The Last Argument of Central Banks

JOHN MAULDIN | November 10, 2014

For a central banker, deflation is one of the Four Horsemen of the Apocalypse: Death, Famine, Disease, and Deflation. (We will address later in this letter why War, in the form of a currency war, is not in a central banker's Apocalypse mix.) It is helpful to understand that, before a person is allowed to join the staff or board of a central bank, he or she is taken into a back room and given DNA replacement therapy, inserting a gene that is viscerally opposed to deflation. Of course, in fairness, it must be noted that central bankers don't like high inflation, either (although, looking around the world, we see that the definition of high inflation can vary). In the developed world, 2% inflation seems to be the common goal. You wouldn't think that 2% a year is a significant change in the overall price structure, but the panic among economists that would ensue with a 2% price deflation would border on hysteria.

IN THIS ISSUE

Definitions of Inflation and Deflation Page 1

Measuring Inflation/Deflation Page 3

Asset Inflation Versus Price Inflation Page 4

So Who's Afraid of Deflation? Page 5

And Then There Is Debt Deflation Page 6

The Last Argument of Central Banks Page 9

New York and New Technology Page 10

Inflation and deflation are often topics of discussions as I travel, but I find that there is general confusion about what inflation and deflation actually are. This is understandable, since many economists don't agree on the definitions, so they are often talking about totally different phenomena. In this week's letter I have for you a brief essay on the topic of deflation. Depending on your view, you might find some of my thoughts controversial, but I will try to make my case clear, at least. Please note this is the 30,000-foot view and is nowhere close to definitive. If you want great detail, I suggest you get my good friend Gary Shilling's latest book on deflation (of four that I know of), called *The Age of Deleveraging*. (It's only $11.49 on Kindle.)

Definitions of Inflation and Deflation

Generally speaking, there are two schools of thought about inflation. The Austrian school of economic theory, founded by Ludwig von Mises, sees inflation as an increase in the money supply and deflation as a contraction in the money supply. Somewhat similarly (but not entirely!), the monetarist school of economic theory tends to see money supply as the chief determinant of GDP in the short run and of the price level over the long run.

Mainstream economics (generally Keynesian) tend to refer to rising or falling prices as inflation or deflation. They tend to see deflation as a general price decline, often brought about by reductions in available credit, money, or reserves or by the government's restraint of spending programs.

So when we talk about inflation/deflation, it is important to know whether we're talking about monetary inflation or price inflation. As we have seen recently, a rising money supply is not necessarily accompanied by rising prices (although there is a certain long-term rhythm to the two different measures).

When I talk to the general public about deflation being something to be avoided, I get confused looks. Don't we like it when the price of something goes down? Who doesn't love a sale on something they want to buy? Since the beginning of the First Industrial Revolution, the general tendency for the prices of manufactured goods (in real inflation-adjusted terms) has been to go down as productivity has gone up. This is what Gary Shilling and others refer to as "good deflation."

You can actually have solid productivity, GDP growth, wealth creation, a general increase in the standard of living, and a buoyant economy during a period of overall price deflation such as we had in the late 1800s – if it is the good kind of deflation.

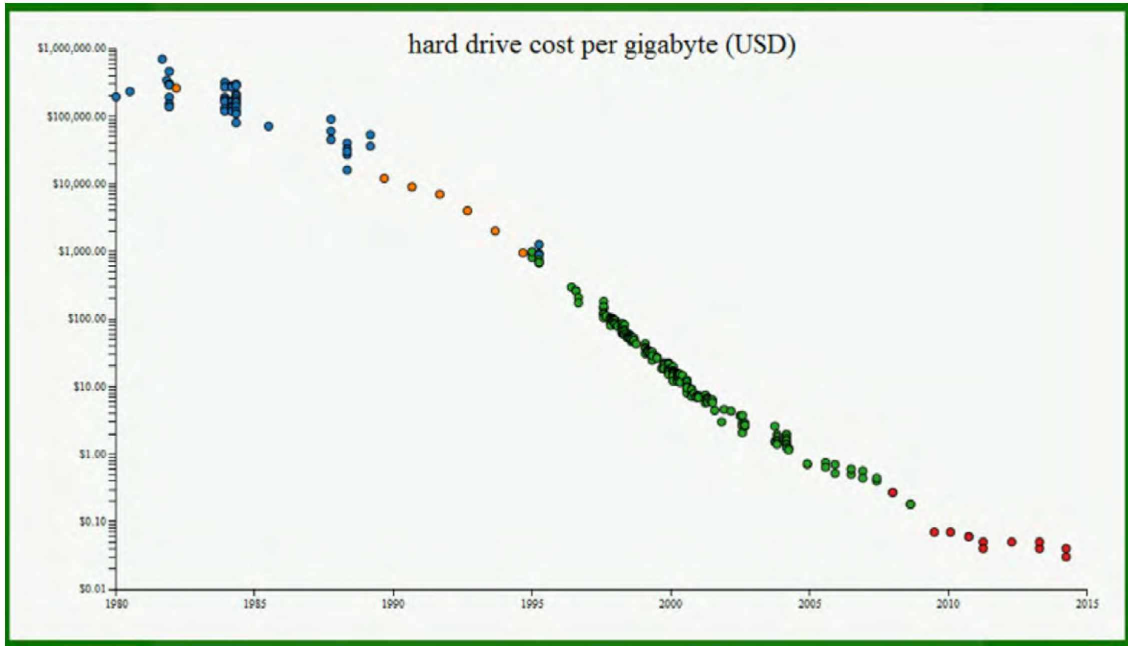
What is the difference between good deflation and bad deflation? Good deflation is the general fall in prices that comes from an excess supply of goods due to increased productivity and product improvement. From 1870 to 1897 wheat prices fell from $1.06 to 63¢ a bushel, corn from 43¢ to 30¢ a bushel, and cotton from 15¢ to 6¢ a pound. Most of the time farmers received even less for their crops.

While farmers blamed all sorts of people for their falling prices, the primary cause of their problem was overproduction resulting from increases in the acreage of farms and increased yields per acre due to improved farming methods, as well as the advent of railroads that made it easy to get produce to Eastern markets. A farmer had to produce more just to stay even. It didn't help that global competition from Argentina, Russia, and Canada was added into the mix, as increasingly large oceangoing steamboats made international transportation cheaper and ended an era of American agricultural export advantages.

This period of time saw one-third of farmers move to the cities for other work as they lost their employment on small family farms. That trend in falling farm employment continued until recent years, and farming has seen even greater increases in productivity (yield per acre) in recent decades. Farm and ranch families are just 2% of the US population today. Only 15% of the US workforce produces, processes, and sells the nation food and fiber. Today's farmers produce almost three times more food with 2% lower inputs than farmers did 60 years ago. A third of American agriculture is strictly for exports.

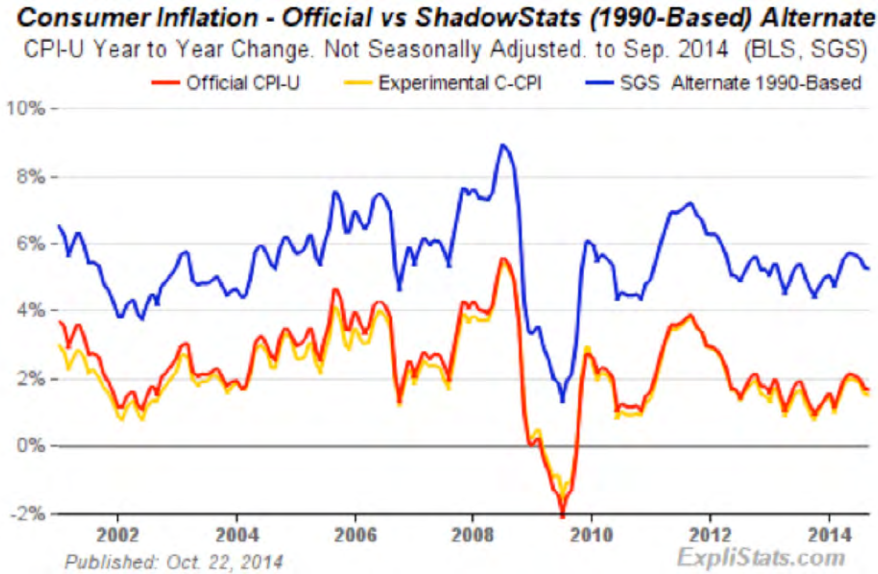
The late 1800s was a particularly contentious period of history in the United States as farmers blamed railroads, bankers, and industrialists for their problems – a situation not unlike the income inequality debate we have today. And while falling prices weren't fun for the farmers, the general public enjoyed lower food costs and higher-quality food.

