THE ECONOMIC SITUATION

A Quarterly Commentary

Bruce Yandle

Dean Emeritus
College of Business and Behavioral Science and
Alumni Professor of Economics Emeritus
Clemson University

Distinguished Adjunct Professor of Economics,
Mercatus Center at George Mason University

yandle@bellsouth.net

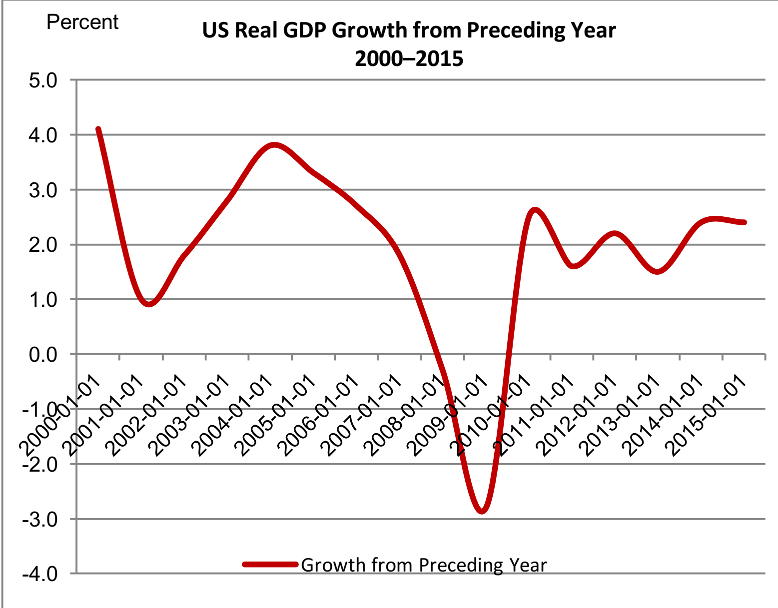
March 1, 2016

- Life in the slow lane
- Money: does it really matter?
- The geographic imprint
- Employment, wage growth and regulation
- Suggested spring reading

Life in the Slow Lane

With falling exports induced by a strong dollar, declining investment in the energy sector driven by falling oil prices, and a Chinese economy that continues to weaken, the US economy seems to be locked in low gear. GDP growth for 4Q2015 came in at a snail-paced 0.7 percent, giving 2.4 percent growth for the year, the same as for 2014. Pass the word. The world is flat!

Some suggest we might as well get used to it. It's been 15 years since we saw 4.0 percent growth and 9 years since 3.0 percent. Somehow, the Great Recession seems to have ripped high gear from the economy's transmission. And the transmission did not come with a warranty.



Is there a way to repair the Great American Bread Machine? Is there a 2016 recession in the cards? Must we just get used to it?

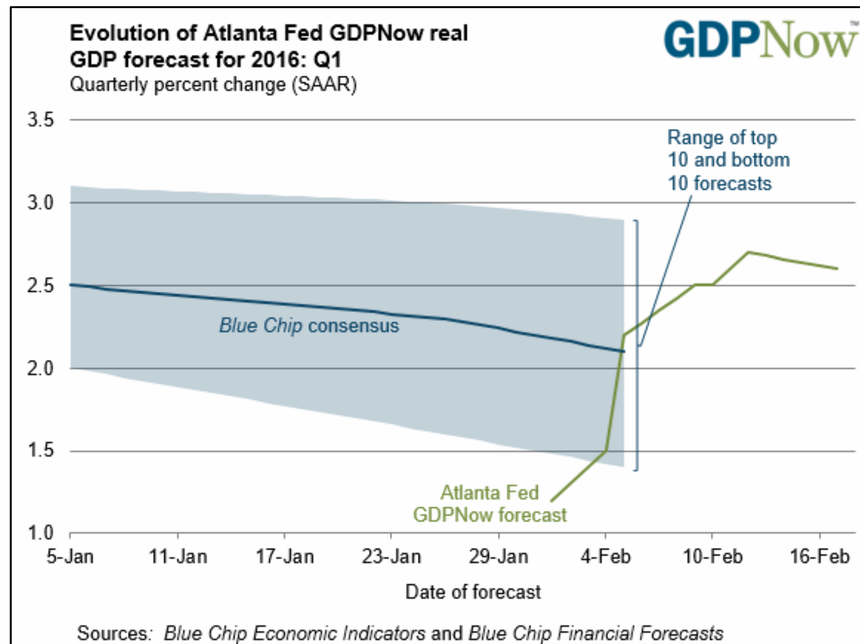
The forecasters are saying "get used to it"

A quick survey of forecasters reported next shows no evidence of a recession, even though there are some pretty weak numbers. But GDP growth at 2.5 percent is becoming the 2016 norm. Notice that 2017 does not look better. Here are the numbers from six major institutions.

GDP Growth Forecasts

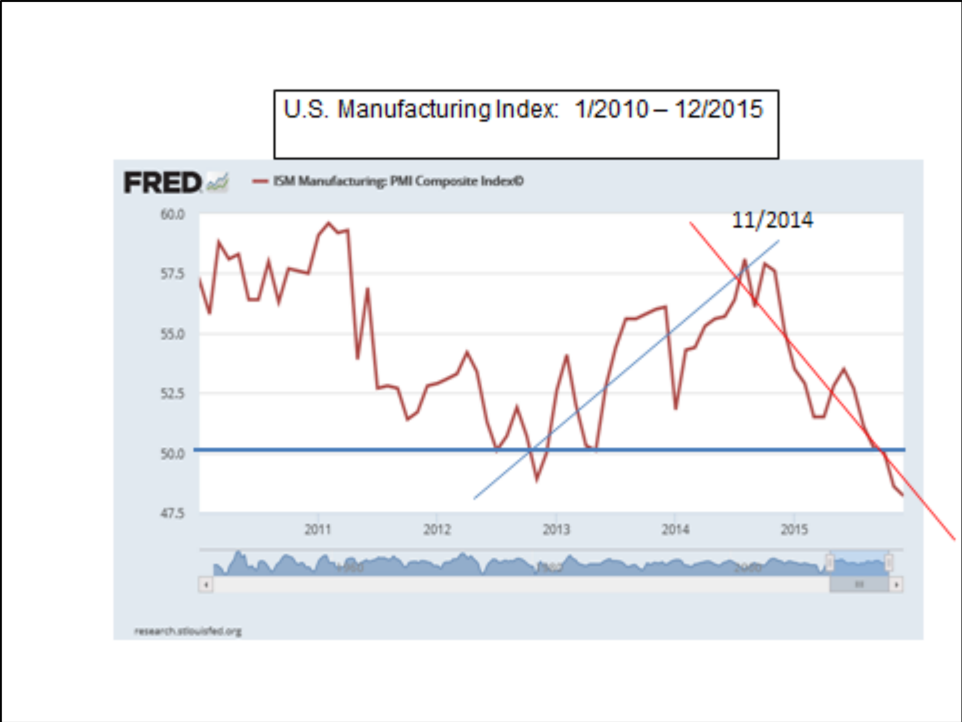
	2016	*2017*
CBO	2.5%	2.5%
Merrill Lynch	2.5%	
Morgan Stanley	1.8%	1.8%
OMB	2.6%	2.6 %
Wells Fargo	1.8%	2.3%
World Bank	2.7%	2.4%

GDPNow, provided every couple of weeks by the Atlanta Federal Reserve Bank, points a bit beyond 2.5 percent growth, at least on a quarterly basis. But be happy! As the chart here indicates, this is up from less than 1.0 percent growth observed in January.



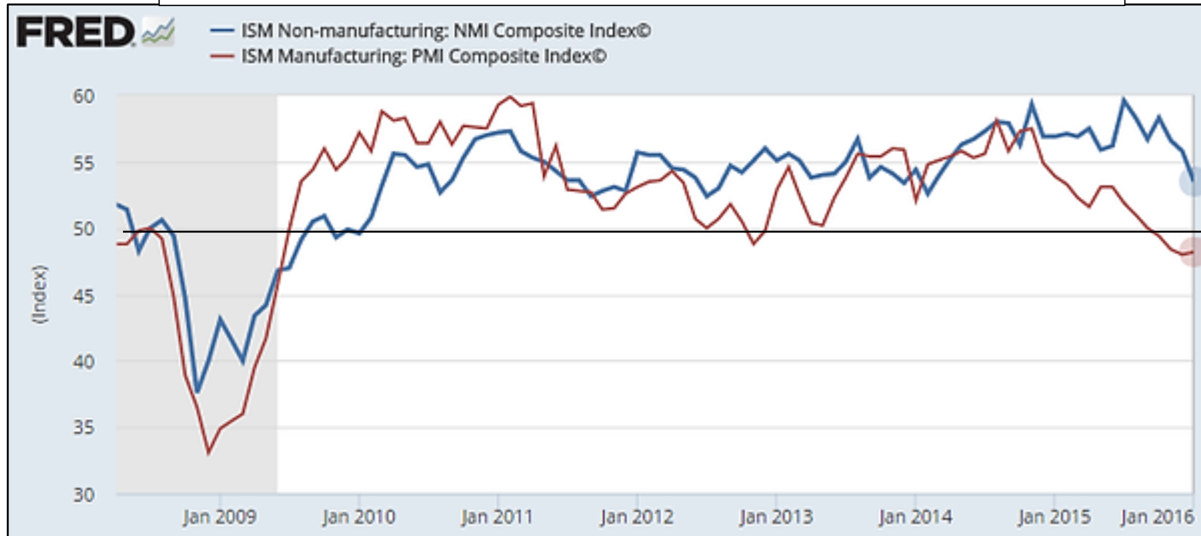
But will we get a manufacturing recession?

In spite of the pale but positive 2016 GDP forecast, there is a pronounced slowdown occurring in US manufacturing, which accounts for 12 percent of total value added in the economy. Energy production, which accounts for another 2 percent of total value added, is also in decline. The next chart gives the manufacturing side of the story. Notice how growth in manufacturing activity accelerated until around the end of 2014 and then decelerated and went negative in 2015's last half. We now have four consecutive months of negative growth in manufacturing output.



The chart that follows compares growth data for manufacturing and the nonmanufacturing, or services, economy. Note that manufacturing is leading the decline, while the pace of the services economy is much stronger. The number 50 in the chart is the neutral point. A number less than 50 implies negative growth.

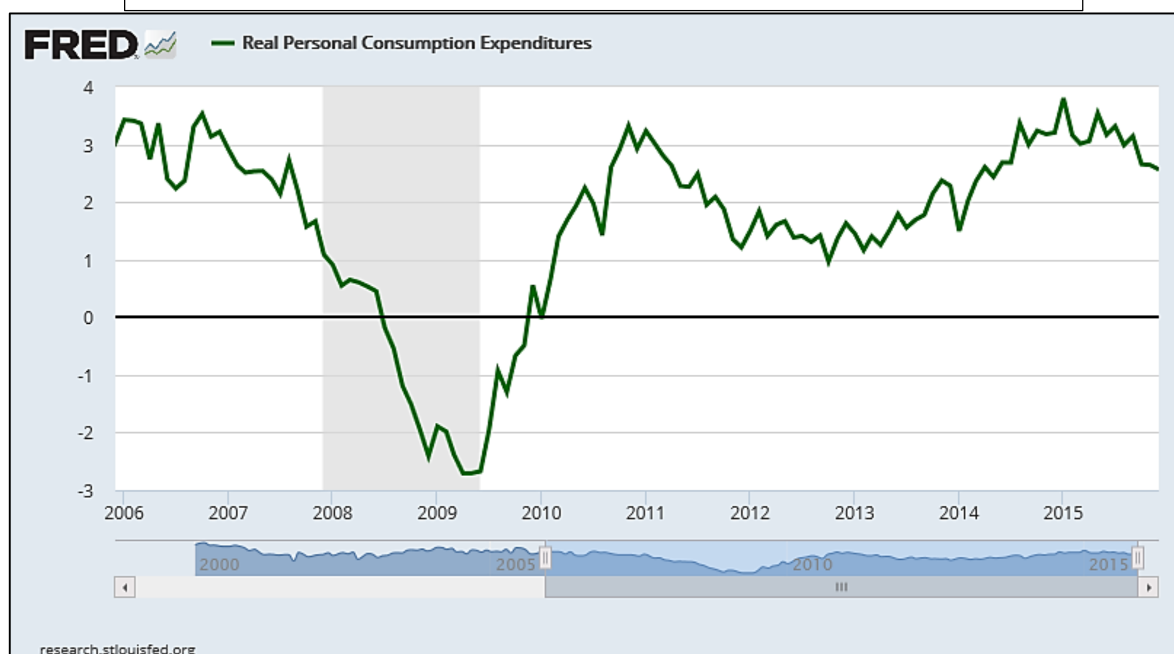
US Manufacturing and Services Index: 1/2009–1/2016



What are the chances that manufacturing and energy might bring down the services economy (which accounts for 67 percent of total value added) and generate a recession?

Wells Fargo economists addressed the question in a February 2016 commentary titled “Can Manufacturing Take Down the Service Sector?” Their statistical analysis showed that a 3 percent decline in manufacturing value added would be required to push services, which make up some 65 percent of the economy, into negative growth territory. Data for manufacturing value added data through 3Q2015 are now available. These data show annual growth rates of 0.6 percent for 3Q2015 and 0.2 percent growth for each of the preceding two quarters. No, we don’t have negative numbers yet, but the positive margin is getting thin. Can we count on the reliable consumer to push the economy forward? What does growth in real consumption data tell us? The data in the next chart are encouraging.

