



## The Economic Situation, June 2017

### The Roller Coaster Economy

*by Bruce Yandle*

Have you ever ridden a roller coaster, a really big one with lots of ups and downs, and wondered if you were nearing another summit to be followed by a stomach-churning downturn, only to learn it was just a momentary deceleration, a prelude to higher ground? Do you recall how the roller coaster speed dropped off as the engine strained to pull the cars to what might become the summit? Yes, you were still climbing, but the pace was slowing down.

The roller coaster analogy may apply as we think about the midyear economy. Our economy has been climbing from the Great Recession for eight years now, but the pace has been uneven and slow, especially in the last 12 months. But is the economic roller coaster nearing a summit, with a recession coming maybe a year from now? Should we fasten our seatbelts and sit low in the seats? Or does this eight-year-old recovery and expansion—weak though it may be—have another surge of energy that will propel it forward?

I think this post-2008 expansion is not quite done, that 2017 will rack up 2.3 percent real GDP growth, and that 2018 will do about the same—until we hit 2018's last quarter. After that, the economy may be headed south for a couple of quarters. Here's the picture that I see for the United States for 2017–2018: inflation will rise a bit. Look for 2.5–2.7 percent growth by year-end. Interest rates will nudge up. The 10-year bond yield will be 2.60–3.10 percent. The plain vanilla mortgage rate will be 4.30–4.60 percent.

### **TAKING A CLOSER LOOK: TWEET UNCERTAINTY**

When measured by real GDP growth, the economy is down in the dumps. The Department of Commerce's April 28 estimate for 1Q2017 GDP growth came in with a hard-to-detect 0.7 percent

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#### **FOR MORE INFORMATION**

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annual growth rate, weakened primarily by low consumer spending and cutbacks to inventory.<sup>1</sup> This was revised upward on May 26 to a not-quite-so-pale, but still way-below-par 1.2 percent.<sup>2</sup> Let's face it, there's a lot of uncertainty out there. Ordinary folks are waiting for word on taxes, healthcare, immigration, travel bans—you name it. Enterprising decision makers face another set of hard questions. Will NAFTA be revised or not? One day it's yes, the next day it's no. What about China? Friend or foe? Trade wars with Canada? What about Mexico? Is NATO obsolete or necessary? It's called regime uncertainty, or maybe we should call it Tweet Uncertainty, and we have plenty of it. One thing about the low first quarter estimate: it makes 2016's final 1.6 percent growth rate look like boom times. Needless to say, we should probe deeper.

A scan of other important indicators adds strength to the notion that we are approaching the peak of an economic cycle. Take employment growth, for example. We have seen monthly employment gains that exceed 200,000, and the headline unemployment rate has been below 5 percent for 12 months. Help wanted and hiring signs are now commonplace indicators of stronger economic activity. But when plotted, the number of jobs added monthly on a five-month moving average since 2015 has a pronounced negative slope. In multiple conversations with business leaders, I get the impression they are scraping the bottom of the barrel when trying to find qualified workers.

Bank commercial and industrial loan activity, like the overall economy, is also growing, but at a diminishing rate. And in March, the manufacturing component of the Fed's industrial production index came in with negative growth. Falling total vehicle sales for Ford, GM, Nissan, and Toyota confirmed the weak manufacturing numbers.<sup>3</sup> Viewed together, the path these data are forming is shaped like a roller coaster approaching the peak when viewed from the ground. The path is concave from below.

But all signs do not point to a slower economy. Consider the Institute of Supply Management's March reading on the manufacturing economy. Its index has been signaling faster growth for seven consecutive months. The nonmanufacturing, or services economy, index stands at an even higher level, signaling growth for more than 80 consecutive months. Add to this the International Monetary Fund's April increase in its forecast for global GDP growth to 3.5 percent in 2017, as compared with 2016's 3.1 percent.<sup>4</sup> The IMF also announced a US 2017 forecast of 2.3 percent growth to be followed by 2.5 percent in 2018. The improved outlook for the world and the United States is based on rising world trade activity. Let's hope that the Trump administration fascination with tariffs, border taxes, and protectionism doesn't derail that.

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1. Bureau of Economic Analysis, "National Income and Product Accounts—Gross Domestic Product: First Quarter 2017 (Advance Estimate)," April 28, 2017, <https://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm>.

2. Bureau of Economic Analysis, "National Income and Product Accounts—Gross Domestic Product: First Quarter 2017 (Second Estimate)—Corporate Profits: First Quarter 2017 (Preliminary Estimate), May 26, 2017, <https://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm>.

3. Tom Krisher and Dee-Ann Durbin, "Auto Sales Fall 4.7 Pct.; 7-Year Win Streak May Come to End," *Associated Press*, May 2, 2017.

4. Landon Thomas Jr., "IMF Raises 2017 Outlook for Global Economic Growth," *New York Times*, April 18, 2017.

We get another shot of optimism when considering surveys of consumer confidence. Both the Conference Board's and University of Michigan's readings are hitting multi-month high points, although these happy readings are not ratified by data on consumer spending. We should note, however, that University of Michigan's data that adjust for political preference show that its happiness index is being driven largely by respondents who label themselves Republican.<sup>5</sup> By contrast, the Democrats polled seem to think a recession started in November when President Trump was elected. Richard Curtin, who directs the Michigan survey, indicates that since 1946, "the partisan divide has never had as large an impact on consumers' economic expectations."<sup>6</sup> When we stir into the mix the Philadelphia Federal Reserve Bank's manufacturing index, we see more a more optimistic picture. On top of all this, we have the whipped cream of improved postelection stock market averages, which may be interpreted as a not-so-reliable indicator of better times ahead.