The easiest way to illustrate this trend in the modern area is by looking at the cost of a gigabyte of storage. You can see an interactive version of this chart here. Prices for a gigabyte of storage dropped from $500-700,000 in the early 1980s (depending on what you were buying) to about $0.03 today. Put another way, a gigabyte cost about 2 million times more 35 years ago than it does today. And it has fallen by 50% every few years. The good deflationary fall in prices for data storage has enabled all sorts of industries and products, creating millions of jobs. And we could find dozens of other, similar products whose prices have been falling dramatically.



Measuring Inflation/Deflation

Each month we are greeted by the announcement of the Consumer Price Index (CPI), telling us what the level of general price inflation has been for the previous month and year. I've written about CPI extensively in past letters, but basically we need to understand that the CPI is an artificial amalgamation of the prices of various products and services. The composition of the CPI has changed significantly over the last 40 years. As John Williams at Shadow Stats demonstrates, if we used the same measurement methodology that was in force during the Reagan years or the early Clinton years, inflation would be almost 4 percentage points higher now than it is currently calculated to be.



Contrary to some commentators, I do not see this is a conspiracy to mislead investors or consumers, or to slow down the rise in Social Security payments. We should all be grateful that there is a small band of economists who are consumed by the details of what inflation actually is. They go to conferences and vehemently argue with each other (well, vehemently for academic economists) over arcane topics that would bore 99%-plus of the population. They are passionate about trying to find the proper measure of inflation.

My personal feeling is that the adjustments that have been made in the calculation of inflation are generally quite reasonable, if somewhat controversial. With the prices of electronics and many other manufactured goods falling over the decades, how do you measure inflation in those items? Or rather deflation? I still spend about the same amount for a new phone today as I did 10 years ago, but my new iPhone 6+ is a major improvement over the Motorola flip phone I had 10 years ago, by any standard you want to apply. Both could make phone calls, but that is about where the similarity ends. Am I getting better value for my money? More bang for the buck? Absolutely.

Currently, the economists who determine inflation see that increase in value as an actual drop in inflation, and they use a somewhat controversial methodology called hedonics to adjust the prices of a myriad of products for quality. If anti-lock brake systems are now standard whereas before they were optional, then by this doctrine the price of your car went down. (Those who are interested can google *hedonics* and get a wealth of information on the definition and the controversy.)

Housing is a big component of our spending. Should we use actual housing prices or what the inflation economists call "owner's equivalent rent prices" as our measure of housing cost increases? If we had used actual housing prices during the 2000s, the inflation figures would have gone through the roof, suggesting to the Federal Reserve that they should be raising interest rates rather than lowering them or keeping them too low. And again, if we had been using actual house prices to calculate inflation during the Great Recession, the economy would have been seen as being swamped by serious deflation. There would've been even more weeping and wailing and gnashing of teeth.

CPI is a useful measure by which to judge the overall trend of the economy, but we have to remember is that it is a simple statistical construct. Just because the CPI says inflation is 2% doesn't mean that inflation for you as an individual or for the economy in general is actually 2%. It is 2% inflation based on current assumptions and methodology. There is a margin of error. The CPI is one of those statistics about which you can say, "it's close enough for government work," … because it actually *is* government work. We have to try to measure price inflation for a host of government and business reasons, but we need to apply a healthy dose of economic reasoning, a little salt if you will, to the stew that is CPI.

Asset Inflation Versus Price Inflation

I was at a conference last month where the rules of participation forbid me from naming the other attendees or disclosing the specifics of what they said without their permission. But I can talk about ideas I picked up. So, name-brand economists (think Nobel Prize winner and central bankers) argued that inflation is too low and that the Fed should continue to provide a stimulative monetary policy and work towards bringing inflation back up. They also argued for a much higher inflation target than 2%.