Growth in Real Personal Consumption Expenditures
Year-Over-Year, 1/2006–12/2015

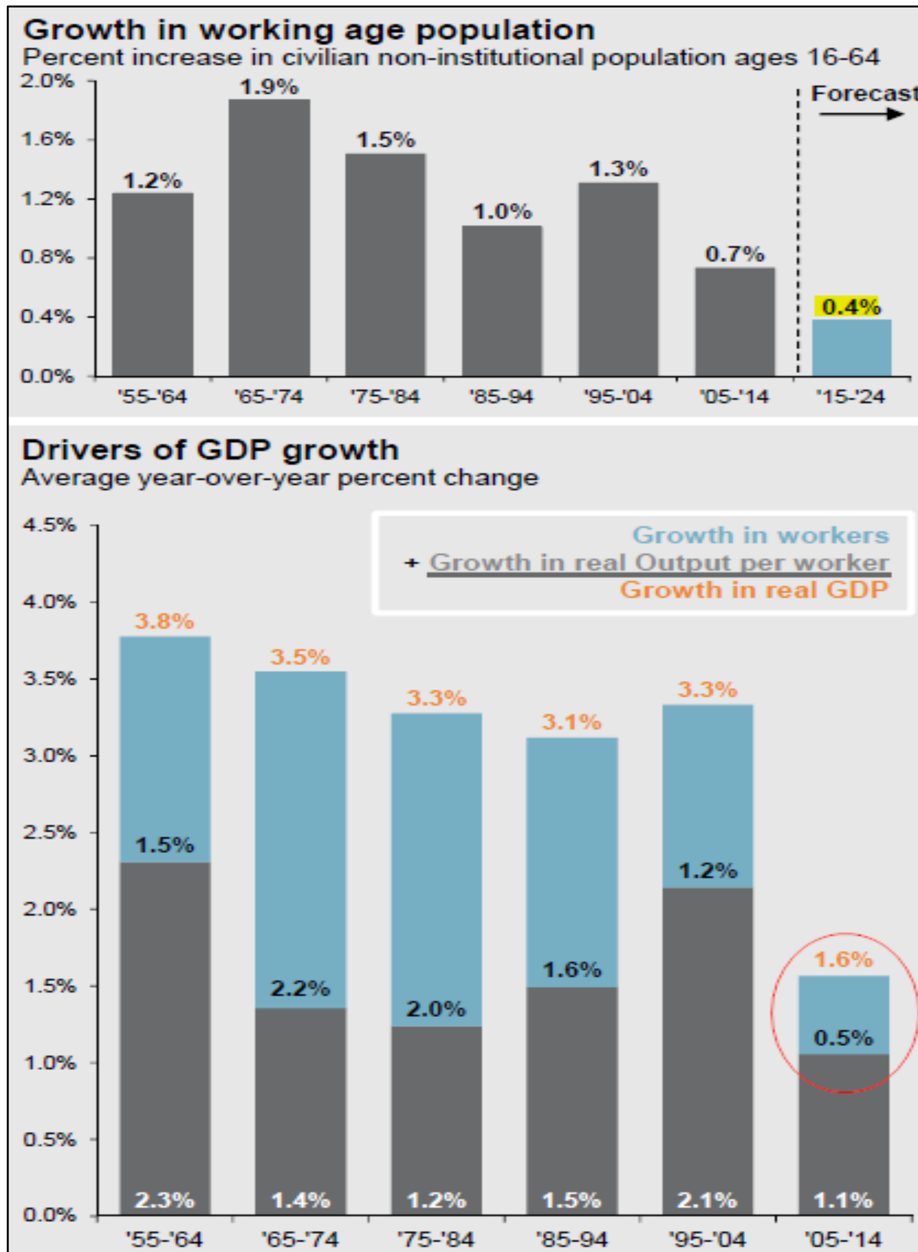


A recession? The signals are weak, but not negative. Put another way, the caution light is just barely yellow.

Could the forecasters be overly pessimistic?

With low-gear GDP growth churning 2.0 percent to 2.5 percent annually, what are the prospects for once again riding on the 3.0 percent yellow brick road? Will we see higher steady state growth in the next few years? The quick answer says not likely. Here's why. There are two basic short-run ingredients that determine real GDP growth: growth of work-age population and growth in productivity. Take a look at the next two charts. Both numbers look pale for the next few years.

As indicated in the top of the duplex chart, work-age population is predicted to grow at the low historic level of 0.4 percent in the next decade. The bottom part of the charts looks at what happened in the most recent decade, 2005–2014. Here we see the result of low growth in productivity combining with small growth in the work-age population.



But wait a minute. Are these numbers carved in stone, or are they the result of human action based on incentives? Surely, it is the latter. So what might cause a larger increase in the labor utilization? After all, not all the work-age population works. Indeed, the labor participation rate has been falling for more than a decade. Will some of these people come back to work? Perhaps. A significant number are comfortably caught in a welfare trap that opened during the Great Recession. Recipients of disability income insurance and other welfare benefits pay a high price when they go to work: they forfeit most of their welfare benefits. On the other hand, a lot of young people who decided to

go to college during the bleak recession years are now leaving college and joining the workforce, or at least trying to do so.

What about productivity? Well, that depends on the rate of technology change, inventions, and innovation. We can't expect sudden breakthroughs. But then there are man-made restrictions, regulations that prevent adaptation and production expansions. Those barriers are pretty stout, and they are not likely to yield very much in the next five or so years. Over the longer term, there are meaningful possibilities—at least theoretically.

Money: Does It Really Matter?

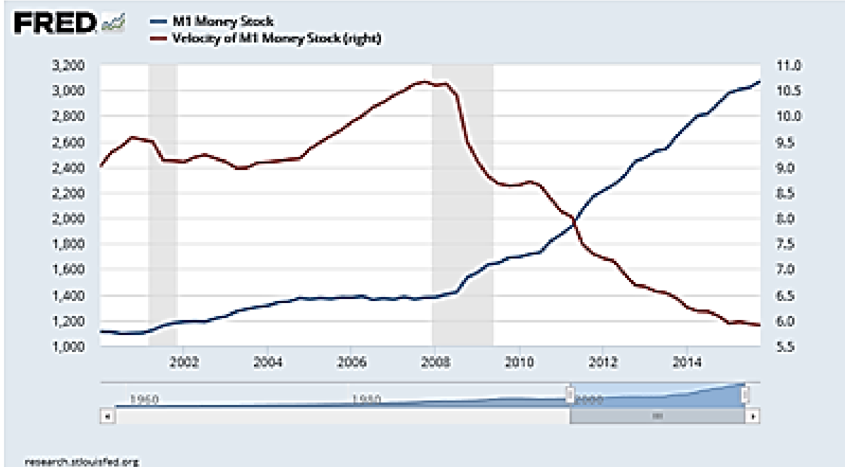
Back in 1911, economist Irving Fisher focused attention on the equation of exchange, a relationship between the amount of money in the economy, the rate at which it moves across transactions, and the nominal level of GDP. The relationship had been noted much earlier by John Stuart Mill and David Hume. But Fisher wrote out the equation and from it developed a monetary theory of economic activity. The equation says:

$MV = PQ$,

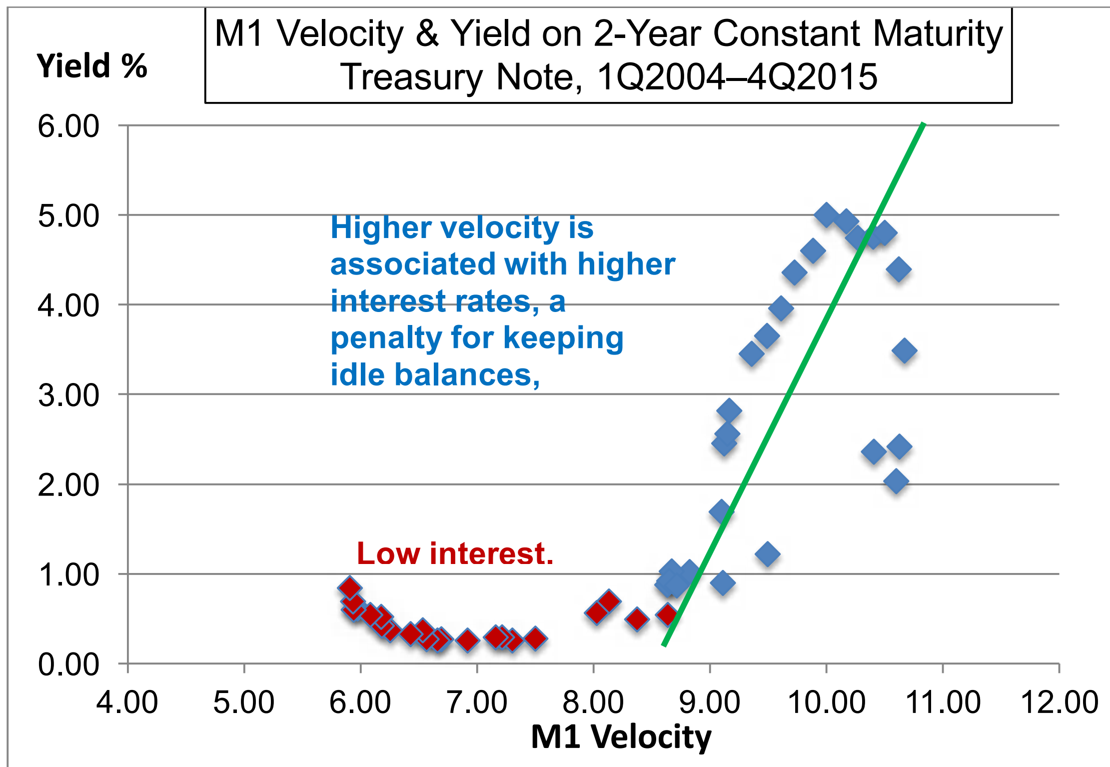
where M is the amount of money in the economy, V is its velocity—the rate at which money sails through the economy, P is the price level, and Q is the quantity of goods and services produced by the economy. The equation implies that when M rises, holding velocity constant, PQ will rise. More money injected into the economy can be associated with higher nominal GDP. Going a bit further, we can see that when M rises and V and Q are constant, then P, the price level, will rise; that is, inflation will increase. But what happens when V heads south, other variables being the same?

