



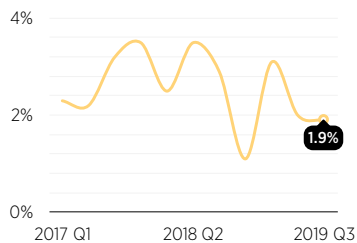
THE ECONOMIC SITUATION

December 2019

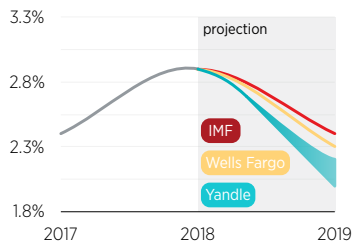
Bruce Yandle

KEY ECONOMIC STATISTICS

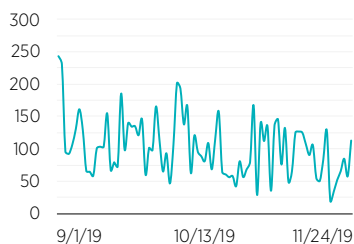
Current Quarterly GDP Growth



Annual Projected GDP Growth



US Economic Policy Uncertainty Index



As 2019 comes to a close, America has a highly employed but slowing economy.¹ The nation's unemployment rate is 3.7 percent and real GDP growth is less than 2.0 percent. But the International Monetary Fund (IMF) says the world economy is cooling. According to the IMF, much of the slowdown in world GDP growth—from 3.8 percent in 2017 to 3.0 percent now—results from a sharp decline in world exports. Growth rates in world exports have fallen from 5.7 percent in 2017 to 1.1 percent now.² Yes, the US-initiated trade wars are taking their toll.

Will things speed up? Get slower? The evidence suggests a cooling economy.

When we look closer to home, we see 2019's real GDP growth headed toward 2.0 to 2.2 percent, and 2020's prospects seem to be even slower. With a slowing economy, we have impeachment uncertainty to consider along with Federal Reserve (Fed) uncertainty. Drilling deeper into state data, we find that President Trump's much-discussed trade war is taking its heaviest toll in industrial states such as Delaware, Michigan, Ohio, and Wisconsin, and in grain and coal exporters such as Wyoming and Kentucky, where both current and future personal income growth are suffering.

While GDP growth is limping along at a slow pace, the US economy is still producing some meaningfully positive outcomes. For example, the latest US Department of Commerce (DOC) data on income growth tell us that America's middle-income group is shrinking. But don't frown; these Americans are moving to the higher income category.³ At the same time, the lower-income group is not growing. Put another way, things overall are looking better for American income mobility.

This report first focuses on the national economy and how things look across the 50 states. It starts by looking more closely at GDP growth and considering the effects of the impeachment process. After

that, the report discusses the latest data on capital goods production and the slowdown in capital investment. Attention then turns to an exploration of different aspects of the troublesome trade war and some of its potentially long-run effects. After that, the report's state spotlight, authored by Mercatus Center at George Mason University research associate Ethan Greist and data engineer Stephen Strosko, will be directed to Delaware, one of the nation's smallest states in square miles, but one with an important high-tech manufacturing and services economy. Finally, the report concludes by reviewing the books found on Yandle's reading table.

LOOKING AT THE NATIONAL ECONOMY

US GDP growth for 2019 started strong with 3.1 percent real GDP growth in the first quarter.⁴ Whether because of accelerating trade wars, Fed policy, or a slowing world economy, quarterly growth fell sharply. The second quarter slowed to 2.0 percent growth.⁵ The slower pace seemed to become the new norm. In late October, the first estimate for third-quarter growth came in at 1.9 percent.⁶ Consumers were spending, but slow investment in nonresidential capital was a key element that contributed to the slow growth. From all indications, 2019's annual GDP growth will hardly break 2.0 percent, and 2020 is expected to look about the same. There are also other uncertainties to consider.

With impeachment and a yet-to-be-determined Senate trial diverting attention from other policy matters and perhaps raising uncertainty that could chill investment, we are left to wonder what, if any, effect a full-blown impeachment trial might have on GDP growth.

In an attempt to answer that question, I looked closely at quarterly GDP growth as well as

the daily Economic Policy Uncertainty Index for late 1998 and early 1999, when President Clinton was impeached and tried. Interestingly enough, there is no evidence of interrupted GDP growth, and the uncertainty index, which certainly formed a higher crest during the period, did not skyrocket in October 1998, when the House of Representatives voted to impeach, or during the time of the Senate trial.⁷ Perhaps market participants predicted accurately that the 1999 trial would not lead to dismissal and the interruption of the White House's policy endeavors. I note that the Senate vote to impeach failed with a 45 to 55 vote. Given Republican control of the Senate at that time, we might expect the same result now, should impeachment go forward. The data suggest that we can rest somewhat more comfortably knowing that we will have a slow economy over the next 12 months, but not a recession.