A famous hedge fund manager raised his hand in the give-and-take and argued that there is plenty of inflation in the United States; it is just asset-price inflation, and nobody complains about that. By that he meant that we have seen a significant rise in the stock market and other asset classes (including real estate) because of current Federal Reserve monetary policy. I won't say that his rejoinder was summarily dismissed, but I felt his point was more or less ignored.

We (as in "us guys and gals in the market," which probably includes you) don't see an increase in the prices of our stocks and other assets as inflation. We just like to think that the market is finally recognizing the value that we saw when we invested in them. The Fed purposely engineered a rising asset-price level because they felt there would be some trickle-down from what is called the wealth effect – i.e., if people have more net worth due to a rising stock market, they will likely spend that money and stimulate the economy. The trouble is, nearly every recent academic paper on the topic has demonstrated that there is, in fact, either no or very little wealth effect. Wall Street, bankers, and investors have made out like bandits under the current policy; and Main Street hasn't benefited to nearly the same extent.

The problem with asset-price inflation is that prices generally keep rising until they've gone too far, and then they fall and you get asset-price deflation. And asset-price deflations (otherwise known as bear markets) are highly correlated with and sometimes the cause of recessions.

The hedge fund manager was expressing a view held by many people (including your humble writer), that by purposely targeting stock market prices the Fed may be laying the groundwork for the next asset-price deflation and recession. It is one thing for the Fed to lower rates in order to stimulate borrowing and thereby theoretically increase demand, and another thing altogether to engage in quantitative easing to stimulate stock markets. At precisely what point did the Federal Reserve decide that they needed a third mandate, that is, to boost asset prices? The only two Congressional mandates for the Fed are to control inflation and stimulate employment. It is not entirely clear what the transfer mechanisms are from monetary policy to employment, so that second mandate is suspect as to how it could actually be implemented, in the opinion of many. There is a lot of theory, and there are demonstrable correlations; but the evidence, in my opinion, that quantitative easing did anything to stimulate employment is sketchy. While unemployment has fallen during the recent periods of quantitative easing, correlation is not causation.

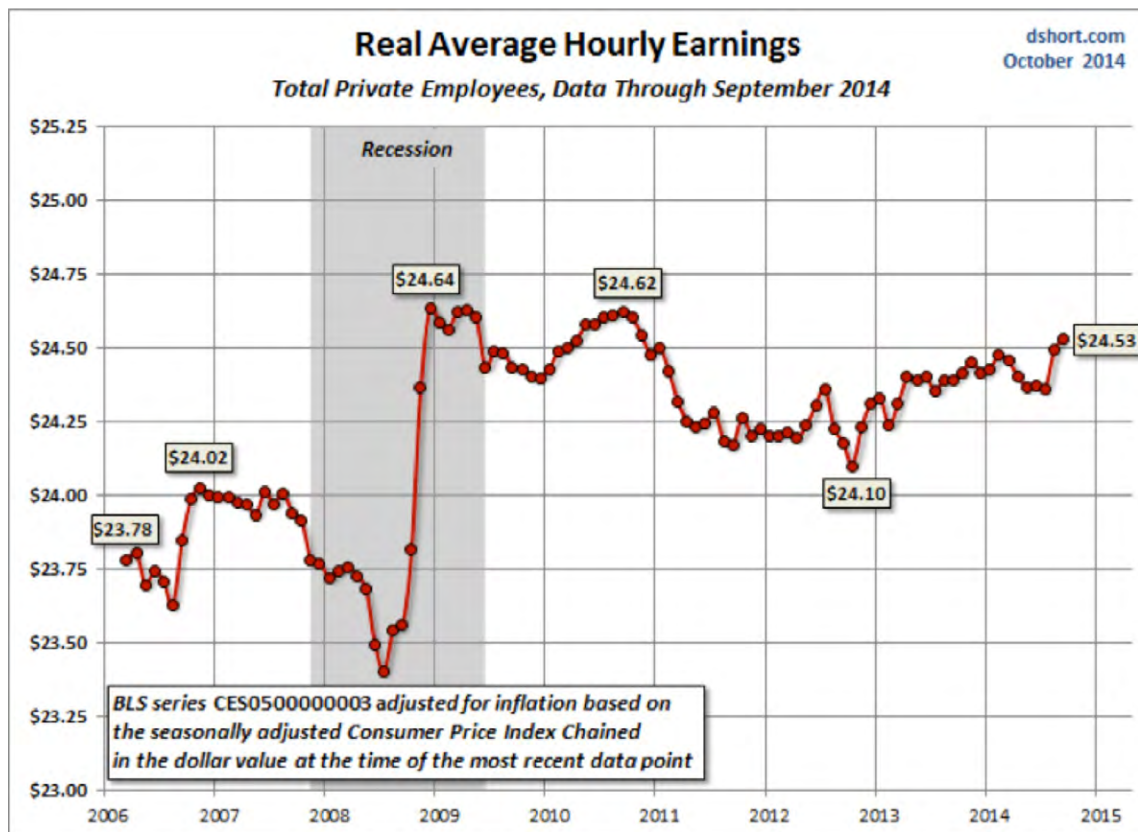
One thing we do know is that significant asset-price deflation almost always leads to a recession and to price disinflation, if not temporary deflation.

So Who's Afraid of Deflation?

If good deflation is not a problem, what constitutes bad deflation? One major cause of deflation is decreased aggregate demand, which is a function of insufficient income and/or availability of credit. This bad type of inflation is typically associated with lower corporate profits and bear markets. It also generally results in lower wages and rising unemployment, which if not halted can become a self-reinforcing downward spiral.

As an aside, this is one of the reasons that Janet Yellen keeps talking about income inequality (lately, somewhat ad nauseam). The demonstrable stagnation of wages of the middle class clearly has a negative effect on aggregate demand. From a Keynesian point of view, the lack of aggregate demand is something both to worry about and to counter.

One of the elements of inflation is rising wages. It is hard to get serious inflation (over 2%) without a concurrent rise in wages. And in general we have not seen a rise in average hourly wages since the end of the recession (for a variety of reasons). The following chart is for the last eight years, but we've all seen numerous charts demonstrating that inflation-adjusted wages have been stagnant for well over a decade if not longer.



This is one of those chicken-and-egg arguments that economists frequently have. There are those who think that if we can stimulate aggregate demand then that will increase profits and GDP and will result in rising wages and lower unemployment. And then there are those (including your humble writer) who think the problem is inadequate income and not enough productivity. In this scenario rising incomes will increase aggregate demand. If that is your philosophy, then the focus of government policy should be not on making it easier to *borrow* money but on making it easier to *make* money. And perhaps on giving people a chance to *keep* more of the money they do earn.

And Then There Is Debt Deflation

And now we come to the real problem that central bankers and governments have with deflation: it makes debt more expensive and thus more difficult to pay back. Deflation is not kind to borrowers, especially governments.

It is not unusual to look at government debt in relationship to the size of the economy as measured by gross domestic product, or GDP. When Dick Cheney argued way back in the dark ages of the last decade that deficits don't matter, he was arguing that if the economy is growing faster than the debt is rising, then your debt relative to GDP is shrinking. I don't think in his wildest nightmares he ever thought we would see debt rising by 6-7% of GDP per year (or more).

When we talk about GDP, we have to know whether we mean nominal or real GDP. For newbies, nominal GDP is GDP unadjusted for inflation, while real GDP is actual growth after inflation is factored out.

If I borrow $200,000 to buy a house, that debt is not inflation-adjusted every year. I negotiate an interest rate that presumably the lender thinks will give him a return over and above the inflation rate. If my income falls, then the percentage of my income I need to pay for that mortgage increases. My debt-to-income ratio increases even though the loan amount stays the same.

Deflation is generally associated with recessions (at least in the modern era). In a recession GDP will shrink and government income from taxes will fall. Even if there is no increase in the debt, the debt-to-GDP ratio will rise as GDP falls.