The next chart shows a mapping of velocity into the interest rate on 2-year constant maturity US Treasury notes. Notice that since the Great Recession in 2008, the money supply has grown markedly and velocity has fallen. Put another way, there is a lot of money on the sidelines, not circulating in the economy. GDP growth has been pale for years. I have marked the period of low interest rates in the chart when there is little movement in velocity. The remaining data points suggest a pattern that confirms the notion that higher opportunity cost of holding idle cash leads to more vigorous money use. What we have here is an image of the liquidity trap—a situation where, due to low interest rates, increases in the money supply may yield little in the way of GDP increases.

Money & Velocity, 1Q2000–4Q2015



The liquidity trap explanation that monetary policy may cease to be effective in energizing economic activity grew out of the work of J. M. Keynes. A competing theory offered by adherents to the Austrian school of economics argues that what some may call a liquidity trap is actually a condition that emerges after years of misguided investment generated by erroneous government policies. An example would be seen in massive growth in subsidized housing mortgages that led to too much residential investment. This argument suggests that financial markets will not function “normally” until the excess investment is depreciated out of the system.



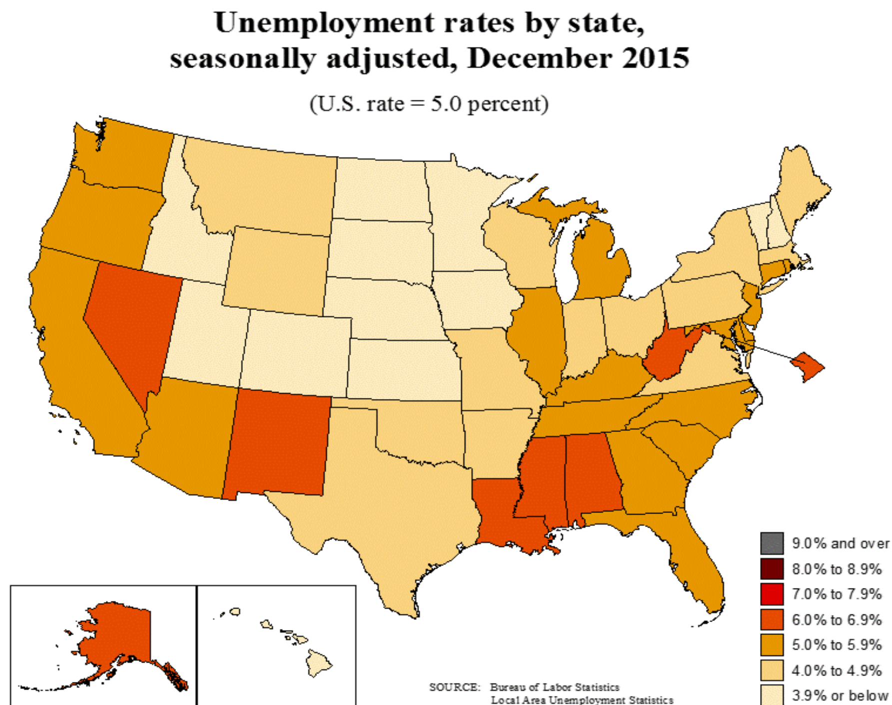
What does all this say about Fed interest rate policies and future GDP growth? The Fisher equation and the relationship between velocity and interest rate tell us that breaking the Fed's zero interest rate will lead to higher velocity and more GDP. But remember, the equation is about nominal GDP, not necessarily real GDP. This implies that higher velocity will generate higher inflation, at least until goods production rises.

And how might the Fed go about raising interest rates? Consider this approach: at present, the Fed pays 50 basis points in interest on bank reserves that it holds. According to Cato Institute monetary economist James Dorn, this racks up $12 billion annually paid to banks by US taxpayers. Put another way, the Fed offers a 100 percent sure thing, a 0.50 percent return to banks that deposit their reserves with the Fed. This gives banks an incentive to keep money on the sideline instead of lending it, which reduces velocity. This Great Recession policy has helped banks strengthen their balance sheets, but at the expense of less cash flow to generate economic activity. Eliminating the payment on bank reserves might be a meaningful way for the Fed to raise interest rates and accelerate economic activity.

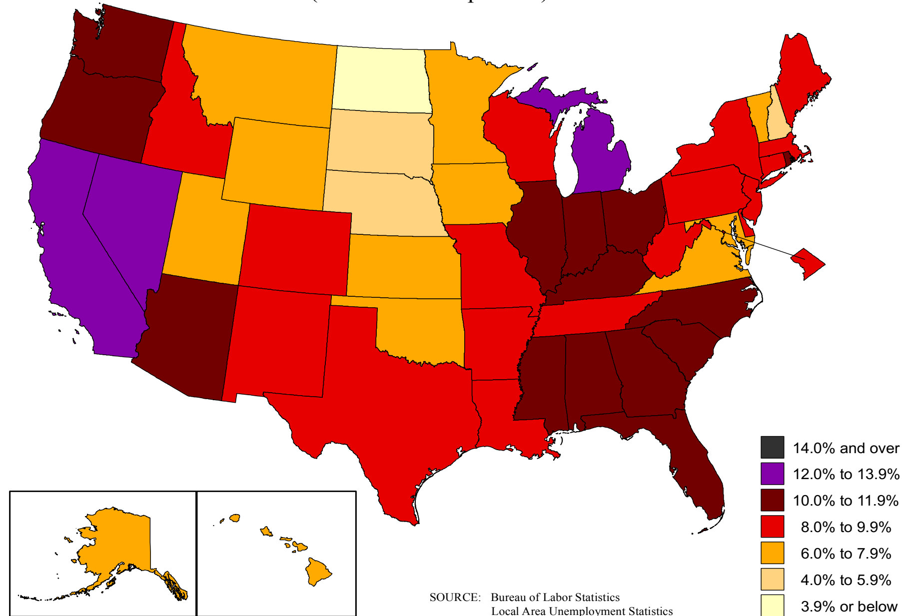
Go figure. But don't stay too long. This seems like another bootlegger and Baptist story. The bootleggers? Banks, of course. And the Baptists? Those who argue that our financial system must be shored up to handle the next economic shock, which is surely bound to come—eventually.

The Geographic Imprint

Variations in data across the 50 states provide one way of looking at the results of how economic outcomes are transmitted geographically. Consider first December's state unemployment rates. The Bureau of Labor Statistics paintbrush uses light colors for states with low unemployment rates. The December outcomes were still positively affected by energy production by those wonderful square and not-so-square states in the middle of the map.