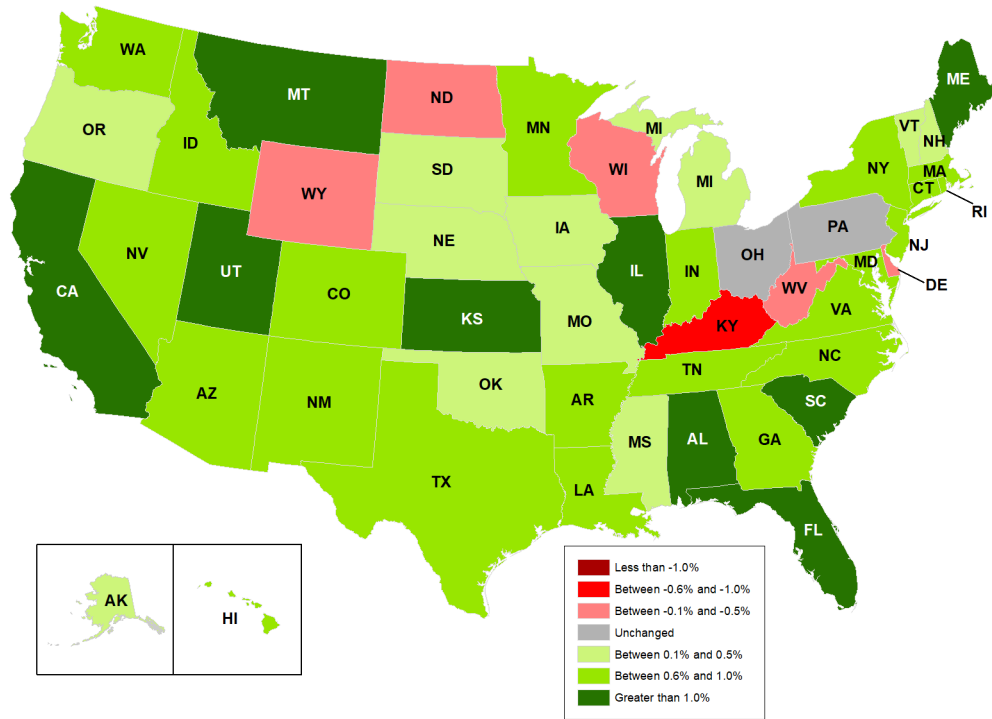
Taking a Closer Look

October's news on US production of long-lasting capital goods brought a reminder that trade wars and the resulting slower world economy are eating away at America's prosperity.⁸ The sharp decline in durable goods output—the largest drop in four months—confirmed what the IMF had earlier reported when it reduced its estimate for world GDP growth. Much of the weaker growth was attributed to weaker world trade growth.⁹

Now, according to the IMF's most recent data, growth in world trade has fallen to 1 percent, which is the weakest growth rate since 2012.¹⁰ Indeed, the IMF estimates that this year's loss in this prosperity-forming activity has reduced world GDP growth by 0.8 percent, which is the size of Switzerland's economy.¹¹

The US effect from all this was made clear recently when the Federal Reserve Bank of Phila-

FIGURE 1. SEPTEMBER 2019 STATE COINCIDENT INDEXES: THREE-MONTH CHANGE



Source: Federal Reserve Bank of Philadelphia, “State Coincident Indexes,” October 23, 2019, <https://www.philadelphiafed.org/research-and-data/regional-economy/indexes/coincident/>.

delphia produced its latest map (figure 1) showing the three-month growth in its 50-state coincident economic indicators, always a useful collection of data.

A quick glance at the map identifies the states that are hurting most from the trade-war-induced slowdown: Delaware, Kentucky, North Dakota, Ohio, Pennsylvania, West Virginia, Wisconsin, and Wyoming. All these states specialize in manufacturing, coal, grain, or some combination thereof.

One might eye the map and counter the ugly evidence with the happier observation that, yes, there are slowing state economies, but the US economy is performing with some of the lowest unemployment rates in recent history. And one would be correct. But the occurrence of high employment in the face of a slowing economy can be the result of America putting tariff-made

rocks in its own harbors to keep out lower-cost foreign goods. When cheaper goods can no longer be imported, Americans have to work longer and harder to maintain the same level of consumption.

Low unemployment is still something to celebrate, but let’s note that there are some people who might (quite reasonably) prefer to work a little less and have more leisure time as well as cheaper cars, clothes, and tools, which are some of the goods that have been hit with tariffs.

Let’s all hope that we will see some meaningful progress in the US-China trade negotiations. If we are lucky, we may be able to enjoy the same level of prosperity that we celebrated before all this started.

There’s Still Some Good News

But while trade wars are taking a toll on the economy, there’s still some good news to celebrate in

the most recent census report on US household income.¹² Stated in inflation-adjusted 2018 dollars and including all forms of income, the shares of high-income, middle-income, and low-income families have changed dramatically. Since 1967, the share of high-income households has grown rapidly while the middle-income share has become smaller. Meanwhile, the low-income share and the number of people counted in poverty has fallen too.

All Americans have something to smile about. No, these happy results cannot be claimed as the work of one president or one party; I am talking about a decades-long process that cuts across all kinds of political action. In any case, America cannot be described as a place where the rich only get richer and the poor only get poorer. Nor can one say that income inequality has reached crisis proportions, as some politicians are inclined to say. The evidence, which speaks well for the operation of America’s market economy, suggests strong economic mobility.

These results are shown in figure 2, developed by American Enterprise Institute economist

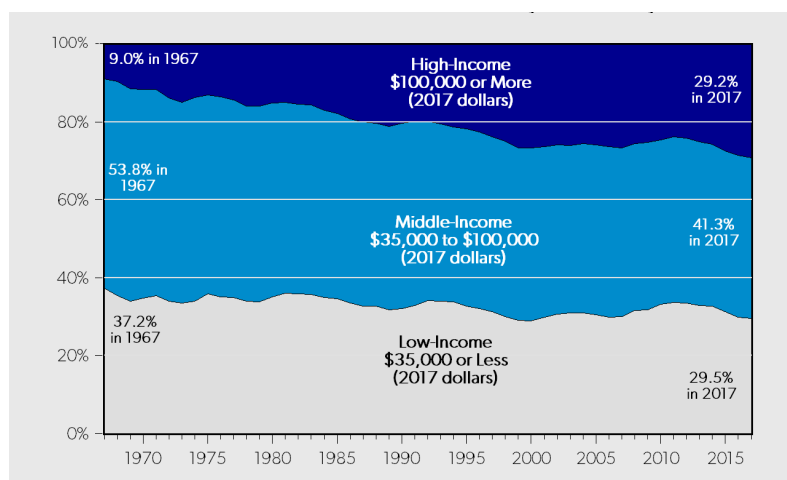
Mark Perry. Notice that in 1967, just 9.7 percent of US families were included in the high-income group. In 2018, 30.4 percent were high-income households. And in 1967, 53.8 percent of all households were counted in the middle-income group. In 2018, the middle-income share included 41.7 percent of all households. Finally, take a look at the low-income category. The share fell from 30.4 percent to 27.9 percent.