Let's look at Japan. There the government is trying to engineer a nominal growth rate of at least 4%. They are hoping to have 2% real growth plus 2% inflation. The problem for Japan is that they have had almost no nominal growth for over 20 years, a period they call the Lost Decades. The country has often been mired in outright deflation. And if, as Japan has done, you borrow 5 to 7% of GDP per year in order to run deficits to try to stimulate demand (classical Keynesian theory), you will eventually get to the place where Japan is today, with a debt-to-GDP ratio of around 250%. The only possible ways they can bring that ratio down is to increase nominal GDP to a level above that of the rate of borrowing – or to monetize the deficit and/or actual debt.

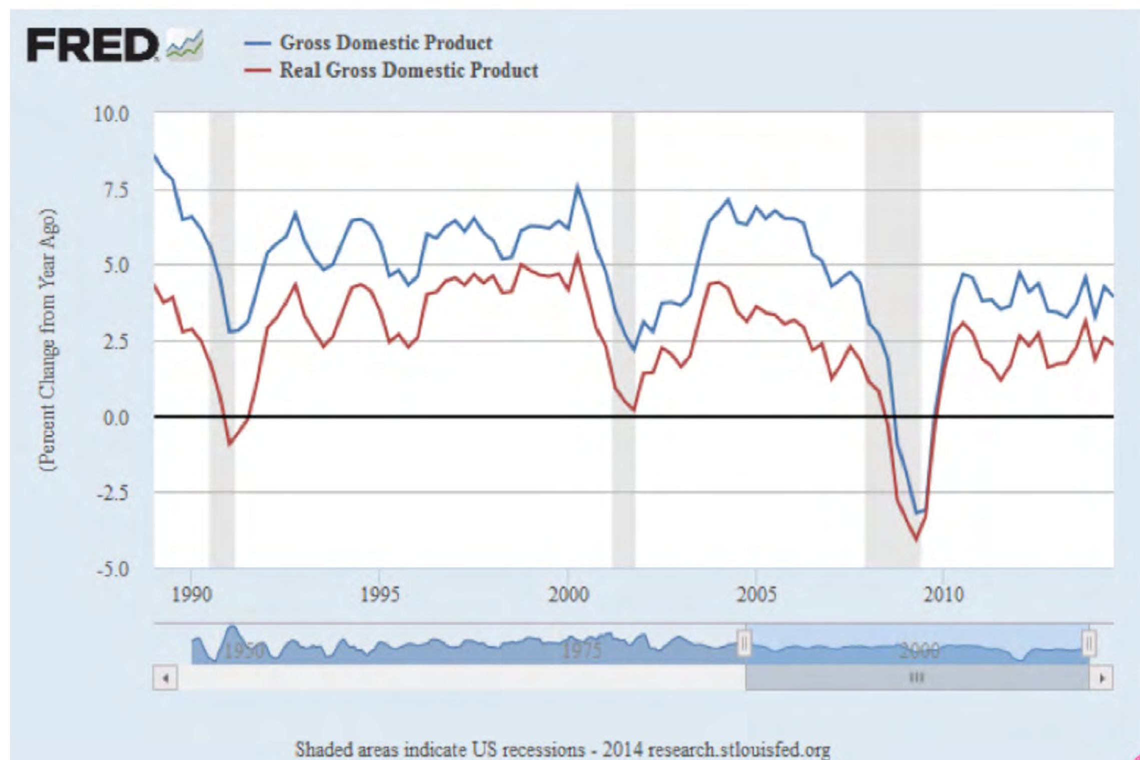
According to my friend Nouriel Roubini, in 2013 Japan's total tax revenue fell to a 24-year low. Corporate tax receipts fell to a 50-year low. Japan now spends more than 200 yen for every 100 yen of tax revenue it receives. It is likely Japan will run an 8% fiscal deficit to GDP this year, but the Bank of Japan is currently monetizing at a rate of over 15% of GDP, thereby theoretically reducing the level of debt owed by government institutions other than the central bank. At some point, when the Bank of Japan has monetized enough debt and the government is running something close to a nominal surplus, including debt service, the debt on the balance sheet of the Bank of Japan will have simply been made to go away (whether de facto or de jure makes no difference – as long as the government is not paying on the debt).

But that monetization comes at a cost. The yen is already down 40% in buying power against a number of currencies, and another 40-50% reduction in buying power in the coming years is likely, in my opinion.

Such a reduction in debt is currently not possible in the Eurozone, which means that European governments must increase their debt at a slower rate than their nominal GDP growth. Since they are all (except Germany) running 3-4%+ deficits and most of the continent is in recession, their debt-to-GDP ratio is getting progressively worse each year, making it more expensive for them to pay off their debt. Even if you think that outright debt monetization is a good thing (and many Keynesian economists do), to implement it would take an almost-impossible-to-achieve rewriting of the treaty that created the Eurozone or a willingness by all the members (and their courts) to ignore the current treaty.

Is it possible to reduce your debt-to-GDP ratio without falling into some sort of austerity-dominated recession? Absolutely. The US did it following the Clinton/Gingrich compromise in the mid-'90s. We were actually reducing our debts and running surpluses at the end of the Clinton era.

But the United States had a very obliging set of circumstances in those days. Not only did we have high growth, we had inflation (as measured by CPI) that averaged well above 2%. Notice in the chart below that nominal growth averaged roughly 6% in the '90s and has barely averaged 4% so far this decade. (For those looking at the chart in black and white, the upper line is nominal GDP.)



This past week we learned that the 2014 government deficit will be only 2.8% of GDP (it last saw that level in April 2005), the first time in a long time it has been below nominal GDP. It is projected to fall again next year before rising in 2016.

For the United States, this represents a reprieve, allowing us some time to deal with potential future problems before government spending rises to a proportion of income that is impossible to manage without severe economic repercussions. Government spending on mandated social programs will rise more than 50%, from $2.1 trillion this year to $3.6 trillion in 2024, potentially blowing the deficit out of control.

If the US economy were to slip into deflation, it would clearly become more difficult to both service the debt and reduce the total debt. And thus the central bank and government aversion to deflation. Not to mention that the experience around the world of deflationary times has not been pleasant. It has been quite some time since we have seen good deflation for any sustained period of time in an economy in the developed world.

Is global deflation in the near future possible? The short answer is yes, for several reasons. Commodity prices are falling all over the world and especially in dollar terms. This is a result of the high prices of the last decade, which resulted in excess supply in a world where demand growth is trending lower, especially the demand growth provided by China. Commodity prices are a key component of the prices of all manufactured goods and of food.

Wages are stagnant, and in general it is hard to see wage inflation, although my friend David Rosenberg swears he can see it coming in his charts. Given the deflationary environment we are in, an increase in wages would be a welcome event. Stagnant wages are a prescription for weak retail sales growth, thus keeping a lid on inflation.

It is very possible that we could see asset-price deflation in the near future and an accompanying bear market. A few weeks ago I discussed the possibility that the next recession will actually be led by a bear market as opposed to the bear market simply resulting from a recession. I should note that the recent bubble-like levels of subprime corporate credit and junk bonds have set up the potential for a collapse in debt valuations. Shades of 2008.

And last but not least, the rising dollar is also somewhat deflationary. A rising dollar in and of itself is not enough to create deflation, but it can help create an environment where deflation takes root.

The elements of a deflationary surprise are all in place. Given the composition and economic beliefs of the current Federal Reserve governing bodies, it is more than likely that monetary policy would become even more easy and quantitative easing would resume should we get close to 0% inflation.

The Last Argument of Central Banks

King Louis XIV had the words *Ultima Ratio Regum* or "The Last Argument of Kings" cast on the sides of his cannons. Central bankers exercise an equivalent last argument when they fight deflation by monetizing debt and lowering their currency valuations. Japan is clearly trying to export its deflation. It has deployed the largest monetary cannons in history and is likely to double down over the next few years. Europe would like to do the same, and a falling yen may force it to do so. One of the classic ways (at least in theory) to fight deflation is debt monetization, which leads to currency wars.

At the beginning of this letter I said that the Four Horsemen of the Apocalypse for central bankers are Death, Disease, Famine, and Deflation. I substituted Deflation for War because the monetary equivalent of war is a currency war, and evidently central bankers today don't see that as a problem that rises to the level of the problems created by deflation.