So where are we on the roller coaster ride?

## Recession Watch

For several years now, I have ended lectures on the economy with a caution-flag warning that there is a good possibility that we will experience a typical credit cycle recession around 2018. Well, the moment of truth may be coming. As they say: "If you are going to forecast a number, don't give a date!" My recession forecast, as I explain to my listeners, is not based on some econometric magic but rather on the expectation that the US economy will finally get on its feet, accelerate, and in doing so, generate inflationary forces that the Fed will decide to extinguish. As is typical, I suggest, the Fed will hit the brakes hard—and perhaps late—thereby generating a credit crunch that will take the edge off new construction and investment. The economy, as I tell the story, will cycle through a couple of quarters of negative GDP growth. No, I am not talking about a repeat of the Great Recession, or even close kin, but rather a case where the economic roller coaster hits a peak, heads south, bottoms, and begins another climb, all without wiping out particular industries and regions.

The Fed has already hit the brakes, gently nudging the targeted interest rate to higher ground—calling for a federal funds target in the range of .75 to 1.0 percent—and has announced an intention to raise rates several times in the year ahead. But until recently, inflation readings were looking a bit better. What had been a year-end inflation surge that carried on till March had turned south a bit—at least until the April 28 GDP estimate arrived.<sup>7</sup> The news from the Department of Commerce was not so good. The first quarter estimate for the personal consumption expenditure index, which is a reliable cost of living index, showed a 2.4 percent jump, the largest

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5. Nelson D. Schwartz, "Boom or Bust: Partisan Divide over Economy," *New York Times*, April 9, 2017.

6. *Ibid.*

7. Lev Borodovsky, "The Case for Peak Inflation," *Wall Street Journal*, April 24, 2017.

since 2011, and the employment cost index also rose 2.4 percent on a year-over-year basis. In short, the inflation numbers put us back in the Fed's red zone for action.

There's still more to consider. The prospects for even higher interest rates than might result from Fed open market operations were raised in mid-April when the minutes of the Fed's March meeting were published. There was notice that the Fed was contemplating selling off or not replacing at maturity major parts of the \$4 trillion in bonds held on the Fed balance sheet. What had become a financial monument to the Great Recession is now slated for gradual demolition. The minutes read: "Participants agreed that reductions in the Federal Reserve's securities holdings should be gradual and predictable, and accomplished primarily by phasing out reinvestments of principal received from those holdings. Most participants expressed the view that changes in the target range for the federal funds rate should be the primary means for adjusting the stance of monetary policy."<sup>8</sup> Just as an aside, about one-half of the Fed's holdings in US Treasury debt, some \$250 billion, will mature by 2018. If not replaced, demand for Treasury bonds will fall. The same holds for mortgage backed securities when they mature across the next 18 months without reinvestment. All else equal, this implies higher interest rates. The possibilities of a mild 2018–2019 credit cycle recession will be enhanced. But then there is an inconvenient fact to consider. In 2016 the Fed, as hedge fund manager, transmitted \$92 billion in earnings to the US Treasury, which represented interest earned on the Fed's \$4.0 trillion balance sheet.<sup>9</sup> It's likely that the Treasury will not want to lose that big chunk of change, and—who knows—may have a bit of influence on its Fed cousin. If Treasury influence prevails, the much-celebrated Fed as hedge fund manager may continue to operate.

My bottom line? Enjoy the roller coaster ride. We should see stronger GDP growth in this year's remaining quarters, with calmer 2018 activity. There's a lot of turbulence, so keep your seatbelts fastened. As mentioned earlier, I expect we will take a swing downhill in late 2018 or early 2019.

## PRODUCTIVITY AND WHERE PEOPLE WORK

Isn't there still more to consider? What about the Trump administration's regulation removal and other efforts that might free up the economy and generate strong enough productivity gains to more than compensate for the Fed's braking action? Let's take a longer look at the productivity puzzle.

In last quarter's *Economic Situation*, I noted that GDP growth is determined by two simple ingredients—growth in the workforce plus growth in labor productivity. On its face the formula is deceptively simple. How can it be that just these two variables tell all we need to know to determine

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8. Federal Reserve Board, "Minutes of the Federal Open Market Committee: March 14–15, 2017," 4.

9. Board of Governors of the Federal Reserve System, "Federal Reserve Board Announces Reserve Bank Income and Expense Data and Transfers to the Treasury for 2016," January 10, 2017.

the current and future course of the world's largest market economy? What about new plants and machinery? Big data? Driverless cars? The cloud? Healthcare access? Hurricanes? Terrorist attacks? Yes, the list of things that alter the course of economic life seems endless. But even so, the issues mentioned here and others end up affecting the number of people in the workforce—or whether they work at all—and how much they can produce when working.

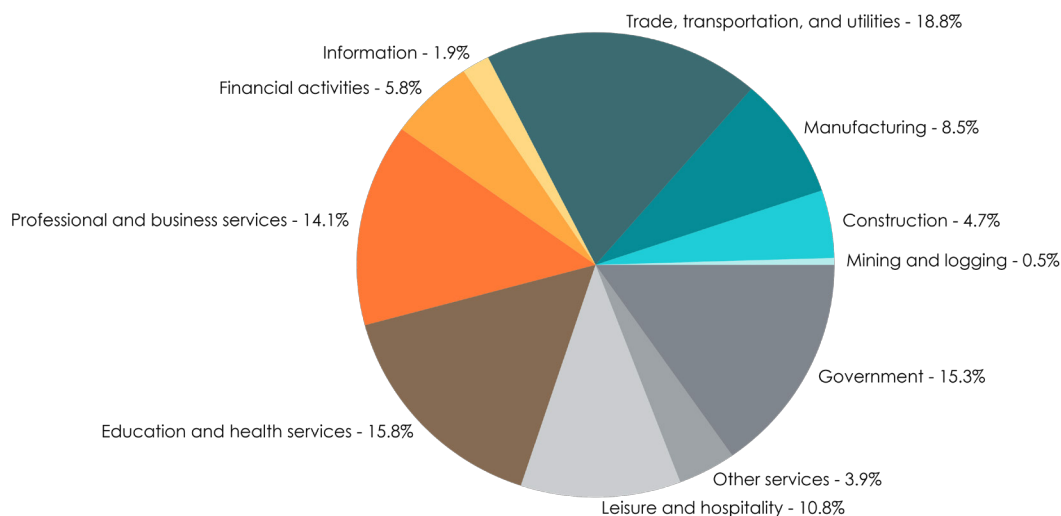
All else equal, new plants are usually more productive than the older ones they replace. Access to and use of big data lowers the cost of production, distribution, and marketing, which makes users more productive. Driverless cars may be safer and work enabling. Improved healthcare access can make for healthier, more productive workers. Hurricanes and terrorist attacks interrupt production and consumption patterns, which reduces the number of people working and their productivity. Greater security can be productivity enhancing.

Why aren't all these actions along with massive investments in education yielding larger gains? I was puzzling over these questions recently while preparing a lecture for an industrial machinery firm. To illustrate what had transpired over the years, I gathered a few historic industrial plant photos for textile manufacturing. One showed a 1909 spinning room operation. Another, a 1950s spinning room. And the last, a 2017 spinning operation. The differences I observed were massive. From slow, cumbersome, labor-intensive work that employed children to an operation of high-precision, fast, completely automated production, the three photos formed a labor productivity case study. But then I wondered how can there be further gains in labor productivity with a manufacturing process that now uses hardly any labor at all. It's challenging, to say the least. Of course, so long as there is one production employee, there will be labor productivity gains that can come with improved energy utilization and even faster, cleaner, and more precise technology, along with the use of the Internet of things when coordinating production. Even so, we must grant that the easier productivity gains occur in the early years of industrialization.

### Taking a Look at a Pie

I call attention to the accompanying employment pie chart in figure 1. Today, just 8 percent of the workforce is employed in manufacturing. Just 8 percent. In 1970, the share was 25 percent. And consider the 18 percent of the workforce currently employed in education and health. In 1970, the share was 6 percent. Also, take a look at professional and business services, which is the economy's fastest growing sector. In 1970, the share was 7 percent.

Figure 1. US Employment Sectors, February 2017



Source: Bureau of Labor Statistics, "The Employment Situation," May 2017.

Today, amazing manufacturing improvements may take place, but the result is associated with just 8 percent of a diminished labor force and a declining share of GDP.

We can learn a bit more from the pie chart. Consider the retail trade, which is a part of the trade, transportation, and utilities sector. A revolution is occurring in that sector. Major department store operators are closing hundreds of stores as consumers shift their patronage to internet sellers. In March 2017, general merchandise retailers—think big box stores—employed 3.1 million workers, down 50,000 from March 2016. Non-store sellers—think Amazon, for example—employed 555,000 in March 2017, up some 30,000 since March 2016. The transition is accelerating; it is rough on those caught in the transition, but there is a gain in productivity that goes with the pain.

There is yet one more lesson. Manufacturing employment is historically a male-dominated sector. The education and health services sector and professional and business services sector shown in the pie chart are rapidly expanding, and they are likely to be more female-specialized than male, especially so for education and health. The transition has left a large number of unemployed male workers who are not well-qualified for the expanding sectors. The United States is a high-consumption, service economy with the vast majority of the workforce employed in healthcare, education, trade, distribution, finance, and government services. If we are to have large overall productivity gains, the improvement must come in nonmanufacturing sectors where the track record for productivity improvement is not very good.

## Projected Employment Growth

A 2015 Bureau of Labor Statistics report provides some insight as to what we might expect to see between 2014 and 2024.<sup>10</sup> Expected employment growth for major sectors indicates zero annual growth for the entire goods-producing sector, including agriculture. No more additional workers employed in that sector! The service sector forecast calls for an annual employment growth of 0.7 percent with the highest annual growth rate reported for professional and business services (0.9 percent), private educational services (0.9 percent) and health care and social assistance (1.9 percent). Yes, the service sector promises to be the employment growth engine.

What about the output forecast? Output from the goods-producing sector is expected to grow at annual rate of 2.1 percent, with zero growth in employment! That's pretty strong growth in labor productivity. Service sector production is expected to grow at annual rate of 2.3 percent, which is just a bit more than the goods sector, but with an annual employment growth of 0.7 percent. Notice it takes more people in services to add about the same output growth as expected from goods production. Not a good sign for overall productivity improvement.

## Manufacturing: A Closer Look

The next table gives an indication of what's hot and what's not, based on estimates provided by the Manufacturers Alliance for Productivity and Innovation. Here, I show summed annual GDP growth rates in projected manufacturing industry output for the years 2015–2020. I have highlighted industries with cumulative growth that exceeds that of the all manufacturing category. I note that computers and electronic products is the hottest industry, followed by nonmetallic mineral products, which includes sand, gravel, and glass, and aerospace products. Rubber and plastics is strong, as is food. The declining industries include furniture, textiles, and apparel.

Table 1. Cumulative Annual Manufacturing Growth, 2015–2020

ALL MANUFACTURING	6.9%	RUBBER & PLASTIC	13.3%
FOOD	10.0%	NONMETALLIC MINERALS	15.8%
TEXTILE PRODUCT MILLS	-12.4%	PRIMARY METALS	-9.0%
APPAREL	-9.5%	FABRICATED METAL PRODUCTS	3.4%
FURNITURE	-13.8%	MACHINERY	5.1%
PAPER	8.2%	COMPUTERS & ELECTRONIC	18.7%
PRINTING	9.3%	ELECTRICAL EQUIPMENT	7.5%
PETROLEUM	-4.1%	MOTOR VEHICLES & PARTS	8.6%
CHEMICALS	-4.9%	AEROSPACE PRODUCTS	15.7%

Source: Cliff Waldman, "US Industrial Outlook: Glimmers of Light," Manufacturers Alliance for Productivity and Innovation; author's calculations.

10. Bureau of Labor Statistics, "Industry Employment and Output Projections to 2024," *Monthly Labor Review* (December 2015).

## CORPORATE INCOME TAXES AND LIVING WITH ROBOTS

As of the writing of this newsletter, the Trump administration has just unveiled key elements, but little in the way of details, of its plan to revise the tax code.<sup>11</sup> The individual income tax is to be sharply simplified, with just three brackets instead of seven, and the highest marginal rate will be cut to 35 percent, down from 39.5 percent. The corporate tax rate is to be cut to 15 percent, and the capital gains tax will be reduced. Although the legislative journey has just begun, it is probably safe to say that tax rates will be cut.

Congressional discussions of corporate income tax revisions are often associated with comments about the fact that the 35 percent US corporate tax rate is one of the highest in the industrial world. Indeed, of 188 countries and tax jurisdictions in the world, only the United Arab Emirates (55 percent) and Puerto Rico (39 percent) have higher rates.<sup>12</sup> The comparisons are based on statutory rates, of course, not what firms actually pay. What happens to taxes after corporate-tax-code specialists have done their work is another matter. A March 2017 Institute on Taxation and Economic Policy (ITEP) report that examined the records of Fortune 500 firms for the years 2008–2015 sheds a bit of light on the subject.<sup>13</sup> The authors selected firms that had been profitable for each of the eight years studied. The average tax rate for those 258 firms was 21.2 percent. Within the sample, 59 firms paid more than 30 percent, 78 paid between 20 percent and 30 percent; 66 paid between 10 percent and 20 percent, and 55 paid less than 10 percent. Within those 55 firms, 20 enjoyed a negative tax rate. Instead of paying, they got paid. Most of those in negative territory were producers of electricity that have still not recovered from the Great Recession.

### The Highest Corporate Tax Rate in the Developed World

What does this say about that “highest corporate tax rate in the developed world” argument? And what about the prospects of reducing the rate for competitive reasons and so that most of the \$2.4 trillion in offshore corporate profits will be returned and taxed? A valid comparison of the US corporate tax rate with the rest of the world would require examining each country’s tax treatment of comparable firms. We simply can’t reach a conclusion about competitiveness by comparing statutory rates across countries. But saying this doesn’t deny the fact that lower US rates will improve the country’s competitive position, all else equal.

Given that the average tax rate for the 258 firms examined by ITEP was 21.2 percent, would reducing the US rate to 20 percent have an effect on earnings repatriation? Yes. It is the marginal rate that matters. As the ITEP data tell us, the tax code is filled with special exemptions and other

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11. Richard Rubin, “Trump Unveils Broad Tax-Cut Plan,” *Wall Street Journal*, April 27, 2017.

12. Kyle Pomerleau and Emily Potosky, “Corporate Income Tax Rates around the World, 2016” (Fiscal Fact No. 525, Tax Foundation, Washington, DC, August 2016).

13. Matthew Gardner, Robert S. McIntyre, and Richard Phillips, “The 35 Percent Corporate Tax Myth: Corporate Tax Avoidance by Fortune 500 Companies, 2008 to 2015” (Institute on Taxation and Economic Policy, Washington, DC, March 2017).



loopholes that corporate lobbyists have struggled to obtain. Perhaps politicians prefer to start with a high statutory rate and then “assist” their client constituents by giving them special treatment. Negotiating what the actual tax burden will be, once special treatment is accounted for, is also a way for politicians to price discriminate across potential corporate tax payers. As Commodore Vanderbilt famously put it: “I charge what the traffic will bear.” Politicians doing the same can shear the sheep close to the skin. Ultimately, the tax code is about getting tax revenue, and more revenue can be gained through economic growth that is partly generated by lower taxes and by rates themselves that determine the tax harvest. The current tax cut proposals have been delivered with the stated goal of lifting the nation’s GDP growth to 3 percent, which could in turn generate more tax revenue.

## Living with Robots

With tax reform up for debate, plans to repeal and replace the Affordable Care Act, continued ruminations about NAFTA, arguments proposing limits on Canadian dairy exports, actions pending for protecting US steel and timber products industries, and a host of other policy issues, there is plenty of uncertainty to go around. As if there were not enough, we are now told that robots are threatening to replace 4 in 10 jobs in the next 15 years or so. At least, this is the latest estimate by PricewaterhouseCoopers.<sup>14</sup> When asked about this potential mischief, US Treasury Secretary Steven Mnuchin said he wasn’t worried, and that the robot problem wasn’t even on his radar, at least for now.<sup>15</sup>

What about displacement by robot? What do people do when robots push them aside?

Robots have been part of American industry for a long time, with more on the way. According to the Association for Advancing Automation, “Over the seven year period from 2010 to 2016, 136,748 robots were shipped to U.S. customers—the most in any seven year period in the US robotics industry.”<sup>16</sup> They point out that “in that same time period, manufacturing employment increased by 894,000 and the U.S. unemployment rate decreased from 9.8% in 2010 to 4.7% in 2016.” Sounds pretty good, doesn’t it?

In related work, economists Daron Acemoglu and Pascual Restrepo, using data for 1990–2007, analyzed the employment effects of robots on the US economy and see a more pessimistic picture.<sup>17</sup> They find that each new robot added to the industrial economy is associated with the

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14. PricewaterhouseCoopers, “UK Economic Outlook,” March 2017, 30.

15. David Reid, “Mnuchin on Robots Taking US jobs: ‘It’s Not Even on Our Radar Screen . . . 50-100 More Years’ Away,” *CNBC*, March 24, 2017.

16. “Work in the Automation Age: Sustainable Careers Today and into the Future” (white paper, Association for Advancing Automation, Ann Arbor, MI, April 2017).

17. Daron Acemoglu and Pascual Restrepo, “Robots and Jobs: Evidence from US Labor Markets” (NBER Working Paper No. 23285, National Bureau of Economic Research, Cambridge, MA, March 2017).

overall loss of a bit more than three jobs, and that most job losses are for blue-collar, lower-skilled workers. Their work supports the findings of Adams B. Nager and Robert D. Atkinson, who find that US manufacturing real value added has not kept pace with the overall economy.<sup>18</sup>

Is it possible that these assessments can both be correct? I think so. Anyone visiting an automobile manufacturing plant will be impressed by the bevy of robots busily welding and assembling automobiles. You will also be impressed by the small number of workers in the same assembly areas. Common sense alone suggests that more robots are associated with fewer production workers when a particular plant is considered. Common sense also suggests that lower-cost and more efficient robot-assisted manufacturing can increase sales (or at least maintain sales) and lead to the construction of more manufacturing plants and more total employment (or, at least, it can keep some existing plants running). Put another way, more robots can lead to more employment than would have been the case otherwise. To estimate the net effect, we have to focus on what might have been had robots been excluded from manufacturing.

This may partly resolve what appear to be competing stories, but that doesn't tell us what happens to where people work when robots and other forms of automation reduce manufacturing employment. The earlier data on sector employment—the slices that make up the employment pie—give at least a partial answer to the question.

Recall that in 1970, 25 percent of the US workforce was employed in manufacturing. Educational and health services employed 6 percent of American workers. Professional and business services employed 7 percent. These three sectors together employed 28 percent of the workforce. In 2017, manufacturing employed 8 percent of the workforce. Educational and health services employed 16 percent, and professional and business services, 14 percent. The three sectors together employed—guess what?—28 percent of the workforce. Across these 17 years, the employment shares for most other sectors, with the exception of the growing leisure and hospitality sector, remained about the same. Employment in manufacturing was transformed to employment in the service sector where, by the way, average pay today is about the same or a bit higher than in manufacturing. But saying this is easy; living through it is not.

There are two explanations for part of the employment transitions from manufacturing to services. During the 17-year period, many manufacturing firms started contracting out functions. What had been factory jobs such as engineering, maintenance, payroll/accounting, and trucking, for example, became service sector jobs. Manufacturing itself became more specialized. Then, and this is the more difficult part to explain, lots of people who, in the past, may have gone to work at a factory, prepared themselves for something else and entered the service sector. Somehow, children and young people learned to adapt and to alter their career plans; as adults they entered the

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18. Adams B. Nager and Robert D. Atkinson, "The Myth of America's Manufacturing Renaissance: The Real State of US Manufacturing" (Report, Information Technology and Innovation Foundation, Washington, DC, January 2015).

service sector. As part of the process, many former industrial workers just stopped working and stopped looking for work. Labor participation declined.

## **BOOTLEGGERS FUNDAMENTALISTS AND CARBON PROHIBITION**

While running for office, Donald Trump promised that he would reverse the Obama administration's initiatives that toughened the regulation of coal-fired electricity production, delayed the construction of oil pipelines from Canada to the Gulf of Mexico, set stricter fuel economy standards, and, perhaps most importantly, pledged American support of the international Paris Agreement on carbon emission reductions. One by one, Mr. Trump is delivering on his promises.

Regulatory rollbacks may surely feel good to economic sectors, industries, some firms and even states or regions that are burdened by them. But they can be just as threatening to another cast of characters who fought, struggled, and paid the political price to get the restrictions in the first place. Generally speaking, the special interest groups involved include some easily identified bootleggers and Baptists. Recall, both bootleggers and Baptists love Sunday closing laws that shut down corner liquor stores, but for entirely different reasons. The Baptists see Sunday prohibition as a way to make the world a better place. The Bootleggers see the same restrictions as a boon to business, a legal way to eliminate competition at least one day a week.

When Mr. Trump announced an end to US cooperation in carbon emission prohibition—or at least an end to stricter standards—howls of anger and moral outrage were heard from the environmental community. What about the bootleggers? Did they sound off? You bet your boots they did.

Exxon was first among the bootleggers. On March 28, 2017, ExxonMobil's environmental manager, Peter Trelenberg indicated that the United States would "best safeguard the interests of its multinational petroleum companies by remaining with the 2015 accord."<sup>19</sup> Mr. Trelenberg pulled no punches. He indicated, "We believe that the United States is well positioned to compete within the framework of the Paris Agreement, with abundant low-carbon resources such as natural gas, and innovative private industries, including the oil, gas and petrochemical sectors." Put another way, the Paris Accord works well for Exxon. Please keep those carbon liquor stores closed on Sunday.

Another bootlegger/environmentalist response was heard from General Electric CEO Jeff Immelt. Mr. Immelt indicated, "I think we're cowards if we don't take a position occasionally on those things that are really consistent with what our mission is and where our people stand."<sup>20</sup> Immelt, for the moment sounding like an environmentalist, indicated that he believes

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19. Jean Chemnick, "Exxon Asks White House to Stay In," *Greenwire*, *E&E News*, March 28, 2017.

20. Jackie Wattles, "GE CEO on Disagreeing with Trump: 'We're Cowards If We Don't,'" *CNN*, April 1, 2017.

in working to help protect the environment. It is notable that GE has booked \$300 billion in revenue from its environmental initiative over the past 12 years. Carbon prohibition has been good for GE's business.

Focusing on the interplay among political interest groups that can together affect policy outcomes helps at times to explain the details of regulations that become imposed on an economy. We should recognize the limits of the analysis, too. Bootlegger/Baptist analysis helps to explain the way the world works, not whether particular regulations or their rollback is net beneficial for all people taken together.

## **THE STATE SPOTLIGHT: OREGON'S ECONOMIC SITUATION**

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The state spotlight is a newsletter regular feature. The March 2017 issue focused on Kentucky, a state in transition. Oregon is in the spotlight this time. The state is one of the nation's strongest manufacturing economies and a favorite destination of many families and individuals when deciding where to settle down. Like most states, Oregon faces some regulation challenges.

Oregon is enjoying a period of high economic growth. The state's personal income grew at 4.5 percent in 2015–2016, compared to the nation's 3.6 percent growth rate. Oregon is among the nation's strongest manufacturing states, ranking second nationwide in manufacturing's share of GDP. In 2015, manufacturing accounted for 22.8 percent of the state's GDP, compared to the nation's 12.1 percent. The semiconductor and electronic component sector leads the state's manufacturing category. The semiconductor industry employs over 27,000 Oregonians, with an average annual wage of nearly \$135,000.

Another leading industry in the state is the footwear, sports apparel, and outdoor gear sector, as Oregon is home to both Nike's world headquarters and the Adidas North American headquarters. Recent economic prosperity throughout the state has supported the nearly 500 sporting goods retail stores, ranging from small, privately owned businesses to large chain stores, which employ about 5,300 people in the state. As the industry continues to boom, companies are seeking to expand employment by the hundreds.<sup>21</sup>

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21. Jeff Manning, "Booming Sports Companies Look to Fill Hundreds of Jobs," *Oregonian*, May 1, 2016.

Industries from the traditional economy such as logging, which has experienced some stormy times, and agriculture continue to thrive, even as the economy moves toward technological and service industries. Agriculture employs over 49,000 people in the state, which includes about 9,800 workers in the logging industry. Both industries have recovered well from the recession and continue to grow in terms of output and employment.<sup>22</sup>

The state ranks above the mid-point in educational attainment, ranking 21st among the 50 states with 90 percent of the adult population having graduated from high school, and ranking 16th with 32.2 percent of the adult population having bachelor's degrees. The state ranks 17th in median household income. The state's unemployment rate dropped to its lowest point since 1976 in February 2017 at 4.0 percent.<sup>23</sup>

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 for Oregon. A second assessment of future prospects relates to the extent to which a transition is being made toward the emerging knowledge economy. The 2014 State New Economy Index produced by the Information Technology and Innovation Foundation provides this broader assessment.<sup>24</sup> Their most recent report shows Oregon ranks near the top of the 50 states with respect to knowledge-based jobs, innovation capacity, and size of the digital economy, ranking 15th overall in making the transition to the new economy.<sup>25</sup>

According to the Brookings Institution's study of 2013–2015 output and employment growth for advanced manufacturing, Oregon ranks first and eighth respectively, largely owing to the state's semiconductor manufacturing sector, which experienced an output growth of 10.2 percent between 2013 and 2015.<sup>26</sup>

## Taking a Look at the Metro Areas

When we look at Oregon's metro areas, we find a mixed bag with a positive tilt. Let's take them one by one.

**Bend–Redmond:** This metro area was hit hard by the recession, with the (non-seasonally adjusted) unemployment rate peaking at 17.2 percent in March 2009. Since then, however, the area has

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22. State of Oregon Employment Department, "Diverging Employment Trends in Oregon's Agriculture Industry," April 25, 2017.

23. Nick Beleiciks and David Cooke, "Oregon's Unemployment Rate Reaches Record Low 4.0 Percent in February," State of Oregon Employment Department, March 21, 2017.

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

25. *Ibid.*, 8.

26. David M. Hart, Mark Muro, and Siddharth Kulkarni, "America's Advanced Industries: New Trends" (Report, Brookings Institution, Washington, DC, August 4, 2016).

recovered pretty well, falling below 5 percent in September 2016. Like the state as a whole, the labor force has significantly increased since 2013.

**Corvallis:** Corvallis has remained economically healthy, with the unemployment rate remaining under 9 percent, even throughout the recession. By February 2017, the (non-seasonally adjusted) rate fell to only 3.0 percent, the lowest since 1999. The labor force has been steadily climbing since 2013.

**Eugene:** Eugene has followed the state, with its unemployment rate under 5 percent. It has recovered well, with the (non-seasonally adjusted) unemployment rate peaking at 14.0 percent in March 2009. However, the metro area experienced a more than 10 percent decline in the labor force from 2009 to 2013, and has only partially recovered, which may be propping up the employment figures.

**Medford:** Medford has recovered well from the recession. Like the state as a whole, the (non-seasonally adjusted) unemployment rate recently fell under 5 percent and the labor force is steadily climbing.

**Portland–Vancouver–Hillsboro:** This metro area has recovered better than other parts of the state, with the (non-seasonally adjusted) unemployment rate falling under 4 percent in February 2017 after it peaked at 11.3 percent in July 2009. Like many other areas of the state,<sup>27</sup> the labor force has been steadily climbing since 2013.

**Salem:** Salem looks like much of the rest of the state, with its (non-seasonally adjusted) unemployment rate falling under 5 percent in October 2016 after peaking at 12.2 percent in March 2009. This metro area is more subject to seasonal employment fluctuations than other areas of the state, but the labor force appears to be recovering nicely since the statewide decline in 2013.

Finally, we note that based on migration analysis of 2013–2014 IRS income tax return data, Oregon gained 44,650 additional income tax filers, who brought \$2.3 billion in adjusted gross income to the state. Some 35,208 income tax returns migrated out of the state, taking with them \$1.8 billion in income.<sup>28</sup> Put another way, people voted for Oregon with their feet and their money.

## Oregon’s Regulatory Challenges

Regulation has been proven to have a direct impact on economic output and growth. Therefore, to get a full picture of Oregon’s economic future it is important to look at the state’s regulatory condition.

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27. While the Portland metropolitan area includes a small percentage of the population in Washington State, it is still a reliable indicator of the well-being of Oregon’s economy.

28. Internal Revenue Service, “SOI Tax Stats—Migration Data—2014–15,” accessed May 31, 2017.

Oregon’s regulatory code is published in the *Oregon Administrative Rules* and contains over 14.8 million words. RegData found 167,401 restrictions in the *Oregon Administrative Rules*.<sup>29</sup>

In addition, RegData identified the most-regulated industries in Oregon. The top four regulated industries are ambulatory healthcare services (8,731 restrictions), chemical manufacturing (4,245 restrictions), nursing and residential care facilities (3,799 restrictions), and utilities (3,764 restrictions).<sup>30</sup> Many of the restrictions on the ambulatory healthcare services industry come from Title 333, which contains rules from the Oregon Health Authority, Public Health Division. The Public Health Division’s rules alone contain 15,797 restrictions.<sup>31</sup>

At the federal level, healthcare is also a highly regulated industry. Nursing and residential care facilities, for example, are regulated by 3,149 federal restrictions in addition to the nearly 3,800 state-level restrictions. Although it is often the case that state regulations flow from federal agency requirements, a first step toward regulatory reform can be taken by pulling back the regulatory curtain, reexamining the full array of regulations, and lifting up for removal all rules that can no longer be justified.

## FROM YANDLE’S READING TABLE

Yale Law School professor Bruce Ackerman’s 2010 book, *The Decline and Fall of the American Republic* (New Haven: Yale Press, 2010), is one for our times. Though published seven years ago, and based on a series of Princeton lectures, the book traces the erosion of constitutional constraints that, in the author’s view, have led to major shifts of US political power. Ackerman notes at the outset, and I emphasize, the book is not about the decline of America’s economy. Nor is it about the decline of our democracy. Indeed, it is about the decline of a representative republic with, as the Founding Fathers intended, power divided three ways—legislative, executive, and judiciary.

As Ackerman enumerates changes in how we select and elect presidential candidates, he discusses the move to direct election of senators, the rise of the primary/caucus method for selecting nominees, and the concentration of White House power that has been fortified by massive increases in the legal staffs in both the White House and the Department of Justice. These and other institutional changes have empowered presidents to act more unilaterally and, when challenged, to defend their actions successfully. Going further, the author argues that the recent shift to popular nomination with social-media-fortified primaries and caucuses has strengthened the power of special interest groups to affect outcomes while at the same time placing charismatic candidates with movie star appeal in a strong position. The combined effects expand transactional politics,

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29. James Broughel, Oliver Sherouse, and Daniel Francis, “A Snapshot of Oregon Regulation in 2017” (Policy Brief, Mercatus Center at George Mason University, Arlington, VA, May 2017).

30. Ibid.

31. Ibid.

where candidates make specific promises to special interests in exchange for their undivided support. Ackerman's scholarly book is one that deserves to be widely read and discussed.

Anyone looking for a mind-bending and perhaps mind-expanding read will enjoy traveling the pages of Thomas Friedman's latest book, *Thank You for Being Late* (New York: Farrar, Straus, and Giroux, 2016). The book, subtitled *An Optimist's Guide to Thriving in the Age of Accelerations*, is not the equal of his earlier *The World Is Flat* or before that *The Lexus and the Olive Tree*, but it still provides fodder aplenty for thought and conversation. Friedman's overriding thesis is that a new world was hatched in 2007 when smartphone and other information technologies accelerated by Moore's law brought almost universal connectivity to people worldwide. This, coupled with related cloud computing, yielded competitive disruptions and an institutional disconnect that leaves people closer than ever before. Now, with supercomputers in almost every pocket, ordinary people are better equipped to do good and evil than ever before, while still striving to comprehend the dimensions of the newly expanding world we inhabit.

Friedman captures some of this by quoting Dov Seidman, CEO of LRN, a firm that advises executives on ethics and leadership: "The world is not just rapidly changing, it is being dramatically reshaped—it is starting to operate differently. And this reshaping is happening faster than we have yet been able to reshape ourselves, our leadership, our institutions, our societies, and our ethical choices" (28). The quote adequately sets the stage for book's content. Friedman is at his best, I think, in using personal interviews and fascinating anecdotes to explain and interpret major technological and social change. He does this in a chapter on cloud computing, which he calls the supernova, and then uses cloud-provided availability of knowledge and data to show, for example, how a global consulting firm can operate successfully from its Madagascar headquarters.

Friedman provides a heady treatment of cloud-provided higher education with a discussion of Khan Academy's provision of zero-priced Internet-based learning and affiliation with the College Board to offer an intelligent assistant for high school students who seek to be better prepared for their SAT encounters. Beginning with the never-to-be-fully appreciated power of Moore's law that accelerates and cheapens computing, Friedman ends with a long discussion of theological and social questions. His book is one to read and contemplate.

Finally, I call attention to a classic that I just got around to reading—Leo Tolstoy's *The Death of Ivan Ilyich*, first published in 1886 (New York: Bantam, 2004). In this novella, only a bit longer than 100 pages, Tolstoy demonstrates his masterful ability to paint such vivid word pictures that the reader unconsciously enters the scene being described and feels as though he, too, is an observer or participant. The book focuses on Ilyich, a lawyer and judge who, in his lifetime, gained the material markers of a successful professional man—the right house, best furnishings, and appropriate friends. For Ilyich, success was about having the right stuff, not so much enjoying the stuff.



Long past his prime, after suffering a fall, Ilyich begins to suffer abdominal pain, which gets worse, to the point of its becoming unbearable and therefore debilitating to his courtroom work and performance. With the best doctors unable to assist him, the resulting loss of his work takes away life's meaning. Facing death, Ilyich is left to contemplate the large question: what was it all about anyway? And what about my family and inner circle of friends? Do they really understand that I am dying? Why don't they stop playing games, pretending that I, by some miracle, will recover and get back to my work? Why don't they just call it what it is, the end, and comfort me? In his unhappy assessment of key people in his life, Ilyich finds them wanting. Then, Ilyich realizes that his servant boy, Gerasim, the meanest member of the household, sees the situation in the simplest yet most profound terms. In carrying out his duties, Gerasim brings comfort to a dying man. In a momentary epiphany near the end, Ilyich realizes there are others who do the same.

Smitten by the book, I sent copies to my three children and other family members and asked them to read and react to the book. One of them, my son, Bruce, an Auburn University liberal arts graduate, wrote, "The great authors don't come up with new ideas so much as express what we already thought but never knew how to put into words. . . . His depiction of the servant boy, Gerasim, is interesting. The upper class tends to marvel at the brutes beneath them and their simplicity when, in truth, they are no more simple than anyone else." It's a book worth reading. And it is short!

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#### ABOUT THE AUTHOR

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