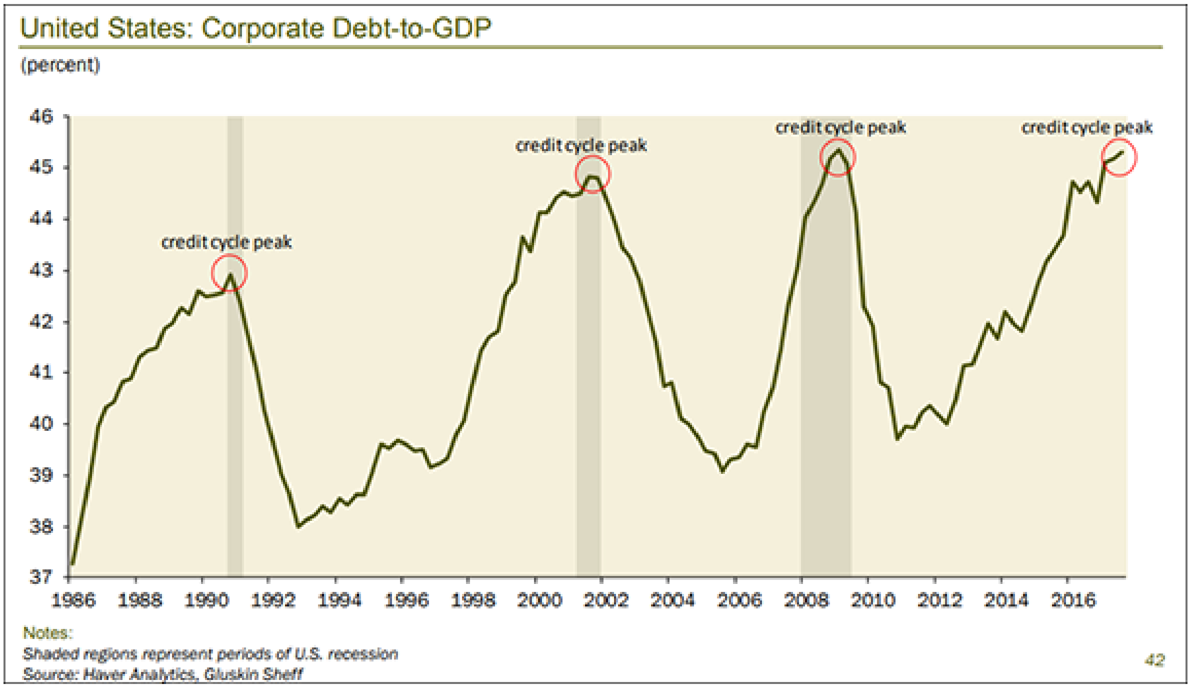
In an old-style economic cycle, recessions triggered bear markets. Economic contraction slowed consumer spending, corporate earnings fell, and stock prices dropped. That's not how it works when the credit cycle is in control.

Lower asset prices aren't the result of a recession. They *cause* the recession. That's because access to credit drives consumer spending and business investment. Take it away and they decline. Recession follows.

If some of this sounds like the Hyman Minsky financial instability hypothesis, you're exactly right. Minsky said exuberant firms take on too much debt, which paralyzes them, and then bad things start happening. I think we're approaching that point.

The last "Minsky Moment" came from subprime mortgages and associated derivatives. Those are getting problematic again, but I think today's bigger risk is the sheer amount of corporate debt, especially high-yield bonds, which will be very hard to liquidate in a crisis.

Corporate debt is now at a level that has not ended well in past cycles. Here's a chart from Dave Rosenberg:



Source: Gluskin Sheff

(By the way, if you see seemingly contradicting debt-to-GDP numbers in this and the following chapters, know that it is impossible to exactly reconcile debt numbers from different sources. "Corporate debt" can be defined in various ways, for one. And some of the "financial" debt gets counted twice because the same money shows up as a deposit at one bank and a loan at another.)

The debt/GDP ratio could go higher still, but I think not much more. Whenever it falls, lenders (including bond fund and ETF investors) will want to sell. Then comes the hard part: to whom?

You see, it's not just borrowers who've become accustomed to easy credit. Many lenders assume they can exit at a moment's notice.

We have two related problems here:

- Corporate debt issuance, especially high-yield debt, has exploded since 2009.
- Tighter regulations discouraged banks from making markets in corporate and HY debt.

Both are problems, but the second is worse. Experts tell me that Dodd-Frank requirements have reduced major banks' market-making abilities by around 90%. For now, bond market liquidity is fine because hedge funds and other non-bank lenders have filled the gap.

The problem is they are not true market makers. Nothing requires them to hold inventory or to buy when you want to sell.

That means all the bids can "magically" disappear just when you need them most.

Worse, I don't have enough exclamation points to describe the disaster when high-yield funds—often purchased by mom-and-pop investors in a reach for yield—all try to sell at once and at fire-sale prices to meet redemptions.

In a bear market, you sell what you can, not what you want to. The picture will not be pretty.

To make matters worse, many of these lenders are far more leveraged this time. They bought their corporate bonds with borrowed money, confident that low interest rates and defaults would keep risks manageable.

In fact, according to S&P Global Market Watch, 77% of corporate bonds that are leveraged are what's known as "covenant-lite." Put simply, the borrower doesn't have to repay by conventional means. Sometimes they can even force the lender to take more debt.

As the economy enters recession, many companies will lose their ability to service debt. Normally, this would be the borrowers' problem, but covenant-lite lenders took it on themselves.

This means the macroeconomic effects will spread even more widely. Companies that can't service their debt have little choice but to shrink. They will do it via layoffs, reducing inventory and investment, or selling assets. All those reduce growth and, if widespread enough, lead to recession.

The problem is that much of the at least $2 trillion in bond ETF and mutual funds isn't owned by long-term investors who hold to maturity. When the herd of investors calls up to redeem, there will be no bids for the "bad" bonds. But funds are required to pay redemptions, so they'll have to sell their "good" bonds. Remaining investors will be stuck with an increasingly poor-quality portfolio, which will drop even faster.

Those of us with a little gray hair have seen this before, but I think the coming one is potentially biblical in proportion.

The Great Reset

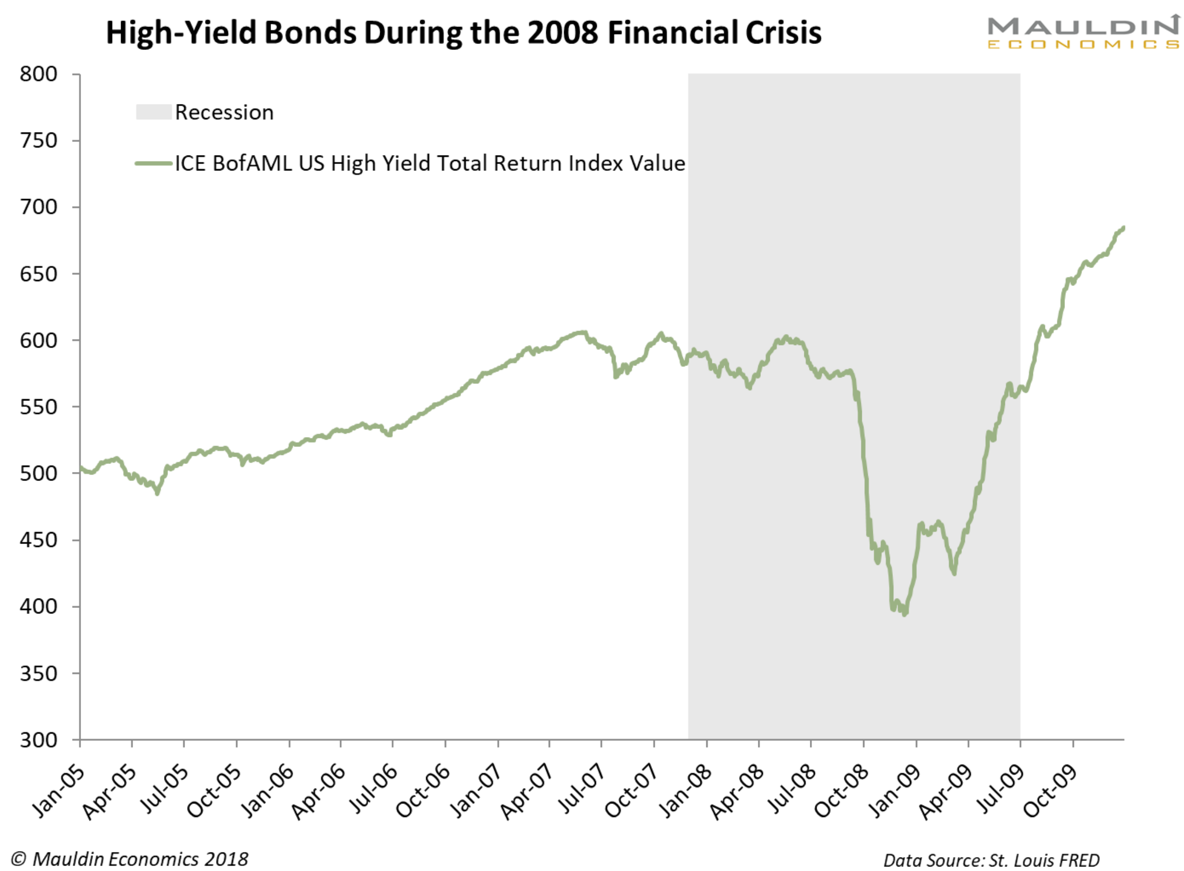
Key takeaways:

- A crisis in high-yield corporate debt will be the beginning of "The Great Reset."
- As lower-quality corporate bonds drop to junk status, institutional investors will be forced to sell, drying up liquidity.

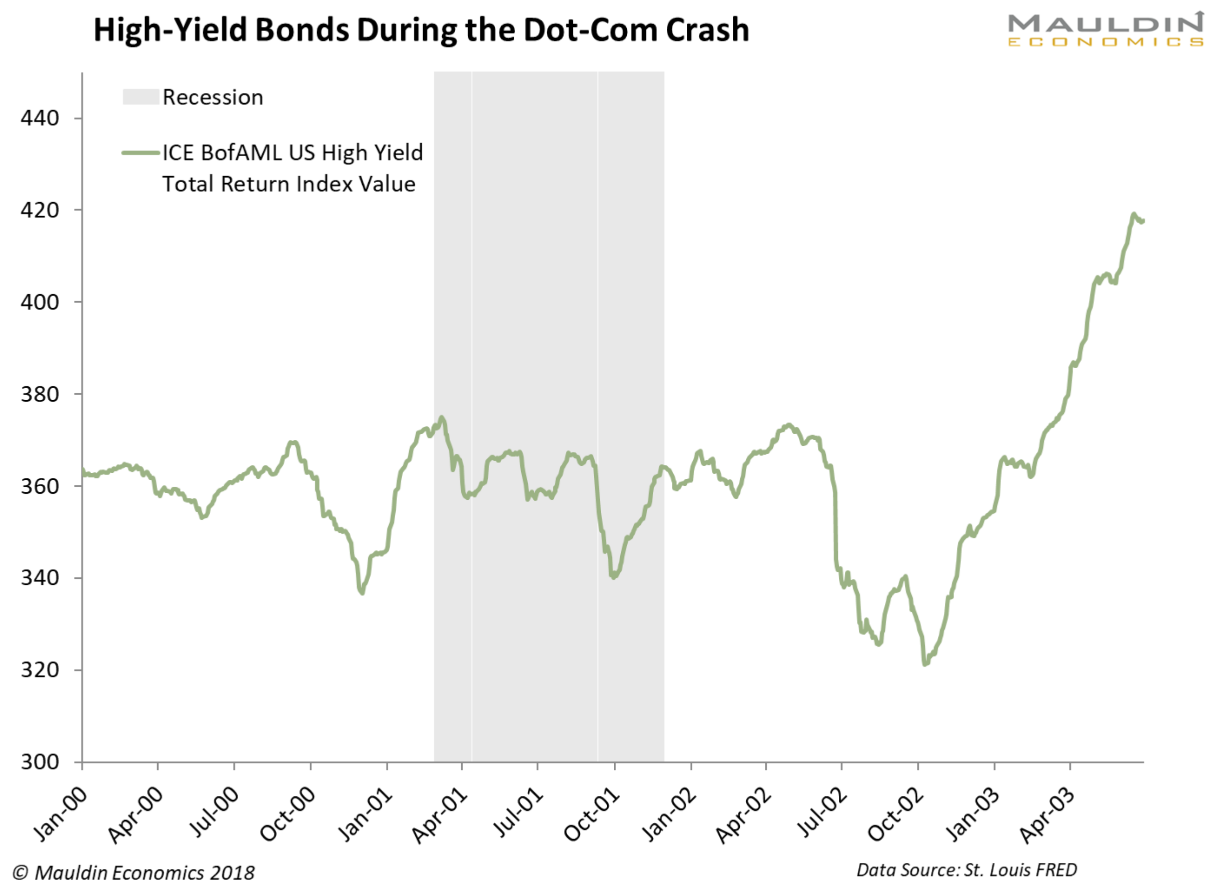
- The selling will spill over into stocks and eventually trigger a recession.
- As the recession unfolds, the Fed and other central banks will pull back from QE reversal plans.
- The world has too much debt, which will force governments to find a way to "reset" it.
- All of this will lead to the most volatile decade in US history.

In the previous chapter, I described the coming credit crisis as a potential trigger for the next recession. The core problem will be what I mentioned: illiquidity. Trading can and will dry up in a heartbeat at the very time people want to sell.

In late 2008, the high-yield bond benchmarks lost a third of their value within a few weeks, and many individual bond issues lost much more, in large part because buyers disappeared.



The same thing happened in the dot-com recession, though not quite as dramatically. There were several whipsaws and a particularly terrible month in June 2002.



This time, I believe the collapse will go deeper and happen faster because Dodd-Frank has reduced market makers' ability to cushion it.

Likewise, the Fed will be reluctant to bail out ridiculously priced bonds like WeWork and its many covenant-lite, unsecured brethren.

But the initial credit crisis stemming from the fall of high-yield bonds will be merely the *beginning of woes*. Illiquidity will spread as lower-quality corporate bonds drop to junk ratings. Legal and contractual constraints will force institutions to sell, pressuring all except the highest-grade corporate and sovereign bonds.

Treasury and prime-rated corporate bond yields will go down, not up (see 2008 for reference on this). The selling will spill over into stocks and trigger a real bear market—much worse than the hiccups we saw earlier this year.

I give the probability of a credit crisis in the high-yield junk bond market somewhere close to 95%. Nothing is 100% certain, but I think this is pretty much baked in the cake.

Lending Drought

Remember how I described the new cycle in the previous chapter. Instead of recession pushing asset prices lower, lower asset prices *trigger* the recession. That will be the next stage as falling stock and bond prices hit borrowers.

Rising defaults will force banks to reduce their lending exposure, drying up capital for otherwise creditworthy businesses. That will put pressure on earnings and reduce economic activity, and a recession will follow.

This will not be just a US headache, either. It will surely spill over into Europe (and may even start there) and then into the rest of the world. The US and/or European recession will become a global recession, as happened in 2008.

As always, a US recession will spark higher federal spending and reduce tax revenue, so I expect the budget deficit to quickly reach $2 trillion or more. Within four years of the recession's onset, total government debt will be at least $30 trillion.

All of this will further constrain the private capital markets and likely raise tax burdens for everyone—not just the rich.

The Great Reset

As this recession unfolds, we will see the Fed and other developed-world central banks abandon their plans to reverse QE programs. I think the Federal Reserve's balance sheet assets could approach $20 trillion later in the next decade—roughly quintuple what they did after 2008.

They won't need to worry about the deflation that usually accompanies such deep recessions (dare we say depression?), because the Treasury will be injecting lots of high-powered money into the economy via deficit spending.

That's what they will do, but it won't work.

As you will learn in the following chapters, the world simply has too much debt, much of it (perhaps most) unpayable. At some point, the major central banks of the world and their governments will do the unthinkable and agree to "reset" the debt.

It doesn't matter how, they just will. They'll make the debt disappear via something like an Old Testament Jubilee.

I know that's stunning, but it's really the only possible solution to the global debt problem. Pundits and economists will insist "it can't be done" right up to the moment it happens—probably planned in secret and announced suddenly. Jaws will drop, and net lenders will lose.

While all that is brewing, technology will keep killing jobs. It's projected that 20–40 *million* jobs will be lost in the US alone and hundreds of millions across the developed world.

As we get into the 2020s, the presidency and Congress will again be whipsawed, and we will begin to discuss Bernie Sanders' "crazy" universal basic employment idea, or others like it. By then, the idea will not be considered crazy, but the only feasible choice.

All of this is going to lead to the most tumultuous decade in US history, even if we (hopefully) avoid throwing a war into the mix.

If we somehow get through all that, and particularly the Great Reset, the 2030s should be pretty good. In fact, think incredible boom. No one in 2039 will want to go back to the good old days of the 2020s.

Our kids will think it was the Stone Age. But we have to get there first.

The good news is that there is still plenty of time to prepare, but you need to start planning now.

WeWork and Other Junk

Key takeaways:

- WeWork exemplifies the typical borrower in the high-yield bond market that is vulnerable to even the slightest economic shock.
- The defaults and losses in this market will bleed into the banking system because lenders and businesses connected with borrowers are overleveraged.
- Despite rising risks, corporate bond yields are declining, which is typical end-of-cycle behavior (in search of yield, investors put money in the riskiest places).
- Even investment-grade corporate bonds are no longer safe, with more than half of them being rated BBB, which is one step above junk.
- As the sell-off begins, covenant-lite conditions and the forced selling of high-yield bonds by institutional investors will spark a massive liquidity storm.
- The collapse of high-yield debt will have a similar result to the subprime mortgage crisis in 2008.

In the previous two chapters, I talked about potential problems in the high-yield bond market. That's the polite name for "junk" bonds, issued by companies that can't earn an investment-grade rating even from our famously lenient bond rating agencies.

This is a two-layer threat.

First, many of these companies are so marginal that even a mild economic downturn could render them unable to make bond payments.

Next, bondholders will want to sell those bonds, but the liquidity they presume probably won't be there.

I could point to many examples, but we'll take one that I think reflects the issue best: WeWork. The still-private company issued bonds last year, giving the public a peek into the books.

The offering raised $702 million at 7.875%—a nice yield if it lasts the full seven-year term. That is, if you get your capital back at the end of those years. I'm not convinced investors will.

I have to admit WeWork has a clear business model, one proven by other companies, and it is executing that model with panache and flair. The company signs long-term leases for office space, then subleases to the hordes of freelancers and independent contractors who need an inexpensive workspace. Much of it is just tabletop space in open suites.

The risk is that WeWork's renters could disappear quickly if their own income dries up, as will happen for many when the economy breaks. Investors seem to believe this risk isn't just manageable, but *negligible*.

So, if WeWork's renters disappear, the first victims will not be WeWork, but the property owners who leased space to WeWork. They may have little recourse. But they're probably leveraged themselves, so the losses will flow upstream, eventually to the banking system.

And we know where that ends.

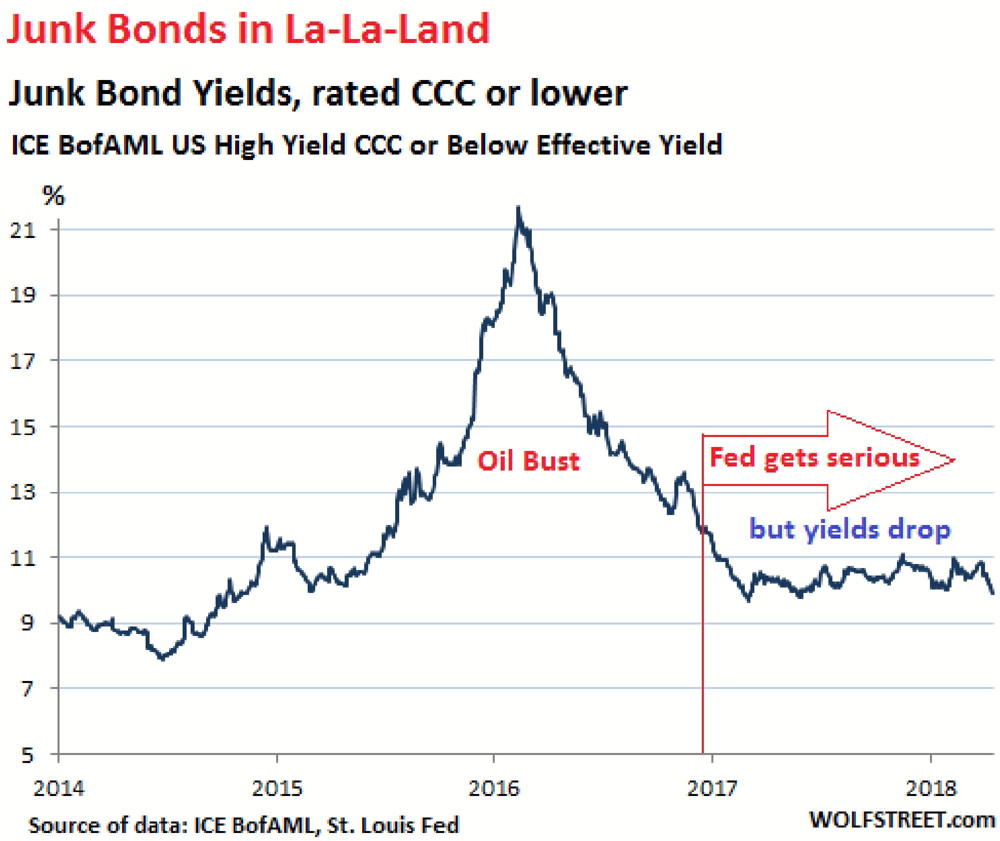
Here's the truly scary part: WeWork isn't unusual. The landscape is littered with similarly tenuous corporate borrowers. It is the inevitable consequence of a free-cash decade.

