

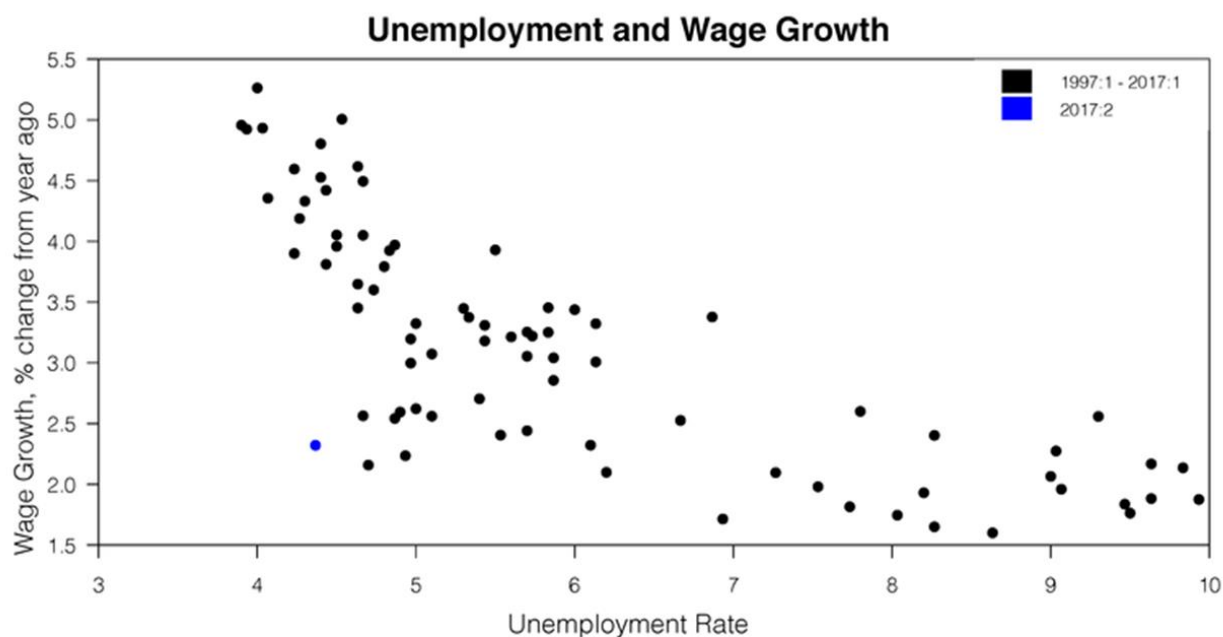
## Faster wage growth is not in the cards

[Tim Duy](#) tries, unsuccessfully, to justify the Fed's tightening bias:

...The Fed can always fall back on the unemployment rate to claim that although inflation is low now, it will creep back up to its 2 percent target with the economy operating at full employment. The [minutes of the July FOMC meeting](#) made clear that central bankers remain **committed to this Phillips curve framework**. Although persistently low wage growth calls that claim into question, **the Fed has good reason to believe wage growth will soon accelerate**.

To understand why, note that there is no single wage measure. We have a number of different compensation metrics. Obviously, using the "best" or "right" measure would be optimal, but in the absence of such knowledge, I created a composite based on the average of some common compensation measures.

With this measure I created a Phillips curve for wages. **You can see that the current spot on the curve is an outlier:**



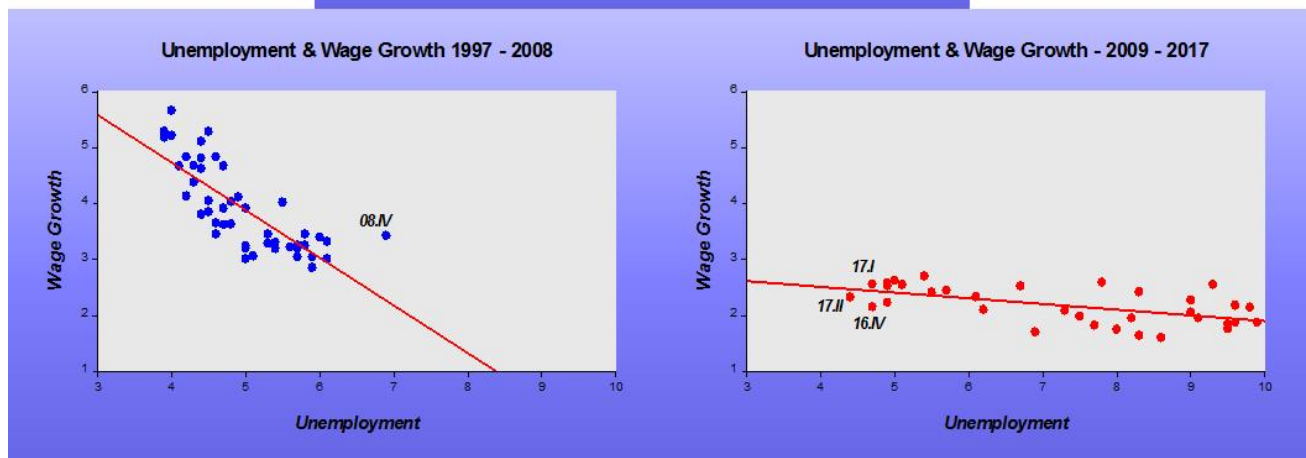
Wages growth calculated as an average of common compensation measures \* Data via FRED \* Chart created: 08/13/2017 20:15

The Fed's relative confidence that the economy is operating

at full employment is *not unreasonable*. If recent data are *historical outliers*, then wage growth will jump sharply higher – and probably soon if unemployment keeps pushing lower.

Tim Duy puts too much emphasis on the latest “spot” being an outlier. However, if you do a more detailed analysis you find that’s not the case.

The charts below illustrate.



It is clear that post crisis, the Wage Phillips Curve not just flattened, it became flat. You see that the current (2017.II) is only an “outlier” if you think the data generating process has remained stable, which it clearly hasn’t.

The “outlier”, if there is one is the 2008.IV spot. It occurs during the transition from the “steep” to the “flat” Wage Phillips Curve. At that time unemployment was rising fast, but wage stickiness impeded wage adjustment.

Duy's conclusion is turned on its head. Since the recent data are not "outliers", there is no indication that wage growth will jump sharply higher, let alone soon.

Therefore, by remaining committed to its Phillips Curve framework, the Fed will continue to err, causing painful damage.

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## **Is The Fed Suffocating The Economy And Thus Productivity?**

Recently the question has been raised in the econo-blogsphere whether the Fed has been effectively suffocating productivity gains, by crimping demand and cheapening labor whenever businesses—viewing a strong economy and outlook—might think it worth the risk to invest in labor-saving plant and equipment.

[J.W. Mason](#), citing the work of economic historian Gavin Wright, notes productivity surged in the 1920s when labor became more expensive (and demand was strong) and posits a line of thought thusly:

“Turning to the 1990s, the starting point is the sharp acceleration of productivity in the second half of the decade. This acceleration was very widely shared, including sectors like retail where historically productivity growth had been limited. The timing of this acceleration has been viewed as a puzzle, with no ‘smoking gun’ for simultaneous productivity boosting innovations across this range of industries over a short period. But ‘if you look at the labor market, you can find a smoking gun in the mid-1990s. ... real hourly wages finally began to rise at precisely that time, after more than two decades of decline. ... Unemployment rates fell below 4 percent – levels reached only briefly in the 1960s... Should it be surprising that employers turned to labor-saving technologies at this time?’”

It is hardly any secret that real median earnings in the U.S. have been flat. Full-time adult males make smaller [median weekly](#)

earnings today than in 1979.

Tim Duy, monetary scholar, blogger and columnist for Bloomberg, all but begs the Fed to wait and see if economic good times can inspire U.S. business to upgrade plant and equipment: “The Federal Reserve has an opportunity to test a hypothesis critical to the health of the U.S. economy: Can persistently loose monetary policy boost the pace of productivity growth? Sadly, for now, an adherence to a strict Phillips curve framework for the economy and fear of financial instability will prevent the Fed from venturing down this path.”

As NGDP Advisers has repeatedly written, and as St Louis Fed President James Bullard recently speechified, that the Phillips Curve is prone, and probably dead. Bullard opined driving unemployment down to 3% would raise core PCE to...1.8%.

That 1.8% is still below the Fed’s putative 2% target, which is supposed to be an average, not a ceiling.

