

Interest Rates and Inflation*

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Northern Arizona University Thursday, November 14, 2019



*A slightly condensed, but annotated version made available for public access.









Overview



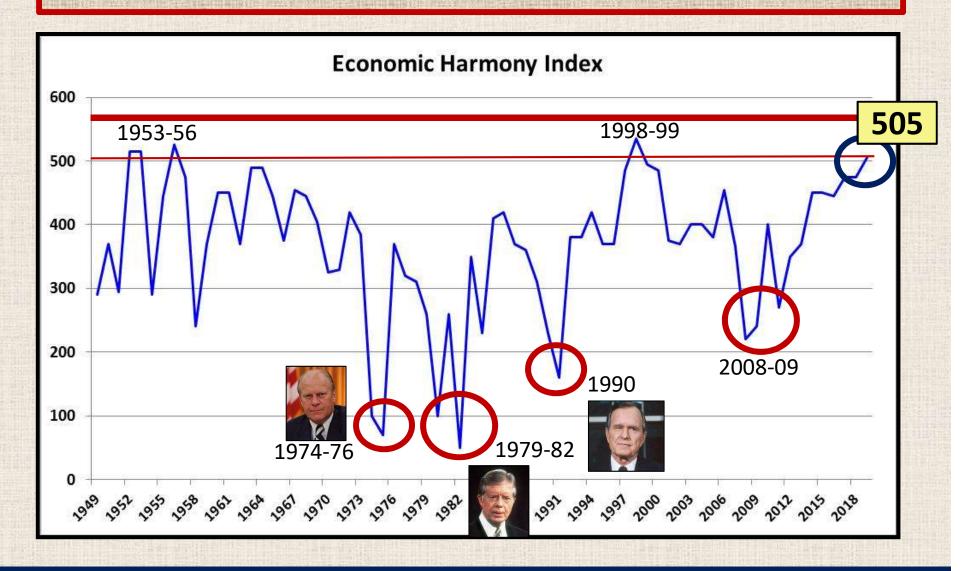
- The Best of Times the Worst of Times Redux
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The Best of Times - The Worst of Times







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Last year I introduced to you an index of my own creation, called the "Economic Harmony Index." Its inspiration comes from the so-called misery index that was often cited back in the 1970s and 1980s.

This index consists of 4 variables – the unemployment rate, the rate of inflation, the prime rate of interest and the growth rate in real GDP. Each has a different weight. I identify what I think is the optimal outcome range for each and assign a positive score to that. Other outcomes that deviate from this get negative scores.

I make a scale adjustment for ease of presentation, where the maximum value the EHI can take is 565 shown by the red line. The value for 2019, where I am basing that off of the first three quarters of data, is an exceptional 505 – surely the best of times.

The only times it has been higher in the past 70 years was in the mid-1950s and 1998-1999.

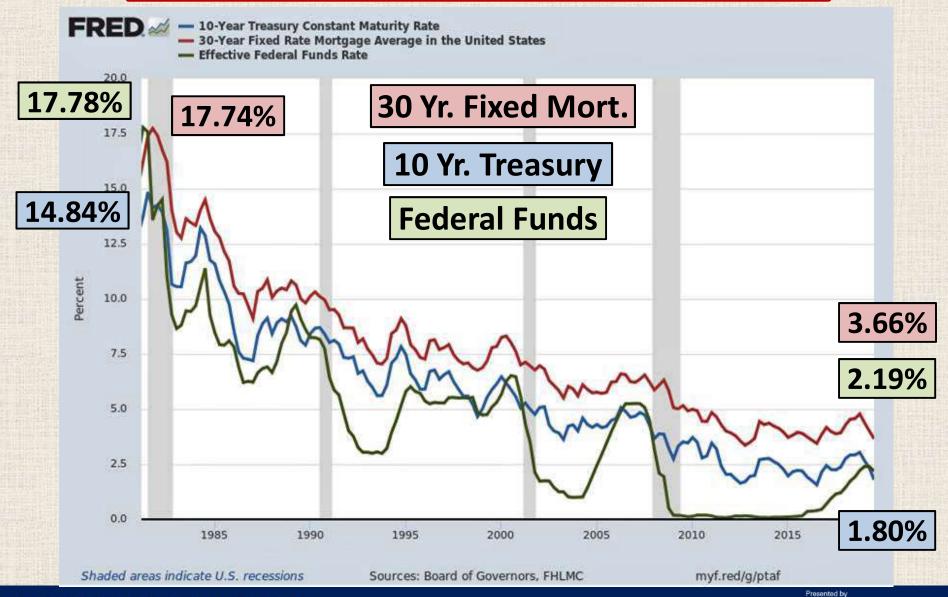
You can see that the four worst outcomes correspond to the recessions of 1974-76, 1979-82, 1990 and 2008-09.