Too much debt – the environment we find much of the world in today – is inherently deflationary, as debt service takes away from current consumption. Debt is future consumption denied, and at the end of a debt supercycle future consumption and thus total GDP are going to be constrained until the debt is dealt with in some manner. Too much debt has often led to some kind of deflationary period. For all intents and purposes, much of peripheral Europe went through a deflationary recession/depression following the last debt crisis. And their debt has not really been dealt with: it is still hanging around to create a problem in the not far-distant future.

Can you monetize your way out of a deflationary collapse brought on by too much debt? Paul Krugman and the monetary authorities of Japan think you can. Japan is running one of the great economic experiments of all time. Can a productive, generally got-its-business-act-together country monetize 200% of its GDP without devastating, or at least seriously affecting, the buying power of its currency? And at what cost to its trading partners and those countries and companies that must compete against Japanese exports?

I think the coming currency war and the potential for protectionism are the most serious challenges we will deal with in the global economy over the next five years. Stay tuned.

New York and New Technology

I fly to New York on Tuesday, where I will speak at a large institutional conference (and get to hear my friend Ian Bremmer make a presentation earlier in the day). I fly back on Friday after a series of meetings and will then be home for the rest of the month. Or at least that is the plan. Things will be quite busy here since, for once, people are coming to see me rather than the other way around.

I mentioned my new iPhone 6+ earlier. For the first time in the seven years since the iPhone was introduced, my new iPhone actually lets me go a whole day without having to carry a charger with me. Admittedly, there is no new geewhiz technology associated with the battery; it's just that the larger phone allows a larger battery. Which, given that I wanted a larger screen (to accommodate my old eyes), seems like a pretty good deal. An 8-megapixel camera is going to finally force me to start taking more pictures. Maybe it will actually spur me to start posting on Facebook and Twitter more often. The only problem is that I have a face more suitable for radio than video.

And speaking of new technology, Patrick Cox and I have been sharing notes on his recent work on all the fascinating research emerging in a whole new developing branch of nutraceuticals. A few months ago he persuaded me to add a few of the recent developments to my daily pill regime. We are starting work on a report on that topic, which will include a list of the nutraceuticals and other supplements we take. Neither of us feels that is something we can charge for, so we're going to make it free, with the caveat that while we are quite willing to be guinea pigs, you will need to consult your doctor before taking anything. I'm sure I'm taking a number of pills that have no meaningful nutritional or health value; the problem is, I don't know which ones. Whatever I'm doing, it seems to be working. I am loath to mess with what is (so far) a winning formula. Knock on wood.

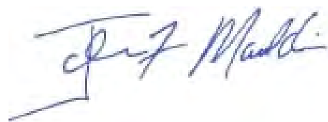
And we will soon be releasing a fabulous new documentary on Bitcoin that my team at Mauldin Economics has produced. It is actually network quality, and I'm quite proud of it. Coming to a computer screen near you – watch for it.

The kids are coming over later to celebrate Melissa's 34th birthday. Some of you may remember that she had a thyroid cancer scare a few years ago. And while we dealt with the cancer, one of the problems of thyroid removal is that you have to substitute synthetic hormones. You would think after 40-odd years of doing this, modern medicine would have it down to an exact science. As it turns out, that is not the case. It is somewhat of an art form to get the dosage right, and there are multiple ways to go about it. You start with a theoretically correct dosage and then adjust from there depending on how you feel. Naturally, with Melissa it was more complicated than that. Her body was not dealing with the synthetic hormone properly, requiring more medications and adjustment. It was just never quite right, and she was always physically out of kilter.

Some 90 days ago she was put on a brand-new drug that is a derivative of pig thyroid hormone rather than synthesized hormones. For the first time in almost two years she seems to have balanced out. Her energy levels have increased, and I actually feel like I have my old Melissa back.

I can smell the chili starting to cook. Melissa inherited my creative kitchen style and has a gift for cooking. Which is to say that we make it up as we go along, and it generally ends up extraordinarily well. If I was half the writer I am a cook, my readers would be even happier. Have a great week. I'm going to start mine off right as a masseuse shows up later tonight and tries to work out some of the kinks.

Your running faster than ever analyst,



John Mauldin

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