## **Conclusion**

A peevish fixation on inflation, higher interest rates and shrinking the Fed’s balance sheet—in pursuit of “normalization”—is less a monetary policy than a collection of totems dolled up for genuflection.

The Fed appears intent on missing the central banker opportunity of a lifetime to promote solid economic growth with mild inflation. The Fed has only to hit the broad side of a barn with a six-gun at 10 paces, but more likely it will shoot the American economy in the foot.

**PS** Tim Duy is incorrect to characterize present Fed policy as “persistently loose.” We have been hearing the “Fed is loose” for a couple generations. Along the way inflation has tumbled from double digits to sub-2%, and could crater in the next recession. This is “loose”?

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# Explaining low wage growth: From “stockpile of pent-up wage cuts” to “changes in workforce composition”

In January 2015: [Why Is Wage Growth So Slow?](#)

Despite considerable improvement in the labor market, *growth in wages continues to be disappointing*. One reason is that many firms *were unable to reduce wages during the recession, and they must now work off a stockpile of pent-up wage cuts*.

This pattern is evident nationwide and explains the variation in wage growth across industries. Industries that were least able to cut wages during the downturn and therefore accrued the most pent-up cuts have experienced *relatively slower wage growth during the recovery*.

That theory didn't pan out, so now it is “demographics and a strong labor market” that explain it.

August 2017: [The Good News on Wage Growth](#)

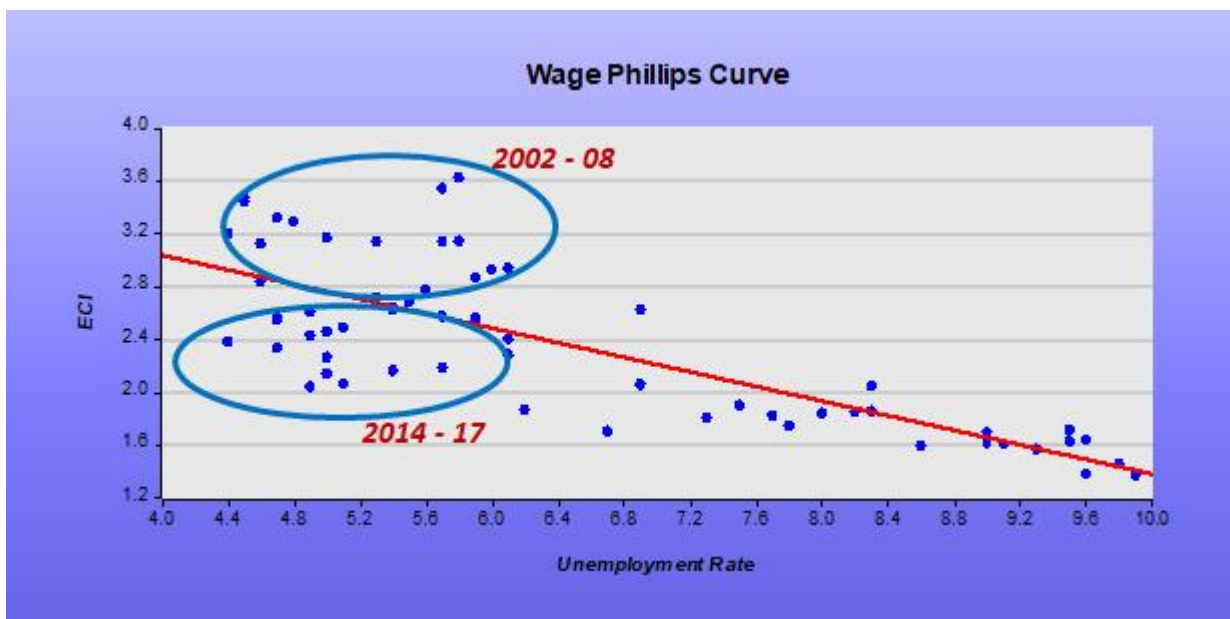
The *drag on wage growth* due to these flows into and out of full-time work reflects *changes in workforce composition* associated with *demographics* and a *strong* labor market.

- Simply stated, new entrants to full-time work, whether they are entering for the first time, re-entering from periods of involuntary or voluntary non-employment, or moving from part-time to full-time work, are more likely to make *below-average wages*.
- *Counterintuitively, this means that strong job growth can pull average wages in the economy down and slow the pace of wage growth.*
- This is exactly what we have been seeing in recent

years. As the labor market has continued to strengthen, many workers have moved from the sidelines of the labor force or part-time positions into full-time employment. The vast majority of these new workers **earn less than the typical full-time employee**, so their entry brings down the average wage.

- This effect is even more pronounced than usual because of the **large-scale exit of higher-paid baby boomers from the labor force**. With so many of this generation still approaching retirement, the so-called Silver Tsunami will continue to be a drag on aggregate wage growth for some time.

The chart depicts the wage Phillips Curve with wage growth given by year-on-year growth in the employment cost index for wages and salaries (ECI).

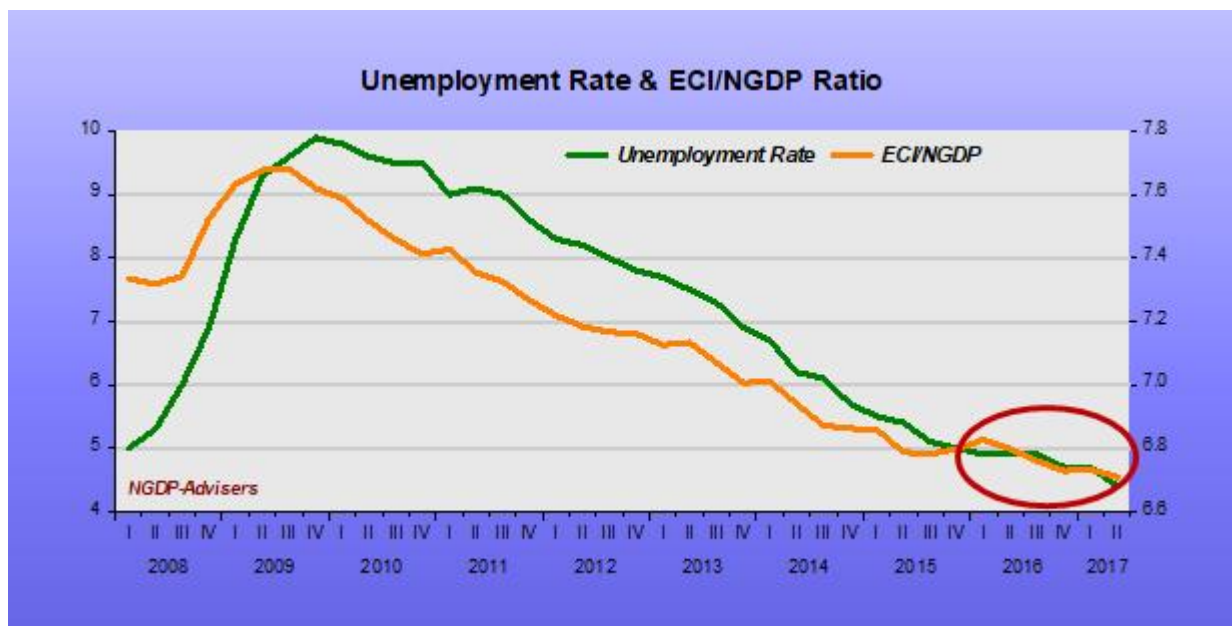


Note that "low side" unemployment (unemployment rate less than 6%) is divided by the regression line into two groups. The "high wage growth group" (2002 -2008) and the "low wage growth" (2014 – 2017).

Maybe it's not "demographics coupled with a strong labor market" that explains the "low wage growth" of the past years, but the low nominal GDP growth observed since 2010.

Unemployment falls with the fall in the wage/NGDP ratio. If NGDP

growth is low, wage growth has to be even lower for the ratio to fall, giving the impression of a “strong labor market”.



More recently, the ECI/NGDP ratio has fallen more slowly/stabilized and so has the unemployment rate.

For wage growth to rise, with unemployment remaining low, NGDP growth would have to increase. That, however, is not what the Fed has in mind.

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## **St. Louis Fed President Says 3% Unemployment Would Raise Inflation Rate To...1.8%.**

The U.S. Federal Reserve in recent Beige Books (its periodic review of the national economy) has **pontificated** that, “Labor markets continued to tighten, with most Districts citing shortages across a broadening range of occupations and regions.”