If you have some interest in the presidential election next year, there are few things to note about this chart. I'll just mention one. No sitting president won re-election during these low points. Gerald Ford did not win in 1976, Jimmy Carter did not win in 1980 and George HW Bush did not win in 1990.





Interest Rates - 1981 (I) to 2019 (III)





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Let's take a look at interest rates.

The shaded-in sections of the chart show periods of recession for us – 1982, 1990, 2001 and 2008.

The blue line shows the yield on the 10 year U.S. Treasury going back to 1981. Over this time frame this rate peaked at almost 15% and is currently at 1.80%. That is more than a little troubling as measured inflation is about the same level, meaning that in real terms, these bonds are earning a zero return.

The red line shows the long end of the interest rate spectrum – the average 30 year fixed mortgage rate of interest. You can see that it peaked at the astonishing rate of nearly 18% back in 1981. It currently stands at 3.66% and as you can tell from the graph, it tends to be about 1.5 to 2 percentage points higher than the 10 year bond rate, reflecting, at a minimum, higher risk.

The green line shows the short end of the market – the federal funds rate of interest. This is the rate that banks pay when they lend to, and borrow from, each other for overnight loans. This is the rate that the Federal Reserve sets as its primary target for monetary policy. It was also almost 18% back in 1981 and now sits at 2.19%.





Fed Policy - The Federal Funds Rate





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This chart highlights the federal funds rate going back to 2001. You can see how the Fed has manipulated this rate for policy reasons following the last two recessions.

To stimulate spending in the 2000s the Fed pushed this rate down to a low of 1%. Once it felt that the economy was recovering, they raised this rate until it topped out at 5.25%. Then, they lowered the rate as the recession of 2008 got started, this time practically to zero. And, as if that wasn't unusual enough, they kept it there for 7 years. Finally, the Fed decided that rates could be raised but did so in a fairly timid fashion. They rose to 2.4% and, shockingly, are now falling again!

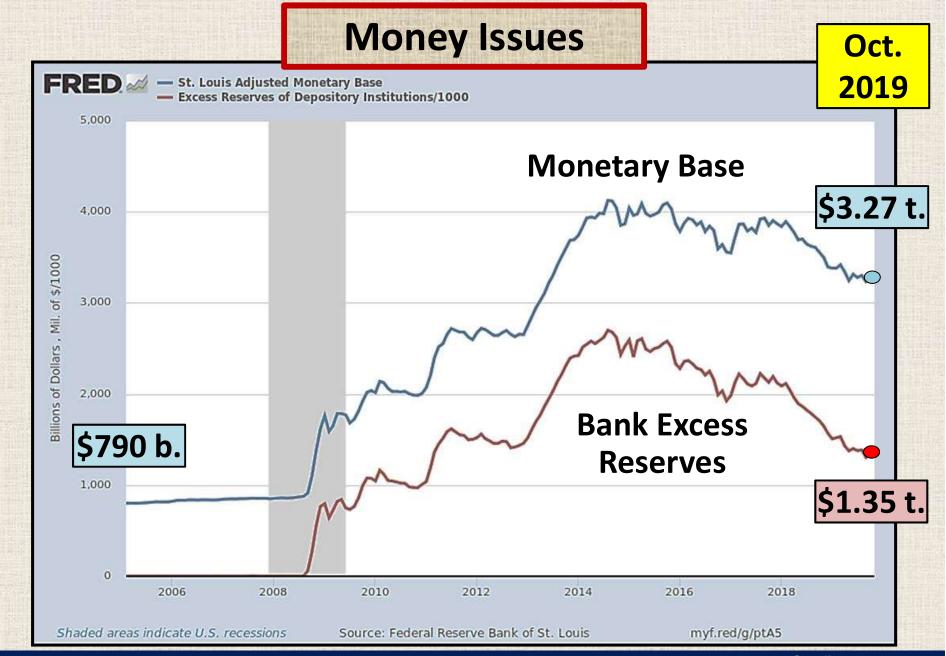
Now, I can't really explain this decision to lower rates. Unemployment is down and inflation is down, yet it seems like the Fed is acting as if a recession is coming.

The box shown here is a chronology of the Fed's targets for the last year and a half.

Now, I know that President Trump has been criticizing Chairman Powell for not lowering interest rates — which is really a terrible and unsustainable idea — so I don't know if that is a part of this story. I would note that two of the members of the Federal Open Market Committee, which makes these decisions, have consistently voted against these rate reductions.









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To lower the Federal Funds rate of interest the Fed expands something called the monetary base. Literally what they are doing is buying bonds. This increased demand for bonds will raise the price of bonds in the market and that lowers the interest return on these bonds. Since the Fed can create money out of thin air to buy these bonds, when it does so, the "monetary base" expands. The monetary base measures what the Fed can control with some precision – every dollar of the monetary base had to be created by the Federal Reserve.

Going into the last recession, the monetary base stood at a bit under \$800 billion. Then-chairman of the Fed Ben Bernanke embarked on a series of programs that came to be known as "quantitative easing." Sounds rather medicinal, but really they could have called it, "printing money."

As a general rule, if the monetary base expands, eventually so too will prices. Yet that hasn't really happened. And the reason for that is shown by this other line on the chart – bank excess reserves. At the start of the recession, banks held about \$20 billion in excess reserves – the amount above and beyond what they are required to hold. As the monetary base expanded what happened is that most of it landed and settled into bank reserves, which peaked a few years ago at about \$2.7 trillion.

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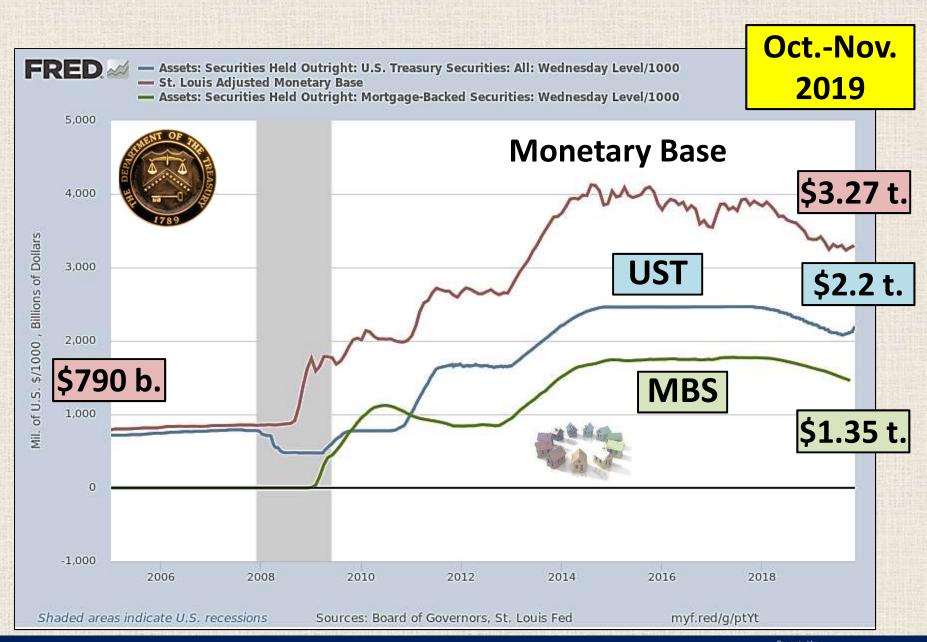
These excess reserves represent an enormous inflationary threat should banks decide that this is a good time to expand credit like crazy. To keep that from happening the Fed actually pays banks an interest on these reserves. Currently that rate is 1.8%

The most recent data show that both of these are much lower today – \$3.27 trillion and \$1.35 trillion, respectively – but still far above what anyone should consider as "normal."

Yet the Fed has stopped its policy of winding these down and is now promising to buy upwards of \$300 billion in bonds through March of next year. And, this time they don't want to even call it "quantitative easing," and of course they still don't want to call it "printing money."









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Now, when the Fed expands the monetary base, it acquires financial assets, primarily U.S. Treasury bonds.

So, here's our chart for the monetary base.

And, here is the Fed's holding of Treasuries: from about \$800 billion in the years preceding the recession up to a peak of \$2.5 trillion. They fell for a bit, but now they are headed back up again and are currently at \$2.2 trillion.

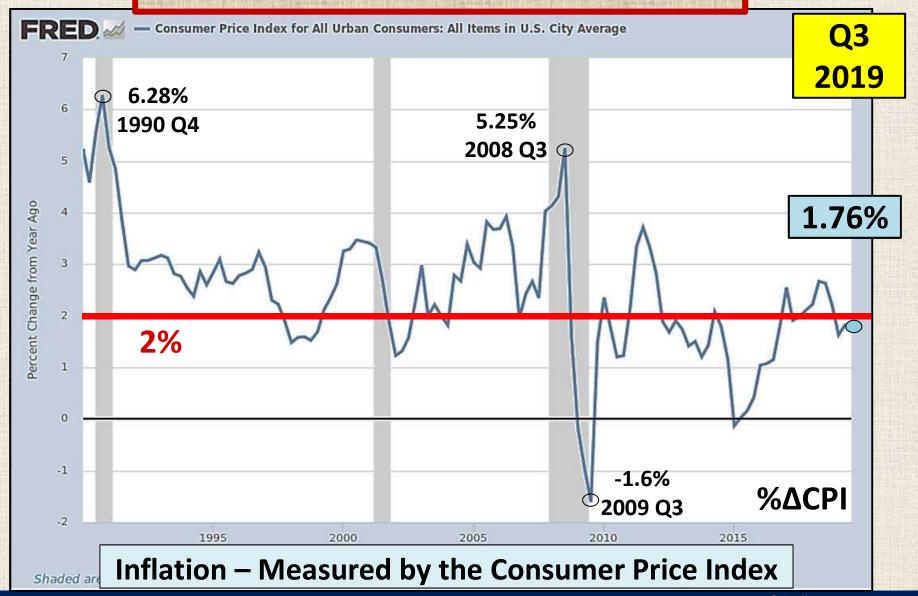
Starting during the recession the Fed also began buying mortgage-backed securities. They currently hold \$1.35 trillion, which is a significant share of this \$7-\$8 trillion market.

Even if you believe that the Fed's policies are well-intended, and I do not, you still must ask yourself whether it makes sense to act in a way that benefits specific markets like this and specific vested financial interests.





Price Inflation: 1990 to 2019





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Let's turn to the situation with regard to inflation. This chart goes back to 1990 and you can see 2 peaks – 6.28% in 1990 and 5.25% in 2008. You can also see the deflationary spike in 2009 when the year over year rate for the consumer price index was actually negative 1.6%.

The 3rd quarter rate is at 1.76%. As a general rule, that's not terrible, except for the fact that this is near to the Fed's target. Some years ago the Fed took its mandate to "maintain stable prices" to mean an inflation rate of 2%. It may sound like a minor detail, but it really isn't, especially over long periods of time. To me, and many others, "stable prices" means zero inflation.

So, why does the Fed target 2%? The reason is that they want to be able to drive real interest rates into negative territory. It should be quite understandable that nominal rates of interest can't be negative; they can only go down to zero. But, real rates, which are defined as the nominal rate minus inflation, can, and many times in the past have, gone down below zero. If you earn 1% on a bond and the inflation rate is 2%, then really you are "earning" negative 1%, and losing value as a consequence. If that doesn't make any sense to you then you are properly grasping this situation.

Which brings me to my 5 monetary policy questions that really do need to be addressed. I think that these are all very important questions and deserve to be widely and deeply debated. Yet, none of these come up, especially in the mainstream media. During the last election, I counted up how many time these monetary questions were asked of Donald Trump and Hillary Clinton and my total is ... zero. My prediction for the next election is that yet again these questions will come up zero times.





5 Monetary Policy Questions

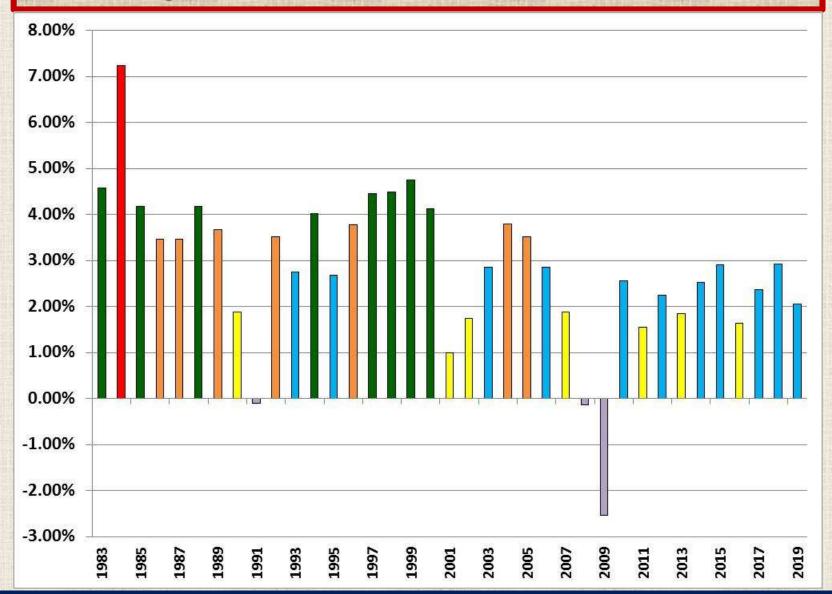
- 1. Why is there a 2% inflation target?
- 2. Should the Fed be ★&\ interest rates?
- 3. Should the Fed be buying UST?
- 4. Should the Fed be buying MBS?
- 5. Should the Fed be paying banks interest on their reserves?







The Big Picture – Annual RGDP 1983-2019





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As if these monetary issues weren't problems enough for us, let's step back and consider the bigger picture of overall economic growth.

This chart shows the annual growth rate in Real GDP going back to 1983. The recession of 1990 shows up as a small negative change, while the most recent recession shows up more dramatically. I separated out the years by the level of growth to better highlight our ongoing dilemma of an ever more sluggish economy.

The purple bars show we had 3 years had negative growth, indicating recession years.

The yellow bars show we had 7 years of growth between 1% and 2%, with six of the seven since the year 2000. While positive change is better than negative change, anything under 2% is generally considered to be rather stagnant insofar as our average standard of living goes.

The blue bars show we had 9 years of growth between 2% and 3%, more than half of those years since the last recession.

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The tan bars show we had 7 years of growth between 3% and 4%; the last time was 2005. This should be the lower bound for our normal state of affairs and yet it has been nearly 15 years since this has happened.

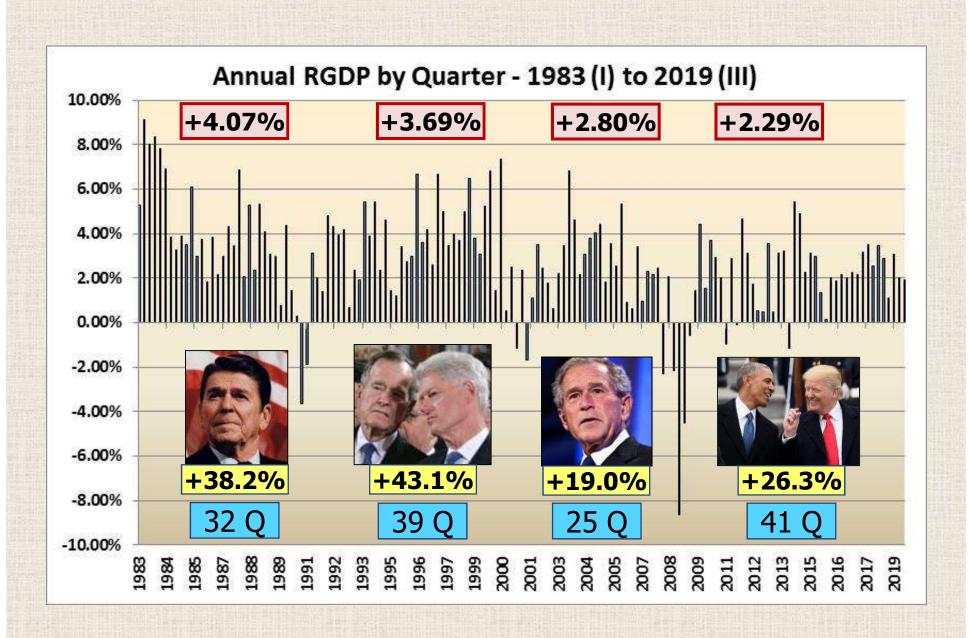
The green bars show we had 8 years of growth between 4% and 5%, and this story is even worse - the last time this occurred was almost a generation ago, back in the year 2000.

So, why isn't this an issue of national interest? Why isn't this the "existential" crisis that we are facing? It's as if we can't see the reality around us and are living in the world of the Matrix... ... Another one is coming out by the way – and I am kind of excited about that.

One year was quite dramatic back in the early 1980s, with growth above 7% (the red bar). I put this one in because it followed the very serious recession of 1981-82. So, why didn't we get a big bounce coming out of the 2008-09 recession like we did back then? Another question that nobody seems interested in asking.









Here is the same data, but expressed in annual terms by quarter.

We can mark each recovery, or growth, phase of the business cycle by the presidents in office at the time: Reagan in the 1980s; Bush & Clinton in the 1990s; Bush in the 2000s; and, Obama and Trump in the 2010s. I like this picture of Presidents Obama and Trump because they're both smiling at each other. Alas, that seems so long ago.

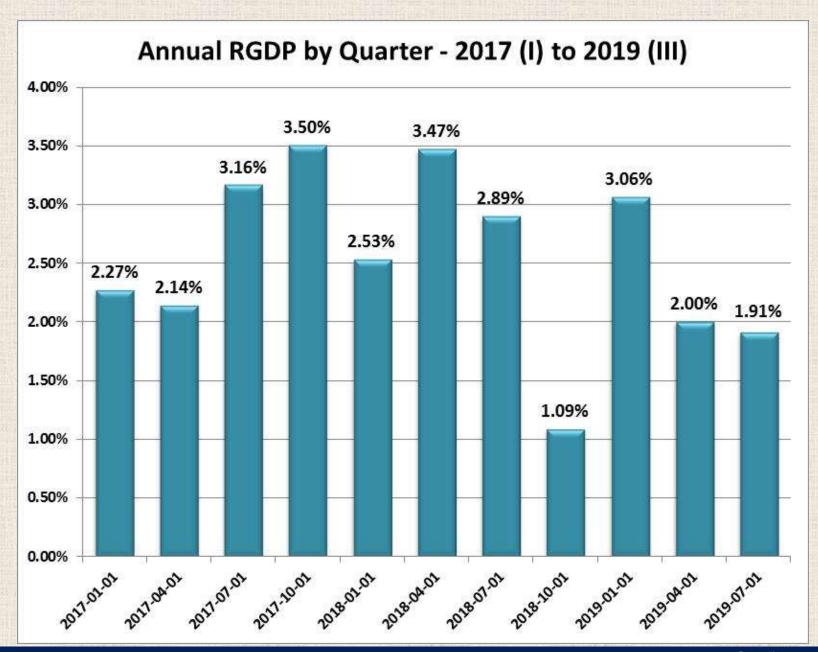
The length of each recovery phase is shown here along with the aggregate growth in real GDP. You can see that our current recovery phase is the longest, at 41 quarters, but we have only just recently passed the 2000s in terms of aggregate growth.

When you convert this information into the average annual growth rate over these past 4 recovery periods, you see a very troubling trend. The average annual growth in GDP has fallen from 4.07% per year to about 3.7% per year to 2.8% per year and is now at about 2.3% per year.

Is this is the "new normal"? Is this the subject of intense discussion around those fabled kitchen tables? Is this what dominates the news cycle? Of course not.









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Here is a closer look at our economic performance over President Trump's term, with annualized quarterly growth shown.

You can see that growth was on the upswing during most of the first two years, while over the last year 3 of the 4 quarters had growth rates at, or below, 2%.

Which brings me to the reason that I believe is at the core of all these problems we face and that is what economist Friedrich Hayek termed, "the fatal conceit." That conceit is that we can substitute government centralized planning for individual decision-making and not only that we won't make a mess of the world, but we can make life better. So far, the evidence is to the contrary.

Here's what Hayek had to say about this ...





The Fatal Conceit



The curious task of economics is to demonstrate to men how little they really know about what they imagine they can design.

— Friedrich August von Hayek —

AZ QUOTES

From manipulating interest rates to Socialism



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"The curious task of economics is to demonstrate to men how little they really know about what they imagine they can design."

This applies to a wide range of "designs" from the presumed optimal interest rate to full-fledged socialism.

So, let's consider the case of socialism. There has been increased interest in, if not outright embracing or, socialism's basic tenets that markets are bad and that government planning is good.

What exactly does Socialism entail? In its fullest form ...

- * it abolishes private property that now belongs to the state;
- * it abolishes free markets the state decides on the distribution of goods & services; and
- * it abolishes money it is no longer needed for exchange purposes.

Now, there are "lite" versions of this, but all lead inexorably to these outcomes.

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And, what are the problems with this? Well, Hayek is not alone in arguing that the first problem is one of a lack of incentives. If we are all equal, who will do the dirty jobs? How will we be assigned? Or, will some jobs pay more than others? Who will decide that? Then, how do you insure that people perform these jobs efficiently and conscientiously? How hard will you work if you get a guaranteed income? How hard will you study if college is free? How much will get done if there is no cost to doing nothing.

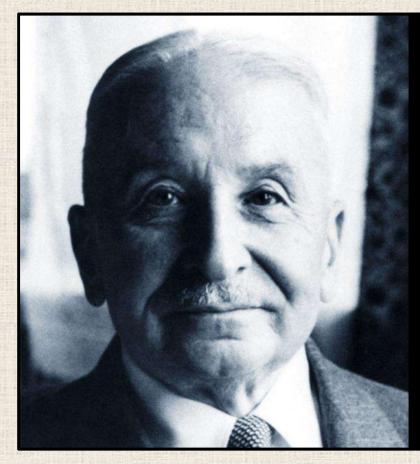
The problem here is that the allocation process is not a technical issue. We live in a world of scarcity. We can discern technical production processes, but what is it that we should actually produce? A classically liberal economist, which I consider myself to be, believes that an economic system works best when it responds to the tastes and preferences of the individuals that make up our society. Socialism can't do that.

But, the argument gets even stronger. Back in the 1920s, Ludwig von Mises kicked off what came to be known as the "Socialist Calculation Debate." Mises argued that we can ignore the question of incentives — we'll assume that the "new" Socialist man — or woman — is hard working and fully productive. Further, we can assume that the central planners actually know what mix of goods and services will maximize consumer preferences and that they seek to achieve that mix. Even under those rather absurd assumptions, Mises argued, Socialism is impossible because nobody will be able to calculate the opportunity cost of resource use. Consequently, such a society will spin itself into deprivation and despair; i.e. modern day Venezuela.

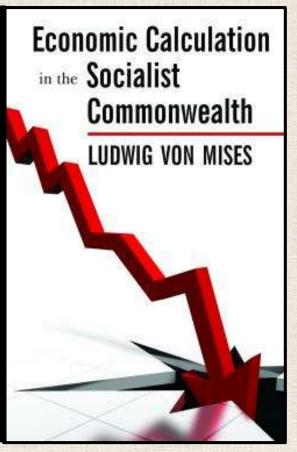




The Fatal Conceit



"Every step that takes us away from private ownership of the means of production and from the use of money also takes us away from rational economics."



From manipulating interest rates to Socialism



The argument made by Mises is that without private ownership of resources – capital goods – and the ability to exchange them for money, we don't know what mix of resources is most "rational," that is, least-costly. In a Socialist state, you cannot know what is "least-costly." It is not a problem that can be solved on technical grounds. Consequently you end up with essentially random production processes that will lead to increased distortions over time and, ultimately, a collapse of the system and a failure to cater to the tastes and preferences of consumers.

Indeed, Mises argued that these distortions begin whenever you take away ownership and exchange:

"Every step that takes us away from private ownership of the means of production and from the use of money also takes us away from rational economics."

And, this is what infects our economy today – government control over vast sectors of the economy, distorting resource use, incurring high costs and waste and slowing down our economic engine. Continuing along this path will not make things better.

When it comes to Socialism, it's wrong. It's dead wrong. It's suicidally dead wrong. I'm against it.

So, let's turn to my outlook ...







What is the Outlook?



GDP growth stagnant in 2020 (~ 2%)

Interest rates may continue to ♥ (ff rate 1.25%)





Inflation will hang around at the target of 2% for 2020



Although economic conditions are positive right now I see chaos on the horizon and feel that the margin of error on my forecast, or anyone's, is likely to be very, very wide.

That being said ...

I think that GDP growth will be about 2% - not terrible, but not great. It could be lower but I don't hold out hope that it will be higher.

I think interest rates may continue to fall. The Fed is holding off on further reductions, but I'm not going to be too surprised to see the target range for the federal funds rate lowered by a quarter percent or even a half percent. But, I do think that will only take place in the spring. 2020 is an election year and I think that Chairman Powell will try to keep a low profile during what I presume will be a contentious fall election.

I don't see any movement in inflation in the works for next year. If banks expand their excess reserves, this rate could even fall despite the Fed's desire to keep it at/near 2%.







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