The major change here is the shift of the share of middle-income households to the high-income category.

While the income shift has occurred, higher-income Americans have become far more responsible for funding government. More households paying more taxes means that the federal deficit, as large as it may be, would be a lot larger were it not for the growth of higher-income households.

Wouldn’t it be refreshing if the outspoken candidates for the highest office in the land would acknowledge that not everything is out of kilter with the US economy? That not everything is broken and needs fixing?

FIGURE 2. PERCENT SHARES OF US HOUSEHOLDS BY TOTAL MONEY INCOME LEVELS IN CONSTANT 2018 DOLLARS, 1967 TO 2018



Source: Mark J. Perry, “Animated Chart of the Day: America’s Middle-Class Is Disappearing . . . But It’s because They’re Moving Up,” *AEIdeas*, July 30, 2019.

Wouldn't it be grand to hear a well-informed debate about what's right in America, and how the "great American bread machine" is still baking bread? America isn't perfect, of course, and it would be ideal if more low-income households moved into the middle- or high-income categories more quickly. Still, let's learn from this positive experience, instead of simply condemning capitalism and leaning toward socialism.

It's time to look at the data, leave the rhetoric at the door, and celebrate progress.

But Is the System Rigged?

Senator Elizabeth Warren (D-Mass.), a leading candidate for the Democratic presidential nomination, has been openly critical of capitalism as we know it and is eager to offer a better path forward. As she puts it, the economic system is rigged in favor of industry.¹³ She wants a more accountable capitalism, one with more direction from the top. She is right about the rigging but wrong about the solution.¹⁴

Yes, the system is rigged. But how did it get that way? By way of deliberate regulatory actions taken by the US Congress. Should we expect that same body to behave more benevolently in the future? Hardly.

I once had a front-row seat to one such example: the federal government's regulation of fuels consumed in the production of electricity.

The case in point involves two of America's most plentiful fuels: natural gas—among the cleanest-burning—and coal—one of the dirtiest. Most everyone who even casually considers the relative merits of each on a level playing field would urge more use of natural gas. After all, it's clean, cheap, and readily available nationwide. It has been for decades.

But that was not the way the US Congress

saw the matter in 1978, when the Power Plant and Industrial Fuel Use Act of 1978 (FUA) was passed.¹⁵ As a part of other legislation dealing with challenges stemming from the Arab oil embargo, that law banned the burning of US-produced natural gas in newly built electricity-generating plants, urging the use of coal instead. Much to the joy of the coal lobby and the distress of natural gas producers, the system was rigged.

The 1970s environmental community was right there celebrating with the coal lobby, in a textbook case of the "bootleggers and Baptists" political phenomenon. Environmentalist "Baptists," seeking to regulate away a problem like old-school Baptists did with alcohol, argued that clean natural gas was too valuable to be burned in bulk just to produce electricity.¹⁶ The coal industry, like the bootlegger who profits without open liquor stores, formed a profitable alliance with its environmental rivals.

As the 1978 law was being debated, I was a senior economist on the staff of the president's Council on Wage and Price Stability and a member of a small group charged with considering the economic impact of newly proposed regulations. Environmental regulation was my beat. In an effort to gain a better understanding of the proposed gas-banning law, I met with an EPA scientist involved with his agency's development of the law.

He showed serious concern about the greenhouse gases that would be produced if the United States made a complete switch from natural gas to coal for electricity production. I recall his saying that there was no scientific literature available for guidance. There had never been an experiment that would tell us what happens in the upper atmosphere with the massive increase in carbon dioxide and sulfur dioxide emissions that would occur if the law were passed. He was worried about cli-

mate change. Nonetheless, the law passed, and science has uncovered a bit more about climate change in the decades since.

Yes, the system was rigged in 1978, and coal producers laughed all the way to the bank. Until, that is, the tables turned in 1987. The game was rerigged when the US Congress repealed sections of the 1978 law that banned the burning of natural gas.¹⁷

By 1987, concerns about dirty coal had taken center stage, while natural gas was even more plentiful and cheap. This was also the case with petroleum.¹⁸ With coal lobbyists now working to keep their favored position and natural gas and petroleum lobbyists fighting against them—this time with environmental organizations in the corner with natural gas—coal lost out.

Indeed, the reversal of FUA, combined with 2011’s new stricter Clean Power Plan rules on emissions from coal-fired electricity production effectively pointed coal toward the fuel cemetery.¹⁹ Once again, the system was rigged. But then, wouldn’t you know, the hearse carrying coal to the graveyard went in reverse when President Trump entered office in 2017, winning with the support of coal-producing West Virginia. Things got rerigged again. Though no longer as competitive as it once was, coal became a legal contender for producing electricity.

Senator Warren speaks sincerely when she discusses accountable capitalism. Any thinking person should want capitalists to be accountable. But the question is to whom? To the US Congress? To the president? To investors? I favor accountability too—to consumers. Had consumers had their say in 1978, a lot less of that coal exhaust would have entered the atmosphere. And how might such accountability be achieved? By avoiding government regulation that favors one indus-

try, one product, or one activity over others. Do we really want to put Senator Warren or the US Congress in charge of fixing capitalism?

I say let’s unrig the system by sharply reducing the scope of federal regulation and by looking for ways to open competition and put consumers back in the game. Putting an end to the trade war and associated tariffs that protect local industries could help.

Bootleggers, Baptists, and Regulatory Rollback

President Trump’s efforts to lighten the load of federal regulation felt by American industry have brought on another “bootleggers and Baptists” episode.²⁰ In this case, major oil companies and leading environmental groups alike are saying, “Enough, already. We want enforcement of the costly rules that are currently on the books.”

As one *New York Times* writer put it, “The [regulatory] rollback plan is particularly notable because major energy companies have, in fact, spoken out against it—joining automakers, electric utilities and other industrial giants that have opposed other administration initiatives to dismantle climate-change and environmental rules.”²¹

The case in point is the recently announced plan to sharply modify the EPA’s technology-based methane gas rule requiring drillers of gas and oil to capture emissions rather than allow those emissions to escape into the environment.