Yields Act Crazy

There's something else interesting and a little counterintuitive.

You might think the yield on bonds issued by risky companies would rise as the cycle matures. That would be consistent with investors demanding more compensation for their risk.

But it hasn't happened that way.



Source: Wolfstreet.com

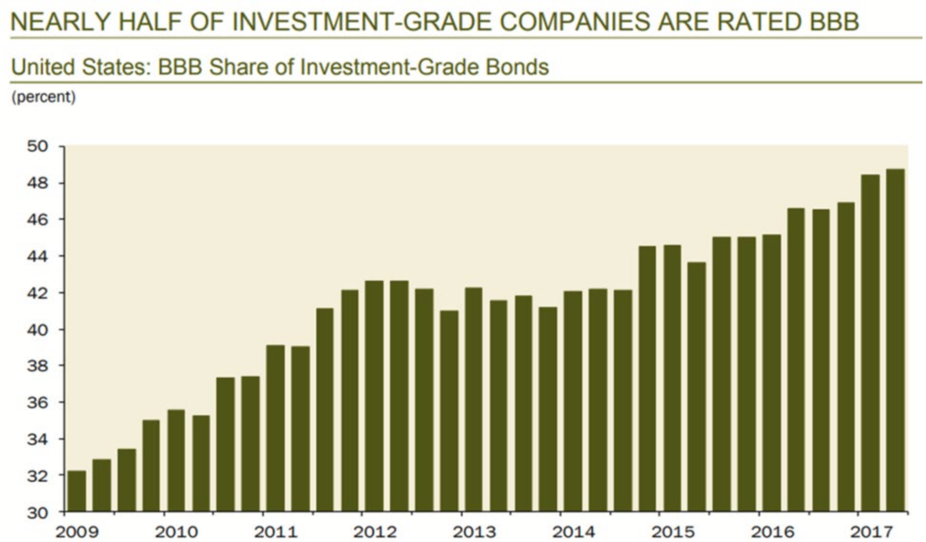
After spiking higher during the 2015–2016 oil bust, when many shale drillers had serious problems, yields dropped in 2017. Not by coincidence—that's also when the Federal Reserve began hiking rates every quarter.

Fearing capital losses, Treasury investors relaxed their credit standards and created more demand for junk bonds, which sent those yields lower. That's my theory, at least.

We're seeing classic end-of-cycle behavior: throw caution to the wind and plunge capital into the market's riskiest corners. This artificially induced buying is propping up companies that would otherwise succumb to the fundamental forces arrayed against them.

Nor is it simply a junk-bond problem; the investment-grade corporate market is becoming measurably riskier too.

Here's another chart from Dave Rosenberg.

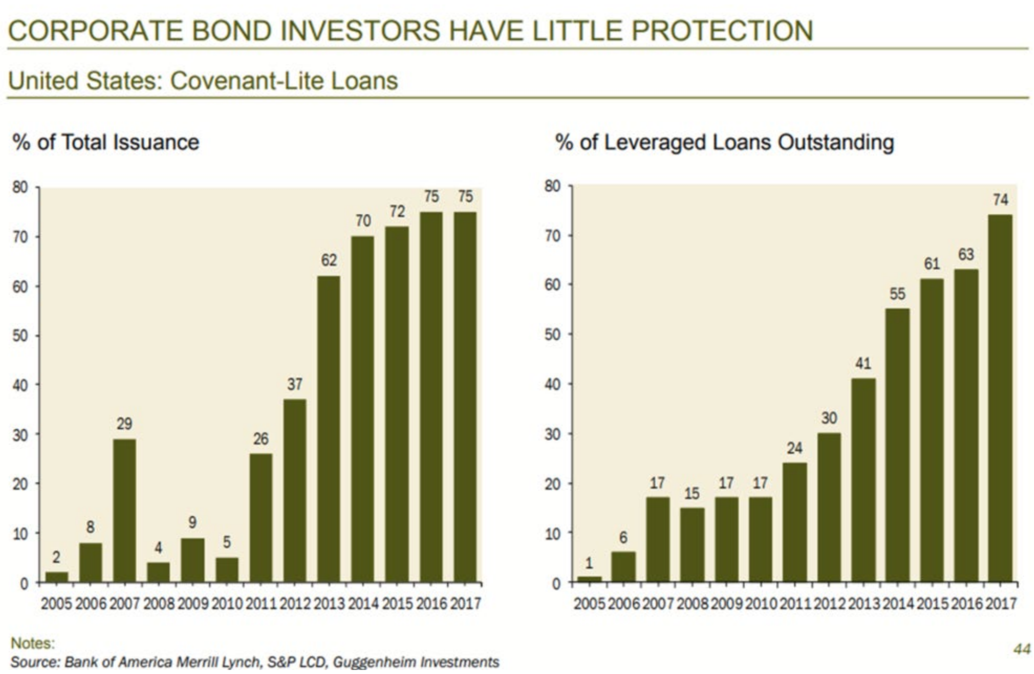


Source: Bloomberg, Gluskin Sheff

Almost half of investment-grade companies are rated BBB, just one step above junk, up from just one-third in 2009.

When the economy breaks, some of those companies will run into trouble. Some of them will get downgraded, which will force many funds to sell them. This will further intensify the liquidity storm I've described.

A few companies will probably default. Bondholders may have little recourse to recover their principal, having accepted covenant-lite conditions and taken on leverage themselves.



Source: Bank of America Merrill Lynch, S&P LCD, Guggenheim Investments

Leveraged lenders will be in a pickle when the defaults begin, but they won't be the only ones. It all flows downstream. Whoever extended credit to leveraged loan buyers will be in trouble as well.

That's how problems in one market spread to others.

The $2 Trillion Threat

My data sources show different amounts of high-yield bond issuance, but all show a lot of it.

Some of these funds are well managed, and others are so large, they buy anything (maybe including WeWork) because they need to invest their incoming cash.

Those numbers don't count high-yield bonds held outside of funds and ETFs. According to the National Association of Insurance Commissioners, the insurance industry has $240 billion worth of high-yield debt, which represents 5.9% of their total bond investments.

Then there are pensions, foundations, and endowments that have their own exposure to high-yield bonds.

The $2 trillion+ in high-yield bond funds and ETFs get marked-to-market every day, so individual investors can see their values go down as well as up. If losses cause enough of them to withdraw, it will force those funds to sell into a shrinking market, putting further pressure on valuations.

In a plunging market, you don't sell what you want, you sell what you can. Funds have to meet redemptions. That means increasingly lower-rated bonds remain for investors who don't move early. Valuations drop, and it just cascades.

A decade ago, we saw a subprime mortgage debt crisis bleed into the rest of the markets. I think this time, the high-yield debt crisis will have the same result.

Europe in Shambles

Key takeaways:

- Europe has many vulnerabilities, like Italy's politics, Spain's banks, Germany's export crisis, and Brexit.
- The European Union is inherently unstable because its members have different interests and don't trust each other.
- The euro regime has made northern nations, especially Germany, wealthy at the expense of impoverished southern members, such as Greece, Italy, and Spain.
- Southern European economies today are devastated by debt and record-high unemployment levels—and with no control over their fiscal policy, they are in a helpless position.

- There's a real chance that the Netherlands and Germany will allow the European Central Bank to mutualize all sovereign debt.

This credit bubble is not only a problem of the United States but a worldwide phenomenon. Europe remains a giant accident waiting to happen—as Italy reminded us last year.

And Italy is not Europe's only problem. The big Kahuna is Germany, which spent years offering generous vendor financing to the rest of the continent to entice the purchase of German goods.

The result: a giant trade surplus for Germany and giant, unpayable debts for those who bought German goods. Greece, for instance.

Worse, a lot of that debt is on the balance sheet of European banks. S&P cut its rating for Deutsche Bank to BBB+. That is only a few notches above junk status. And if there were Italian issues, many German banks could see their ratings fall to below junk.

Spain is not quite the basket case that Italy is, but its banks are certainly wobbly. The UK is still winding its way down the Brexit path as I write this, which doesn't directly affect the euro but is disruptive nonetheless.

All in all, Europe is mostly stable but has problem spots like Italy. All it takes is one of them to blow up to bring the whole structure down.

That's not normal and doesn't happen in a monetary union in which all the members share the same goals. And that's kind of the problem: European governments have irreconcilable interests and thus don't trust each other.

By accident of history and geography, the continent is fractured into dozens of competing economies, languages, and cultures. Unity has long been a dream—but only a dream.

The euro currency union is fatally flawed because it leaves each member state to set its own fiscal policy. There are good reasons for that, but it is not sustainable indefinitely. The Eurozone must get either much more centralized or fall apart.

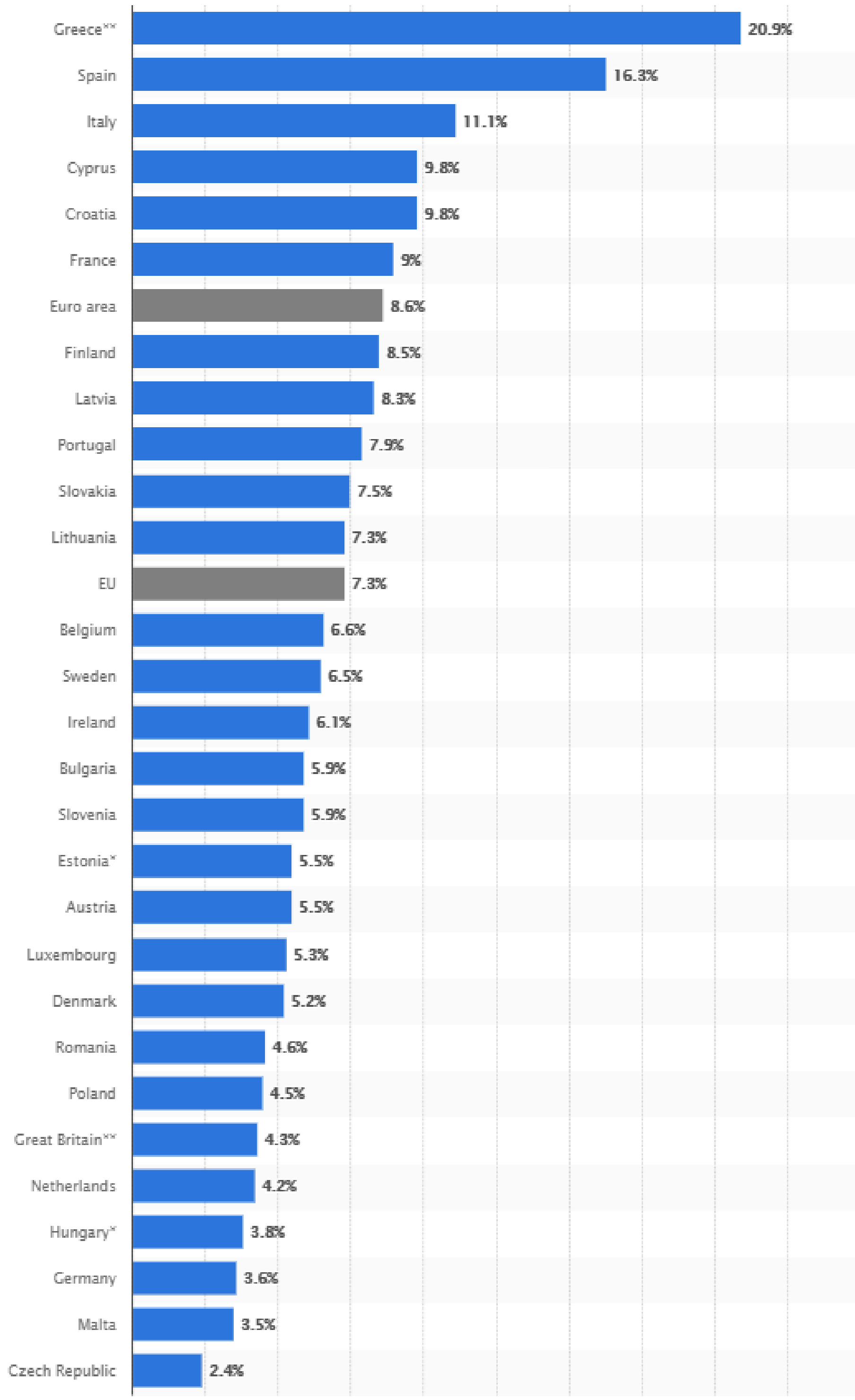
The Mutualization of European Debt

Here's the problem that's brewing. The northern countries, but especially Germany, have prospered tremendously under the euro regime.

If the Eurozone were to break up, German GDP would simply fall out of bed. Half of its economy is comprised of exports. Further, the new German currency would get stronger, which would put even more pressure on German exports.

The Italians have no solution for their debt. Greece has been in a seven-year depression. And while some of the other countries are improving, unemployment rates in most of Europe are still lackluster, to say the least.

The chart below shows the high unemployment rates. The unemployment rates for Millennials are probably double that. That means about one in three Italian youth are unemployed.



Germany and the rest of the export-driven countries need to stay in the euro in order for their economies to grow and prosper. The southern countries, on the other hand, need to figure out how to deal with their debt and unemployment. Italy's debt is around 135% of GDP today.

I think the most probable scenario is that Germany and the Netherlands reluctantly agree to let the European Central Bank (ECB) mutualize all the sovereign debt, taking onto their balance sheet and issuing new ECB-backed debt for the entire zone.

There would have to be serious constraints on running deficits after that point, but it would prevent a breakup, or at least delay it for another decade or so. Kind of the ultimate kicking the can down the road.

Drowning in Debt

Key takeaways:

- The official total government debt in the United States is $24.3 trillion—that's more than 120% of GDP.
- However, the official data doesn't factor in Social Security and Medicare, which are vastly underfunded.
- Both programs have run out of reserves this year, which adds a minimum $50 trillion to government debt, according to the official estimate (professor Larry Kotlikoff thinks the real number is closer to $210 trillion).
- By 2041, Social Security, healthcare spending, and interest payments on the debt will consume 100% of federal tax revenue.
- In the next recession, the US deficit might reach the $2 trillion mark.

In describing our debt problem over the past couple of years, I've discovered a problem: Many of us define "debt" way too narrowly.

A debt occurs when you receive something *now* in exchange for a promise to give something back later. It doesn't have to be cash.

If you borrow your neighbor's lawn mower and promise to return it next Tuesday, that's a kind of debt. You receive something (use of the lawn mower) and agree to repayment terms—in this case, your promise to return it on time and in working order.

As you will learn in the coming chapters, Uncle Sam has made too many promises to too many people, with little regard for its future ability to fulfill them. These are debt. Worse, some of them are *additional* debt on top of the obligations we already see on the national balance sheet.

Even worse, entire generations have planned their retirement lives around the government fulfilling those promises. If those promises aren't met, their lifestyles will be destroyed.

Running Out of Reserves

The official, on-the-books federal debt is currently about $22.1 trillion, according to the US National Debt Clock. $22.1 trillion is the face amount of all outstanding Treasury paper, including so-called "internal" debt. It comes to about 105% of GDP, and that's *only* the federal government.

If you add in state and local debt, that adds another $3.1 trillion—to bring total US government debt to $24.3 trillion (more than 120% of GDP).

Then there's corporate debt, home mortgages, credit cards, student loans, and more. Add it all together, and total debt is about 330% of GDP, according to the Institute for International Finance (IIF).

We are in hock up to our ears.

But it's actually worse than that, due to the kind of promises I mentioned above. Prime among them are Social Security and Medicare.

Strictly speaking, these aren't "unfunded" because they have dedicated revenue streams: payroll taxes. Most Medicare recipients also pay premiums. To date, these revenue sources have covered current expenditures and more, allowing the programs to build up reserves. But that's about to change.

As of this year, both programs are in negative cash flow, meaning Congress must provide additional cash to pay the promised benefits—and it will get only worse.

The so-called "trust funds" are going to run dry sooner rather than later. Last year's annual trustee report estimated Social Security will run out of reserves in 2034, and the hospitalization part of Medicare will dry up in 2026.

So, talking about running out of reserves in 2034 or 2026 is rather meaningless. We've already run out of reserves. Any time a politician talks about putting a "lock box" around Social Security or Medicare trust funds, he or she is either staggeringly ignorant or lying.

Worse, the estimates of when the trust funds run out depend on a slew of assumptions, some of which are too optimistic.

For what it's worth, the Social Security Administration says it has a $13.2 trillion unfunded liability over the next 75 years. That's the benefits it expects to pay minus the revenue it expects to receive.

Medicare projections require even more assumptions, but the "official" assumptions put Medicare's 75-year unfunded liability at $37 trillion. It could be vastly more—or less, if we all get healthier and healthcare costs drop.

My friend Professor Larry Kotlikoff estimates the unfunded liabilities to be closer to $210 trillion. That's a far cry from the $50 trillion official estimate.

So, at a minimum, we can probably assume Social Security and Medicare are *at least another* $50 trillion in debt on top of the $21.2 trillion (and growing) on-budget federal debt.

And then you come to the scary part.

Negative Cash Flow

Last year, the Congressional Budget Office (CBO) released its 2018 Long-Term Budget Outlook. Like the Social Security and Medicare trustees, the CBO makes assumptions, so it's fair to be skeptical of its estimates.

Because the CBO thinks federal spending will grow significantly faster than federal revenue, it foresees debt as a percentage of GDP will likely be 200% of GDP by 2048. But we will hit the wall long before then.

Consider this table from the Committee for a Responsible Federal Budget:

Fig. 2: Projections under CBO's Extended Baseline (Percent of GDP)

	2000	2018	2028	2038	2048
Spending	**17.6%**	**20.6%**	**23.6%**	**26.3%**	**29.3%**
Social Security	4.0%	4.9%	6.0%	6.3%	6.3%
Health Care	3.1%	5.2%	6.7%	8.0%	9.2%
Other Mandatory	2.3%	2.6%	2.4%	2.2%	2.1%
Discretionary	6.1%	6.3%	5.4%	5.4%	5.5%
Interest	2.2%	1.6%	3.1%	4.2%	6.3%
Revenue	**20.0%**	**16.6%**	**18.5%**	**19.1%**	**19.8%**
Deficit	**-2.3%**	**3.9%**	**5.1%**	**7.1%**	**9.5%**
Debt	**34%**	**78%**	**96%**	**118%**	**152%**
Deficit with Extensions	**-2.3%**	**3.9%**	**7%**	**10%**	**13%**
Debt with Extensions	**34%**	**78%**	**105%**	**145%**	**200%**

Source: Congressional Budget Office and CRFB estimates.

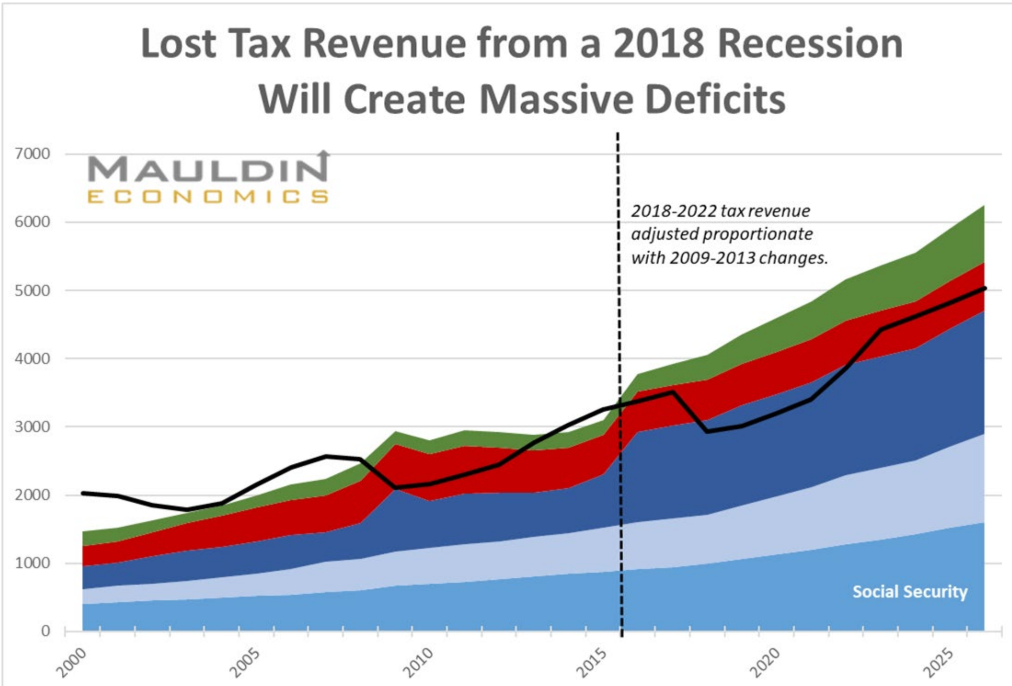
The CBO numbers show that by 2041, Social Security, healthcare spending, and interest payments will consume *all* federal tax revenue. All of it. Everything else the government does (including defense) will require going into more debt.

Yes, making that projection requires an assumption about tax revenue, which requires another assumption about GDP. It could be wrong. But if so, I think it will be wrong in the non-helpful direction because CBO projections don't include recessions and wars.

You think we'll get to 2048 without some years of negative GDP growth? I'll take that bet.

So, take whatever estimates are made about future deficits and debt, and realize they are going to be worse. Kiss your assumptions goodbye. And we are not talking about some distant future. Those spending projections and massive deficits are going to happen in the 2020s.

Here is a graph we used last year. It shows what is likely to happen during the next recession if tax revenue falls to the same degree it did in the last one.



We will have *at least* a $2 trillion deficit in the next recession, plus a bear market that leaves pensions even more underfunded, and a slower recovery because high debt crowds out future growth. Numerous academic studies back up that statement.

The good news is, none of this is going to happen within the next few years—so we have time to make plans. I'm in the same situation as you and already implementing some changes.

Demographics and Pension Debt

Key takeaways:

- Most of our economic problems stem from the rapidly aging population, which is the result of low birth rates and growing life spans.
- The ratio of workers to retirees has been in steady decline since 1940: from 160:1 in 1940 to an estimated 2.3:1 by 2030.
- It is impossible for so few workers to be able to support the increasing number of Social Security and Medicare beneficiaries.

- Today's state and local pension liabilities amount to more than $6 trillion, and the government lacks the money to fund this shortfall.

- The next recession only will exacerbate the problem.

Last year, we've seen a wave of public-school teacher strikes around the US. It started in West Virginia and spread to Kentucky, Oklahoma, Arizona, and elsewhere. Pensions have been an issue in all of them.

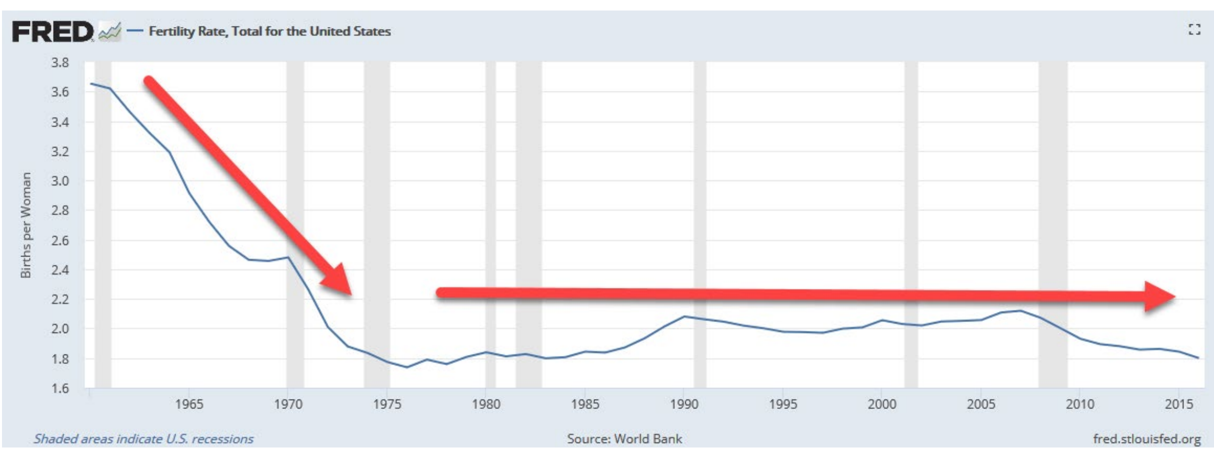
Thinking through this challenge, I'm struck by how many of our economic problems result from the steady aging of the world's population. We are right now living through a combination unprecedented in human history:

- Birth rates have plunged to near or below replacement level, and

- Average life spans have increased to 80 and beyond.

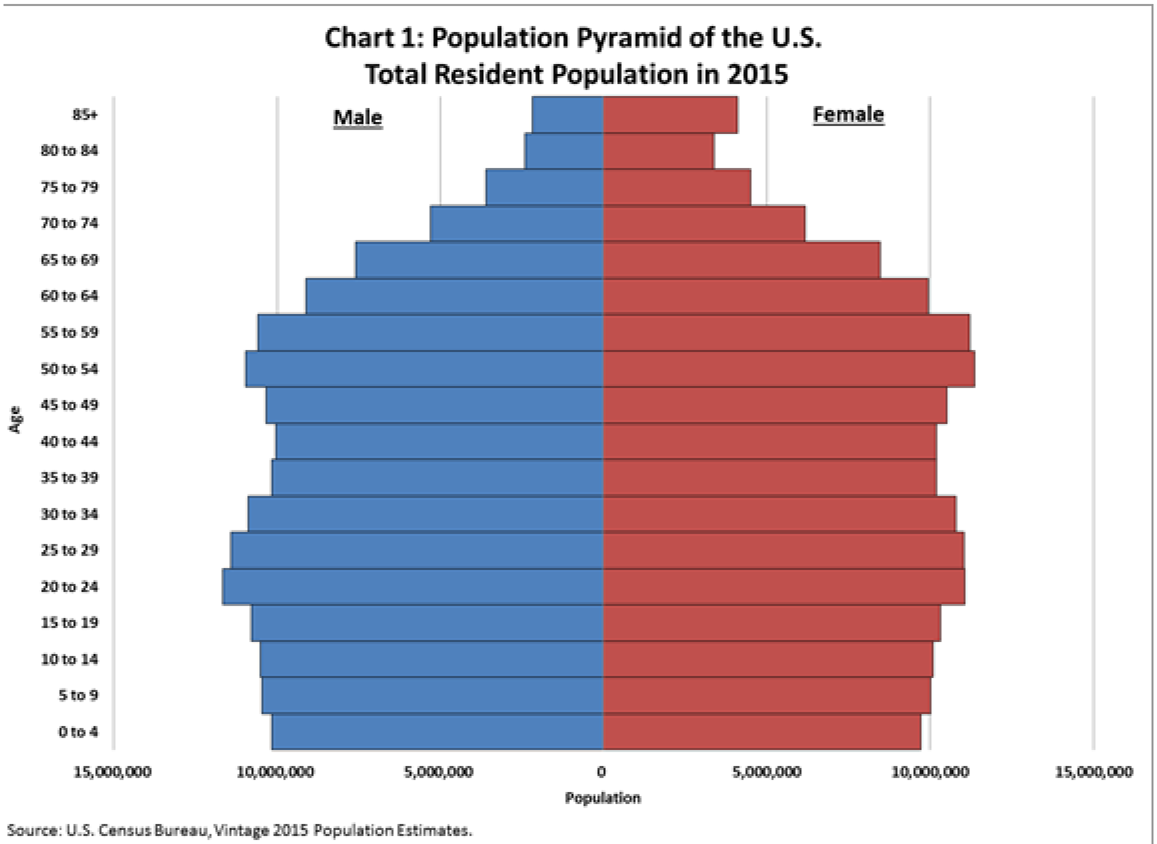
Neither of these happened naturally. The first followed improvements in artificial birth control, and the second came from better nutrition and healthcare. Each is beneficial in its own way, but together they have serious consequences.

This happened quickly, as historic changes go. Here is the US fertility rate going back to 1960.



As you can see, in just 16 years (1960–1976), fertility in the US dropped from 3.65 births per woman to only 1.76. It's gone sideways since then. This appears to be a permanent change. It's even more pronounced in some other countries, but no one has figured out a way to reverse it.

Breaking down the US population by age, here's how it looked in 2015.



Think of this as a python swallowing a pig. Those wider bars in the 50–54 and 55–59 zones are Baby Boomers who are moving upward and not dying as early as previous generations did.

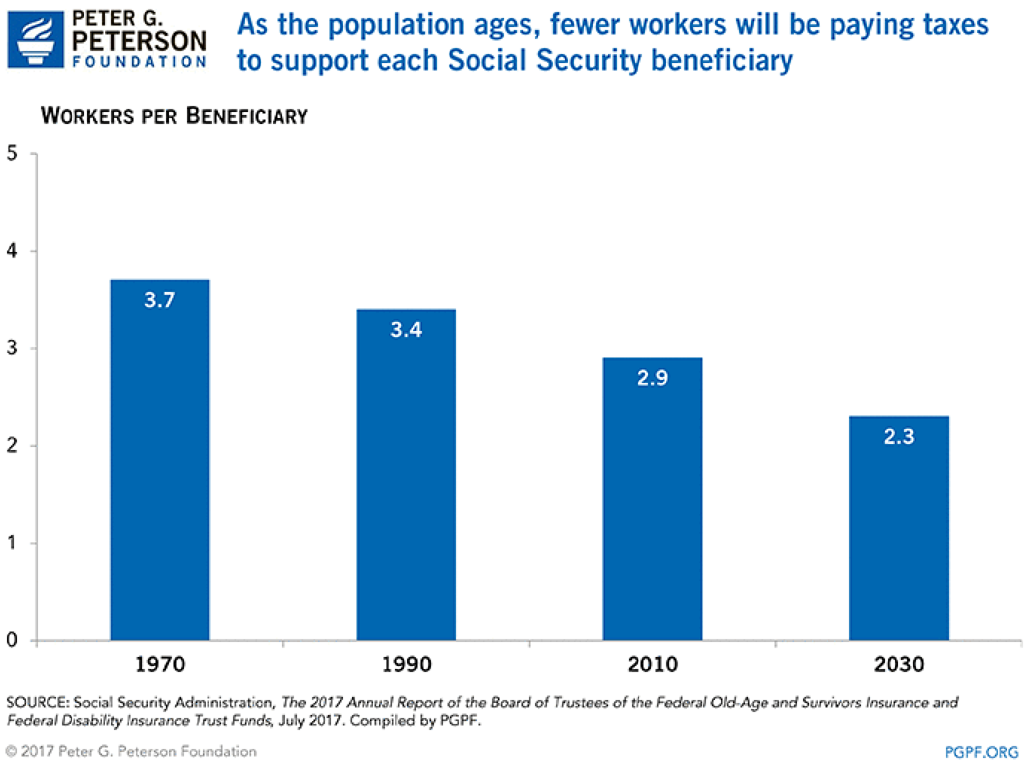
Meanwhile, birth rates remain low, so as time progresses, the top of the pyramid will get wider and the bottom narrower.

This is the basic challenge: How can a shrinking group of working-age people support a growing number of retirement-age people?

The easy and quick answer to this question is to talk about the number of workers supporting each Social Security recipient:

- In 1940, it was 160.
- By 1950, it was 16.5.
- By 1960, it was 5.1.

I think you can see a trend here. As the chart below shows, it will be 2.3 by 2030.



How can two or three workers financially support a retiree while still trying to raise a family with mortgage payments, food, healthcare, etc.?

Obviously, they can't—at least not forever.

But no one wants to admit that, so we just ignore reality. We keep thinking that at some point in the future, taxpayers will pick up the difference. And nowhere is it more evident than in public pensions.

Pension Debt

For a few halcyon years in the late 1990s, pension debt was negative, with many plans overfunded. The early-2000s recession killed that happy situation. Then the Great Recession nailed the coffin shut.

Now pension debt is above 8% of GDP and has barely started to recover from the big 2008 jump.

And this is only state and local worker pensions. It doesn't include federal or military retirees, or Social Security, or private-sector pensions and 401(k)s, and certainly not the millions of Americans with no retirement savings at all.

All these people think someone owes them something. In many cases, they're right. But what happens when the assets aren't there?

The stock market boom didn't help everyone. States' pension funds had nearly $4 trillion of stock investments in 2018. But somehow the unfunded liabilities of state and local pension plans jumped $433 billion in the last year to more than $6 trillion.

There are several problems with this.

First, there simply isn't $6 trillion in any budget to properly fund state and local government pensions. Maybe a few can do it, but certainly not in the aggregate.

Second, we all know about the miracle of compound interest—but in this case, that miracle is a curse. Any underfunded amount that isn't immediately filled will begin to compound.

By that, I mean if you assume a 6% discount rate (significantly less than most pensions assume), the underfunded amount will rise 6% a year. This means in six years, pension underfunding will be at $8.4 trillion if nothing else goes wrong.

Worse, the level of underfunding will rise dramatically during the next recession. Total US government debt from top to bottom will be more than $40 trillion only a few years after the start of the next recession. Again, not including unfunded liabilities.

This is not going to be the end of the world. We'll figure out ways to get through it as a culture and a country, and so will the rest of the world, but it may not be much fun.

European Pension Storm

Key takeaways:

- The UK has a $4 trillion shortfall in retirement savings that is projected to grow to $33 trillion by 2050.
- The UK government's pension liabilities went from a surplus in 2007 to a $500 billion deficit in 2018.
- Switzerland is facing similar retirement headwinds as its population ages and voters reject even the mildest pension reforms.
- Spain is no different—having had a surplus in pension funds just a year ago, the country is soon to run a sizeable deficit.
- Steadily aging populations as well as growing economic and political challenges will only add to the pension woes of European nations.

Non-US readers might have felt a little satisfaction by reading the previous chapters. There go those crazy Americans again, spending wildly beyond their means.

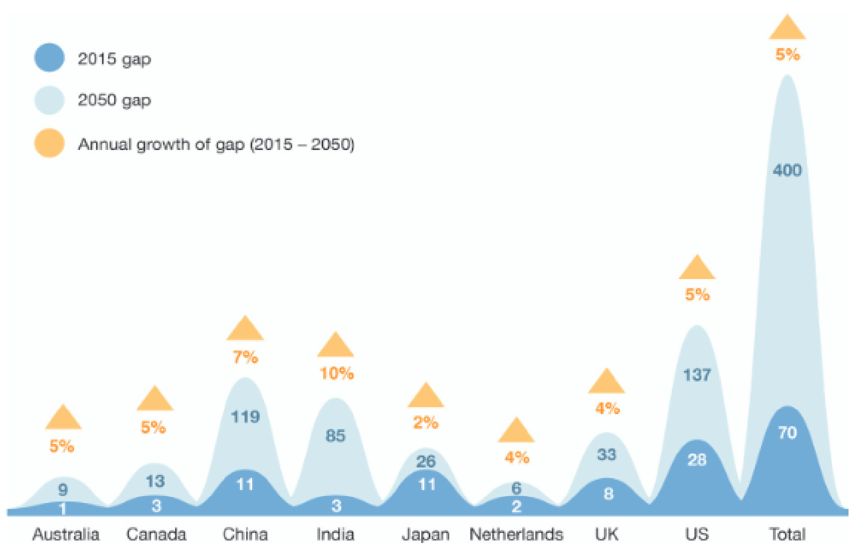
While it is true that we aren't exactly the thriftiest people on Earth, your own country may be more like the US than you think.

A few years ago, a World Economic Forum study looked at six developed countries (the US, UK, Netherlands, Japan, Australia, and Canada) and two emerging markets (China and India), and found a $400 *trillion* retirement savings shortfall by 2050.

That's how much more is needed to ensure everyone of retirement age will receive 70% of their working income, including government, employer, and personal savings—but mostly government.

This staggering number—more than the entire planet's annual GDP—doesn't even include most of Europe. Yet unless those countries somehow find the cash, they *will* break the promises they've made to today's workers.

Figure 4: Size of the retirement savings gap ($ trillions, 2015)



Source: Mercer analysis

Now, let's look at a few individual countries.

Retirement Implosion in the United Kingdom

The WEF study shows the UK with a $4 trillion retirement savings shortfall as of 2015, projected to rise 4% a year and reach $33 trillion by 2050. In a country whose total GDP is around $2.6 trillion, the shortfall is already bigger than the entire economy.

Plus, the estimate was made before the Brexit vote. That major economic realignment could certainly change the outlook.

A 2015 OECD study said developed-country workers could on average expect governmental programs to replace 63% of their working-age income. But in the UK, that figure is only 38%, the lowest of all OECD countries. This means UK workers must either save more personally or severely cut spending when they retire.

UK employer-based savings plans aren't on especially sound footing, either. According to the government's Pension Protection Fund, 72.2% of the country's private-sector defined benefit plans are in deficit, and the shortfalls total £257.9 billion.

Government liabilities for pensions went from well-funded in 2007 to a £384 billion (about $500 billion) shortfall 10 years later and no doubt grew further since. Again, that is a rather large amount for a less than $3 trillion economy.

So, the UK is heading toward a retirement implosion that could be at least as chaotic as in the US.

Switzerland's Woes

Americans often have a romanticized idea of Switzerland. We think it's the land of fiscal discipline and rugged independence. To some degree it is, but Switzerland has its share of problems too. The national pension plan has been running deficits as the population grows older.

In 2017, Swiss voters rejected a pension reform plan that would have strengthened the system by raising women's retirement age from 64 to 65 and raising taxes and required worker contributions. These mild changes still went down in flames as 52.7% of voters said no.

Voters around the globe usually want to have their cake and eat it too. We demand generous benefits but don't like to pay the price. The Swiss, despite their reputation, appear not so different—and that describes most of the world's attitude.

Now, the irony is that even with their problems, the UK and Switzerland are better off than much of Europe. They actually have mandatory pre-funding with private management and modest public safety nets, along with Denmark, the Netherlands, Sweden, Poland, and Hungary.

Conversely, France, Belgium, Germany, Austria, and Spain are all pay-as-you-go (PAYG) countries, with nothing saved in the public coffers for future pension obligations.

Unraveling Retirement Dream in Spain

Spain bounced back from recent crises more vigorously than some of its Mediterranean peers like Greece. That's also true of its national pension plan, which until recently actually had a surplus.

Unfortunately, the government "borrowed" some of that surplus for other purposes, and it will soon become a sizable deficit.

Spain has 1.1 million more pensioners than just 10 years ago, and as the Baby Boom generation retires, it will have even more. Unemployment as high as 25% among younger workers doesn't help, either. And Spain can't debase its currency if necessary because it's tied to the euro currency. That's one reason the Eurozone could eventually spin apart.

In at least some of those pay-as-you-go countries, public pension plans allow early retirement at age 60 or below. The contribution rate by workers is generally less than 25%.

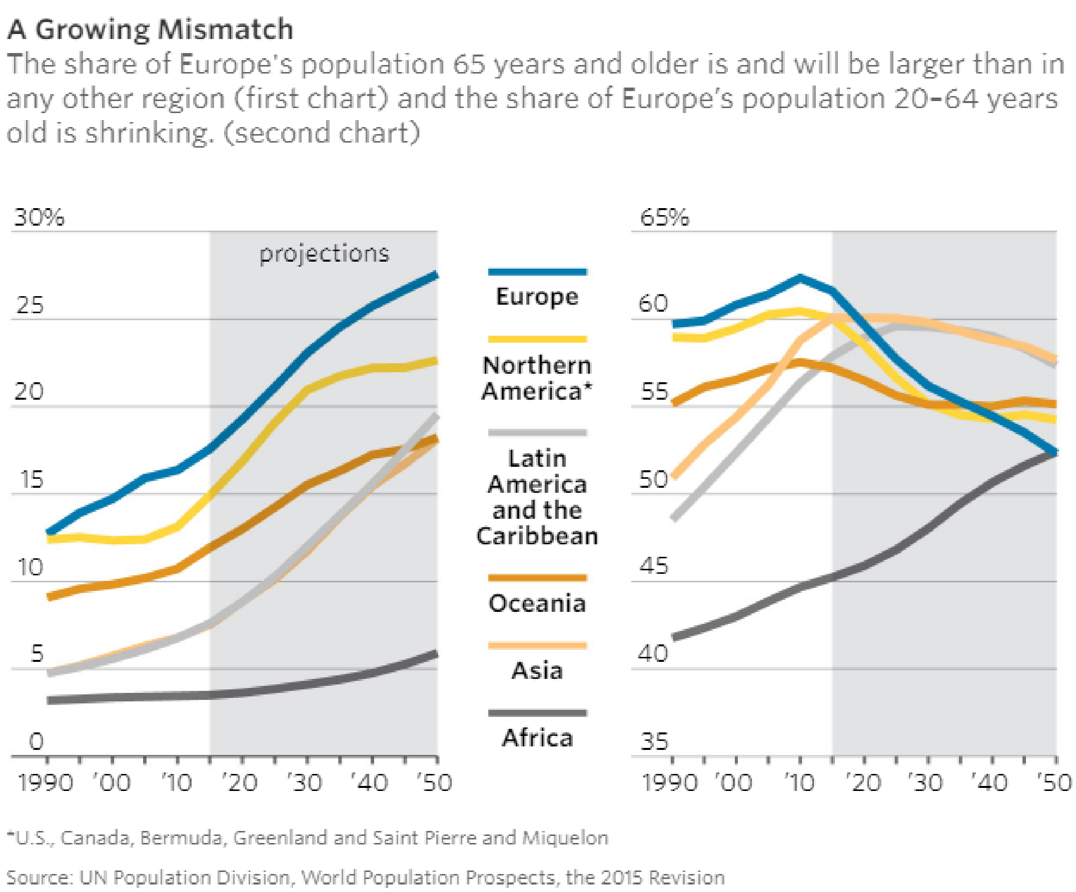
Worse, some governments pay retirees more than they made while actually working—that's more than 100% in Croatia, Turkey, and the Netherlands, and above 90% in Italy and Portugal.

There is simply no way this can continue. These governments have legislated rainbows and unicorns. They will not deliver such benefits, unless wages and benefit payments crash to unimaginably low levels.

No Way Out

Unlike most European financial stories, this isn't a north-south problem.

Austria and Slovenia face difficult demographic challenges right along with Greece. This *Wall Street Journal* chart compares the share of Europe's aged population to other regions, and then the share of working-age population. These are ugly statistics.



Across Europe, the birth rate has fallen 40% since the 1960s to around 1.5 children per woman, according to the United Nations. At the same time, average life expectancy has risen from 69 to 80 years.

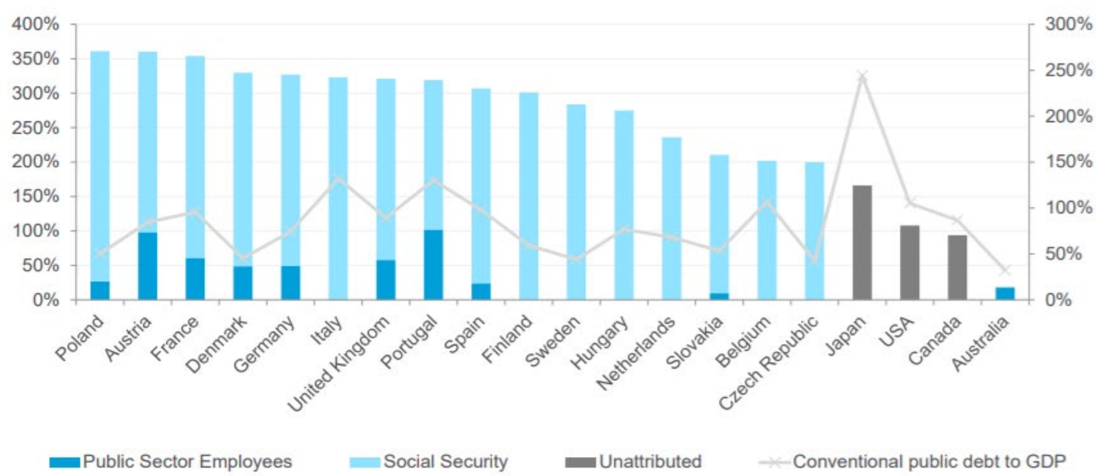
In Poland, birth rates are even lower and the demographic disconnect is compounded by emigration. Taking advantage of the EU's freedom of movement, many Polish youth leave the country in search of higher pay.

Everything I read about the pay-as-you-go countries in Europe suggests that they are in a far worse position than the United States. Plus, their economies are stagnant, and the tax burden is already near 50% of GDP.

That means the total cost of meeting the income and healthcare needs of retirees as a percentage of GDP is going to dramatically increase across Europe.

The line going through each of the countries in the chart below shows their pension debt as a percentage of GDP. Italy is already over 150%. And this is an older chart; a newer chart would look even worse.

Figure 15. Collated Estimates of Contingent Government Pension Liabilities as a % of GDP



Note: Most data based on 'Freiburg' model calculated on 2006 data; UK, Australia and Spain based on National calculations based on 2010 data; US, Japan and Canada based on 1996 data estimated by Chand and Jaeger.
Source: Kaier and Muller (Freiburg University), DNB, OECD, Citi Research

Source: Citi GPS

This problem is far bigger than even the most disciplined, future-focused governments and businesses can easily handle... and it is not limited to any one country or continent. The problem exists everywhere, differing only in severity and details.

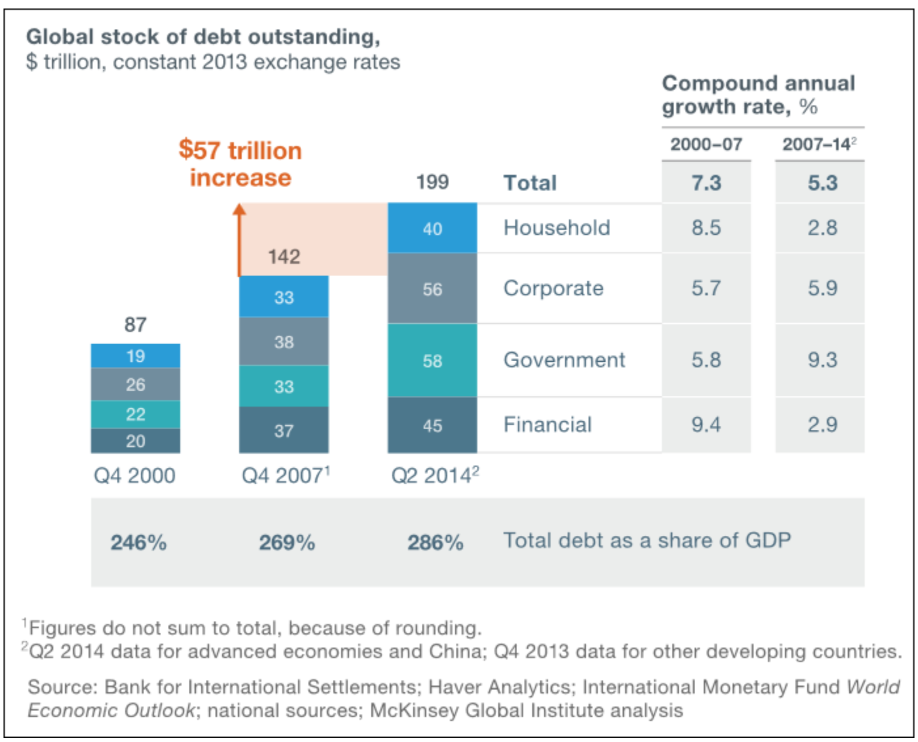
Leveraged to the Hilt

Key takeaways:

- From the 2008 Financial Crisis through 2014, global debt grew from $142 trillion to $199 trillion.
- Encouraged by low interest rates, corporate and government debt grew fastest.
- To make matters worse, much of the corporate debt went to share buybacks, further raising the level of leverage.
- In 2017, the largest debt increases were seen in emerging markets (EM), reaching unsustainable levels.
- Most emerging markets borrowed money in US dollars when the dollar and interest rates were low. As both rise, so will the debt-servicing costs.
- The average non-financial business today is 20% more leveraged than it was during the 2008 Financial Crisis.

In 2014, the McKinsey Global Institute released a massive research report called Debt and (Not Much) Deleveraging. It reviewed the global debt situation and where it might be taking us.

The answers were not pleasant. The McKinsey team created this fascinating graphic summing up the world debt situation.



From the Great Recession's beginning through Q2 2014, global debt grew $57 trillion to $199 trillion. From 2007–2014, world debt levels grew at a 5.3% compound annual growth rate.

That was slower than the previous seven years but still considerably faster than the world economy grew. Hence, debt as a share of world GDP rose to 286%.

But not all the debt categories rose equally. Government debt grew far faster than household, corporate, or financial debt. Household debt growth slowed to a crawl, from 8.5% per year in 2000–2007 to only 2.8% in 2007–2014. Which makes sense because families had little choice but to deleverage, often via bankruptcy.

Government and corporate borrowers faced no such pressure. They kept borrowing and lenders kept lending, encouraged by central bank-generated liquidity.

We talk a lot about profligate governments running up debt, and rightly so, but they are not alone. Businesses are equally—and sometimes more—addicted to debt.

That would be fine and even positive if it were funding innovation and new production. But much of this new corporate debt paid instead for share buybacks that reduce equity, which further increases a corporation's leverage.

Overleveraged Emerging Markets

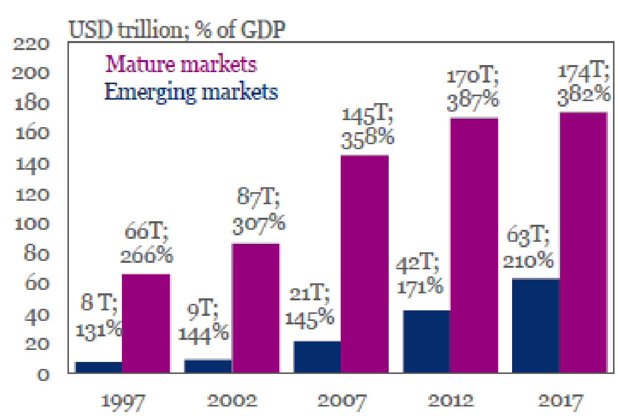
As far as I know, McKinsey has not updated that 2015 report, but we can get similar data from the *Global Debt Monitor* by the Institute for International Finance (IIF).

If the IIF's data and my math are correct, global debt grew at an 8.5% compound rate from 1997–2007 and then slowed to 3.6% from 2007–2017.

But in 2017, debt started rising again. Government debt grew the least, at 6.7%. Non-financial corporate debt went up 11.1%, household debt 12.5%, and financial-sector debt 11.3%.

Here's another IIF chart showing global debt as a percentage of GDP for both developed countries and emerging markets:

Chart 1: Total Global Debt Stock Continues to Rise

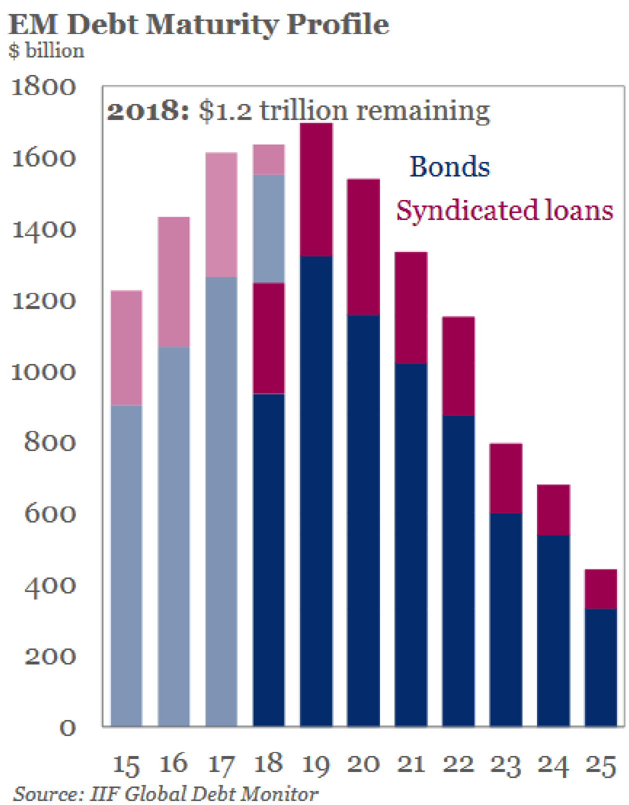


Source: IIF, BIS, IMF

Developed countries are far more leveraged than emerging markets—though at 210%, the latter are no pikers either. They also lack the stabilizing resources developed countries possess. The IIF data points to Argentina, Nigeria, Turkey, and China for the largest debt-to-GDP ratio increases last year.

The problem is that many EM businesses and financial companies borrowed money in US dollars when the dollar was weak and US interest rates low. This level of debt is unsustainable because, among other reasons, debt matures and must be either repaid or refinanced.

Here's emerging-market debt by maturity:



$4.8 trillion in EM debt matures from 2018–2020, and much of it will need to be rolled over at higher rates and, if USD strength continues, in an unfavorable currency environment.

But we have a much bigger concern back home.

Leverage Plus Leverage

The IIF report includes this note about US corporate debt:

> *US non-financial corporate debt hit a post-crisis high of 72% of GDP: At around $14.5 trillion in 2017, non-financial corporate sector debt was $810 billion higher than it was a year ago, with 60% of the rise stemming from new bank loan creation. At present, bond financing accounts for 43% of outstanding debt with an average maturity of 15 years vs. the average maturity of 2.1 years for US business loans. This implies roughly around $3.8 trillion of loan repayment per year. Against this backdrop, rising interest rates will add pressure on corporates with large refinancing needs.*

I see at least three alarming points in this paragraph.

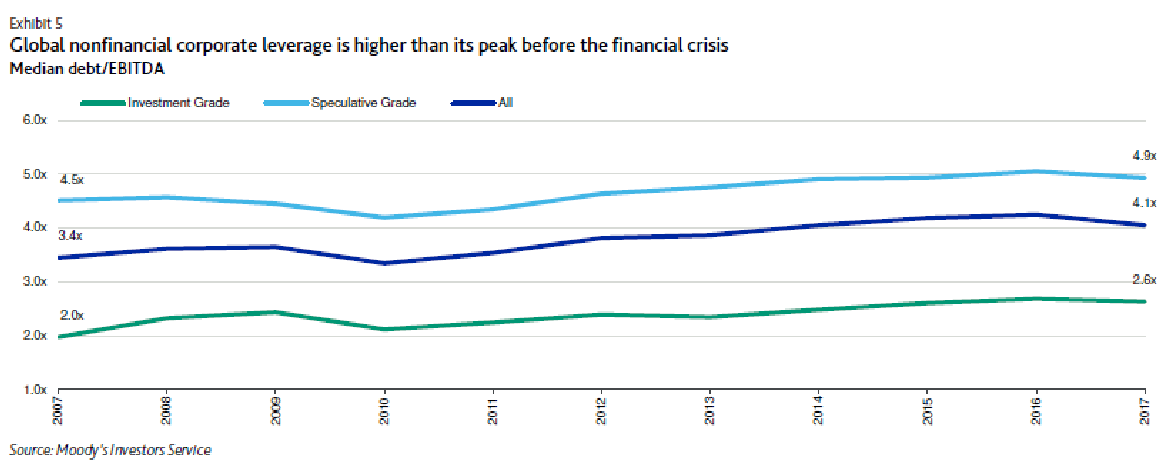
First, corporate debt is now 72% of GDP. That's in addition to the government debt that is approaching (or has passed, depending on how you count debt) 100% of GDP and household debt at 77% of GDP. Add in 81% financial-sector debt, and the US combined debt-to-GDP ratio is near 330%.

Second, 60% of new corporate debt is coming not from bond sales but new bank loans, which have much shorter maturity, averaging 2.1 years. That means refinancing time is coming for much of it, and rates are not going lower.

Third, IIF infers about $3.8 trillion in corporate loan repayments each year¬ just in the US. That's a lot of cash companies need to find.

From a recent Moody's report, we see that 37% (or $2.4 trillion) of US non-financial corporate debt is below investment grade.

The proportion is similar globally. Furthermore, all corporations, both investment grade and speculative, added significantly more leverage since the Great Recession.



Not all leverage is bad, but it's still mind-boggling that just a decade after the Great Recession, the average non-financial business is now about 20% *more* leveraged than it was the last time all hell broke loose.

CEOs and boards seem to have learned little from the experience—or maybe they learned too much. If you believe the Fed has your back, then leveraging to the moon makes sense.

Dodging the Crisis

In this report, I made the case for a coming worldwide debt default/restructuring/financial engineering. Call it whatever you want, but it won't be good.

While we have a few years, I see little chance we can escape some kind of painful reckoning, which will likely culminate toward the middle to the end of the 2020s. And the opportunities to change course are already behind us now.

We can't do anything about that—and the people who can do something are choosing not to—but we can take steps to protect ourselves and maybe even profit from this inevitable crash.

Since I started writing about the "Great Reset" in *Thoughts from the Frontline*, many readers have asked for more specific investment advice.

I'm somewhat limited in what I can say, both for legal reasons and because there's no one-size-fits-all approach. But I can give you some general ideas and rules to follow.

Rule #1: Get Active

The last decade of generally rising markets has given rise to passive "buy and hold" investment strategies. Why pay a manager when you can get great results for lower cost or nearly free with ETFs?

I've never been a buy and hold fan. Nobel laureates who say it's the only way to succeed in the long run are right about the numbers. But they are wrong about human nature.

Any investment strategy works as long as you stick with it. And most investors don't stick with holding their investments. They will panic and sell at exactly the moment a bear market sets in. Every advisor and broker has seen it happen.

Ideally, an advisor should prevent you from making rash decisions. But advisors can only do so much. It's still your money, and they have to pull it out of the market if you say so.

That doesn't mean advisors are useless—a good one can save your bacon. However, it should be someone philosophically aligned with you and in whom you can place enormous trust. They aren't easy to find.

Active managers worth their salt will manage risk as part of the deal. And risk management is exactly what you need as we enter the volatile 2020s.

Rule #2: Diversifying Active Managers

No one is perfect and neither are active managers.

That's not a reason to avoid them. It is a reason to use *several* of them covering different strategies and asset classes. Assembling the right combination takes some skill, though.

It does you no good to have three managers who make and lose money at the same time. That only creates more paperwork. Your portfolio of active managers, so to speak, has to be uncorrelated.

Multiple managers are the core of my personal strategy. I have money allocated to several of them who use it to trade ETFs. In other words, they're *actively* trading a *passive* portfolio. I think this is an ideal combination.

I also am a strong believer in data rather than human discretion. Don't give your money to gun slingers who "have a feel for the market." They will lose their feel right after you invest your money. Trust me.

Also, look beyond the common long/short equity strategies. There are all sorts of interesting markets available. As I've written in the past, the "alpha" in long/short equity has evaporated where passive investors simply buy everything. Even the dogs go up.

It's very frustrating for a value investor, which I consider myself to be. Our time will come, but for now, let's do something else.

Rule #3: Sell Liquidity

This one takes a little more explanation.

If we anticipate a global debt default, then it's obvious we don't want to be a lender. But in reality, it's practically impossible *not* to. Even stashing your money in a bank is technically a loan. Your savings account is a liability on the bank's balance sheet.

Even if you avoid corporate bonds and buy equities, you still might be an indirect lender in case the company leases equipment or real estate to other parties. Those are a form of debt.

The only way not to lend your assets to someone else is to invest in physical, storable property. Gold is a great option, and I think it's a good idea to own some, but only some. What else can you do?

The answer is to keep lending but be smart about it.

Maybe you can't avoid lending or predict whether a debt jubilee will take away your principal. But you can make sure that you earn yields that compensate you for the risk. And the best way to do that is to sell liquidity.

The nice thing about bank accounts, money market funds, and Treasury bills is you can always trade them for something else, with no notice. That's *liquidity*.

But we often forget that liquidity isn't free. Your "price" is a lower yield on those assets.

High liquidity make sense if you really do need that money available instantly, but that's often not the case. People leave cash in money market funds for months and even years. They earn much less than they could by simply buying a three-month CD and rolling it over. There's no significant difference in credit or interest rate risk. It is simply a lost opportunity—a gift you hand to other parties.

Obviously, you want *some* liquidity because things happen, but most investors want too much of it. And it cuts deeply into their returns.

With very little extra risk, you can increase your return on cash by 1%–2% annually. You just accept lower liquidity on money you don't need to keep liquid anyway.

You might do even better.

In the private credit world I've written about (see "The Seven Fat Years of ZIRP"), it's possible to earn 300–600 extra basis points in additional yield. Those opportunities are legally accessible only to high-net-worth investors. But they are worth investigating if you qualify.

Rule # 4: Get Radical on Taxes

Woody Brock, President and Founder of Strategic Economic Decision, predicted that our debt problem will get solved with a wealth tax.

Even if he's wrong, I think the era of lower tax rates on wealthy people is drawing to a close. We had a good 30 years or so, but this most recent tax cut may have been the peak.

However, higher tax *rates* don't necessarily mean you pay higher taxes. We'll just have to get more creative within what the law allows.

For instance, there are ways to use life insurance to defer your taxes. And there are very low cost annuities (as in $20 a month) in which you can control the investment and defer your capital gains until you sell. It's just as liquid as a bank account, but tax deferred.

If you own a small, privately held business without many employees, consider setting up your own defined benefit plan. You can control the investments and place a lot more money into the plan than you can with a traditional IRA or 401(k). I know people with several of these.

Conclusion

To wrap up this special report, I'd like to do a little recap, which I'll begin with the most important statement in this report: "*We no longer have business cycles, we have credit cycles.*"

It is critical to understanding the trends outlined in this report.

I think the next crisis will unfold in four stages.

- **The Beginning of Woes:** Something, possibly high-yield bonds, will set off a liquidity scramble. It will spread through the already-unstable financial system and trigger a broader credit crisis.

- **Lending Drought:** Rising defaults will force banks to reduce lending, depriving previously stable businesses of working capital. This will reduce earnings and economic growth. The lower growth will turn into negative growth, and we will enter recession.

- **Political Backlash:** Employers will automate jobs as they grow desperate to cut costs. Suffering workers—who are also voters—will force higher "safety net" spending, and government debt will skyrocket. A populist backlash could lead to tax increases that prolong the recession.

- **The Great Reset:** The Federal Reserve and other central banks will abandon plans to reverse QE programs. The Fed's balance sheet assets could approach $20 trillion later in the next decade. But it won't work because the world simply has too much debt. They will need to find some way to rationalize or "reset" the debt.

We are talking about debt and unfunded promises to the tune of *multiple hundreds of trillions* of dollars—vastly larger than global GDP.

All that debt cannot be repaid under current arrangements, nor can those promises ultimately be kept. There is simply not enough money and not enough growth. At some point, we're going to have to deal with these issues and restructure *everything*.

Now, people have been saying that for years. Remember Ross Perot and his charts in the early 1990s? We've all heard the doom-and-gloom predictions of the demise of civilization that will be brought on by our Social Security and/or healthcare and/or pension problems.

Nonetheless, these are real problems we must face.

That said, the day of reckoning is not here yet. We have time to adjust and prepare. But I believe that within the next 5–10 years, we'll see the end of the debt-and-government-promises supercycle that has been developing since the late 1930s.

Even though the "Great Reset" may be inevitable, there's also light at the end of the proverbial tunnel. I'll see you on the other side!