And so the Fed says it must raise interest rates and shrink its balance sheet, as part of a “normalization” effort.

But then St. Louis Fed President James Bullard on August 7 delivered a dumbfounding **speech** that said, in part, that cutting the unemployment rate (now at 4.3%) to 3.0% would raise the PCE core inflation rate to 1.8%—still below the Fed’s 2.0% putative average target on the PCE.

Bullard concluded, “Low unemployment readings are probably not an indicator of meaningfully higher inflation over the forecast horizon.”

Bullard cited a 2016 [paper](#) by Olivier Blanchard of the Petersen Institute that reported the Phillips Curve has been prone since the 1980s, and the accelerationist-inflation boogeyman dead for decades.

Evidently, no one told the Fed or the orthodox macroeconomics profession of the demise of their favorite specter, and they have been carefully husbanding arguments for tight money and loose labor markets through the scores of decades. The sad result is the United States has lost trillions of dollars of lost output, lost profits and lost wages—all for miniscule results on reported inflation.

To paraphrase Winston Churchill, “Never have so many given up so much, for so little.”

We now see socialists and nationalist-kooks ascendant in national politics of the United States. The economy and labor markets have a lot to do with that.

## **Conclusion**

The Fed is still loudly fretting about labor markets, pursuing a policy of tighter money, and promising rate hikes and a smaller balance sheet. Perhaps the damage the Fed will do will not be enough to undo the slow-growth, tepid non-recovery underway since 2008. Other global central banks, most particularly the Bank of Japan and perhaps the People’s Bank of China, are leaning against the Fed, and promoting growth.

The outlook is hardly encouraging, even as equities and property appear richly-priced. Investor beware.

And pray Americans do not choose worse in the poll-booths.

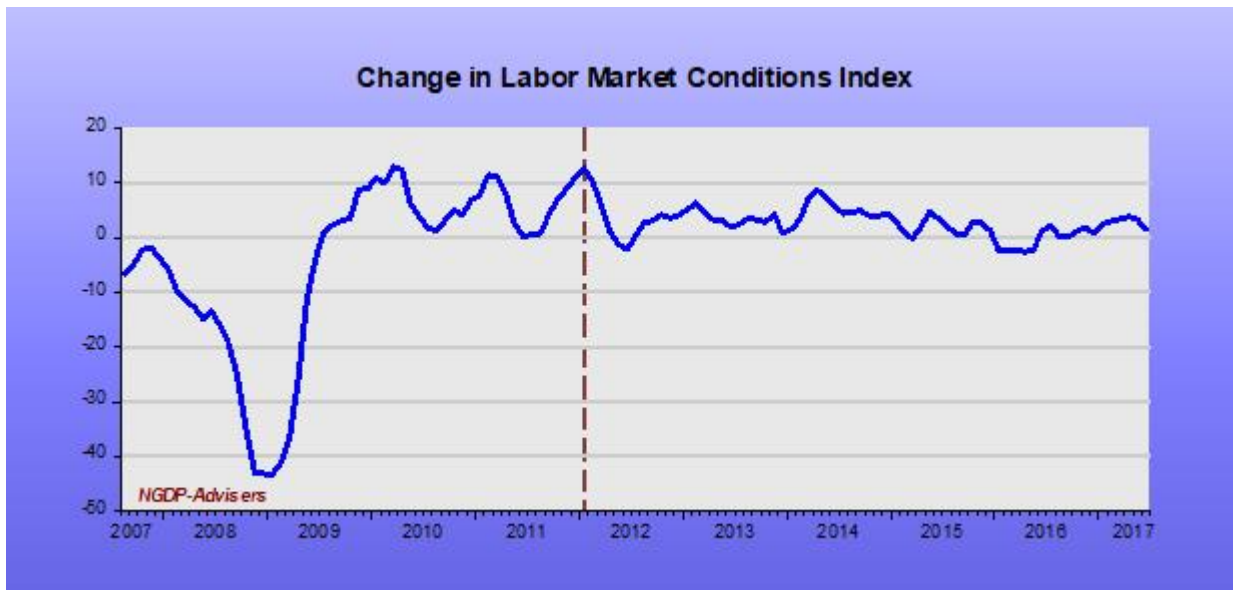
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## **The Fed Shoots The Messenger**

**The Labor Market Conditions Index Buried in Shallow Grave**



With all the fanfare of a charlatan skipping town after dark, the U.S. Federal Reserve last week unceremoniously ended its once-ballyhooed Labor Market Conditions Index. Since 2012, LMCI kept showing labor market conditions slipping.



The LMCI was introduced in May 2014, and is based on 19 labor market indicators.

When unveiling the LMCI at the Fed's 2014 annual confab in Jackson Hole, Wyoming, Chair Janet Yellen hailed the new, better indicator as a "broader gauge" of labor market, compared to simple unemployment numbers. The LMCI includes underemployment, part-time work and long-term unemployment figures.

In a jaw-dropping yet ultimately cryptic explanation, the Fed last week said graveyards for the LMCI, especially as the tracking of "average hourly earnings as an indicator did not provide a meaningful link between labor market conditions and wage growth."

You could decipher that sentence for a long time, without conclusion.

### **A Cynic Might Say**

It is odd that the once-touted LMCI was dropped just a few days before the July reading was due for publication. Looking at the LMCI chart trends through June, one might surmise the July LMCI would indicate a labor market *actually easing up*.

Thus the buried July LMCI reading would be in direct conflict with recent Fed statements, such as the May Beige Book outlook that,

“Labor markets continued to tighten, with most Districts citing shortages across a broadening range of occupations and regions.”

One might hope that an enterprising Washington, D.C. reporter will file a Freedom of Information Act request at the Fed, seeking the July LMCI.

Add on: the Q2 Bureau of Labor Statistics report released yesterday on productivity and wages, is consistent with...deflation! From the [report](#), “Unit labor costs decreased 0.2% over the last four quarters.”

## **Conclusion**

What to make out of the insistence at the Fed and in establishment media that a scourge of “labor shortages” threatens to raise wages, undercut the recovery and possibly produce runaway inflation?

Unit labor costs are falling year-over-year! The Fed’s own July LMCI is suspiciously torpedoed just before publication.

The Fed is proving a menace to prosperity and the free-market system. Could one blame the employee class for concluding the nation’s central bank, iconic of banking, prefers wage suppression to wage growth?

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## **Stable but Dismal**

In [Business Insider](#), Pedro da Costa writes:

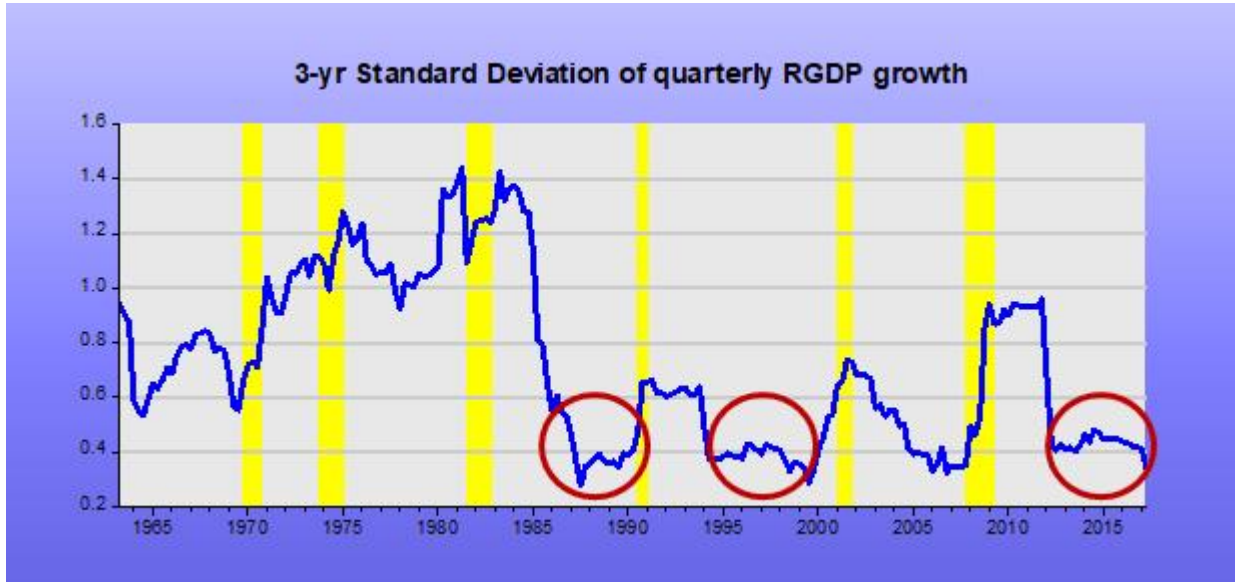
Indeed, one remarkable trend of the recent economic recovery, [which is on track to be the longest but also weakest expansion on record](#), has been the incredibly steady pace of job-market gains, which once fluctuated much more drastically from month to month.

“To our mind what is truly remarkable is the stability of this jobs growth, not solely its headline strength,” said Rick Rieder, BlackRock’s chief investment officer, in a statement following the employment report.

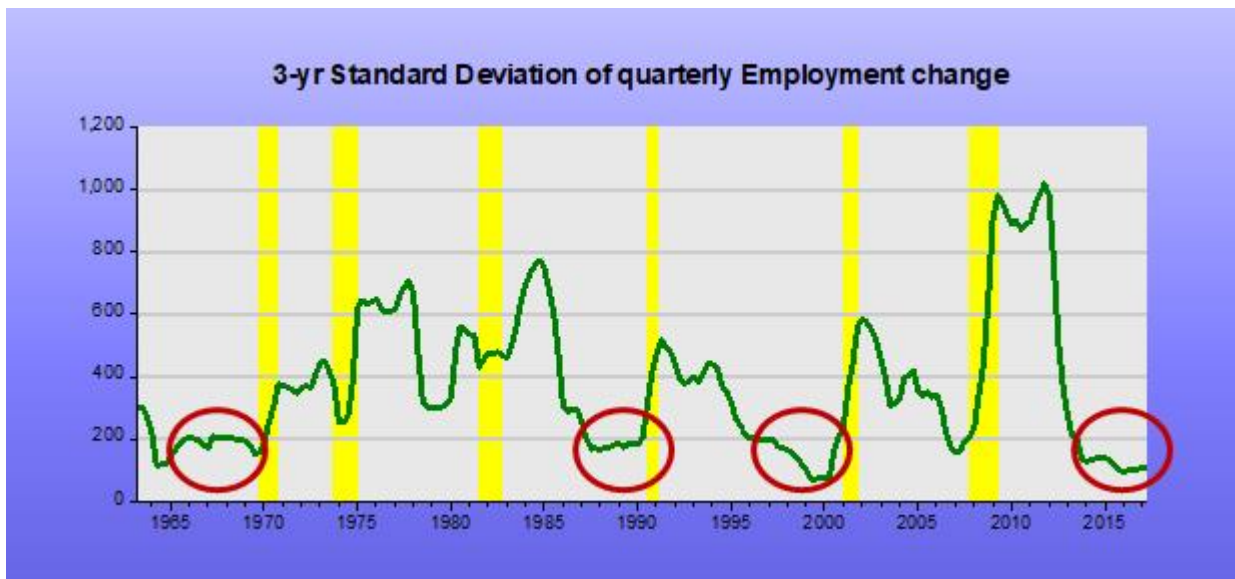
In fact, everything is remarkably stable in this cycle, but everything is also remarkably dismal.

First the stability aspect

Real growth



Employment change



Core PCE prices

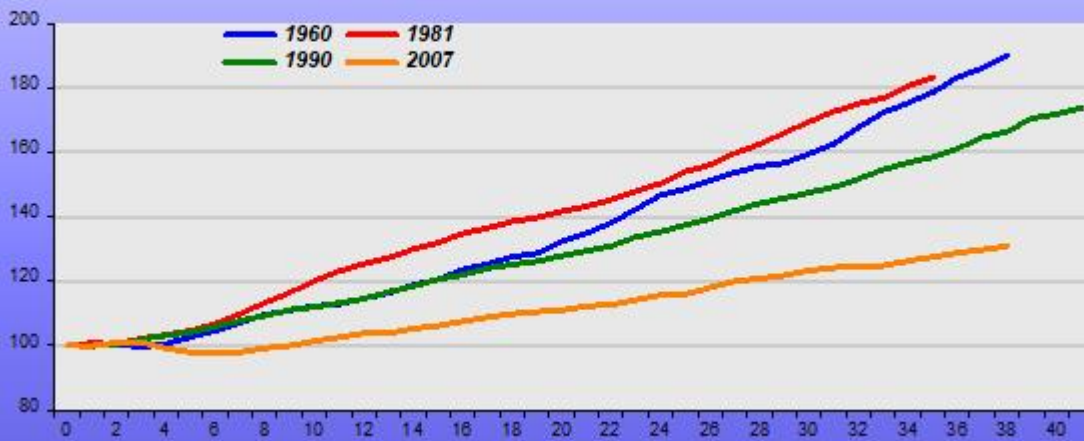
3-yr Standard Deviation of quarterly Core PCE Inflation



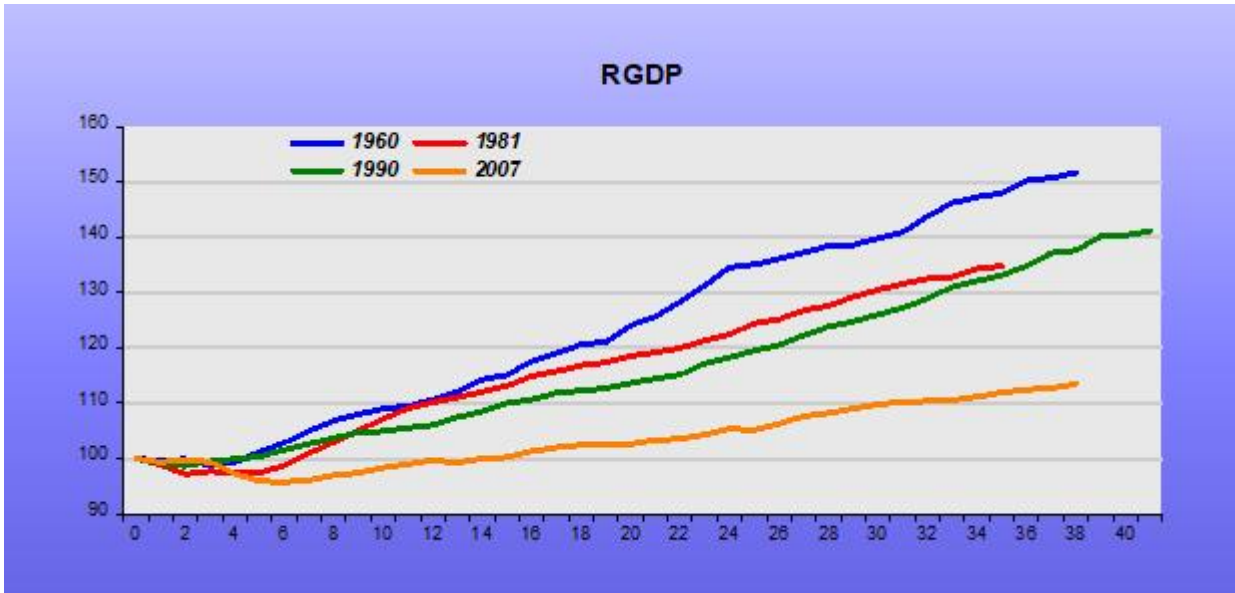
Now, the dismal aspect (comparing the four longest cycles (Peak to Peak))

NGDP

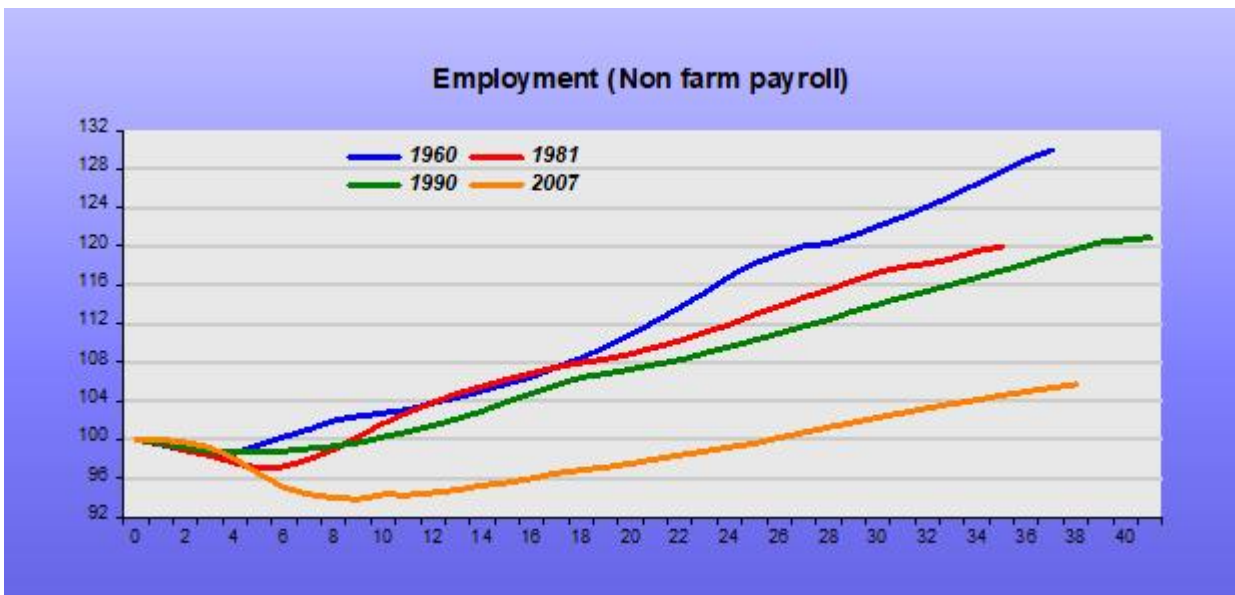
NGDP



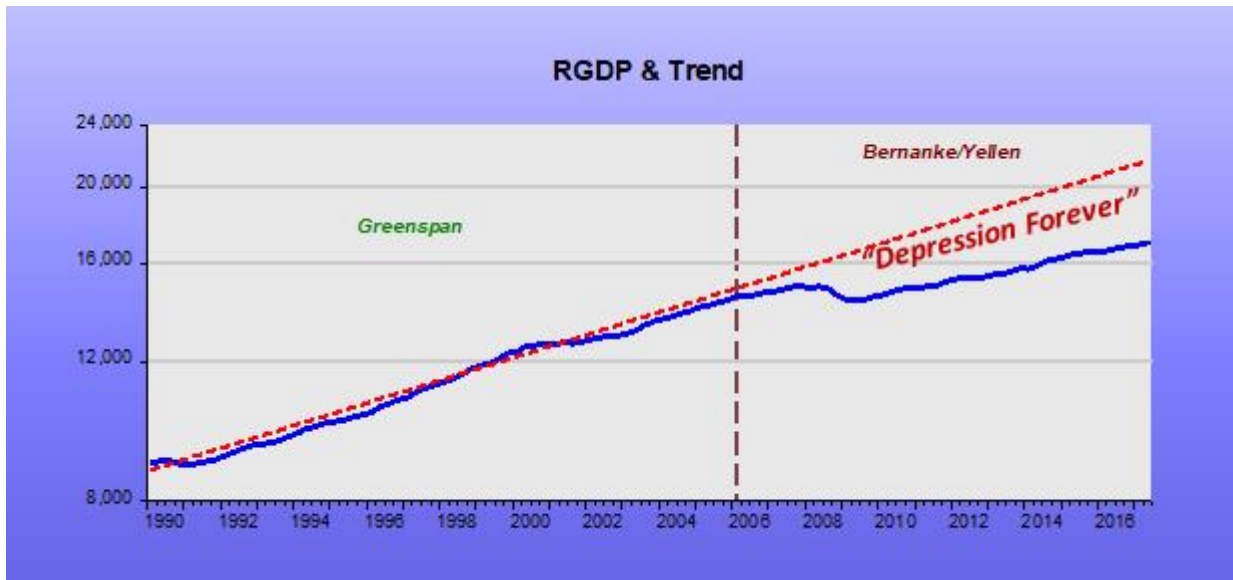
RGDP



## Employment



This one has been running so slowly that it could very well go on to break the record. Unfortunately, the Fed wants to slow it even more, maybe to make the depression go on forever!



## Hong Kong: The World's Freest Economy! Featuring The World's Least Affordable Housing!

The city-state Hong Kong generally draws kudos from orthodox macroeconomists for its free-trade policies and vibrant services sector. Indeed, the Heritage Foundation honors Hong Kong annually as the [world's freest economy](#).

Yet, it is perhaps an honor increasingly lost on Hong Kong residents. In a nutshell, the cost of housing in Hong Kong is undermining the public case for "free markets."

The typical Hong Kong apartment costs 18.1 times median household income—the middle-class cannot buy housing in Hong Kong, and not even close.

The Hong Kong government recently reported Hong Kong ["families were spending on average 66.1% of household income to pay mortgages."](#)

Okay, how about a life of renting? "This brings the asking rent for a typical 450 sq. ft. flat in the city to HK\$[15,800 per month](#)," reported the South China Morning Post recently. That's about \$2,054 for 450 square feet. Median household income is about \$3,250.

In Hong Kong, renting or buying will eat up roughly two-thirds of median household income.

The market is responding, and a new development, named the [Tplus Development](#), is offering 128-square-foot housing flats. That's about 9 feet by 14 feet.

This is the higher living standards to be gained by world's freest markets? Ever escalating housing costs and shrinking living space?

### **Global Challenge?**

If Hong Kong were a one-off, perhaps the former crown colony would only be instructive. But more likely Hong Kong is a warning, a harbinger of life in many developed nations.

All 10 of the world's least affordable housing markets are in Hong Kong, Australia, the United States or Canada, reports the most-recent Demographia International Housing Affordability Survey. [They add](#), "There are 94 severely unaffordable markets, with 36 in the United States, 33 in Australia, 11 in the United Kingdom, 7 in Canada, 6 in New Zealand and the one market in China. Singapore, Japan and Ireland have no severely unaffordable housing markets."

Meanwhile, in Great Britain the middle-class is [boxed out of housing markets](#) nearly everywhere in the entire nation.

What unites these disparate high housing-cost nations and economies, with different cultures, policies regarding home mortgages, and monetary policies?

They all run chronic current trade deficits and they all zone property development.

Singapore, something of a cousin to Hong Kong, runs trade surpluses, as does Japan and Ireland. They have affordable housing.

### **Property Zoning**

The orthodox macroeconomics profession does not regard property zoning, or the impact of chronic current account deficits (and subsequent large international capital inflows) on property values, to be macroeconomic topics.

Indeed, the Heritage Foundation gives to Hong Kong a very high [93.7 rating](#) on "property rights," in their economic freedom index. Thus, we see right-wing think tanks embrace restrictive property zoning as entirely consistent with economic freedom and property rights.

But looking at a Hong Kong, a Sydney, a Vancouver, a Los Angeles, a Boston, or the entire nations of an Australia, New Zealand and Great Britain, surely one can ask if the Heritage Foundation or the orthodox macroeconomics profession can profitably embrace such overt biases much longer.

What do “free markets” and “free trade” mean in Hong Kong, if real household incomes sink under crushing housing costs?

### **Risks**

One risk of spreading very expensive housing is that monetary authorities will “tighten up.” As we saw in the U.S. and around the world in 2008, if you torpedo an economy through tight money, you can reduce house prices. But they just go back up later.

Nevertheless some Hong Kong authorities are [suggesting higher interest rates are warranted.](#)

The second risk is that voting publics will become (justifiably) un-enchanted with the putative virtues of “free markets” and “free trade.”

### **Conclusion**

Orthodox macroeconomics must be useful to remain relevant.

At present, the orthodoxy of tighter monetary policies and free trade are hamstrung by ubiquitous property zoning, and perhaps other structural impediments embedded in the developed nations.

Worse, voters may conclude the glories of “free markets” are but a ruse by the entitled to redistribute income up the pyramid.

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## **Some Rays Of Light From The Fed...and Don Trump? But Some Darkness Too...**

The U.S. Federal Reserve has been somewhat asphyxiating the economy for years, in its outdated war on inflation (which they perceive as wage-driven), and by not migrating policy to a better target of a nominal GDP level.



In the July 26 Federal Open Market Committee Statement, the Fed seemed to indicate it understands that wage rates are not forcing inflation up, and that the FOMC is below its own inflation target. The FOMC statement is necessarily couched, but seems to put off rate hikes for now.

On the downside, the Fed again raised the specter it will begin to reduce its balance sheet, the \$4.5 trillion hoard of Treasuries and mortgage-backed bonds it acquired through its QE program.

Orthodox U.S. macroeconomists are deeply divided and uncertain as to the effects of the QE program, but what seems clear is now is a terrible time to suck \$4.5 trillion in capital out of the economy by having the Fed's open-market desk sell bonds and effectively "retire" the cash.

A mystery are the monetarists who are in near-permanent apoplexy regarding the Fed's balance sheet, which is described as "bloated." [Ben Bernanke](#) has addressed the "bloated" issue and pointed out that other central banks, such as the European Central Bank and the Bank of Japan have always operated with larger balance sheets.

And what are the horrific threats posed by the Fed's balance sheet?

That is not clear. Mickey Levy, chief economist for the Americas and Asia at Berenberg Capital Markets, [argues](#) the balance sheet does not stimulate the economy and taxpayers may take a principal loss if interest rates rise, lowering the value of the Fed's bond holdings. This paper loss will require repair by the Treasury (under arcane U.S. law) if the Fed sells its hoard. And from there you end up with a loss of (sacred) independence at the Fed. The U.S. Congress, before making appropriations, will extract its pound of flesh.

Of course, the Fed can easily hold its balance-sheet bonds to maturity, making the above argument peculiar. The Fed now is in fact funneling money to the U.S. Treasury annually from interest on the bonds. For taxpayers, QE is a wonderful program, by generating interest income, and, arguably, reducing the national debt. Evidently, QE does not result in much inflation.

A better question is "Why not pursue more QE?" As for Fed independence, what good is that if the Fed must suffocate the

economy to remain independent?

Does the extant Fed-QE hoard stimulate the economy? At this point, probably not. But the Fed selling \$4.5 trillion in bonds and sucking the cash into a digital mattress will probably un-stimulate the economy.

## **Trump**

There was also arguably positive commentary recently from President Donald Trump, and, well, take good monetary-policy impetus whatever the source.

Trump, who's expressed sentiments undulate daily if not mid-sentence, said he likes Fed Chair Janet Yellen, whose term expires February 2018. "I'd like to see rates stay low. She's historically been a low-interest-rate person," Trump [proclaimed](#).

Trump statements are provisional, issued on a stand-by basis. Still, it is refreshing to witness a GOP President not pay tribute, or even lip-service, to the ossified right-wing orthodoxy that money must always and everywhere be tighter.

## **Conclusion**

U.S. equities and property are close fully-priced, inflation is muted, the economy is sluggish at best, but the Fed keeps pondering rate hikes and reducing its balance sheet.

On the other side of the world, the Bank of Japan and the People's Bank of China are operating growth-oriented monetary policies, perhaps acting as global engines.

Despite the Fed, global growth may be passable in coming seasons.

Many large U.S.-based companies operate globally, and may fare better than their domestically oriented counterparts.

Too soon to tell on whether Fed can move to a more growth-oriented stance, perhaps under a new Fed Chair next year. Shrinking the balance sheet would be yet another step in the wrong direction.

**Kicker:** [Bernanke](#) pointed out that the Fed recently projected there will be \$2.5 trillion in paper cash in circulation (outside of banks that is) in just eight years. That's about \$7,353 per

resident, assuming a population of 345 million in 2025.

There is a strong connection with low inflation and interest rates and the surging cash hoards seen in every developed nation, and most evidenced in Japan. These cash hoards facilitate underground economies and tax evasion, and become more deeply embedded into economic behavior over time.

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## **“Solving” the inflation conundrum!**

[Tim Duy](#), a well-known Fed watcher thinks he has the “solution”:

On inflation, [some I think interpreted](#) this as dovish:

On a 12-month basis, overall inflation and the measure excluding food and energy prices have declined and are running below 2 percent. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.

First, this is simply a factual statement, an acknowledgement of what everyone and their brother already knows. Second, ***what is important is the forecast***, and that remains ***unchanged***:

Inflation on a 12-month basis is expected to remain somewhat below 2 percent in the near term but to stabilize around the Committee’s 2 percent objective ***over the medium term***. Near-term risks to the economic outlook appear roughly balanced, but the Committee is monitoring inflation developments closely.

The only thing wrong with the forecast is that the meaning of “medium term” has become “infinitely elastic”. After all, that’s been the forecast for the past several years.

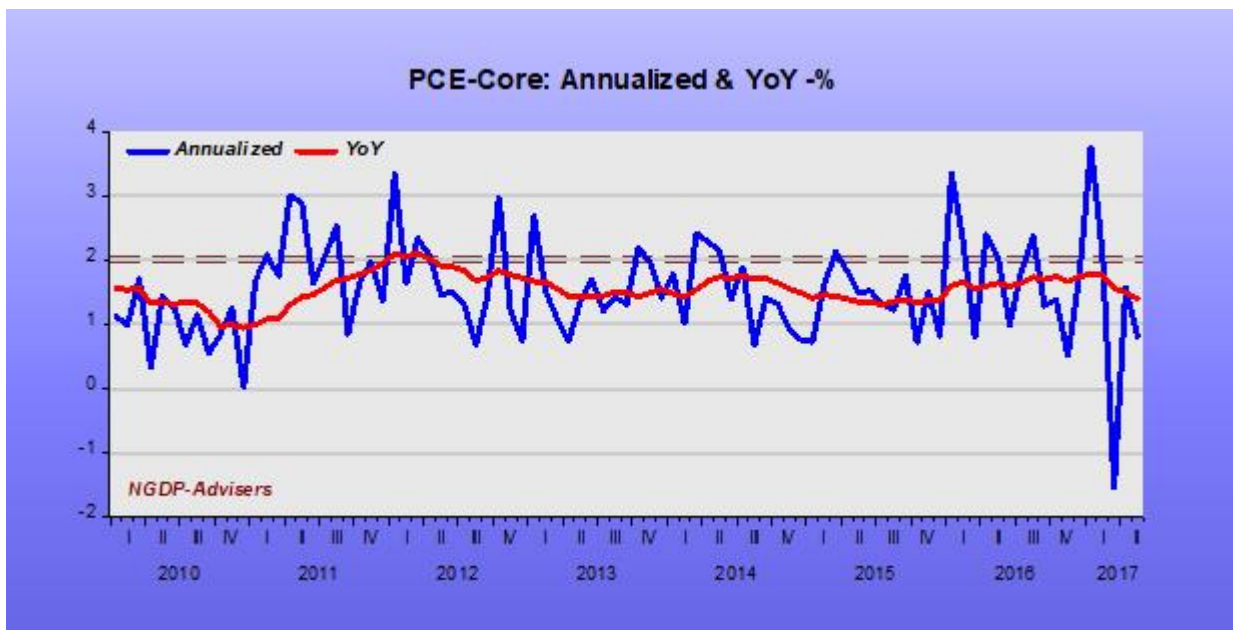
The most “shocking” argument is left for last:

And third, pay attention to the “12-month” language that first appeared in the May statement. Pay close attention. The Fed is telling us to stop paying attention to all

those year-over-year inflation charts we like to make. They have accepted that level effects from inflation shortfalls in the first half of this year will live in the year-over-year numbers until next year. ***Pay attention to the path of the month-over-month numbers.***

If those numbers climb back up toward 2 percent this year, the Fed will feel ***vindicated*** even if the year-over-year numbers remain below target. Not just vindicated, ***but also inclined to raise rates as expected.***

Once you look at the chart, you see that the monthly-annualized numbers have reached and surpassed 2% several times over the past seven years. Over the past 18 months, it has shown quite a bit of volatility, shooting up to almost 4% and down to -1.5%. If the Fed let's itself be "oriented" by such a volatile "guide", one that has already "tricked" it several times, Yellen must be grasping at straws!



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## The monetary story of the "Great Recession" and ongoing "Long Depression"

Several decades after the "Great Depression", Milton Friedman (with Anna Schwartz) provided a monetary explanation for the event. 80 years after the Great Depression, we came across the Great

Recession. In this instance, the Fed was applauded for avoiding another Great Depression!

In 2002, Bernanke himself "[apologized](#)" to Milton Friedman, saying "we won't do it again".

Bernanke is "dangerous". In January 2000, he wrote an op-ed at the WSJ: [What happens when Greenspan is gone?](#) He could have subtitled "I will take over". He said, however, that the Fed should adopt an explicit inflation target. Which he did. But he also "did it again". At least in "miniaturized" form.

He had written in 1983 on "[Non-monetary effects of the financial crisis in the propagation of the Great depression](#)". He also wrote a primer: "[Monetary Policy Transmission: Through Money or Credit](#)".

He applied those ideas to the 2008 financial crisis. With the actions undertaken, he may have avoided a repeat of the bank blowout of 1931-32, which certainly deepened the depression. More importantly, however, if he had focused on "money", instead of "credit", the "Great Recession" would have not been "Great" and surely would not have been followed by a "Prolonged Depression".

[Note: On Wednesday, September 24 2008, Bernanke wrote ([Courage to Act](#), page 317): *"Throughout the day I hammered home the argument that deteriorating credit conditions posed a grave threat. **Credit is the lifeblood of our economy**, I told the House Financial Services Committee. If financial conditions didn't improve, we're going to see higher unemployment, fewer jobs, more foreclosures...This is going to have real effects on at the lunch-bucket level"*]

The best a central bank can do is provide nominal stability. The "Great Moderation" came about because, maybe by chance, the Fed managed to provide, largely, nominal stability.

It may not have been all chance. In both the December 1982 and December 1992 FOMC Meetings, for example, Nominal GDP Targeting was discussed. Snippets follow:

[1982](#):

**MORRIS. I think we need a proxy—an independent intermediate target— for nominal GNP, or the closest thing we can come**

to as a proxy for nominal GNP, because that's what the name of the game is supposed to be.

**1992:**

Jordan: I put together a table—a big matrix of every forecast for as many quarters out as the Greenbook does it—for every meeting for the last year. *What struck me was that it looked as if we were on a de facto nominal GNP target. When nominal GNP is at or above expectations, the funds rate is held stable; but when nominal GNP comes in below what has been expected, we cut the funds rate.*

Greenspan (in closing):

As I read it, there is no debate within this Committee to abandon our view that a non-inflationary environment is best for this country over the longer term. Everything else, once we've said that, becomes technical questions.

*... I'm basically arguing that we are really in a sense using [unintelligible] a nominal GDP goal of which the money supply relationships are technical mechanisms to achieve that.*

NGDP Targeting was also discussed during Bernanke's tenure. In *The Courage to Act*, we read (pps 515-19):

With substantial new securities purchases and balance sheet expansion unlikely to win the Committee's support in the near term, it was once again time for blue-sky thinking. I had been discussing a wide range of monetary policy options internally since the previous summer (2011). The conversations continued through 2011 and into 2012.

...A more radical idea, supported by many academics, was called nominal GDP targeting. I had discussed it with Don Kohn, Janet Yellen and Bill Dudley before launching QE2 in 2010.

Bernanke goes on to show he has no understanding of what NGDP targeting means:

Under nominal GDP targeting, the central bank no longer has a fixed inflation target. Instead, when growth is strong, it shoots for lower inflation. When growth is weak, it seeks higher inflation...

To him, as an ardent inflation targeter, everything is understood in terms of inflation! He doesn't understand that NGDP Targeting (level targeting) simply means that you will try to keep NGDP evolving along a stable level path. There's no "shooting for lower or higher inflation".

The full FOMC would discuss nominal GDP targeting at its November 2011 meeting.

...After a lengthy discussion the Committee firmly rejected the idea...For nominal GDP targeting to work, it had to be credible. That is, people would have to be convinced that the Fed, after spending most of the 1980s and 1990s trying to quash inflation, ***had suddenly decided it was willing to tolerate higher inflation, possibly for many years...***

Bernanke confirms he's clueless about what nominal GDP targeting entails because he goes on to say (again, mistakenly, couching the argument in terms of inflation):

But what if we succeeded in convincing people inflation was headed higher? That outcome, too, carried risks. Would people trust that future policymakers would have the courage and competence to quash inflation later, as the strategy dictated, even if doing so risked creating a recession? ***If not, nominal GDP targeting could increase fear and uncertainty about future inflation...Then the Fed could eventually find itself in a 1970s-style predicament – without credibility and with the economy suffering from low growth and too high inflation.***

Not understanding what nominal GDP targeting means, he writes:

An idea **related(!)** to nominal GDP targeting, but far easier to communicate, was simply increasing our inflation target to, say, 4 percent – ***without the commitment inherent in***

***nominal GDP targeting to later bring inflation very low...***

Bernanke is really an inflation-targeting freak! Note that in 1982 or 1992, no one said that by targeting NGDP, the Fed ***“had suddenly decided it was willing to tolerate higher inflation, possibly for many years”***. And just two months after this discussion, in January 2012, the Fed made the 2% target official policy!

The fact is that during Bernanke's tenure at the Fed nominal stability was lost. Just as high/rising inflation – a “Great Inflation” – is the outcome of losing nominal stability in one direction, a “Great Recession” is the outcome when nominal stability is lost in the opposite direction!

As I'll also show, just by recouping nominal stability, but keeping it at the low level attained after it was dumped during the “Great Recession”, leads you to the “Long Depression” in which we have been living for the past seven years. In other words, there was never a recovery following the “Great Recession”, only an “underwater” expansion.

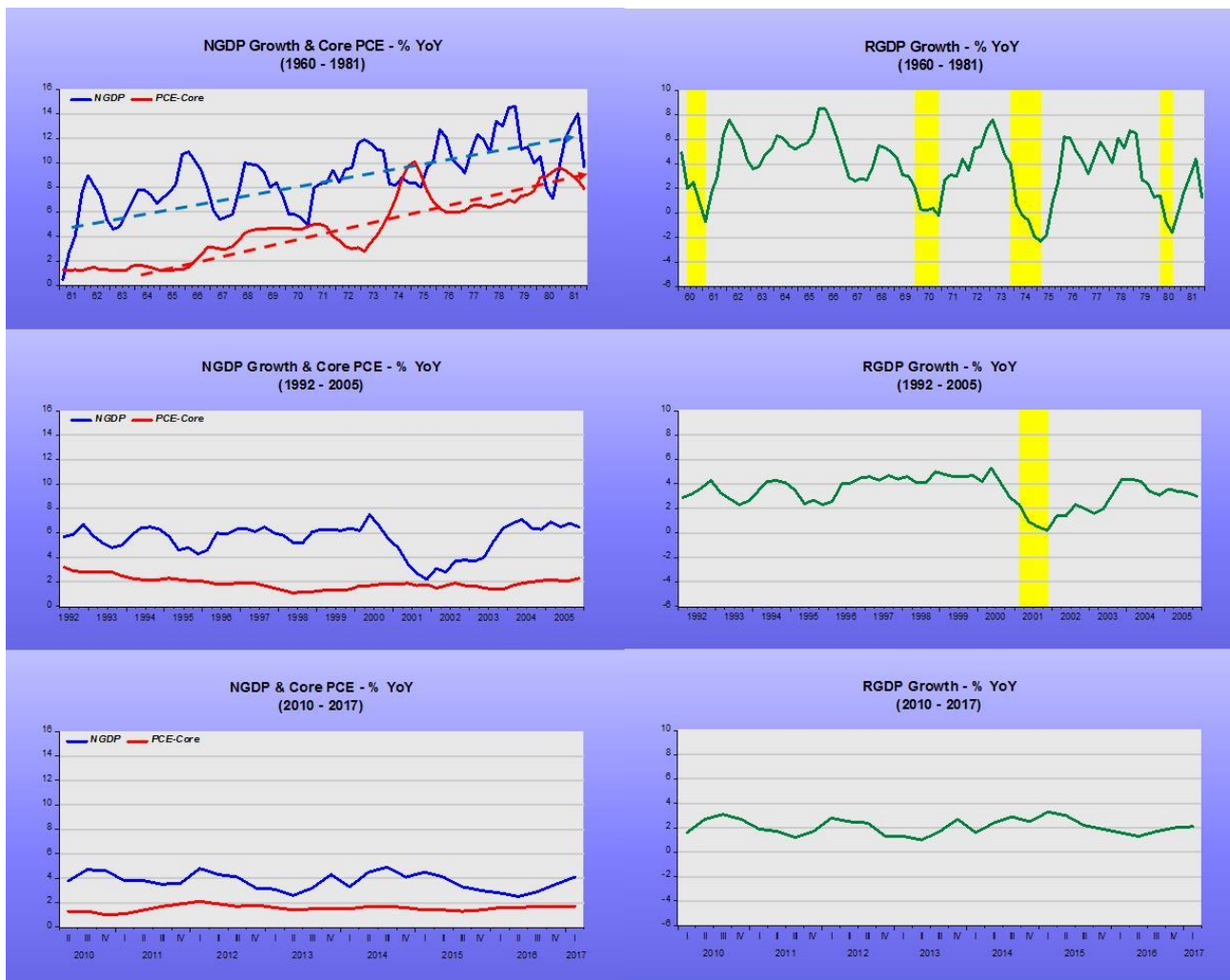
The panel below depicts

1 a period of nominal instability from a rising NGDP growth trend, resulting in rising inflation and volatile real growth (top chart),

2 a period of nominal stability at an adequate trend level path of NGDP, resulting in low & stable inflation and robust but stable real growth (middle chart) and

3 a period of nominal stability at a “too low” trend level path of NGDP, resulting in low & stable inflation and low but stable real growth (bottom chart).

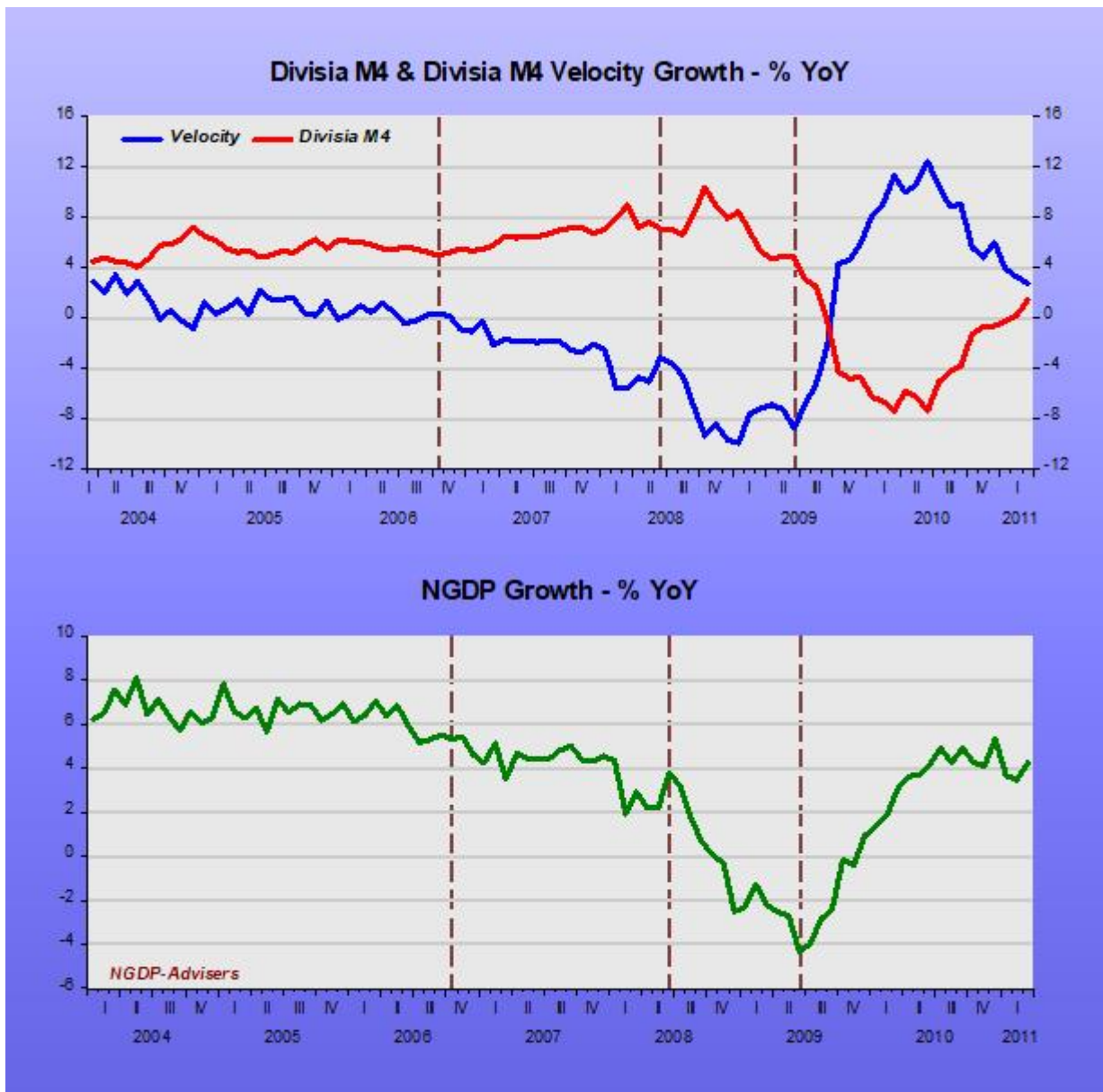




The monetary story I will tell, explains how the economy went from the middle chart to the bottom chart, in other words, how it got stuck in a low nominal & real growth environment, remaining, in fact, depressed.

The monetary variable I use is the broadest measure of the Divisia Monetary Index provided by the [Center for Financial Stability](#). The monthly GDP (nominal & real) are from [Macroeconomic Advisers](#).

To maintain nominal stability, the Fed has to offset changes in velocity, according to  $MV=PY$  or, in growth form,  $m+v=p+y$ . Let's check from 2004 onwards. (We know, from looking at the middle panel of the chart above, that nominal stability prevailed for much of the time at least since 1992).



Beginning soon after Bernanke becomes Fed Chairman in January 2006, velocity begins to fall (money demand growth to increase). Money supply growth only offsets this partially, resulting in a slowly falling NGDP growth.

In mid-08, still three months before Lehman, velocity shoots down. Money supply initially barely budges and then falls. NGDP growth becomes significantly negative. That's the "Great Recession" part.

In mid-09, just as the GR comes to an official end, Divisia M4 velocity growth rises significantly. Now, money supply growth offsets it only partially, allowing NGDP growth to rise. From that point on, nominal stability is regained, albeit at a lower level of NGDP growth, implying a lower level of real output growth.

Divisia M4 & Divisia M4 Velocity Growth - % YoY



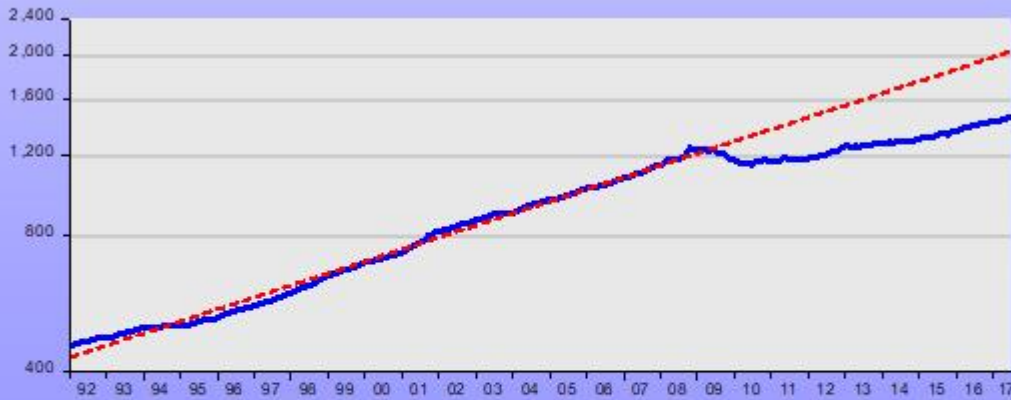
NGDP Growth % YoY



The result was that, by not allowing NGDP to climb back to its previous trend level after the original mistake made by the Fed, the “Great Recession” morphed into a “Long Depression”.

As the charts below indicate, by letting the money stock permanently fall, the level of nominal spending was permanently reduced, as was the level of real output.

Divisia M4 & Trend



NGDP & Trend



RGDP & Trend



It is, therefore, not at all surprising that inflation remains “too low”, and long-term interest rates do not go higher despite all the Fed’s threats to “normalize” monetary policy. In fact, by insisting on “normalizing” policy, the Fed will likely reap recession!