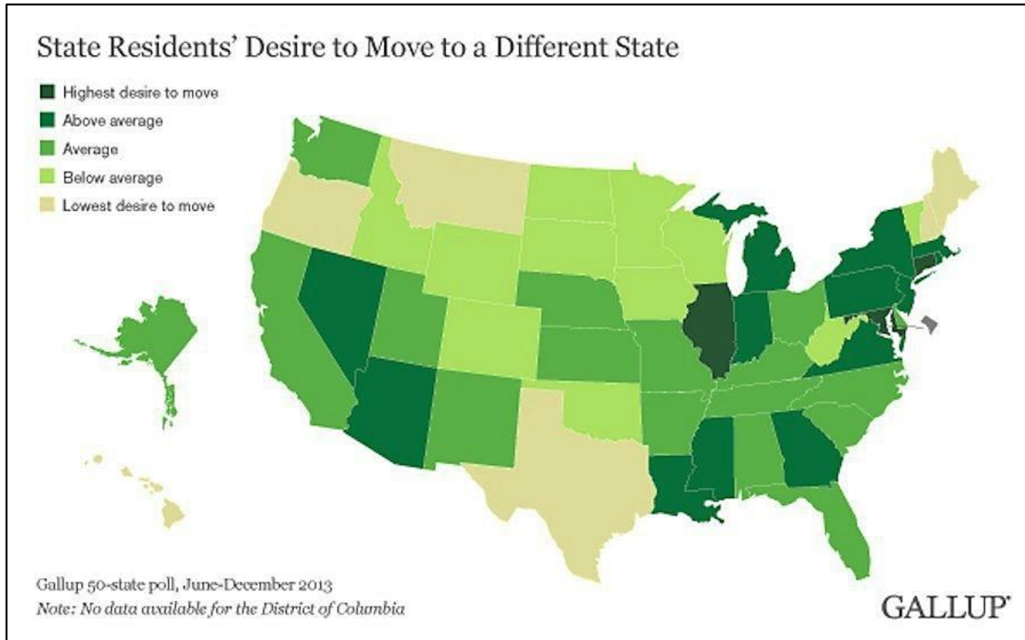


I show next a map of 2010 to illustrate how much progress there has been during the five intervening years.



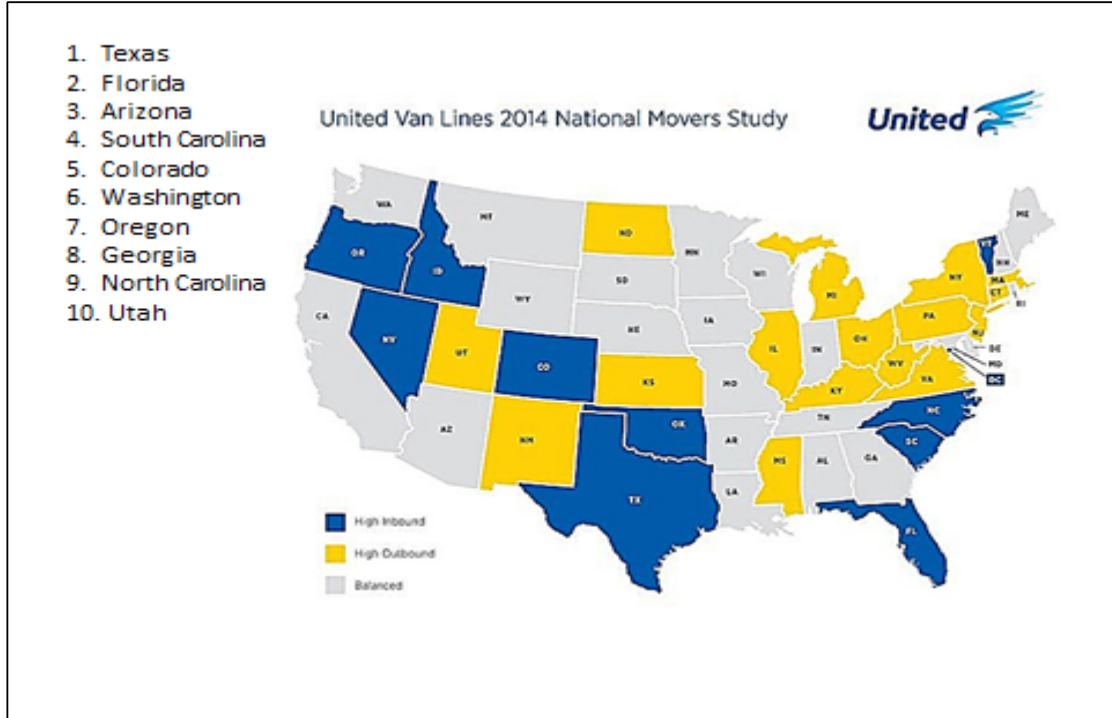
It's interesting to note that some of those middle-of-the-map energy states somehow missed out on the Great Recession. Could it be the federal government's (taxpayer-subsidized) ethanol program that saved them?

We might expect that unhappiness with a current location might cause people, when asked, to say they would like to live somewhere else. The results of a Gallup inquiry about the desire to relocate are shown in the next map. Note how the unhappiness states compare with the higher unemployment states shown earlier.



According to Gallup, the "let's get out of here" states are Illinois, where 50 percent wish to leave, Connecticut (49 percent), Maryland (47 percent), Nevada (43 percent), Rhode Island (42 percent), New Jersey (41 percent), New York (41 percent), Massachusetts (41 percent), Louisiana (40 percent), and Mississippi (39 percent). At the other end of the spectrum, where people seem to be happily settled and fewer wish to pack up a U-Haul, Gallup found Montana (23 percent), Hawaii (23 percent), Maine (23 percent), Oregon (24 percent), New Hampshire (24 percent), Texas (24 percent), Colorado (25 percent), Minnesota (25 percent), South Dakota (26 percent), and Wyoming (27 percent).

While Gallup's data are based on surveys of 600 people in each of the 50 states, a report from United Van Lines tells us what people actually did. The next map confirms much of the Gallup results. I've listed the top destination states on the map.

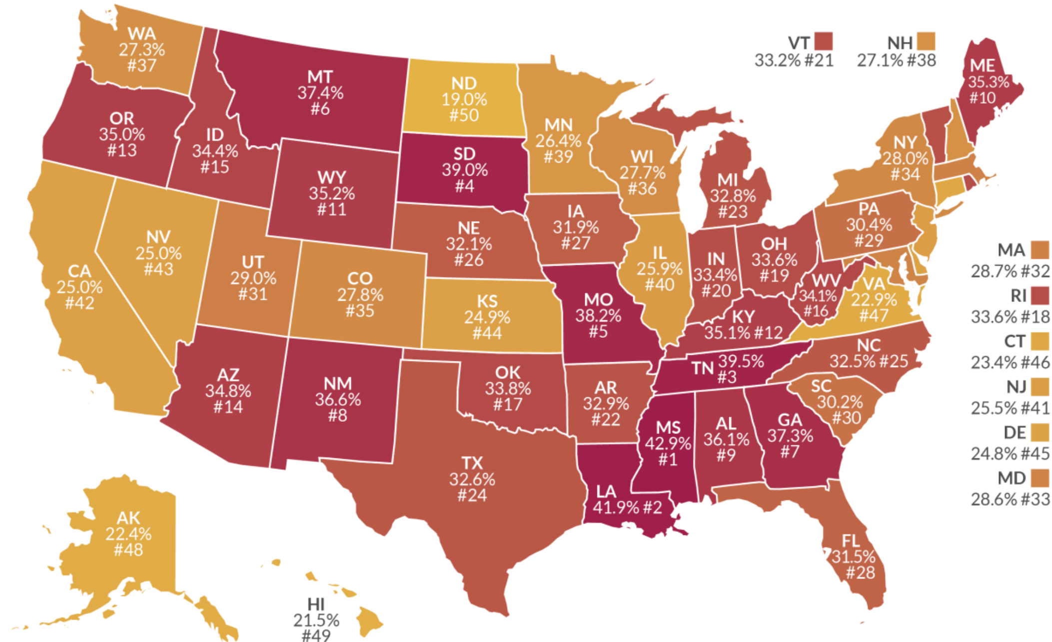


Which states depend most on federal aid?

