THE ECONOMIC SITUATION

December 2021

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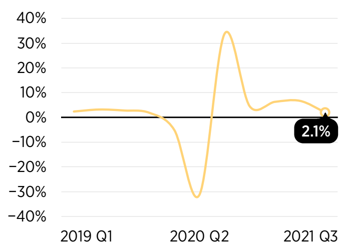
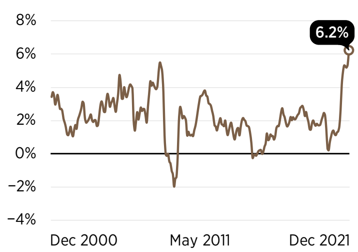
KEY ECONOMIC INDICATORS

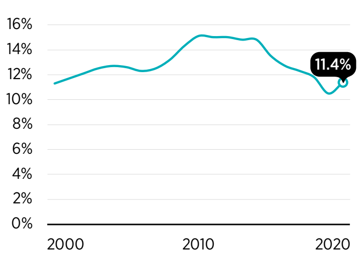
Current Quarterly GDP Growth



Consumer Price Index (Percentage Change from Prior Year)



Percentage of People Living in Poverty



With 2021's conclusion almost in sight, a quick scan of the economic landscape reveals a degree of chaos generated by unexpected fluctuations in demand and supply delivered by the COVID-19 pandemic and responses to it.[1] Many of the major challenges America now faces spring from multiple trillions of stimulus dollars that have been injected to the economy without an accompanying supply of goods and services that normally go with income flows. Once the effects of peoples' responses to closed workplaces and shuttered schools are added, the result is a combination of uncertain changes in demand and supply and rising expectations for more inflation.

This result is what I continue to call a Frankenstein economy, a social giant formed in the political world's most elaborate economic laboratories. America's economic engine is part natural, or evolved from market processes, and part political, or constructed by statutes, regulations, and executive orders for the purpose of achieving what are deemed to be vital political and social goals.

For more than two years, Americans have seen a massive buildup of savings and demand deposits as stimulus dollars flowed in, yet for much of this time, consumers were prevented by the pandemic from engaging in normal spending activities. In addition, employment and health uncertainties have led logically to a desire to hold higher precautionary cash balances. Now, with the economy finding a new COVID-19 norm—whatever that turns out to be—supply-side labor market complications, whether because of closed schools that limit employment options or higher unemployment compensation that make interrupted work more feasible, have led to supply chain uncertainties. Meanwhile, in recovery mode, the US economy has sprung forward, with real GDP growth exceeding 6 percent in 2021's first and second quarters. However, GDP growth fell to 2.1 percent in the October estimate for the third quarter.[2]

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Table 1. GDP Growth Forecasts (Percentage)				
	Q4 2021	2021	2022	2023
Philadelphia Fed	4.6	5.5	3.9	2.6
Wall Street Journal	4.8	5.2	3.6	2.5
Wells Fargo	5.6	5.5	4.1	3.3

Sources: "Fourth Quarter 2021 Survey of Professional Forecasters," Federal Reserve Bank of Philadelphia, November 15, 2021, https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/spf-q4-2021; Anthony DeBarros, "About the Wall Street Journal Economic Forecasting Survey," *Wall Street Journal*, October 17, 2021; "Weekly Economic & Financial Commentary," Wells Fargo, November 19, 2021, https://wellsfargo.bluematrix.com/links2/html/10170cfa-c5b1-4051-a592-c9a5414fee3b.

EXPECTATIONS FOR GDP GROWTH AND OUTPUT

All that is going on with the pandemic is not counted when GDP growth is estimated. For example, rising fatalities and falling life expectancies don't show up directly, but still GDP growth matters. The quarterly GDP growth estimates for the final quarter of 2021, the annual GDP estimate for 2021, and the annual GDP estimates for the following two years are shown in table 1. When the scorecard is examined, one finds that 2021 still promises to be more than just a decent year and that 2022, in spite of large uncertainty dealt with by the forecasters, shows good promise as well. However, 2023, at this point, does not look to be a year for the record books.

Inflation Is the Hot Topic

Inflation is the hot indicator for now, and it is most likely not just temporary or transitory. The all-item Consumer Price Index (CPI) on a year-over-year basis was up more than 5.0 percent in July, August, and September.[3] Estimates by independent scholars using high-frequency credit card data to capture actual purchasing patterns suggest that the CPI increases for 2021 are understated by as much as 0.7 percentage points. With CPI data applied, the millions receiving Social Security payments can look forward to a 5.9 percent increase in benefits in 2022, the largest cost-of-living adjustment in decades.[4] From a policy standpoint, it is worth remembering that the Federal Reserve (Fed) considers 2 percent inflation to be its bright-line monetary policy goal. Obviously, there is a large gap between the goal and conditions on the ground.

Price levels as measured in the Producer Price Index (PPI), which partly foretell what is on the way for consumers, are up even more, showing an 8.6 percent year-over-year September increase, the largest since the series started in 2010.[5] And although inflation is not just a US phenomenon, inflation in the United States is higher than in Eurozone and G20 countries.[6] This means that the dollar should remain relatively weak against those countries' currencies. Other things the same, a cheaper dollar will encourage demand overseas for US exports, but it will make imports more expensive, driving their demand down.

Generally, a few key items, such as energy, rent, and used cars, are called out in discussions of inflation. Price increases seem far more prevalent now. An analysis of the price movements in the July Personal Consumption Expenditures (PCE) index, which is the Fed's preferred inflation measuring rod, shows 84 percent of included items rising in price.[7] The September PCE index was up 4.4 percent on a year-over-year basis, having risen from 4.0 percent in June, registering the largest monthly increase since October 1990.[8]

Energy prices—in practically every form (natural gas, oil, and even coal)—are heading skyward. US housing prices are accelerating at breakneck rates. Steel and wood product prices are rising rapidly. Automobile production is interrupted for most major brands. Supply chain disruptions, including in transportation services, are creating unexpected shortages across a broad range of products from furniture to appliances. Indeed, whether pandemic-induced or otherwise, the stranding of container ships is about to become this year's version of *How the Grinch Stole Christmas!*

Inflation is not just about rising prices. The rising price level is the result of an inflated money supply—all those trillions of stimulus dollars now out chasing harder after goods and services. The latest data show consumers are spending, savings are being drawn down, and retail sales are booming—in September up almost 14 percent from a year earlier.[9] Indeed, second-quarter spending on goods for 2021 was 18 percent higher than in 2019's fourth quarter, well before the pandemic began.[10]

Thus far, 2021's GDP growth has been enhanced by a recovering service economy as previously homebound consumers engage in catch-up activities.[11] But with manufacturing sector output at a plateau since 2010 and with supply-chain interruptions hurting production and employment, manufacturing output weakened in the third quarter. However, employment rose in the food, drink, and hospitality sector.[12] Overall, wages are rising, airports are packed, national parks are crowded, and football stadiums nationwide are being filled on weekends as apparently happy crowds turn away from the pandemic and enjoy being a part of long-awaited mass gathering experiences.

Surely, this is neither the worst of times nor the best of times.

Divided Government and a Frankenstein Economy

In the midst of all this, there are contentious political debates about mandatory COVID-19 vaccinations and wearing masks in public places. Meanwhile, Congress, once again, with frowning faces and dire warnings, struggles to deal with a pending federal debt limitation and budget legislation, taking temporary actions while offering nightmare images of interrupted economic activity and defaulted debt.

Down in the foundation of the ongoing political struggle, one observes powerful tension between significant portions of the electorate. One group calls for more entitlements and federal solutions to the disruptions caused by such things as climate change and the industrial revolution that may be required to accommodate the birth of a low-carbon emitting world, and it sees these issues as deeply moral. These self-named progressives are bumping heads against another group that worries about growing debt, government interference with private decision-making, rising inflation, and a growing tendency for the national government to disregard, or even to erode, the foundations of what this group believes to be moral behavior.

The Remaining Sections of This Report

In this report, I first look closer at how economic news is being interpreted and thus how things are not always what they seem to be. I name this section "On the Other Hand" after the kind of interpretation of economic data it discusses. The reason for the title is apparent in the section's first paragraph. With the renewed interest in the Biden administration in clearing away some barriers to trade, especially with China, the following section focuses on how international trade disciplines price increases in trade-sensitive sectors relative to those sectors that are less subject to trade competition. The section makes more apparent the importance of opening the doors to freer movement of goods and services across national boundaries. The next section looks at environmental policy and highlights efforts in the past few decades to improve environmental outcomes. The beneficial use of property rights and common law remedies is a major theme in the discussion. After that I tell a personal story about my father's advice to me on spending and debt and explain how this might be a good time to heed his message. He didn't mince words. The advice is simple, yet profound.

Near the end of the report, we put the state spotlight on California. The report concludes with two book reviews.

AN "ON THE OTHER HAND" ANALYSIS OF ECONOMIC NEWS

It's a well-known story about President Harry S. Truman and economist double-talk: "What I need is a one-armed economist," Truman said. He was weary from hearing a strong analysis of the latest data only to be hit with the qualification, "but on the other hand." Of course, one has to grant that there are many major moving parts that form the US economy, and it is vital that a national leader be made aware of more than one possible outcome when policy changes are considered. But still, President Truman's point is well taken.

I thought about Truman's appeal recently when reading the latest news from the Census Bureau on 2020 household income growth. The *Wall Steet Journal*'s front-page story begins with what sounds like bad news: "Americans last year saw their first significant decline in household income in nearly a decade, government data showed."[13] Yes, the pandemic took its toll: employment plummeted; factories, restaurants, and hotels closed; and millions of Americans found themselves stranded at home with school-age children and otherwise-disrupted lives. As the story reported, median household income in 2020 was $67,500, down 2.9 percent from the previous year's level. It was a tough year!

But was it really? What about all those stimulus dollars and tax cuts? Did that figure into Census Bureau numbers? No, strangely enough, those offsetting payments don't count as household income. The devil is in the details, so we get a message from the two-armed economist.

According to the *Wall Street Journal* story, when stimulus payments, tax cuts, and food stamps get counted, median household income did not go down in 2020 at all. Instead, the number that really matters to real American households went up 4 percent. Despite all the hardship caused by the pandemic, 2020 was a pretty good year, at least in terms of household income. And this two-armed analysis partly explains the pulsating demand that has been so challenging to global supply chains. When the stimulus checks were not flowing, things looked pretty bleak, but then . . . .

On the Other Hand, Poverty and Inflation

But what about the share of Americans living below the poverty line? Did the share rise with the pandemic or fall? Again, it depends on how one defines income. The normal way of estimating poverty portrays 2020 as a rough year. According to Census Bureau numbers, the year saw 37.2 million living in poverty, an increase of 3.3 million. But again, the traditional definition does not count taxes, stimulus payments, and noncash benefits such as food stamps. When all this gets folded in, guess what? The share of the population living in poverty went down, from 11.4 percent in 2019 to 9.1 percent in 2020. The plight of the poor was improved.

One recently saw another "on the other hand" story when CPI inflation for the month of August was reported to have grown 5.3 percent from a year earlier. With prices for food and energy removed, the number was reduced to 4.0 percent. Both numbers were slightly better than July's inflation estimates. Indeed, August's lower inflation number was viewed as good news, because it may have taken some pressure off the Fed to raise interest rates and slow economic activity. CNBC happily said the inflation numbers were smaller than expected, and the *Wall Street Journal* headline put it this way: "Inflation Eased in August, though Prices Stayed High."[14] But those inclined to celebrate core inflation of "only" 4.0 percent—if one can even believe that anyone other than White House staff would celebrate—may have been a bit shocked when the lower number was observed to have eliminated all the previous year's income gains for America's lowest tier of wage earners.[15] It turns out that the lower-paid population got slapped real hard.

Beef, Pork, and Chicken in an "On the Other Hand" Crisis

"On the other hand" struck again when, a while back, President Joseph R. Biden decided that the prices Americans were paying for beef, pork, and chicken, which, after all, were supporting higher wages in those industries, were the result of profiteering on the part of the small number of large firms found in the meat-products industry. While on the one hand recognizing that Americans love to move up the food chain to beef and admitting that his stimulus and child payment programs were enabling consumers to shop with greater abandon, Biden, in a way implied that, on the other hand, it's not right for businesses to take advantage of the situation, increase prices, and make larger profits.

None other than one of the world's most noted economists and, generally speaking, a source of inspiration for more liberal politicians, John Maynard Keynes, first described this inflation-profiteering-government-finger-pointing activity in his 1923 book, *A Tract on Monetary Reform*.[16] Keynes had far more inflation to worry about than we have today. World War I had so disrupted economies in England, France, and the United States—just to name three countries—that the price level had more than doubled between 1914 and 1918. And there was defeated, reparations-plagued Germany, where runaway inflation caused the value of the mark to practically disappear along with the German economy.

Keynes carefully documented the process I just described: governments print money, inflation surges, profits head skyward, and the world points a shaking finger at business leaders. Yes, Keynes used President Biden's favorite word, "profiteering," but he went on to bemoan how the blame game caused the public to lose deserved respect for the many business leaders who make markets work for all participants.

Keynes described the besieged business leaders as "now to suffer sidelong glances, to feel himself suspected and attacked, the victim of unjust and injurious laws—to become, and know himself half-guilty, a profiteer."[17]

Mostly because of inflation.

The president's take on the situation understandably calls for putting a tighter antitrust focus on the market behavior of major meat producers. His approach also suggests he may have missed out on some lessons about supply and demand and how rising profits are the economy's way of calling forth more future production and, thus, lower future prices.

To counter the situation, President Biden announced increased antitrust scrutiny, expanded US Department of Agriculture spending to assist farmers, and enhanced efforts to counter climate change, which, after all, is a bad thing for beef production.[18] Concern about profiteering will put the meat products industry on the agenda for the newly created White House Competition Council.[19] There is an important lesson to be learned here: when politicians and policymakers take over operations of parts of the economy, normal market forces are blunted, including open entry and the threat of competition. In short, a command-and-control economy is more subject to anticompetitive behavior.

On the Other Hand, the Wind Stopped Blowing

A final "on the other hand" example is found in Europe's and especially the United Kingdom's push to replace fossil-fuel sourced energy with wind, solar, and any other low- or no-carbon energy sources. Normally blessed with lots of North Sea winds, for example, the United Kingdom pushed the construction of windmills, planning to produce enough wind-based energy to power all UK homes by 2030.[20] Instead, the wind stopped blowing, and wind energy is now producing less than 1 gigawatt of power instead of the 24 gigawatts that would be needed. Meanwhile, natural gas prices have risen fourfold and European consumers are facing skyrocketing power bills.

Put in a nutshell, wind-based power offers the prospect of providing a substantial amount of carbon-free electricity. But if the wind stops blowing there will be no energy produced from that source at all.

In spite of Truman's stated preference for one-armed economists, maybe it's not a bad idea for economists and other soothsayers to describe more than just one possible outcome when they look at their crystal balls. On the one hand, sometimes strange things happen, and sometimes the way people count and measure things can make them think they are better off or worse off than they really are. On the other hand, it does take time and energy to consider multiple possibilities, doesn't it?

Most of the time, discussions of inflation focus almost exclusively on the domestic economy. What is the Fed doing with the money supply and interest rates? Is organized labor gaining some success in bargaining for higher wages? What about the horrible heat waves that are knocking out electrical grids and the economic production served by them? Each of these questions and a host of others speak to important economic elements that could affect the overall price level. Much less attention is devoted to the international economy and the flow of goods and services that supplement and discipline the domestic economy.

WHAT ABOUT IMPORT COMPETITION?

Import competition is another important factor to consider. Open borders bring an increased supply of components and services needed to produce final goods in the US economy and, of course, competition to domestic producers that might otherwise raise prices. Tariffs, quotas, and other government restrictions on the flow of goods from abroad limit that effect. Recent years have seen a surge in protectionism that affected goods such as wood products, steel, aluminum, and a host of Chinese-produced consumer goods. Under US law, the president is authorized to impose tariffs in retaliation to the action of other countries or when, in the opinion of the president, national security is threatened. Recognizing this, former president Donald J. Trump proudly called himself "Tariff Man," causing me to refer to America's newly protected economic system as "Gatekeeper Capitalism." Yes, while in office, President Trump imposed lots of tariffs but failed in his attempt to limit the importation of European automobiles. The US Department of Commerce was unable to show that those imports threatened national security.

Once in place, tariffs and other border controls get intertwined with other foreign policy issues and become more difficult to remove. For example, once President Biden took office, his trade leaders emphasized that free trade was no longer America's objective and that more concern should be shown for the effects of imports on the wages and well-being of US workers as opposed to the well-being of all Americans taken together.[21] Yet in late October, President Biden agreed to selectively remove Trump-administration tariffs on EU steel and aluminum, and EU countries reciprocated by eliminating retaliatory tariffs that had been imposed on American exports.[22] Those moves opened some previously closed gates to American capitalism and arguably made things better for all Americans. It is also the case that the relaxed steel tariffs were celebrated by Harley-Davidson, along with other US manufacturers, because those firms were having difficulty obtaining enough competitively priced steel to take care of business.[23] The new US-EU accord left rules in place that limit trade in steel products that are produced in plants that emit lots of carbon pollution, and these rules apply especially to China. Biden's trade negotiators are still delaying the removal of Trump-administration tariffs on Chinese goods because other foreign policy questions remain to be addressed.[24]

Some of the Effects

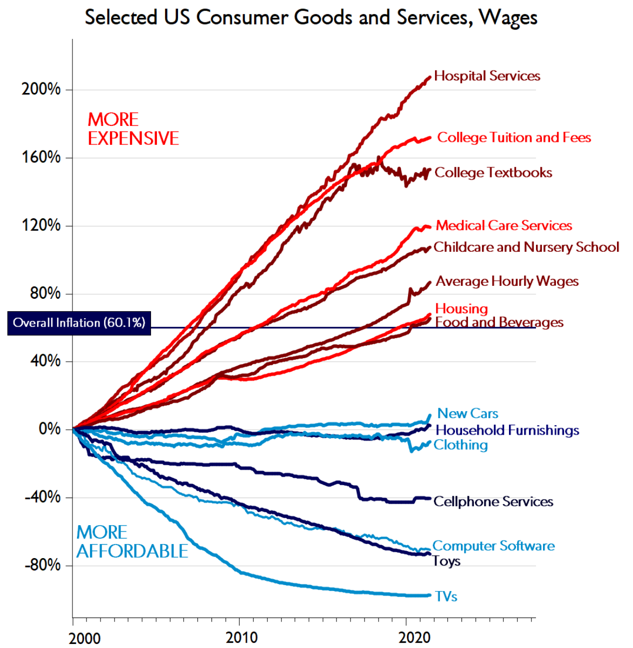
What is the extent of all this? In 2019, the United States imposed tariffs that averaged 13.78 percent on a trade-weighted basis.[25] This was for everything—petroleum, all commodities, and all consumer goods. But imagine what might happen to prices and Americans' overall well-being if the country's borders were truly locked down. One gets an inkling of what could happen by examining American Enterprise Institute's Mark Perry's latest graphical rendering on inflation by commodity and service category for the domestic economy, which I show in figure 1.

The data are for the period 2000 through June 2021. First, notice the items that show the largest prices increases. They are primarily services where international completion has little effect. They are also categories with a large government presence: college tuition and fees, hospital and medical care services, for example. Then, take a gander at the categories that register the largest price decreases. This is where import competition matters most—clothes, toys, autos, even cell phone services. The chart also conveniently shows what has happened to the average hourly wage in the US economy. It has not risen very much, especially when compared with services price increases. Obviously, imports are the working person's friend, but they understandably don't always see it that way, especially when the item being imported is what they happen to be producing here!

Is There a Lesson?

Yes! The lesson is obvious. Competition matters. When given the choice, consumers will search for what they consider to be the best bargains, whether the items involved are made domestically or internationally. When domestic firms

FIGURE 1. PRICE CHANGES, JANUARY 2000 TO JUNE 2021



Source: Mark J. Perry, "Chart of the Day.... Or Century?," *Carpe Diem*, American Enterprise Institute, July 13, 2021.

raise prices, foreign producers take note and push more goods and services into American markets. And finally, when government gets involved in an industry, one can predict higher prices. The data in the chart are convincing, to say the least.

The chart also warns to be careful when thinking about monkeying around with border controls, as the United States is doing right now. In association with the European Union, the United States is attempting to develop border taxes that will be imposed on imports from countries that do not adequately control carbon emissions from the industries that produce the imports.[26] Border taxes interfere with the flow of imports—that is their purpose—and, no matter how carefully designed, make life more comfortable for homeland industries that gain some protection from unwanted competition. As a result, consumers will face higher prices.

ENVIRONMENTAL REGULATION ON THE RISE

With the Biden administration announcing a half-trillion-dollar legislative package to target climate change and commit to achieving net zero carbon emissions by 2050, with stricter motor vehicle fuel economy standards that reverse the Trump administration's relaxation, and with new calls for fleet electrification, one can be assured that a time of green regulation has arrived.[27] Major changes are already in the works. The announced reviews of Trump administration revisions—or, as some would say, "relaxation"—of rules for endangered species and wetlands protection brought resounding cheers from environmental groups and cautious expressions of concern from farmers, industrialists, and economic development enthusiasts.[28] Each interest group understandably pointed to possibilities of biological or economic harm, as the case may be, that may result if the Trump revisions are either kept or removed.[29] On the one hand, if a Trump rollback does not take place, a mountain lake that provides drinking water to 400,000 people would be threatened, and on the other hand, a reversal of Trump-inspired leniency could end industrial development and employment gains along a major ocean-bound river. Opportunity cost rears its head in both cases.[30] There is no such thing as free species and water quality protection. Maybe this is the time to get the incentives right.

To say that rules put in place to protect these two important environmental categories have been controversial from the start is a bold understatement. Indeed, the fact that in either case—wetlands or endangered species protection—the customary rights of landowners to continue unimpeded use of their land for farming, ranching, and development can be compromised without compensation has always stood in the way of peaceful and productive enforcement of the two areas of regulation. In fact, there has been continual legislative efforts to amend the Endangered Species Act to require compensation by taxpayers, at least partial, to agricultural and other landowners when they are required to cease using their land and provide safe habitat for an endangered form of life.[31]

Focusing on Property Rights

Arguments have been raised all the way to the Supreme Court regarding private owners' losses associated with seasonal wetlands defined to be part of the navigable waters of the United States and therefore forced out of production and use by their private owners.[32] At one point in the effort to protect wetlands, there was even a "glancing goose" test. If a goose on an interstate trip decided to stop for a drink of water from a pothole in a farmer's field, that pothole could be deemed part of the navigable waters of the United States and therefore subject to EPA rules regarding protection and management.[33]

The multitude of issues surrounding protection of endangered species and wetlands indicates the complexities involved in trying to get such protections right. The biology of the problems and where different technical approaches may lead are highly uncertain. And of course, emotions run high on all sides of the policy debates that unfold when any changes or new initiatives are proposed. With this acknowledged, it is still the case that property rights issues and related incentives lie buried deep inside these two environmental efforts. Consider this: one would expect that, when people head to a grocery store to shop for food, they consider the prices they must pay when purchasing both essential and frivolous items for the evening meal. And if shoppers are told not to worry, that their bills will be paid by someone else at checkout time, one would expect to see a change in their behavior. When someone else pays, more—and more expensive—items show up in the shopping cart. Incentives matter. They affect buyers and sellers alike.

Now, as the Biden administration reexamines the regulatory approaches used to protect endangered species and precious wetlands, the time has come to assert that private property rights will not be taken for public use without just compensation and that abiding by this constitutional rule can bring more effective and happier environmental outcomes. Those who want more asset protection will be more careful when making their choices known, and those whose land might be made more valuable because they could be paid will be a bit more cheerful when it comes to protecting endangered species and threatened wetlands.

Trying to Improve Environmental Justice

I was interested to see the EPA announce that some $50 million of the new infrastructure money will be dedicated to securing improved environmental justice. This effort may make a difference, but to bring meaningful change will require a lot more than $50 million.[34] After all, that amount yields, on average, just $1 million per state, which suggests that the whole thing is symbolic.

The environmental justice issue is old, deep, and complex. Historically, cities have located incinerators, industrial parks, and landfills on low-cost land often in poor neighborhoods. When a new stadium is to be built or an expressway enlarged, it is neighboring low-cost rental property that, taken by imminent domain, brings the forced removal of low-income occupants. And the worst modern offender of all, other than the City of Flint, Michigan, where city government allowed the city drinking water to become contaminated with lead to avoid higher cost alternatives, was America's urban renewal programs. They wiped out well rooted inner-city neighborhoods and between 1950 and 1966 displaced more than 300,000 urban dwellers who by way of federal action lost their common law rights to sue to protect their property rights. The University of Richmond has named its urban renewal account and analysis "Renewing Inequality." Martin Anderson's highly acclaimed 1964 study is titled *The Federal Bulldozer*.[35] Oddly enough, most people seem to think that environmental justice is threatened by private corporations that disregard their neighbors when they expand polluting facilities. The truth generally casts a broader net.

Love Canal and the Burning Cuyahoga River

The two classic stories told repeatedly in the early heyday of the environmental movement—New York's Love Canal and Illinois's burning Cuyahoga River—were both products of forced public action.[36] In the first case, Hooker Chemical Company, located in Niagara, New York, and the private owner of Love Canal, refused to sell a well-known piece of contaminated property to a local school board that wanted to build a public school on cheap land. The owner said, "No way!" The chemical company had built the underground waste receiver, had sealed it, and had been guarding it to make certain no one would be harmed by the toxic chemical waste. After refusing the sell, the school board exercised eminent domain, took the land, and built a playground in the area of the sealed toxic canal. The rest of the land was sold for private residential development. Construction accidents ruptured the canal's seal, releasing toxic waste. The result was an environmental disaster, closed schools, contaminated homes, and a distressed community. A 2018 retrospective in the *Buffalo News* was graced with a photograph of a shuttered home from the time with a large sign mounted in front that said "Disaster Area. City Failed Us. Taxation Without Representation. Federal Government Help."[37]

The burning Cuyahoga River is another case where common law rights held by ordinary people to protect themselves from unwanted pollution were taken by state action. Described later in a 2019 *Smithsonian Magazine* story titled "The Cuyahoga River Caught Fire at Least a Dozen Times But No One Cared Until 1969."[38] While studying common law, I wondered why people with good common sense would allow a river to become so contaminated that it would become a fire hazard. It just didn't figure. I sent an economics graduate student to Cleveland, Ohio, to dig into the story and find out. She did a good job, found that the river had burned multiple times in its modern history, and learned that a common law suit was brought against the city for deeming the river an industrial stream and thereby sealing its fate. The court dismissed the case as being without merit, pointing out that government has the power to determine environmental use.

Environmental Improvement by Way of Invisible Markets

Obviously, a lot has happened in the more than 50 years since the formation of the EPA. Yet although there are strong ongoing efforts to improve and protect environmental assets by way of statutes and regulation, these political actions are being supplemented significantly by the rise of invisible markets for environmental quality. Consider, the rush to green investment funds that enable environmentally concerned investors to place their funds where their hearts and minds lie. Known as ESG (environmental, social, and governance) funds and accounting for just 1.1 percent of all mutual funds, ESG asset flows grew 72 percent in 2020 and amounted to 25 percent of all mutual fund inflows.[39]

Evidence that a lot is happening is seen in news reports that half of the companies in the Fortune 500 are auditing and reporting compliance with self-imposed carbon emission reduction goals.[40] Treasury Secretary Janet Yellen is pushing for net-zero emissions from US electricity producers by 2035 and has called for American firms to report climate change risks to investors, while Fed governor Lael Brainard and the Securities and Exchange Commission are pushing similar regulations for banks and other corporations.[41] Finally, I note that efforts to achieve significant carbon emissions are seen in an alliance between Mercedes-Benz and Swedish carbon-free steel producer H2 Green Steel for implementing a new steelmaking technology and in Chevron's expanded investment in hydrogen production and carbon capture technologies.[42]

When property rights and market forces combine with political actions, some amazing things can happen.

A FATHER'S FINANCIAL ADVICE IS STILL WORTH HEEDING, EVEN IN WASHINGTON

My father did not spend a lot of time advising me on how to manage my affairs. He was too busy earning a living, I guess, and preferred to teach by example. But he did pass along two pieces of advice that are relevant today.

"Always pay yourself first," he said. "Even if it is just $5 a week, put something in a savings account every payday." I followed his advice, and when I discovered the power of compound interest, I realized I was on to something good.

His other advice had to do with using credit. "Never buy food or gasoline on credit," he insisted. "Once the food is eaten and the gasoline burned, you will be stuck with paying for it, and that's not easy." His point, of course, was to use credit to purchase long-lasting assets (e.g., cars, furniture, a home) and not for momentarily important-but-fleeting pleasures. From a business perspective—he was on the production side of a newspaper—he explained that investment in improved machinery could pay for itself. It was okay to borrow for that.

Oddly enough, I don't remember my father ever using a credit card. But I made up for that. I use credit and debit cards a lot.

I raise these memories as I think about President Biden's recent effort to push a spending bill through Congress, one that started with a $3.5 trillion price tag and then shrank to $1.75 trillion. A major part of the original bill called for investment in human capital (e.g., government-provided community college education), which may at least partly pay for itself from improved life expectancies, among other improved outcomes. But other proposed parts of the legislation called for sending checks to people—many of whom don't need it—and hoping that they would get out and spend the money to juice up the economy.

How they choose to spend the money is the larger question. Will it be for more restaurant excursions, beach holidays—my father's version of a teenager buying gasoline and food—or childcare, home improvements, education, and other investments that have a long-term expected payoff? Of course, stimulus spending involves using someone else's money without having a payback worry, as least directly, and that may bias the spending in favor of food and gasoline.

Since the Great Recession, Americans have practically worn out their government credit card. In 2009's first quarter, total public debt, which is what America borrows as a nation, stood at $11.1

trillion.[43] (All the numbers I give here are unadjusted for inflation.) By second quarter 2021, the total was $28.5 trillion. And way back in 2005's second quarter, the total was only $7.8 trillion. That's almost a fourfold increase in 16 years. The managers of the people's business have not paid the people first—at least not in the smart financial sense, which to say there is no government savings account—and to make matters worse, they have borrowed and spent a lot of money on food and gasoline.

But all may not be lost. It hasn't all been food and gasoline. Across these years, there have been investments made in nutrition, childcare, education, infrastructure, and other features of the economy that could make the average American more productive at work, and thus more prosperous. Unfortunately, this is still a dream of an idea. In 2021's second quarter, labor productivity annual growth was perking along at 2.1 percent, slightly above the 2.0 percent average growth since January 1990.[44] So far, getting productivity gains has been difficult, to say the least.

So how will America pay off its credit card debt? Or, better put, how will future generations pay off the debt?

Like all debt, when the bill hits the kitchen table, one can turn to the cookie jar and use its contents for part of it. Savings can be drawn down and some assets sold to make that possible. And then comes the hard part, the belt tightening part, which means a reduced level of living for people today or for those who come later.

When faced with a pandemic crisis, high unemployment, and a Frankenstein economy that is still searching for its footing, the country may find it too easy to borrow to pay its way out of trouble. But one must remember that today's increased debt will be paid off in the future, one way or another. Perhaps this experience will help remind people of when they truly need to borrow and when they do not.

Remember: "Pay yourself first" and "don't use credit for food and gasoline."

STATE SPOTLIGHT: CALIFORNIA

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Each quarter, we select one state and analyze its economic and regulatory outlook. The past quarter, we put the spotlight on New York. This quarter, we focus on California.

Nestled on the West Coast of the United States, California, with an economy larger than that of Canada, France, or India, is bordered by Oregon to the north, Nevada and Arizona to the east, and the Pacific Ocean to the west.[45] California is the third-largest state by total area, at 163,696 square miles, and with 39.5 million people, it is the largest by population.[46] But 2020 census data indicate a state beset by fundamental change.

Declining birth rates, federal restrictions on immigration, and perhaps the effects of high taxes and burdensome regulation cut California's average population increase of 6.1 percent over the past decade to the smallest in a century and less than the 7.4 percent national average.[47] For the first time in its history, the state is losing a congressional seat. Most recently, California is also a state beset by raging wildfires, flooding, and water scarcity that threaten future growth. The state was also the first to impose a strict shutdown when the pandemic struck. To apply an overused word, California faces some severe challenges.

With its huge land area, it should come as no surprise that the state leads the United States in agricultural production, accounting for more than 12 percent of the national total, based on the 2017 Census of Agriculture.[48] More than one-third of the nation's vegetables and two-thirds of the country's fruits and nuts are grown in California.[49] California is also a leading producer of manufactured goods, ranking second, after Texas, in the export of manufactured products to the rest of the world.[50]

In addition to the state's wealth of land, agriculture goods, and manufacturing strength, California is home to Silicon Valley, which was developed in the late 1970s and is located in the San Francisco Bay Area. The valley is known worldwide as a technological hub and home to many large tech corporations and tech startups. Unsurprisingly, this has driven California to be the nation's leading manufacturer of computers and electronics.

California can boast having the largest state population, but what we find most intriguing is the states' diversity. According to the World Population Review website, California ranks first in the nation for cultural diversity, second for racial and ethnic diversity, third for socioeconomic diversity, fifth for household diversity, and eighth for political diversity.[51] With all of these factors combined, the World Population Review gives California a diversity score of 70.75 out of 100.

CALIFORNIA'S HISTORICAL AND ECONOMIC RELEVANCE

In a very real sense, California's economic development began with gold. The California Gold Rush was the starting point of a massive migration to California owing to the discovery of nuggets in the Sacramento Valley in 1848.[52] During this time thousands of aspiring miners came from all over the world seeking a chance to gain enormous amounts of wealth mining gold.

The gold rush, among other things, stimulated California's admission into the union, making it the 31st state. Although the amount of gold that was able to be retrieved every year decreased as the land was thoroughly excavated, migration and settlement in California continued well past the gold rush peak. In 1850, California's population sat at 380,000, a 280 percent increase from the previous decade.

TAKING A CLOSER LOOK AT THE ECONOMY

Moving to the present and taking a look at income and poverty, California 2019 median household income was $80,440, which is roughly $15,000 (or 22.4 percent) higher than the median household income of the United States, at $65,712. Yet even with the higher median income, poverty effects 11.8 percent of California's population, a rate that is just 0.5 percentage points lower than the national average, at 12.3 percent. Examining poverty data by age reveals that those under 18 account for 15.6 percent of impoverished individuals, those 19–64 account for 10.7 percent, and those 65 or older account for 10.5 percent.

In terms of state GDP, California ranks first, accounting for 14.5 percent of US GDP in 2021's second quarter.[53] Following California are Texas and New York, with 8.6 percent and 8.2 percent of US GDP, respectively. The finance, insurance, real estate, rental, and leasing industry contributed the most to state GDP that year, followed by professional and business services, manufacturing, information, and government and government enterprises.[54]

Long recognized as a high-tax state, California ranks fifth among states for the amount of state and local income taxes per capita, at $2,137.[55] The states that rank higher are New York ($2,877), Maryland ($2,390), Connecticut ($2,227), and Massachusetts ($2,145). California ranked eighth for tax burden, or the share of income accounted for by taxes. Five higher-ranking states, in order from highest to lowest, are New York, Connecticut, Hawaii, Vermont, and Minnesota.

Earlier in this section, we discussed the history of the great migration to California during the gold rush era. We now consider some recent migration trends. The Public Policy Institute of California finds that the state was experiencing out-migration and economic stagnation in 2020.[56] A major factor explaining population loss includes the high cost of living, reflected partly in our earlier discussion of California taxes. We note that a recent Mercatus Research paper focuses on California housing costs, which are deterring in-migration, and on how regulatory reform could improve housing access.[57]

REGULATORY OUTLOOK

California's regulatory code can be found online and is published by the Office of Administrative Law.[58] According to its website, the collection of regulatory text, the *California Code of Regulations*, is the "official compilation and publication of the regulations adopted, amended or repealed by state agencies pursuant to the Administrative Procedure Act (APA)."[59] The collection contains 28 titles that are compiled according to the industries that are regulated.[60]

As of 2021, California's regulatory code contained 399,556 regulatory restrictions and 21,572,397 words. Regulatory restrictions are instances of the terms *shall*, *must*, *may not*, *prohibited*, and *required*, which are legally binding in nature. Using RegData, one can show where states rank based on the metric of total restrictions.[61] In this ranking, the state of California is first, with 90,000 more regulatory restrictions than second place New York.

We use additional machine learning algorithms to analyze the number of regulatory restrictions that were associated with California's industries. For the year 2021, the industries with the highest number of regulatory restrictions were administrative and support services (22,892 restrictions), professional, scientific, and technical services (21,956 restrictions), insurance carriers and related activities (17,111 restrictions), petroleum and coal products manufacturing (14,736 restrictions), and utilities (13,960 restrictions).

Finally, taking a look at the distinctive quality of California's regulation using the Federal Regulation and State Enterprise (FRASE) index, one can determine the extent to which the state's economy is regulated by the federal government relative to other states. As of 2021, California experienced the 39th-highest impact of federal regulations, suggesting that the industries that contribute the most to California GDP are not heavily regulated by the federal government.[62] The top five industries that contributed to California's FRASE score, owing to their size and federal regulatory attention, are chemical manufacturing, petroleum and coal products manufacturing, farms, motion picture and sound recording industries, and monetary authorities (central bank, credit intermediation, and related services). The federal agency that regulates chemical manufacturing the most is the EPA, with 88,783 regulatory restrictions. Looking at things from a broader point of view, the EPA affects multiple industries with its regulation and accounts for 30.9 percent of the total regulatory impact in California. This agency also affects 31.5 percent of the private-sector GDP for the state.

CONCLUSION

Although currently challenged, California's massive economy rests on a solid bedrock of resources, including a large, educated, working-age population, extensive natural resources, some of the nation's best universities, and a rich tradition of entrepreneurial leadership. But like most of America, California is having to adjust to the new realities of the postpandemic world while wrestling with burdensome regulation, high taxes, and extraordinarily difficult natural resource management issues. California's future is bright, but as our analysis here suggests, getting there will be difficult.

YANDLE'S READING TABLE

Anyone looking for a creative treatment of fundamental economic realities—not just theory-based economic principles, mind you—can do no better than turning to James R. Otteson's *Seven Deadly Economic Sins*. More like a highly readable layman's treatment of Adam Smith's *The Theory of Moral Sentiments* than Smith's *The Wealth of Nations*, Otteson's latest book surprises immediately by the selection of deadly sins that are presented. I must confess that I had expected to see things like tariffs, regulation of labor markets, and misguided antitrust actions, but then I remembered that, while very savvy in economics, Adam Smith scholar Otteson takes a broad, not a reductionist, approach when sizing up problems. I offer more on this later.

Taking a look at the book's contents, the reader finds seven chapters and an introduction and postscript. It's worth mentioning that the introduction is titled "Why Care about Economics?" The book has a major chapter named "Why Trust Economics?" Otteson's somewhat casual but nonetheless solid and persuasive discussion of these two questions reflects his career-long effort to communicate Smithian economic logic to audiences of non-economists. Let me put it this way: he's very good at it!

The remaining chapters are devoted to the seven sins. A listing of chapter titles signals the sin being treated. The first chapter title is "Wealth Is Positive Sum." Here, Otteson does a masterful job of explaining gains from trade and presenting data on the rise of humanity's wealth, what has happened to the poorest of poor, and how wealth creation can be viewed as a moral process. His second chapter, "Good Is Not Good Enough," brings opportunity cost into the story and addresses the necessity of making tradeoffs. Chapters three and four, respectively, are titled "There is No Great Mind" and "Progress Is Not Inevitable." Here, one finds a helpful treatment of the "great man" theory of history—as compared with the market process treatment—that helps dislodge the full persuasion of the former to the benefit of the latter.

In his treatment of progress, Otteson provides data that show that from 1980 to 2017 there was an 80.1 percent gain in the average worker's real hourly income, which should be viewed as astounding or at least as something to celebrate. But Otteson recognizes that most college-age readers were born around 2004, when the internet was already churning, and the Apple iPhone would be unveiled when they were three years old. Put another way, there is a tendency for moderns to think that technological change has always moved apace and that all future challenges will be met somehow by the arrival of another app.

These two chapters help one remember that Galileo did not show up until 1615, that Newton's major notions were not written until 1687, that the steam engine started chugging along in 1776, and that the very first commercial PC came on the scene in 1981, just 40 years ago. One of my favorite parts of Otteson's book comes with his discussion of the commercial revolution that ushered in an age of market action. