THE ECONOMIC SITUATION

A Quarterly Commentary on the Economy



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Contents

Whole Lotta Shakin' Goin' On 1
Inflation and Ghosts from the Past 6
The Geographic Imprint 11
Where Has the Growth Gone? 13
Single-State Focus: Kentucky's Economic Situation 19
From Yandle's Reading Table 22

Whole Lotta Shakin' Goin' On

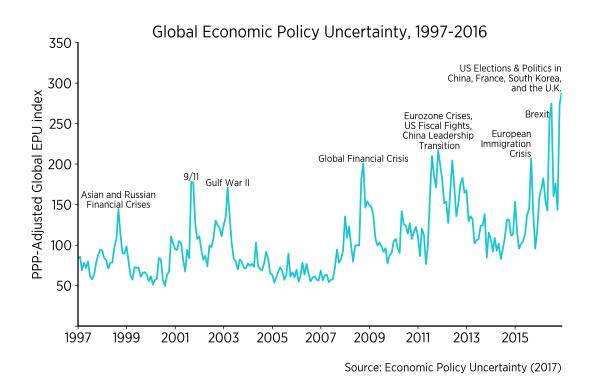
Do you remember Elvis's 1971 hit, "Whole Lotta Shakin' Goin' On"? That rambunctious tune would be a good theme song for the new Trump administration. In just its first few weeks, the administration announced a



score of proposed and major policy changes, including revising the Affordable Care Act, closing immigration from seven mainly Muslim countries, getting action started on the border wall, and initializing steps to remove parts of Dodd-Frank. With more change in the works, there is high uncertainty; and high uncertainty can lead to hesitancy and a bumpy GDP growth path. But of course, changes for the better can yield a pause that refreshes. We are still in the shakedown cruise, a bit too early to tell what the result may be.

I thought about this when the US Department of Commerce announced its first estimate for 2016's fourth quarter GDP growth (not quite 2.0 percent). For an economy that historically—before the year 2000—produced 3.0 percent growth or better, a real growth rate of 1.9 percent looked pale. Our national economy is like a three-lane (3 percent) highway with one lane closed (2 percent). Indeed, if the 1.9 percent estimate holds, 2016's GDP growth will come in at 1.6 percent, the weakest year since 2011. The slow growth data were confirmed by monthly industrial production numbers. They have been flat—no growth—since July.

Why the weakness? It wasn't the consumer. Retail sales and consumption are rising apace. It was low net exports and capital investment. Weaker exports associated with an escalating dollar and very high global uncertainty took away 1.7 percentage points from the GDP growth estimate. The high global uncertainty level is shown in the accompanying chart that reflects data for 17 countries. Compare the high uncertainty of the most recent observations with the uncertainty registered for 9/11. Wow! Mountains compared to molehills. Extreme uncertainty yields postponed investment, delayed hires, and other let's-wait-till-the-clouds-clear reactions that reduce GDP growth.



Making GDP great again: the 4 percent dream

If wishing could make it come true, the statement found on the Trump whitehouse.gov website would surely chase away the clouds: "To get the economy back on track, President Trump has outlined a bold plan to create 25 million new American jobs in the next decade and return to 4 percent annual economic growth." The jobs part of the statement is ambitious but a bit more believable than the call for 4 percent annual economic growth, especially when we are currently



barely moving at 1.6 percent. Notice, of course, the plan is for this to happen along the way to 2027, not next year.

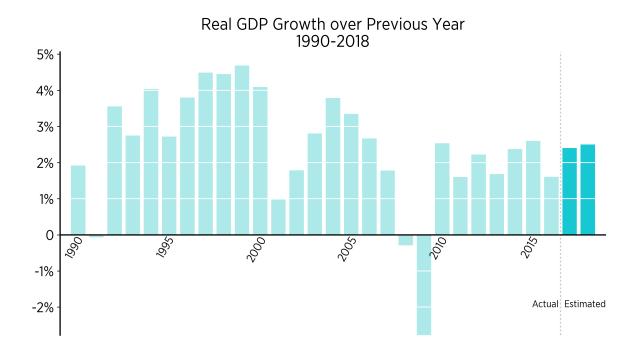
What about 4 percent real GDP growth? Just what are the prospects for seeing it by 2027? Will the economy resume speed?

Let's focus on the recipe for calculating the numbers. The recipe for estimating GDP growth calls for two critically important ingredients. If we can get our hands on the growth in the labor force and add that to growth in labor productivity, lo and behold, we

¹ "Bringing Back Jobs and Growth," WhiteHouse.gov, issues page, accessed January 23, 2017.

would be on our way to estimating real GDP growth. This said, how about the prospects?

First, let's look at real GDP and see how often we see 4 percent growth. The accompanying chart with data for 1990–2016 and estimates through 2018 gives the answer.

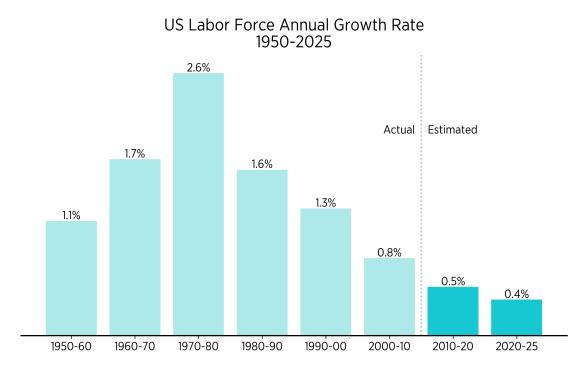


Source: Federal Reserve Bank of St. Louis and the Wall Street Journal

We have to go back to the year 2000 to find 4 percent growth, and when we get there, we see four strong years. So, it took a 16-year slowdown to get us to the moment. (Note that we must travel to 2005 to find 3 percent.)

Can we recover in just 10 years?

What about growth in the labor force and labor productivity? As seen in the next chart, labor force growth is crippled by aging baby boomers leaving the workforce and a smaller generation of workers entering it.



Source: Author's calculations from BLS data

Of course, these numbers can change if we open our borders to more people of working age. But surely that is not in the cards! We are doing just the reverse.

If, as official policy, we turn our backs on access to the ultimate resource—human beings—can't we offset weak labor force growth with high growth in labor productivity? Please, take a look at the next chart.



Source: Author's calculations from BLS data

I call attention to the 10-year and 5-year running averages. Remember, the Trump administration is promising a return to robust growth, not just an occasional 4 percent spike. What has been peak productivity improvement for any 10-year average? It looks like 3 percent growth is the best we have seen since 1950. Let's ease up a bit. For the 5-year average (the dotted green line), the peak lies above 4.0 percent in a couple of places. If we add 4.0 percent productivity growth to the low labor force growth estimates, we get 4.2 percent for 2020–2025. Yes, the return of 4.0 percent is in the cards . . . barely.

Isn't it possible for productivity growth to spike well above 3 percent across a decade? Yes. Powerful things can happen when the incentives are right and the regulatory barrels are removed from the highway. But if that happens or even begins to happen, will we encounter inflation and higher interest rates?

Inflation and Ghosts from the Past

"Job Growth Slows in December; Wages Post Best Gain Since 2009." The January 7 *Wall Street Journal* headline offered a succinct statement about the Bureau of Labor Statistics' December employment report. Yes, as expected, given the spike in global

² Eric Morath and Ben Leubsdorf, "Job Growth Slows in December; Wages Post Best Gain Since 2009," *Wall Street Journal*, January 6, 2017.

economic uncertainty and the correlation between that and decisions to hire, employment growth slowed in 2016's final month, and the unemployment rate nudged up just slightly.

Is inflation returning?

We saw a bit of a reversal in these numbers when January's employment report was released in February. Lo and behold, some 227,000 jobs were added in the economy, and year-over-year wage growth came in at 2.5 percent.³ Though surely appreciated by working families, the 2.5 percent wage growth points to the beginning of an inflationary path. Yes, while at a low level and surely not enough to set off alarms, inflation seems to be back in the game.

Just to be clear, we should remember that rising wages do not cause inflation. Their northward move reflects growing scarcity of skilled workers backed by growth in the amount of circulating money that fuels economic activity. After all, the term inflation itself refers to inflating the supply of money in the economy. Bank lending, the source of new money entering the economy, is on the rise. The banking system's massive capability for making more loans, based on having ample reserves on deposit with the Federal Reserve, tells us that more money—and more inflation—is on the way.

But not so fast. What about all those workers who seem to be waiting on the sidelines for the wonderful world of work to beckon? Doesn't the low labor participation rate suggest that we might have an inflation shock absorber capable of softening a pending inflation surge? Well, maybe. In fact, we are already seeing a small labor participation rate increase. Most likely, however, a large part of the nonparticipating labor force is actually employed, just not in officially documented ways.

Evidence of growth of the underground economy provided by the per capita count of \$100 bills in circulation supports the notion that the cash economy is booming. Coupling the unknown count of shadow economy workers with the more than 8 million now drawing Social Security Disability benefits—up by 1.7 million since 2007—yields a very different labor participation rate story.

Yes, this is the time to keep our interest rate seat belts fastened and our inflation trays in a secure, upright position. Put another way, we can expect to see the Federal Reserve deliver on its promise to raise rates three times in the next 12 months. Higher wages and more inflation lie in the offing.

³ US Department of Labor, Bureau of Labor Statistics, "Employment Situation Summary," February 3, 2017. This section is based on Bruce Yandle, "January Jobs Report a Boon amid All the Chaos," *The Hill*, February 3, 2017.

Dispensing with ghosts from the 2008 credit crunch

With inflationary embers beginning to glow a bit, it may be important to recall the 2008 credit meltdown. It's been almost a decade since the Great Recession, but in mid-January, the US Justice Department accepted the settlement of an \$864 million suit brought against Moody's, an iconic bond rating service, for illegal activities involving the meltdown. Most of us associate the firm's name with labels like AAA found on corporate and government bonds. I note that a \$1.5 billion settlement had been struck earlier with another major rating service, Standard & Poor's, for similar charges. Fitch Ratings, a third rating service, was not the subject of a suit.

Moody's and S&P fell from grace. They were found to have misled investors worldwide and, in doing so, paved the path that led to the credit market meltdown and Great Recession that followed. It took years to get the settlement, but they had to pay.

Until the 2008 credit market meltdown, credit ratings by Moody's and Standard & Poor's were viewed in the same way as government imprints we see on fresh beef in the supermarket. If the sticker says USDA Prime we have no doubt but that the meat has been inspected, is good stuff, and is safe for our family. But think for moment. If suddenly there were no federal meat inspection service, would we be thrown to the wolves and no longer feel safe when buying fresh meat? Or would Publix, Walmart, Whole Foods, and the many other food purveyors double-down and assure us that we would not be poisoned by food purchased in their stores? Would private inspection services come to the rescue—Good Housekeeping Seal? Can competition deliver high quality food? And more accurate bond ratings? Before saying no, think again. Is there a federal inspection service for fresh produce? No. But do we still believe the fresh cucumbers and tomatoes we buy are generally safe for our families? I think so.

But the trust accorded Moody's as well as Standard & Poor's by global investors was shaken when investors learned that the rating agencies had given high ratings to bonds backed by low-quality mortgages. The agencies had carelessly mislabeled their clients' financial papers. They knew their clients preferred good ratings to bad ones. The good rating enhanced the ability of the large banks and brokers to sell securities in global markets.

But then, Warren Buffet puts it something like this: "You only find out who is swimming naked when the tide goes out." Things went swimmingly until interest rates went up. Higher interest rates led to defaults on the subprime mortgages that partly backed the

⁴ Aruna Viswanatha and Josh Beckerman, "Moody's Agrees to Settle Financial Crisis–Era Claims for \$864 Million," *Wall Street Journal*, January 14, 2017.

mislabeled mortgage-backed securities. And then the house of cards started to tumble, worldwide.

It was a case of lost trust.

If competition seems to work in bringing safe tomatoes and other produce to market, why did it fail with rating firms in 2008? At the time, there were just three government-approved rating firms, and new competitors wishing to enter the market faced high regulatory barriers. The incumbent firms enjoyed non-contested markets. They could be a bit more relaxed when favoring clients over consumers in pursuit of profits.

What about now? Did we learn from the sad rating firm experience and alter the way rating markets work? In a word, yes. Instead of just three government-approved rating firms, in December 2015 there were 10.⁵ While Moody's and S&P still enjoy the lion's share of the market, they know that competitors are expanding market share. Market competition may not put everyone's mind at ease when it comes to buying fresh meat, tomatoes, and mortgage-backed securities, but it still helps.

Regulatory rules and real operating economies

Recently, I was reminded that some regulations that constrain bank lending came as the result of the 2008 credit meltdown. After speaking to a gathering of community bankers last year, an attendee asked if I understood what it means when a small town loses its local bank, either replaced by ATMs or by a branch of a larger enterprise. I felt I knew what motivated his question. In a session before mine, we had seen data on the number of banks that had disappeared recently. All of them had been local community banks, which are banks with less than \$10 billion in assets.

"Tell me what's bugging you," I responded. "It's not just a banking business," my friend replied. "Local banks are part of the community core. The owners and management give leadership when the United Way drive is underway. They are often the source of college scholarships for promising high school graduates. The community bank and the people who work there are part of the bedrock that stabilizes the local economy."

There was yet more on his mind. In my remarks, I had predicted that making major changes in Dodd-Frank would be one of the highest priorities for the new 2017 Trump administration. My forecast was based on what I believed to be critical concerns expressed by Trump supporters in small towns, industrial communities, and rural areas in the 2016 campaign. I had focused on new, stricter limits on lending as well as the

⁵ US Securities and Exchange Commission, *Annual Report on Nationally Recognized Statistical Rating Organizations*, December 2015.

⁶ Bruce Yandle, "Regulations Intended to Strengthen Community Life May Do Just the Reverse," *InsideSources*, February 2, 2017.

disappearance of interest earnings on savings, which was not a Dodd-Frank issue but a monetary policy concern. My mention of Dodd-Frank triggered more conversation.

My banker friend asked me, "Can you imagine what it is like when a small-town bank with a lean back office staff receives a 700-page regulation that stipulates how and when to report data on mortgage lending?" It so happened that the Consumer Financial Protection Bureau, a Dodd-Frank creation, had just issued the final rule covering the Home Mortgage Disclosure Act. The rules exist for the purpose of supplying a database that enables federal lending agencies to monitor the extent to which mortgage lenders embrace the full community of borrowers when making loans. The rules apply to any lender that makes just one or more home mortgages each year. "For a banker worried about handling a growing regulatory burden and possible merger with another community bank or larger one, this could be the straw that breaks the camel's bank in some cases," he said.

The conversation lifted up some important concerns. In May 2015 there were 1,971 fewer community banks than existed in 2008. Some 500 of these were Great Recession casualties; the rest were merged into larger banks. The Mercatus Center's 2015 community bank analysis by Hester Peirce and Stephen Mateo Miller documented some of this and reported changes in the number of small and large banks from 2010–2014.

Common sense alone tells us that smaller enterprises facing the same fixed cost activities as larger ones will have a cost disadvantage. Average cost falls with increased activity. And common sense suggests that a search for lower costs motivates mergers. But my banker friend was not expressing concern about the delivery of banking services to small communities previously served by small local banks. Those services will be delivered. He was worried about something deeper than that and the extent to which burdensome federal regulation was weakening community bedrock. He was concerned about finding ways to strengthen flourishing human communities.

Of course, we all know that changing technologies and ways of doing business bring changes to the way life is organized in cities and communities. But what if the changes are not based on real relationships but instead reflect special-interest power struggles? Buried in all this are questions about economies of size and scope that may derive from regulation versus what I will call "real economies" (those that result from private creativity and innovation). For example, a larger bank may develop new software and IT capabilities that bring lower costs over a high level of transactions. All else being equal,

at George Mason University, March 17, 2015.

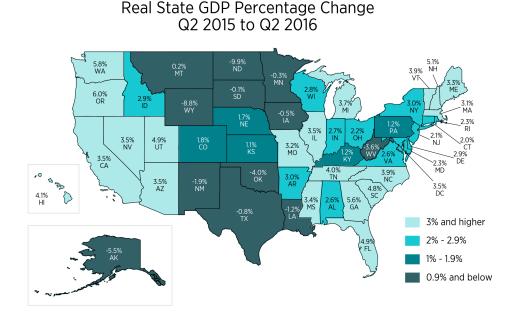
Stacy Mitchell, "One in Four Local Banks Has Vanished since 2008. Here's What's Causing the Decline and Why We Should Treat It as a National Crisis," Institute for Local Self-Reliance, May 5, 2015.
 Hester Peirce and Stephen Mateo Miller, "Small Banks by the Numbers, 2000–2014," Mercatus Center

smaller banks will be placed at a disadvantage. Alternately, smaller banks may emphasize relationship building that involves long-term staff-customer interaction not easily accomplished by larger, more automated enterprises. Regulations that place disproportionate reporting burdens on smaller enterprises may or may not yield improved community well-being, but they do yield differential economies.

It's possible that regulations intended to assure better lending practices for an entire community can have unintended effects: the loss of community banks.

The Geographic Imprint

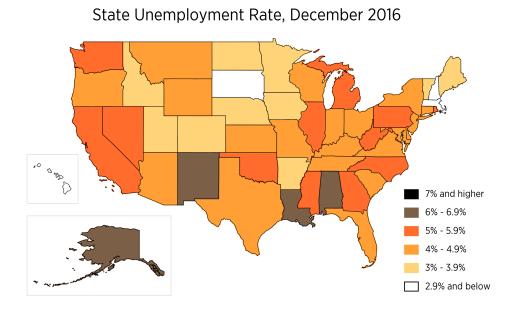
When looking at the wide-ranging economic activity across the 50 states, I am always struck not only by the diversity of outcome but also by how relative fortunes can change over time. The point is illustrated partly by the most recent data on state GDP growth. Note the accompanying map. The darker shades of blue indicate weaker GDP growth. Just a quick scan reveals that the energy states, the Dakotas, Montana, Wyoming, Oklahoma, New Mexico, Louisiana, and Texas, are experiencing negative growth. We see the same result for eastern coal producers, Kentucky and West Virginia. Stronger positive growth is found for two regions: the Southeast and Pacific coast.



Source: Bureau of Economic Analysis

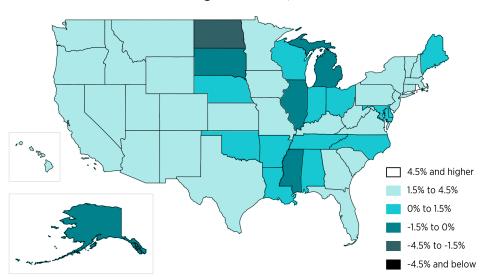
Slow GDP growth can be the result of falling prices for energy products such as natural gas and oil and by complete shut-down of production, as has happened with coal in a

number of locations. Just which is which may be revealed by differences in state unemployment data, which introduces the next map. Here we see that low unemployment still prevails in the Dakotas, but not so in Montana, Wyoming, West Virginia, Kentucky, and Ohio.



Source: Bureau of Labor Statistics

While the most recent state data help us picture how things are going on a country-wide basis, future expectations may be of even greater interest. I provide next a state leading indicator map using data from the Philadelphia Federal Reserve Bank. This portrays what might happen in the next six months. Notice that the country's entire western tier is colored light blue, which indicates strong future growth.



State Index of Leading Indicators, December 2016

Source: Federal Reserve Bank of Philadelphia

Where Has the Growth Gone?

By Patrick A. McLaughlin and Jonathan Nelson

Director, Program for Economic Research on Regulation, Mercatus Center at George Mason University, and Program Assistant, respectively

As Bruce notes, the economy grew at an annual rate of 1.9 percent in the fourth quarter—down from 3.5 percent in the third quarter. The fourth quarter result matches the lackluster growth of 2015 and the first half of 2016, during which the average annual growth rate was a paltry 1.6 percent. Slow growth figures like these have led to the resurgence of terms like "secular stagnation" and "the new normal," both of which hint at acceptance of slower growth going forward.

What about President Trump's one-in, two-out rule?

Until recently, most economists have not formally examined regulation as a possible cause of slower macroeconomic growth in the United States. Policymakers, on the other hand, are not treating the situation so blithely. In January, President Trump issued an executive order directing executive branch regulators to follow a one-in, two-out regulatory reduction program. The executive order was quickly followed by interim guidance to regulatory agencies on how the order will be implemented.

The regulatory production program requires regulators to reduce the regulatory burden from at least two existing regulations for every new regulation they create. The savings from changes to existing regulations must at least equal the costs of the new regulation, effectively creating a regulatory budget that sets future, total regulatory costs at or below their current level.

Among the several issues that the administration's guidance addresses, the most important is the question of how to estimate the costs of new regulations and the savings from changes to old regulations. Overall, the administration's approach sticks to the estimation methodology currently used by regulatory agencies when they produce regulatory impact assessments—which most people think of as benefit-cost analyses for new regulations. Echoing longstanding policy, if not practice, the order states that costs "should be measured as the opportunity cost to society." In practice, this is generally implemented as the sum of the following: one-time "sunk" costs, such as the costs of any machinery that would most likely be required once over the next twenty or more years; ongoing costs related to physical materials, machinery, software, and so on; and both the initial and ongoing opportunity costs of any labor that must be devoted to compliance with the rule. Furthermore, the guidance offers some information on what types of changes might be counted as savings, stating:

Any existing regulatory action that imposes costs and the repeal or revision of which will produce verifiable savings may qualify [as savings]. Meaningful burden reduction through the repeal or streamlining of mandatory reporting, recordkeeping or disclosure requirements may also qualify.⁹

As a working example of how the application of current regulatory impact assessment practices works, imagine a regulation that required companies to create and implement safety training programs. For simplicity, assume the programs consist of printed materials, initial classroom training, and proficiency testing for all employees, as well as ongoing refresher training that all employees must take at least once per 5-year period. Costs might be broken down into the following four groups:

Initial capital	Initial labor	Ongoing capital	Ongoing labor
-printing costs for	-value of labor	-printing costs for	-value of labor required
training materials -printing costs for	required to develop initial classroom	refresher training material	to teach refresher training
proficiency tests	training materials	-printing costs for	-value of labor of all
-rental costs for classrooms	(typically, this is assumed to equal	refresher training tests	employees that go through the refresher

⁹ Dominic J. Mancini, "Memorandum: Interim Guidance Implementing Section 2 of the Executive Order of January 30, 2017, Titled 'Reducing Regulation and Controlling Regulatory Costs,'" February 2, 2017.

o 	he wage rate plus everhead) value of labor to levelop refresher raining materials value of labor equired to develop and grade initial lassroom eroficiency tests value of labor	-rental costs for classrooms used for refresher training	training (e.g., one-fifth of employees per year)
tı	raining materials		
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	equired to develop		
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If the regulatory agency that created the safety training program wanted to remove parts of it in order to produce cost savings for the purposes of complying with this executive order, the only categories of costs that could be considered are the ongoing costs, and not the sunk costs only paid once.

This cost estimation approach treats the industries affected as *static* since it only considers costs borne by the companies in existence prior to the rule's creation. The agency would not consider changes to behavior that result from the changes to the "rules of the game"—for example, new business formation in that sector may decrease because the requirement for a new entrant to develop a training program would create an additional start-up cost for that entrant (especially if considered jointly with other regulatory costs that a start-up would have to bear).

In contrast, a *dynamic* approach would consider how the rule alters businesses' decisions, including the decisions of possible start-ups. Dynamic models are well established in economics and are part of virtually all modern, economy-wide models published in top economics journals. Dynamic scoring of legislation, as recently implemented at the Congressional Budget Office and the Department of the Treasury, also serves as an example. Dynamic scoring of legislation that would decrease income tax rates takes into account the changes to behavior at the margin, where some

individuals may have previously elected not to work more in order to remain below a threshold that would increase their income taxes more than the take-home pay from putting in those extra hours. Similarly, regulations have dynamic effects, which helps explain why policymakers are focused on regulatory reform of late.

Consider again the safety training rule example. One dynamic that a model of regulatory costs should capture is the start-ups that never form because of the rule. This would likely require consideration of the marginal cost of this rule on top of the costs caused by *all other rules* that represent start-up costs. For how many would-be start-ups does the safety training program's initial cost represent "the straw that broke the camel's back"?

The value added to GDP that the non-forming start-ups never actually produce represents an opportunity cost to society—an opportunity cost expressed in GDP growth forgone.

Another dynamic is the potential expansion of existing businesses. In this example, the training program effectively raises the cost of each employee, so how does that alter the decisions for expansion of existing firms? Some may choose to invest more in activities that rely primarily on equipment and other capital, rather than labor. Others may choose not to reinvest at all.

How regulation build-up affects GDP growth

It has been over 10 years since annual growth of 3 percent or more was last observed in the United States. Total factor productivity growth has declined even more precipitously since the halcyon years of the mid-twentieth century, despite the temporary spike of the late 1990s. The start-up rate has followed a decades-long downward trend, while larger and older firms tend to persist longer than they used to, painting a picture of declining economic dynamism.¹⁰

Debates continue over the causes of what some have called the end of US economic growth. Bret Stephens recently described the case for stagnation as a "macro" argument caused by demographics (an aging population means a shrinking workforce), too much saving and too little investment, and inadequate innovation to make up the difference with productivity gains. In contrast, writes Stephens, a "micro" argument might explain the broad and negative trends by referring to specific institutions that have arisen over recent decades to impede investment and growth, with regulation playing the role of prime suspect.

¹⁰ Jeffrey Sparshott, "Sputtering Startups Weigh on US Economic Growth," *Wall Street Journal*, October 23, 2016

¹¹ Bret Stephens, "Doomed to Stagnate?" Wall Street Journal, December 19, 2016.

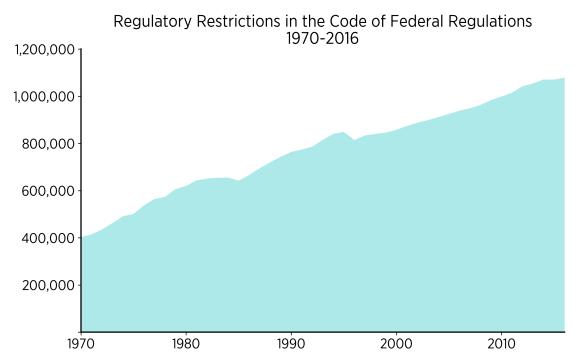
The macroeconomic effects of regulation were historically difficult to identify due to a lack of data on regulation that could be tractably implemented in existing growth models. Economists have been looking under the proverbial streetlight for possible explanations of slowing growth, when the answer may be lying in the dark across the street. If regulation is a significant cause of slower growth, then a search for answers with models that fail to consider regulation's role in the economy will continue to be fruitless.

Yet the ways in which regulation could explain stagnant growth are clear. Long-run growth depends on innovation—a catch-all term that means not only new inventions like smartphones and driverless cars but also any changes in business practices or technology that increase productivity. The build-up of regulations—which, at the federal level, have more than tripled in volume since 1970—distorts business investments, forcing some capital to be used for regulatory compliance and arguably deterring many companies from investing in new product development or business expansion plans altogether.

While the growth in the volume of regulations on the books is striking, the content of regulations arguably matters even more. RegData—a project of the Mercatus Center that has been featured in the Economic Situation before—offers a more nuanced metric of regulatory accumulation by measuring regulatory restrictions. Restrictions in regulatory text consist of those words and phrases that create legally binding prohibitions or obligations, such as *shall*, *must*, and *may not*. The figure below shows that regulatory restrictions have grown from 402,928 in the year 1970 to 1,078,631 as of the end of 2016—an increase of 168 percent.

¹² Omar Al-Ubaydli and Patrick A. McLaughlin, "RegData: A Numerical Database on Industry-Specific Regulations for All United States Industries and Federal Regulations, 1997–2012," Mercatus Center at George Mason University, December 16, 2015, http://regdata.org.

Regulatory Restrictions, 1970–2016



Source: RegData 3.0, McLaughlin and Sherouse (2017)

Regulatory accumulation, as shown in the figure above, may explain why it has been so hard for the economy to maintain or even achieve 3 percent growth or greater. A 2016 study ¹³ that I coauthored with Bentley Coffey and Pietro Peretto shows that the buildup of regulation can have both distortionary and deterrent effects on business investment—including research and development, expansions and upgrades of existing facilities, and the building of new facilities by existing businesses. In turn, regulation's effects on business investment led to significantly slower economic growth. We found that regulatory accumulation slowed annual economic growth by nearly one percentage point between 1980 and 2012. Phrased differently: If the amount of federal regulation had been held constant at the level observed in 1980, the economy would have been 25 percent larger by 2012.

¹³ Bentley Coffey, Patrick A. McLaughlin, and Pietro Peretto, "The Cumulative Cost of Regulation" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, April 2016).

There are a couple of explanations for regulation's effect on business investment and economic growth. For one, regulations cause firms to redirect some resources toward regulatory compliance rather than toward investment in new product development, expansion into new areas, and the like. And regulations may cause some money to remain on the sidelines because cumulative regulatory costs simply eliminate the prospects for any positive return for some business investments. To make matters worse, the growing stock of regulations inevitably means that some rules will contradict others. If firms do not know which rules are going to be enforced or what rules will be passed in the future, they may be hesitant to invest or hire more people. For its part, Congress hasn't helped by passing massive acts such as Dodd-Frank. Even that act's primary sponsors admitted to not knowing what would come of it once regulatory agencies were finished implementing the roughly 400 new rules that it would require.

Economists can't ignore regulatory accumulation anymore—and policymakers certainly aren't. The developed methods of the RegData project were recently used to establish baselines for the status of regulatory accumulation in Kentucky and a few other states. Kentucky, for example, announced a red tape reduction program last summer, and, in order to track progress, policymakers are looking at regulatory restriction counts. RegData has made such regulatory restriction data publicly available. This data—categorized by industry, by agency, and over time—can be deployed in the economic growth models of modern macroeconomics. In other words, a new light has been constructed above the street corner where regulation intersects the economy.

Congress, President Trump, Kentucky governor Matt Bevin, and other policymakers in federal, state, and local governments have signaled their concerns about regulation potentially deterring growth. By turning their attention to regulation, growth economists can help not only diagnose the specific aspects of the regulatory process that impede growth, but also propose solutions—which is precisely why many economists chose their profession in the first place.

Single-State Focus: Kentucky's Economic Situation

We now take a close look at one state, something new in the Situation Report that we will be continuing. We chose Kentucky to be first in this series for a couple of reasons. First, the state faces unusual structural challenges; it is the nation's second-largest coal producer and the second-largest tobacco producer, with 91,000 acres in cultivation. Both sectors are in a state of decline. On the other side of the ledger, the state is also a leading automobile manufacturer. The state is experiencing economic riptides as these sectors rise and decline. A second reason for doing a Kentucky close-up relates to ongoing Mercatus studies of state regulation.

Kentucky's economic situation

Kentucky is one of the nation's strongest manufacturing states, ranking fifth nationwide in manufacturing's share of GDP. In 2015, manufacturing accounted for 19.1 percent of state GDP, as compared with the nation's 12.0 percent. Only Indiana, Louisiana, Oregon, and North Carolina ranked higher in manufacturing's share of state GDP. The automotive sector leads the state's manufacturing category, making it third in national production. Indeed, there are more than 400 auto-related firms in Kentucky. On the more troublesome side of the economic ledger, Kentucky is second only to West Virginia in coal production, a sector that suffered seriously in recent years. In 2014, the Kentucky coal mining industry employed just over 11,000 workers. The number fell to 9,800 just 12 months later. The confluence of these two opposing gale forces—autos and coal—helps to explain Kentucky's relatively weak economic performance. In 2015, state GDP growth registered 1.4 percent, as compared to 2.4 percent for the Southeast region and 2.5 percent for the nation.

Somewhat typical of the Southeast region, Kentucky ranks low in educational attainment, placing 47th among the 50 states, with some 81 percent of the adult population having graduated from high school. The state also ranks 47th in per capita income. Like much of the United States, Kentucky is experiencing outmigration from rural areas, particularly from its coal-mining region that borders West Virginia. Some 36 of its 120 counties showed a decline in total employment in the most recent 12 months. And like most of the United States, urban areas define Kentucky's prospering territory. Employment in six of the state's eight metro areas stands well above the 2008 prerecession level. Noteworthy gains are seen for the Clarksville, Elizabethtown, Lexington-Fayette, and Louisville-Jefferson metro areas. The Milken Foundation's 2016 ranking of 200 high-performing US cities, which takes account of employment and income growth, places Louisville-Jefferson at number 57, up from 71st place in 2015. Cincinnati rose to 84th from 94th place. Huntington-Ashland rose slightly to 196th, and Clarksville, TN-KY; Evansville, IN-KY; and Lexington-Fayette, KY, lost ground.

What about the future economy? There are two indicators to consider. The first is the current state leading indicator produced by the Philadelphia Federal Reserve Bank. The indicator shows what to expect in the next six months. It is very positive. A second assessment of future prospects relates to the extent to which a transition is being made toward the emerging knowledge economy. The 2014 New Economy Index produced by

¹⁴ Bureau of Labor Statistics, "QCEW State and County Map: Kentucky," accessed February 13, 2017, https://beta.bls.gov/maps/cew/KY?period=2016-

Q2&industry=10&geo_id=21000&chartData=3&distribution=Quantiles&pos_color=blue&neg_color=orang e&showHideChart=show&ownerType=0.

¹⁵ Ross DeVol, Joe Lee, and Minoli Ratnatunga, *2016 Best-Performing Cities* (Santa Monica, CA: Milken Institute, December 14, 2016).

the Information Technology and Innovation Foundation provides this broader assessment. Their most recent report ranks Kentucky near the bottom of the 50 states with respect to knowledge-based jobs, innovation capacity, and size of the digital economy; the state ranks in the bottom 10 in making the transition to the new economy.

On a brighter note, the state ranked 10th nationwide in the Brookings Institution's study of 2013–2015 employment growth for advanced manufacturing. Toombining and blending the current data and future indicators leads to this final assessment. Kentucky's economy has major elements of strength that are countered by the declining coal economy. Manufacturing, the state's strong suit, is well positioned by the advanced manufacturing component. Through time, the effects of coal transformation will be strongly offset by growth in the state's other sectors. However, the state's weak knowledge economy participation is troubling; providing the human capital required for the new economy will likely be a major challenge.

Kentucky's regulatory outlook

Regulation has been proven to have a direct impact on economic output and growth.¹⁸ Therefore, to get a full picture of Kentucky's economic future it is important to look at the state's regulatory condition. Kentucky's regulatory code is published by the *Kentucky Administrative Regulations Service* (KARS) and contains over 4,700 individual regulations (6.6 million words) as of 2015.¹⁹ As of 2015, RegData found 129,575 restrictions in the KARS.²⁰

In addition, RegData identified the most-regulated industries in Kentucky. The top three as of 2015 are chemical manufacturing (4,180 restrictions), animal production and aquaculture (4,120 restrictions), and ambulatory healthcare services (3,510 restrictions). Many of the restrictions on the chemical manufacturing industry came from Title 902, which contains rules from the Department of Public Health. The Department of Public Health's rules contain over 18,000 restrictions as of 2015—far more than any other department or cabinet in Kentucky. 22

It is often the case that state regulations flow from federal agency requirements. Even so, a first step toward regulatory reform can be taken by pulling back the regulatory

¹⁶ Robert D. Atkinson and Adams Nager, *The 2014 State New Economy Index* (Information Technology and Innovation Foundation, Washington, DC, June 2014).

¹⁷ David M. Hart, Mark Muro, and Siddharth Kulkarni, "America's Advanced Industries: New Trends, Washington" (Report, Brookings Institution, Washington, DC, August 2016).

¹⁸ Coffey, McLaughlin, and Peretto, "The Cumulative Cost of Regulation."

¹⁹ James Broughel and Oliver Sherouse, "A Snapshot of Kentucky Regulation in 2015" (Policy Brief, Mercatus Center at George Mason University, Arlington, VA, September 2016).
²⁰ Ibid.

²¹ Ibid.

²² Ibid.

curtain, reexamining the full array of regulations, and lifting up for removal all rules that can no longer be justified. Perhaps this is a time for Kentucky as well as other states to adopt Mr. Trump's one-in, two-out rule.

From Yandle's Reading Table

Yuval Levin's book, *The Fractured Republic: Renewing America's Social Contract in the Age of Individualism* (New York: Basic Books, 2016), is deep and wide—deep inasmuch as Levin seeks to identify America's social bedrock, what it is and how it has changed; wide, because his search covers decades of time, from the 1950s to the present. But there is even more. Some conservatives might long for a return of the transformative Reagan era, and some progressives might yearn for a repeat of the 1960s Camelot years, but Levin's important work seeks to tell us that such nostalgia will not enable a return of either era. We dreamers can forget it. Those times are gone forever. Why? Because in Levin's persuasive view, social bedrock—family, marriage before childbearing, common social norms, and broadly encompassing social institutions such as mainline churches, national associations, and even big government programs—has shifted and in some cases completely crumbled.

As Levin sees it, the "ethic of our age has been aptly called *expressive individualism*." More than carrying out the dream of doing your own thing no matter how grating it might be to the social fabric, the ethic is not fulfilled unless those in pursuit of it can shout to the world about who, how, and what they are without being bothered by social pushback. He puts it this way: "The reigning spirit of this era . . . has been a spirit of liberation—a breaking of constraints, enabling people who might previously have felt compelled to repress some feature of their character or facet of their cultural, personal, or sexual identity to now openly express it without fear of condemnation or social sanction." I told you it was deep. But with bedrock disturbed by low-cost social communications technologies that enable individuals to organize, and with the traditional family model now being relegated to museums, what might be the prospect for healing the fractured republic? The answer? In a few words, decentralization of authority and decision-making. There is more, but you will have to read the book to get the full treatment. It is worth doing.

For another fascinating read, I highly recommend *Superforecasting* (New York: Broadway Books, 2015), coauthored by journalist Dan Gardner, who has written on risk and financial bubbles, and Philip E. Tetlock, a Wharton School professor of fame. The book, which was passed along to me by my good friend Lance Bell, is a *New York Times* bestseller and one of the *Economist* magazine's best books of 2015. It is so well written that you will not be able to mark all the important ideas. There are just too many

of them. While the book is truly about forecasting in the broadest sense of the word, it is not about forecasting in the narrow sense. Let me explain. Those in the soothsayers' guild who build statistical models to forecast GDP growth or demand for particular forms of the Affordable Care Act will not learn anything about how to better calibrate their current models. But they and everyone else will learn how to build and evaluate better econometric models and how to predict the occurrence of broader events.

Here's a sample of what I mean by broader events: Will East Ukraine become absorbed by Russia in 2017? Will the United States open up trade with North Korea? The reader will learn that there are so-called superforecasters who are much better at, well, forecasting, than most everyone else. How do we know? Because Tetlock has been keeping score. Through a combination of activities of his Good Judgment Project and activities related to the Intelligence Advanced Research Project, Tetlock has assembled data on the forecasting skills of more than 20,000 people. Among them, he has identified superforecasters. His book explains how this was done, what has been learned, and how forecasting, broadly conceived, can be improved. As you travel through the book, you will encounter the work of Nobel laureate Daniel Kahneman, Nasim Taleb's black swans, and Prussian general Helmuth von Moltke's ideas on leadership, all on the way to learning about superforecasting. It's a very rewarding read.

Reaching back a long way, I recently reread Robert Penn Warren's 1947 Pulitzer Prizewinning classic All the King's Men (New York: Harcourt Brace & Company, 1947). This was prompted by a search for understanding about the presumed role of the "forgotten" man" in Mr. Trump's rise to power. You will recall that Warren's beautifully crafted story is about Willy Stark, an unusually ambitious farmer, and his relentless, brook-noopposition journey to becoming governor. In a way, Stark dreamed of making his state great again. He wanted to improve the lives of ordinary people, the forgotten men and women of his state. Gaining power meant building coalitions and forming alliances with political power brokers. Stark's dream of building a top-notch state medical center became the symbol of his effort. Unfortunately, hubris enters the story at every turn. Ethical compromises abound. Good women and men, at first thought to be bound to the mast, succumb to temptation's beckoning call, and the story becomes a classic American tragedy. Does the book offer insights into the challenges we now face? Most likely. But even if the insights found do not apply, the book is still worth reading a second time, or a first time. Warren is a master at painting word pictures. For a dollar or so plus shipping, you can have the book on your reading table in a matter of days.