Moving to greener pastures may be one way to bring improved income or happier times. Getting government assistance can be another. When asked which states loom large on the government's payrolls, many people are sure they know the answer. Of course, it must be the southern states. But as the next chart tells us, that answer is just partially correct. Yes, Mississippi, Louisiana, and Tennessee are numbers 1, 2, and 3, respectively, but 5th place goes to South Dakota, and Montana comes in 6th. Georgia is 7th and Maine is 10th. Examination of the map will shake some other prejudgments. For example, South Carolina ranks 30th, which is below Ohio, Pennsylvania, and Indiana.

Which States Rely Most on Federal Aid?

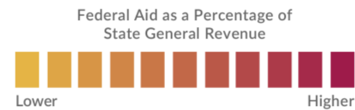
Federal Aid as a Percentage of State General Revenue (FY 2013)



Notes: Figures are calculated by dividing each state's "Intergovernmental Revenue" by its "General Revenue." "General Revenue" includes all tax revenue but excludes utility revenue, liquor store revenue, and investment income from state pension funds. D.C. is designated as a local entity by the U.S. Census Bureau and thus not included here.

Source: U.S. Census Bureau; Tax Foundation.

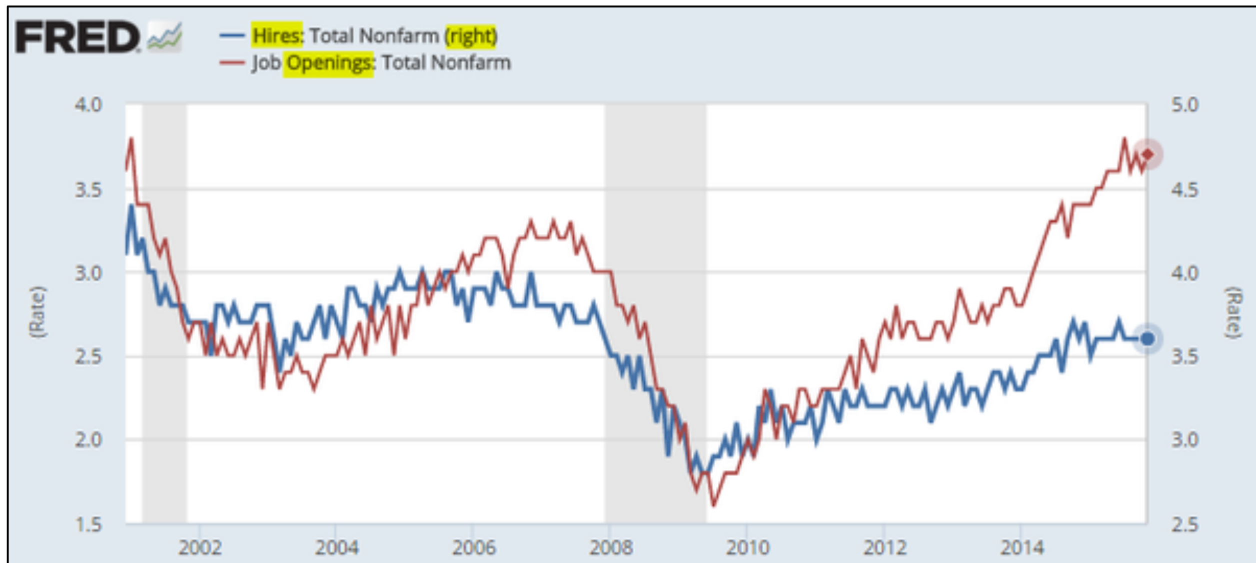
Federal Aid as a Percentage of State General Revenue



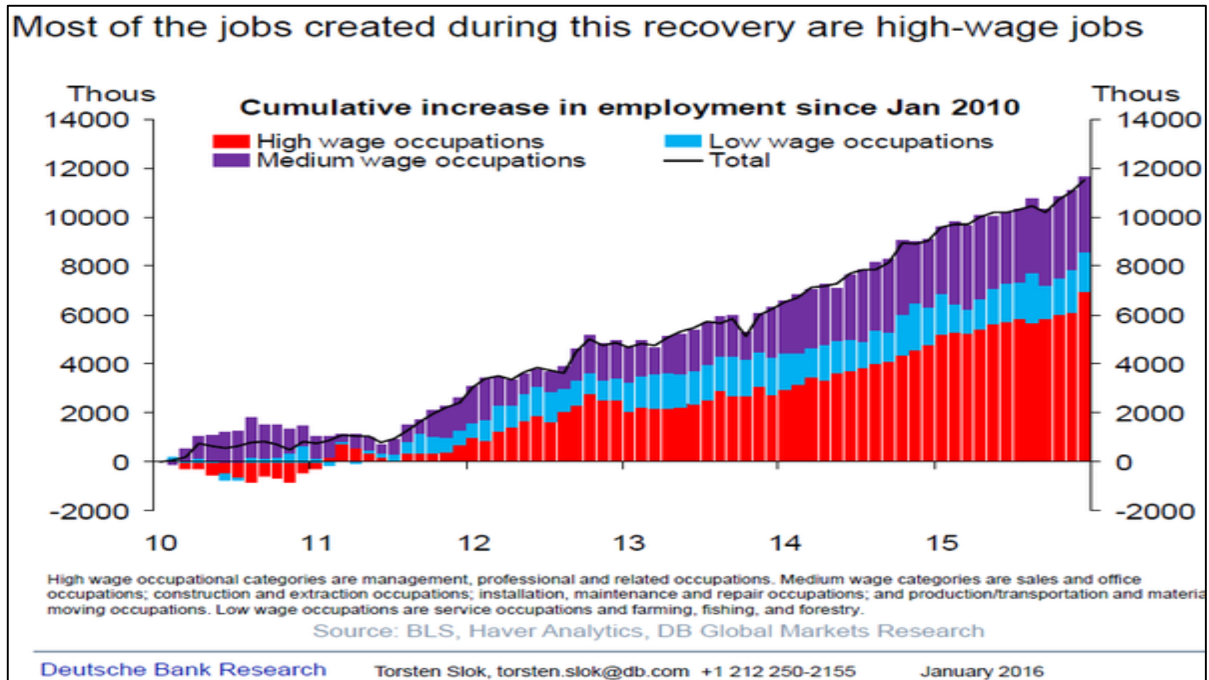
TAX FOUNDATION @TaxFoundation

Employment, Wage Growth, and Regulation

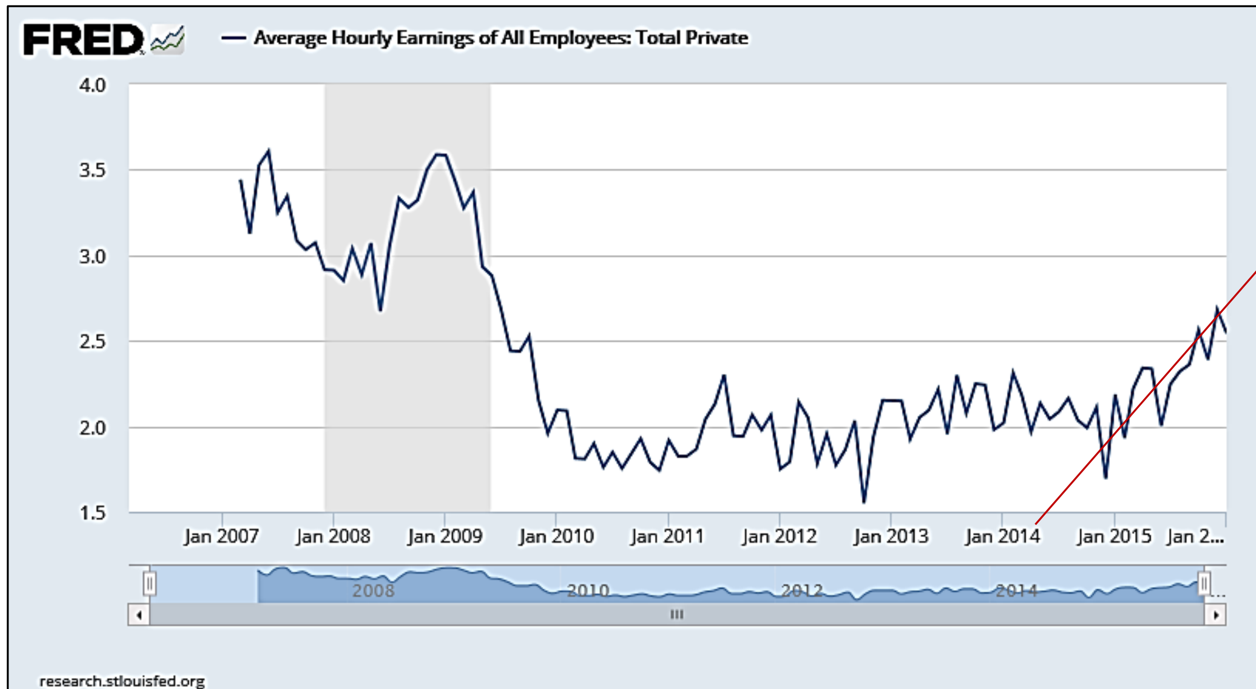
Recently, the Daily Shot, that wonderful daily source of macroeconomic interpretation, provided a St. Louis Fed chart that mapped together growth in job openings with growth in hires. The surprising data, shown in the next chart, say that the postrecession economy is generating far more job opportunities than labor markets can fill. A quick look at the chart tells us that gap between growth in job opportunities and hires has grown significantly in recent years.



The data suggest there is a severe mismatch between work opportunity and qualified workers. I show a related chart next. This one provides an analysis of the kinds of postrecession jobs that have been filled with regard to pay levels. The data say we are enjoying an economy that is providing lots of higher-paying jobs.



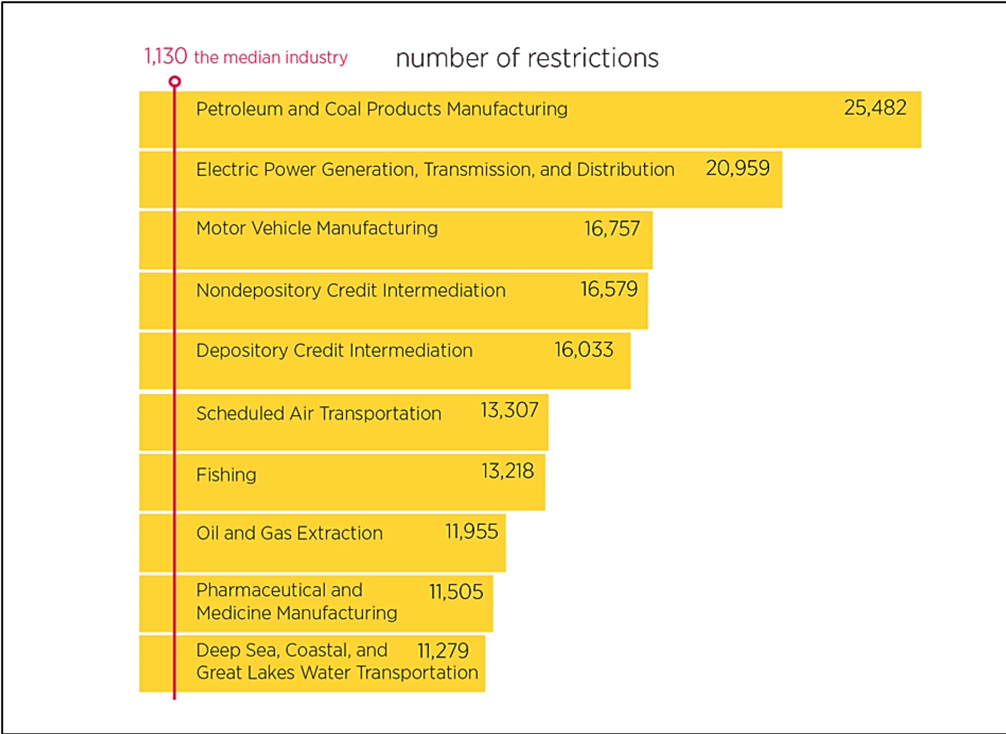
Well, if growth in job opportunities is outstripping hires, and if most of the job opportunities involve higher-paying jobs, then we ought to see some increases in wages. This is exactly what we see in the next chart.



Another look at the regulatory burden

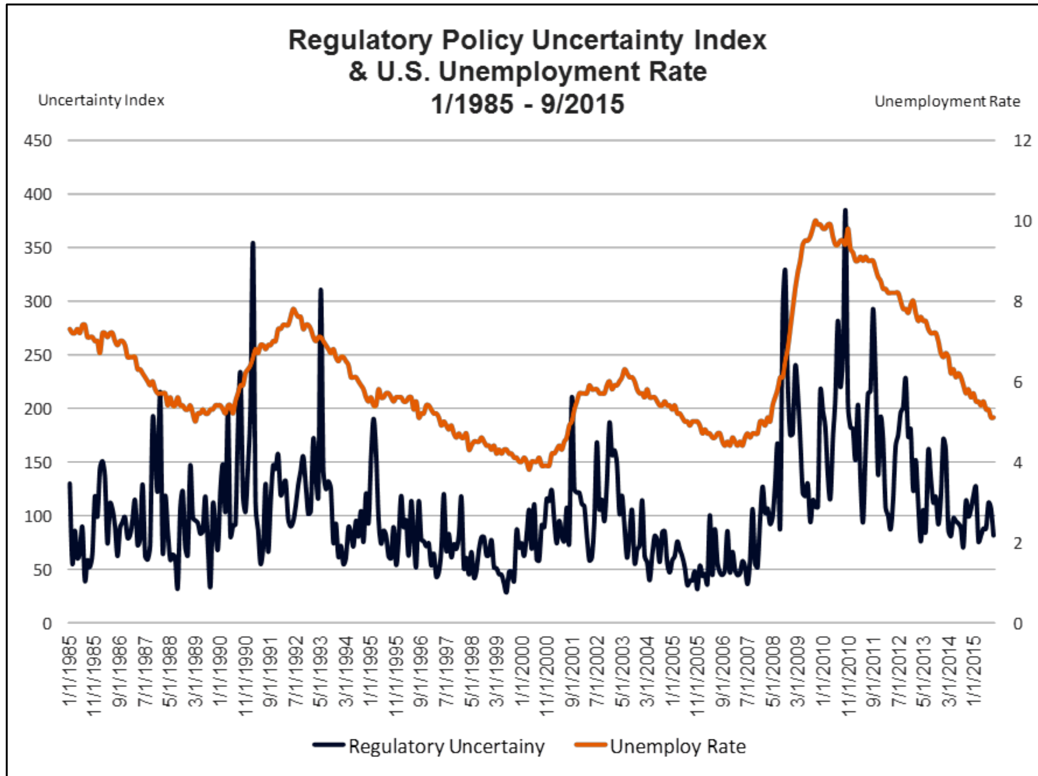
Patrick A. McLaughlin and Oliver Sherouse, two researchers at the Mercatus Center at George Mason University, have counted the number of command-and-control restrictions found in the *Code of Federal Regulations* for major US industries. Here are the 10 most-regulated US industries.

2014’s 10 Most-Regulated Industries



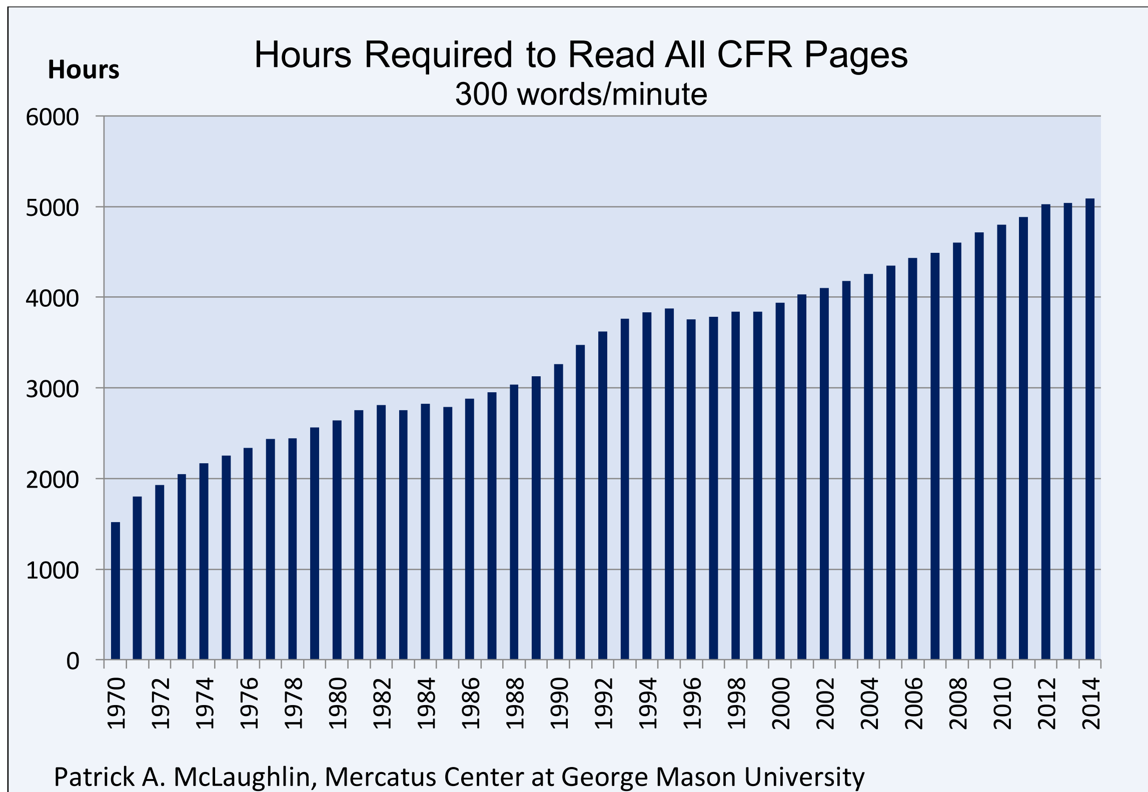
Petroleum and coal rank number one, followed by electricity production and then automobile manufacturing. While scanning the list, keep an eye on the median number of restrictions for all industries—1,130. Of course, that is the count which cuts the distribution at the midpoint.

But these are just numbers, and large ones at that. What about the effects? Can we link regulation to employment? The next chart does just that. It connects the uncertainty that comes with the regulatory burden to the unemployment rate. The US regulatory uncertainty index shown in the chart is based on the frequency of certain words found in major daily newspapers, counting when words like “regulation” and “uncertainty” appear in the same story. When mapped to the unemployment rate, the data seem to confirm what common sense tells us. If you are CEO of a heavily regulated industry, then rising regulatory uncertainty becomes converted into hiring uncertainty. There’s a tendency to delay expanding your payroll while awaiting improved regulatory certainty.



Just in case you wish to read through the *Code of Federal Regulations* to get a grip on the extent to which your industry is regulated, here's how many hours it will take and how that number has grown since 1970. Better get a comfortable chair, it will take 5,000 hours at the normal pace of 300 words per minute to get through the 2014 edition!

Enjoy!



Spring Reading

Some books to consider. I guarantee that Matt Ridley's latest, *The Evolution of Everything* (New York: HarperCollins, 2015) will open your mental eyes to some new ideas and get some fresh gears turning about how the world works. Renowned for *The Rational Optimist*, Ridley writes from the perspective of a former editor of the *Economist*, member of House of Lords, and widely celebrated zoologist. Ridley was impressed years ago by the market process and its ability to gather and conserve information from countless individuals and sources. He was turned on by that idea and how Adam Smith's invisible hand theory had inspired Charles Darwin's adaptation and evolution theory. As a result, emergent systems, those self-organizing processes that generate order from chaos, all without planning, constitute the bold-faced theme of the book. Reflecting the richness of Ridley's mind, there are chapters devoted to the evolution of the universe, morality, life, genes, culture, the economy, money, and more. His discussion of the evolution of technology is my favorite chapter. Here he bombards readers with stories of simultaneous discovery of major inventions and ideas, arguing all along that because of the fertility of billions of human minds, fresh ideas and technical breakthroughs will come whether there are patent-based incentives or not.

Everyone has had the experience of reading an inspiring book only to wish that it had been read sooner. This was the case for me as I read recently Nobel Laureate Vernon Smith's 2008 autobiography, *Discovery*: *A Memoir* (Bloomington, IN: AuthorHouse, 2008). Certainly not only intended for economists, the book recounts Smith's life journey from childhood in a struggling but immensely happy family in Kansas to completing a Caltech engineering degree and earning a PhD in economics from Harvard. It was shortly after Harvard that Vernon settled in at Perdue and pioneered the invention and development of experimental economics. This extraordinary effort, which went against the discipline's grain, made economics for the first time a laboratory science. While telling his story, Vernon introduces the reader to poetry that has inspired him, to people who guided him, and to deep spiritual thought that facilitates his constant ongoing effort to discover more about human behavior. Along the way, Vernon Smith describes his Asperger's syndrome in clear terms and explains how Asperger's gave him an advantage in his discovery enterprise. And if this is not enough to entice a prospective reader, there is more. Vernon, a gourmet cook, also gives a detailed recipe for preparing his own special chili as well as how to cook one-of-a-kind hamburgers using home-grown tomatoes. I guarantee you will find *Discovery* a different but also very inspiring book.

Finally, something very different, at least for me. Take a look at Theresa Brown's *The Shift* (Chapel Hill: Algonquin Books, 2015). Theresa Brown has written a fascinating book about what it is like to be cancer ward nurse for one intense 8-hour shift. Just 254 pages long, the book is a very personal account that focuses on the trials, tribulations, success and sadness faced by four patients, their families, and the hospital team that serves them. As is often the case with cancer patients, some in the story are involved in repeating treatment. Others who thought their illness was in remission face a recurrence and yet another round of hospital care. The nurses and the patients get to know each other very well. The reader learns about high-tech medicine, the now-elevated status accorded nurses (finally) and also the critical importance of human touch. Brown is unusually well-equipped to tell the story. She is a former university professor with a PhD in English who decided to follow her heart and become a registered nurse. This enjoyable and at times inspiring read sheds light on the economy's fast-growing healthcare sector and the very real people whose dedication keep it going.