Methane is a greenhouse gas that may affect global climate change. It is also costly to control, especially for smaller gas producers. Industry members who favor eliminating the rule point out that methane gas is valuable, and accordingly, they have an incentive to capture the gas. Those who favor keeping the rule argue that smaller producers have not kept up technologically and that, either way, the risk to climate change is unusually large.

Thus, perhaps eager to raise their smaller rivals' costs, the major oil companies play the bootlegger role in this story. They have a similar incentive to that of the backyard distiller who wins customers when his county cracks down on legal liquor sales.

Environmental groups, with the moral high ground of protecting the environment, play the Baptist role, with the more straightforward motivations. In this rendering, the oil companies also have donned Baptist robes, arguing that they wish to preserve the clean image now enjoyed by their natural gas product.

Whether they succeed together at derailing the Trump administration's slow-rolling deregulatory locomotive remains to be seen. Finalization of the rule change will require perhaps a year-long regulatory procedure.

It's important to recognize that the "bootleggers and Baptists" regulation theory also offers an explanation of why particular federal rules have certain features. In the methane case, as well as with other air and water pollution control rules, the regulations often require the installation of costly technologies, equipment that in many cases is already being used by larger and newer industry operators. Thus, the rules sometimes impose no new cost on larger firms but raise costs for smaller competitors.

It is noteworthy that the EPA is instructed by Congress to apply technology-based rules and not allowed to use performance standards, which would allow polluters to clean up in any way they desire so long as they achieve an objective environmental goal. Performance standards do not as reliably cartelize an industry as technology-based standards do.

So far, the Trump administration has made unusually large strides in slowing the *Federal Reg-*

ister printing press and eliminating multiple existing rules for each new rule added. But the efforts of the administration's first few years involved grabbing low-hanging fruit (i.e., rules that are no longer especially valuable to either bootleggers or Baptists). Things get harder when that fruit is gone.

The methane rule change will ultimately become a test case decided by the courts. Meanwhile, the bootleggers are harmonizing with the Baptists.

PRESIDENT TRUMP'S AFFECTION FOR TRADE WARS

President Trump's expansion of tariffs on Chinese goods, and the later revision specifying affected goods and implementation dates, brings to mind an important theory of regulation informally called "money for nothing."²² Developed by the late law and economics scholar Fred S. McChesney and elaborated on in a 1997 Harvard University Press book using the phrase in its title, it offers an explanation of how political actors behave when seeking to impose regulation on parts, if not all, of the economy.²³

McChesney's story goes like this: Suppose a government official is in a position to impose rules that will affect every firm in a major industry, such as the handgun industry. At the same time, the regulator is running for office or hoping to keep an elected office. In either case, he needs money.

In developing a regulatory strategy, the politician determines that if he announces an extensive expansion of gun control laws, he may galvanize the attention of key industry groups. Then, after rallying, ranting, and raving, the industry will pledge future support to the politician if he calls off the regulatory hunt. Industry members want no action taken—nothing, in other words—and they are willing to pay for it.

In his theoretical story, McChesney points to the National Rifle Association and its extensive lobbying effort focused solely on reversing any proposed legislative action; that is, offering powerful support in exchange for nothing. He also focuses on how firms or industries that could be hit hard by revisions of the tax code frequently fight to have “nothing” imposed on them.

Another example of McChesney’s theory occurred while he served as an official at the Federal Trade Commission during the Reagan administration. (I was also at the agency at the time.) The episode involved the funeral home industry, an industry that had never been confronted by federal regulation and therefore had no Washington lobbying presence.

In the interest of protecting funeral consumers at a time of high emotional stress, and following the guidance of its oversight committees, the FTC proposed a process for unbundling the charges associated with a funeral, specified a format for discussing details with the aggrieved parties, and went on to require all funeral homes to provide through their own facilities all forms of funeral services, including cremation.

If finalized, the proposed rule would have been quite burdensome for an industry regulated previously only by state and industry rules. As might be expected, the proposal motivated funeral homes to expand their Washington presence, hire lobbyists, and work the halls of Congress in an effort to modify the rule.

With congressional guidance, the FTC did modify the rule, which became final in 1984. Some of the more burdensome requirements were removed, and the industry became a contributor to the campaign efforts of those who assisted them in this time of difficulty. By 1990, the industry, which is made of almost countless

small enterprises, was spending \$240,000 annually on federal lobbying activity, an amount that increased to around \$1 million in 1998, when the rules were modified, and then receded back to about \$700,000 by 2018.²⁴ They paid good money for a specific kind of nothing.

Now consider the Trump administration’s tariff policies. On August 1, the president announced unexpectedly an expansion to the program that would place a 10 percent tariff on some \$300 billion of Chinese exports.²⁵ A 25 percent tariff was already in place on other goods. The list of goods was extensive and largely comprised consumer products. Prominently included were shoes, toys, a host of consumer electronics, and Apple’s latest phones, then scheduled to be announced in early 2020.²⁶

As expected, howls were heard from all kinds of consumer goods trade associations as well as from Apple.²⁷ On August 13, President Trump announced that some items would be excluded from the tariff list, including toys, laptop computers, and iPhones. But perhaps to keep people wondering and not wandering too far, the president indicated that exemptions would expire on December 15. In other words, he may have gotten some political support in exchange for the right kind of nothing, with an opportunity for more of the same coming in December when the tariff decision will be revisited. Of course, this is not the first time the administration has walked back a major tariff threat. Remember? President Trump pushed for tariffs on all goods crossing the Mexican border and then pulled back. Tariffs were proposed for everything coming from Guatemala and later called off. Still pending are possible tariffs on European cars and French wine. The president and his advisers are experienced negotiators who understand the importance of reaching for the

moon when deep down inside they expect something far less dramatic, but they nonetheless act as though they've read McChesney's book.

When Winning a Trade War Feels Like Losing

Though not something to celebrate, America this fall witnessed some of the highest levels of economic policy uncertainty since President Trump's January 2017 inauguration.²⁸ It seems that President Trump hit a veritable uncertainty bonanza when, in a wide-ranging interview, he indicated that America was winning the trade war even though the trade deficit with China—his preferred measure of success or failure—is rising and even though, in his opinion, the trade controversy could produce a short recession.²⁹ Shortly after he spoke, the Economic Policy Uncertainty Index on August 19 rose well above the previous high, which occurred when the government was shut down at the end of 2018. Based on the unhappy relationship between uncertainty and economic performance, this noteworthy achievement predicts lower future per capita income for Americans.

Then, to cap things off, the president tweeted, "Our great American companies are hereby ordered to immediately start looking for an alternative to China, including bringing your companies HOME and making your products in the USA."³⁰

Closing off markets, forgoing gains from trade, and hightailing it home hardly seem like winning.

Of course, it must be granted that President Trump has access to almost unlimited information on the economy, trade with China, and the inside view on progress with US-China trade negotiations, and he may well know that better times are just around the corner, so to speak.

Still, winning doesn't feel like the right word today. After all, US farmers have been forced to yield their Chinese soybean market to Brazil and

are being assisted to the tune of more than \$20 billion, borrowed from somewhere—perhaps even China. Add to this the Congressional Budget Office expectation that the average American family will be hit with a tariff-driven bill of \$580 in 2020.³¹

Part of the pain ordinary Americans are feeling is captured in the amount of tariff revenue being collected by the DOC, paid in dollars by Americans each time foreign-produced goods cross US borders. Until the trade-war acceleration, Americans were paying about \$30 billion annually.³² The annual rate of tariff payment is now hitting \$70 billion. Apparently winning doesn't come cheap.

During the G7 meeting in Paris, immediately following his "we are winning" interview, the president mentioned "second thoughts" while walking back his directive to American firms and said he was feeling better about the ultimate agreement outcome with China.³³ He also indicated that a US-Japan trade agreement would soon be announced and that he would not impose tariffs on Japanese cars.³⁴

Once again, uncertainty reigns supreme. Good news mingles with bad, what was demanded one day is revised the next, and tariffs remain the administration's weapon of choice in building relationships with other nations.

And that's why the US-China tit-for-tat trade war has been going on long enough. Now is the time for negotiating parties and country leaders to bring a little certainty back to the market, to find the compromise position that yields gains to both parties, and to end the pain for American consumers. The time has come to truly win.

Can America "Go Home Again" after a Trade War?

Recently, President Trump offered some recognition that his trade war with China is imposing

real costs on American consumers.³⁵ His concerns have to do with farmers and others whose livelihoods are put at risk by loss of Chinese markets for their goods or services, and they also have to do with ordinary Americans who are beginning to see higher prices on tariff-laden goods in stores and supermarkets.

But while President Trump has publicly accepted the fact that trade wars can punish consumers, he also believes that the short-run cost will be offset by future benefits that spring from improved Chinese policies. To lock down those future gains, the markets for these goods must more or less recover and return to their pre-trade-war positions once the China situation comes to a close.

Put another way, US firms that previously had Chinese customers must once again be able to ship their goods across the Pacific and find at least as many willing buyers. Similarly, Chinese businesses that were shipping goods to America before the trade disturbances must be able to recover fully their US customer base, which, again, benefits US customers too. Will this happen? Not necessarily.

Suggesting that this scenario is a given overlooks the fact that some Vietnamese firms are already taking the place of Chinese businesses, that Brazilian farmers are supplying the soybeans once shipped by Americans, and that former Chinese buyers of American goods have found Chinese or other international suppliers. As Thomas Wolfe put it, “You can’t go home again.” The pre-trade-war home no longer exists exactly as it was.

At the same time that these competitive adjustments are occurring, the Trump administration is expanding its China tariffs to cover more consumer goods, including electronics, and also making noise about potential tariffs on French wine and European automobiles. These new tariffs could just as easily distort long-established trade relationships that, once lost, cannot be regained overnight.

President Trump’s continued preference for using tariffs in the hope of getting his way with other countries is imposing costs in the short run. As for the long run, we’ll learn whether distorting trade relationships was worth it.

STATE SPOTLIGHT: DELAWARE

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Each quarter, we select one state and analyze its economic and regulatory outlook. Last quarter, we put New Mexico in the spotlight. In previous quarters, we have examined Colorado, Hawaii, Illinois, Kentucky, Michigan, Missouri, Nebraska, and North Carolina. This quarter, we will focus on Delaware.

Delaware has several factors that distinguish it from other states and affect its economic makeup. As the nation’s second-smallest state by land area and sixth-smallest by population (slightly fewer than 1 million people),³⁶ Delaware is relatively urbanized and has a high population density of 460.8 persons per square

mile.³⁷ Its southernmost two counties on the Atlantic coast have a lower population density and rely mostly on agriculture (primarily poultry farming), fishing, and some tourism. The majority of Delaware's economy and population is concentrated in the northernmost county. Here, the city of Wilmington and the surrounding suburbs exist in the northeastern transportation and railway corridor between Baltimore and Philadelphia.

Delaware's economy is known for two things: being a center of chemical manufacturing and being the incorporation home for more than half of all publicly listed corporations in the United States. Both of these designations are outdated in their own way. In terms of chemical manufacturing, while it is true that several major chemical companies such as DuPont, Hercules, and AstraZeneca have their administrative and research centers in Delaware, very little of their total manufacturing takes place in the state.³⁸ This inference is supported by statistics on manufacturing as a percentage of Delaware's total employment, which sits at a relatively low 5.9 percent against a US national average of 8 percent for the year 2018.³⁹

The state's curious incorporation situation stems from a permissive 1899 incorporation law. While more than half of all publicly listed US corporations are incorporated in Delaware, the law does not require them to have any significant presence in the state. Instead, the state merely imposes a corporation franchise tax on them, which serves as an important part of state revenue.⁴⁰

Delaware's real economic drivers are the finance, insurance, administrative services, and healthcare industries (categories as defined by the Bureau of Labor Statistics).⁴¹ The notable tilt toward these high-value services may contribute to Delaware's unusual economic situation. That is, like most of the northeastern states, Delaware is wealthier than the US average. However, unlike those states, Delaware has seen very little economic growth above the level it reached before the 2008 recession. Specifically, its real median household income is \$62,800 (higher than the \$60,300 US median);⁴² its per capita income, at \$33,900, is higher than the \$32,400 US average;⁴³ and its per capita GDP in 2017, at \$66,400, is higher than the \$55,000 US average.⁴⁴ Additionally, the unemployment rate is 3.4 percent,⁴⁵ the labor force participation rate is 61.9 percent,⁴⁶ and the poverty rate is 12.5 percent,⁴⁷ which are all on par with the national average. However, observing these metrics over time shows that Delaware's economy has been stagnant since the 2008 recession, especially relative to the rest of the United States. If one defines "northeast" to mean north of Virginia and east of Ohio, then Delaware and Connecticut are the only states of this category whose per capita GDP growth is less now than it was in 2007 or 2008.⁴⁸

DELAWARE'S INDUSTRIAL GROWTH

Breaking down the real GDP growth rate by industry reveals an anemic long-term trend. While a comparison between Q1 2018 and Q2 2019 shows an overall 3.4 percent real GDP growth rate (including 5.2 percent growth in manufacturing, 9.9 percent growth in wholesale trade, and 4.3 percent growth in finance and insurance),⁴⁹ a comparison between Q1 2019 and Q1 2007 shows a much more modest 0.5 percent average annual real GDP growth, with -2.5 percent, -1.2 percent, and -2.3 percent average annual growth rates in manufacturing, construction, and wholesale trade, respectively; and 1.8 percent, 1.7 percent, and 2.0 percent growth rates in professional services, management, and administrative services, respectively; plus a 2.0 percent growth rate in healthcare services and no significant change to the finance and insurance industries.⁵⁰ For reference, overall US real GDP annual growth in this period was 1.7 percent, with overall growth in every industry except construction.

Part of this wealthy-but-not-growing character of Delaware might be explained by its status as a low-dynamism but high-value-added economy. The state places fifth in the New Economy rankings, which consider an array of factors to "assess states' fundamental capacities to successfully navigate an economy driven by technological innovation."⁵¹ A review of these numbers reveals an interesting divide. Delaware does extremely

well in measurements of globalization and the knowledge economy (number of IT jobs, manufacturing value added, high-wage traded services, foreign direct investment, industry research and development, and patent ownership). However, for a state so high in the total rankings, it does shockingly poorly in measurements of dynamism and invention (nonindustry research and development, patent production, IPOs, and venture capital). The lack of major well-known universities or university-based research centers might explain some of this, but the low level of dynamism also challenges the common conception of Delaware as a business-friendly state.

This challenge exists for good reason; Delaware's business-friendly reputation is a mirage. A recent CNBC ranking of America's top states for business in 2019 ranked Delaware 38th owing to an overall higher-than-average cost of living, high cost of doing business, low business friendliness, low quality of life, low performance of educational institutions in the state, and low access to capital.⁵² While some of these negative factors are difficult to mitigate (high cost of living comes with affluence, and improving mediocre Delaware's universities and admittedly underperforming public schools is a very long-term process),⁵³ others are tied to more immediate policy decisions for which we have data.

For example, the "cost of doing business" metric used by CNBC is based on, among other things, the state tax climate.⁵⁴ Not only does Delaware have a relatively high corporate income tax rate, at 8.7 percent, it also is the only state to have both corporate income taxes *and* gross receipts taxes.⁵⁵ While the state lacks general sales and property taxes on individuals,⁵⁶ it is highly fiscally centralized,⁵⁷ which results in a high overall tax burden of 9.8 percent.⁵⁸ A Mercatus fiscal health report ranks Delaware 44th out of the 50 states. The report specifically notes that the high level of taxation relative to state income means there is little room to increase taxes if more state revenue is needed to cover budget shortfalls.⁵⁹ This compounds with an already stretched budget and relative lack of assets to cushion against long-run liabilities or fiscal shocks. All this is to say that Delaware's tax and fiscal situation is acting as a drag on the state economy and deterrent to new business formation, regardless of the famed (but ultimately cosmetic) incorporation law.

The "low business friendliness" metric found in the CNBC report also deserves illumination. The report defined business friendless as a state's legal and regulatory climate and overall level of economic freedom. Regulation is precisely one of the issues that the Mercatus Center studies closely.

DELAWARE'S REGULATORY OUTLOOK

Using RegData (a series of Python scripts and machine learning algorithms developed by the Mercatus Center), we can take a detailed look at Delaware's code of regulations. Delaware's regulatory code is published by the Delaware General Assembly on Delaware.gov as the *Delaware Administrative Code* (DAC).⁶⁰ Delaware's regulatory code spans 20 titles divided by the type of regulation they contain. The code contains 6.7 million words and would take an individual about 374 hours—or more than 9 weeks—to read.⁶¹ Surprisingly, even this massive code is on the short end relative to other states. When counting the number of regulatory restrictions (instances of the legally actionable phrases *shall*, *must*, *may not*, *prohibited*, and *required*), Delaware comes out to 104,562 total restrictions. This makes Delaware the 33rd most regulated state by total number of restrictions. This is low overall but high for a state of its population and economy size.⁶²

The most restrictive title of the DAC is title 7, which is associated with natural resources and the environment. A close second place goes to title 16, associated with health and safety. The top three most regulated industries by restriction count are petroleum and coal products manufacturing, chemical manufacturing, and waste management and remediation services, all of which hover at or above 20,000 restrictions per industry.⁶³ While the heavy degree of waste management and petroleum or coal industry regulation is somewhat confusing, given the marginal role of these industries in the Delaware economy, the abnormal number of

chemical manufacturing restrictions (as compared to other states) makes sense for a state that is known for its chemical manufacturing industry.

Every state is also affected by federal regulations. This effect can vary from state to state based on the mixture of industries in each state's economy. The Mercatus Center's FRASE Index, which measures the effect of federal regulation on state economies, ranks Delaware quite low, experiencing the 39th-highest impact of federal regulations on its economy out of all the states.⁶⁴ While Delaware does rely on industries that are heavily impacted by federal regulations, such as financial services, it does not rely on those industries that are the *most* affected by federal regulation, such as oil and gas extraction, electric power generation, and motor vehicle manufacturing.⁶⁵

CONCLUSION

The August 2019 leading indicator published by the Federal Reserve Bank of Philadelphia predicts that Delaware's economy will contract by as much as 1.5 percent in the next six months,⁶⁶ as compared to the rest of the states, of which all but Delaware, Kentucky, Wisconsin, and Wyoming are projected to experience economic growth in 2020. This is perhaps the consequence of an anomalous feature of Delaware's economy. It is in a lonely category of highly affluent northeastern states that have not seen any significant real economic growth above their position prerecession. The story of Delaware as a center of chemical manufacturing is belied by the mainly administrative footprint of chemical companies in the state. This follows the trend of the rest of the state's economy as being heavily based on technical and professional services employment. The myth of business friendliness stems from an incorporation law which serves merely as a source of tax revenue. In such a fiscally oppressive environment, Delaware can do little to attract dynamic new businesses. This shows up in the numbers as an economy full of high-paying service jobs with no immediate prospects for future growth.

YANDLE'S READING TABLE

James R. Otteson begins his well-written book, *Honorable Business* (New York: Oxford University Press), with a puzzle: Why do people say that businesses should give back after a successful run, implying that something has been taken or stolen? He points out that the same is not said about medical doctors, who also make lots of money. Otteson argues that his question points out sharp differences in public attitudes regarding the two fields and that, apparently, businesses and business executives are held in a much lower regard than medical doctors. Yet the author does not believe that businesses and business executives deserve this. His book is an organized effort to explain why.

The first step involves a discussion of Aristotle's notion of the purpose of the good life: *eudai-*

monia, which may be translated as happiness, but which is also a bit more. In a state of *eudaimonia*, the happy person believes that his life is worth being lived, that life is not just living but flourishing. Otteson explains that generating wealth through business activities enables eudaemonic life.

The second step toward building what Otteson terms honorable business involves institutions. A properly functioning market economy is the primary one. This is the arena where honorable business comes to play. But what is honorable business? These are businesses that contribute to growing, generalized prosperity in a properly functioning market economy. They do this by creating value for others. Dishonorable business, on the other hand, seeks to create value for itself at the expense of others. But what is a properly

functioning market economy? One that assists in forming a just and humane society, which is where people can find *eudaimonia*. Through a multistep process Otteson seeks to lay out a few rules that, if followed by businesspeople, will support creation of a just and humane society in which honorable businesses may flourish. In this process, the final step involves an individual personal commitment where each participant promises to exert Adam Smith's version of self-command, which means that they will live disciplined lives that are dedicated to avoiding coercion and opportunistic behavior while endeavoring to create happiness for others in a voluntary economy.

Unlike other books in the family called business ethics, Otteson sets forth a unifying theme. In doing so, he seeks to explain the *why* of business based on rules of reason and wisdom of the ages rather than explain the *how* of business through the use of case studies. There is more.

In a way, *Honorable Business* is like an enriched CliffsNotes version of Adam Smith's *Theory of Moral Sentiments* and *Wealth of Nations* rolled into one. But there is more: the book also offers a highly condensed but delightfully cogent summary of Deirdre McCloskey's 2016 *Bourgeois Equality: How Ideas, Not Capital or Institutions, Enriched the World* (Chicago: University of Chicago Press) and its two companion volumes, ideally written for undergraduate students.

While Otteson provides what I consider to be excellent material for discussing the *why* of business, I find his highly articulated chain of events for getting to *eudaimonia* extremely difficult to apply in a real-world setting. Here's what bugs me: In Otteson's model, effective institutions that will surround a free market process evolve first. Then, honorable businesspeople enter the competitive field, behave honorably, and create value for con-

sumers so that all can flourish. However, the world I think I know is one where institutions are constantly being revised, even as competitive action is underway. Many of the proposed rules—often put forward by rent-seeking businesses—would effectively take the property of existing firms or in other ways raise costs and reduce the boundaries of the competitive playing field. I ask, "Shouldn't the honorable business professional want to strongly oppose such actions and therefore be involved in lobbying? Or would that be considered rent-protecting and therefore rent-seeking behavior?" Put another way, Otteson suggests that the rules of the game, which are exogenously determined, should be developed in an honorable way. In our world, I believe, rules are determined endogenously and therefore, by Otteson's measure, are dishonorable because of rent-seeking behavior. We have then the challenge faced by moral men in an immoral world. *Honorable Business* is a thought-provoking read and one that I highly recommend for personal use and for use in the classroom.

Jeremy Rifkin's latest book, *The Green New Deal: Why the Fossil Fuel Civilization Will Collapse by 2028, and the Bold Economic Plan to Save Life on Earth* (New York: St. Martin's Press), focuses on the world's rapidly changing energy economy and how carbon-involved environmental tragedies can be avoided.⁶⁷ President of the Foundation on Economic Trends and with several worldwide offices, Rifkin, by his own account, is intensely involved in discussions with top political leaders in Germany, a country he sees as the model for a hasty transition to the new energy economy for the United Kingdom, the European Union, and China. As a result of this involvement, the book is helpfully filled with detailed discussions of policy-rich conversations and events that help to enrich and flesh out his story.

The book's title is guaranteed to resonate with the rich cross section of environmentalists and progressives who believe that climate change threatens life as we know it and that solutions to such serious problems can only be addressed with top-down, command-and-control regulatory actions. This coalition has already helped to install related planks in the platforms of aspiring Democratic presidential candidates and has sponsored legislation bearing the book's name. But there is also something here for those who believe market forces can lead to beneficial outcomes, because Rifkin, maybe somewhat begrudgingly, indicates that the market is already leading to a beneficial outcome. As he puts it, "The market is a guardian angel looking over humanity."⁶⁸

But if the title is not enough to grab attention, the book's Armageddon-reminiscent subtitle (*Why the Fossil Fuel Civilization Will Collapse by 2028, and the Bold Economic Plan to Save Life on Earth*) will surely do so. This sounds like a *National Inquirer* checkout-line thriller, doesn't it? Trust me, the book is not a polemic, though it surely reflects a normative view of the how the world should work. Still, I recommend the book to all who wish to stay informed about political and economic forces that seem to be shaping future institutions that will regulate how we live.

Noting uncritically that the words in the title relate to "America's greatest public works project," Rifkin provides an interesting narrative on how and "where the Green New Deal got its legs."⁶⁹ (I note that it borders on amazing that a much-respected scholar would speak of FDR's New Deal uncritically or without noting, even in a footnote, that the FDR program's overall success cannot be judged in terms of ending the Great Depression, let alone providing new energy to the US economy. But the program may be judged successful by

those who believe that economic life can best be managed with a heavy dose of top-down government direction, what some call socialism.)

Paradoxically, as he puts it, though inspired by FDR, the book's title is European in origin, a 2009 development of the German Green Party's efforts to bring together the European Union and United States to advance a postcarbon economy. These efforts, which involved white papers and conferences, were dedicated to building a game plan for the 2009 Copenhagen climate summit, which was intended to be a time for the display of triumphant policy leadership by the Obama Administration in gaining a world agreement to cut back carbon emissions. Sadly for those who expected a lot, the Copenhagen effort came off like a lead balloon that never got off the ground. Rifkin makes no mention of the conference's failure but goes on to explain how the words "Green New Deal" became a term of art to be found in report titles and initiatives put forward by the European Union, the United Nations, South Korea, and various political movements, including the efforts initiated by newly elected member of Congress Alexandria Ocasio-Cortez.⁷⁰ I note that in 2009 Jody Lipford and I were focusing on the relationship between multicountry GDP growth rates and the time when stricter environmental regulation would be embraced, the so-called Environmental Kuznets Curve relationship.⁷¹ Our work indicated that China was at a point to embrace a global carbon reduction agreement, which is what happened.

Rifkin's decidedly well-written book sets forth his carefully constructed, though not always compelling, argument that a new zero-carbon-energy economy is emerging, one that will be accompanied by vast employment and economic growth opportunities but also serious transition difficulties encountered by owners of and stake-

holders in existing fossil fuel energy infrastructure. Drawing on his past efforts to portray a third industrial revolution that is now underway, Rifkin presents some of the book's best work.⁷² I note that the other two revolutions are the 18th-century, British-initiated, steam-engine-driven revolution and the late-19th-century, American-inspired, petroleum and electricity revolution.

Here we find analytically strong discussions of potentially rapid expansion of decentralized wind and solar power generation, falling prices, and the difficulties to be encountered by US and other investors as well as publicly owned electricity producers. Assuming that the electricity economy expands as Rifkin thinks it will (largely based on movement into electric automobiles) and that decentralized solar- and wind-based generation continues to encounter falling costs and therefore lower prices, then when the tipping point might come and how to deal with stranded assets (e.g., coal-fired generators that no longer competitive) become the chief challenges.

However, Rifkin's key point is that without redevelopment of the power grid for accepting and distributing power from a vast number of newly decentralized generators (e.g., most US homes that become solar powered), the new power economy will be stymied. Furthermore, the longer the delay, the greater the reinvestment in the old carbon-based electricity-generating system. Thus, the stranded cost hazard rears its ugly head.⁷³ With the prospect of stranded costs comes a revaluation of the relative investment attractiveness of existing petroleum- and coal-fired electricity producers.⁷⁴

With appropriate political and industrial leadership, as described by Rifkin, this rapidly forming, highly decentralized energy economy that relies on wind, sun, batteries, and hydrogen for produc-

ing, storing, and distributing lower-cost electricity can evolve, but this evolution will not come easily.

Rifkin recognizes that today's federal regulatory institutions will become unhelpful dinosaurs when it comes to accommodating the needs of the third industrial revolution. After all, US electricity prices are regulated independently at the state level, and producers and distributors include thousands of local, state, and regional actors. He desires that the new world he thinks is evolving will be a sharing economy, where perhaps millions of solar power units and wind power communities will be engaged in a dynamic market setting. As a result, he spells out 23 actions that should be taken by federal, state, and local governments to hasten the day when the new energy economy is operational. These include developing tax credits for rapid development of zero-carbon electricity production as well as for electric vehicles and charging stations, a national green bank for financing carbon-free projects, and federal programs to encourage farmers to enhance their use of low-carbon agricultural techniques. In short, there is plenty here for policy wonks to tear into.

What readers do not find are what are termed *no-regrets policy suggestions*, ideas that might be net beneficial even if the much-discussed climate change collapse does not emerge. From my standpoint, these might include cutting capital gains taxes to zero to hasten deployment of new capital; eliminating all forms of energy subsidies, so that economic agents would be aware of the real cost of their actions; and opening the doors wider for immigration of people and capital, so that climate-change migration might be better accommodated.

But while Rifkin gives the reader plenty to think about as he paints the landscape of a possible future electric economy, he does so without directly paying attention to lessons learned from

public choice economics—though he, at times, recognizes some related difficulties. This becomes most concerning when considering his 23 recommended actions because any one of them, if attempted, would induce carloads of lobbyists and other rent-seekers to enter the fray. This is not to say that considering what might be called pure public interest recommendations is a waste of time. It is not. But history tells us that large-scale electricity production and related energy sources have often called the tune when regulatory reforms have been attempted. As a result, all reform efforts seem to have resulted in more regulation, larger regulatory agencies, and enlarged arenas for rent seekers to explore while working the regulatory commons. I wish Rifkin had written one more chapter titled “What the Third Industrial Revolution Will Look Like after the Rent Seekers Have Entered.”

ABOUT THE AUTHOR

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NOTES

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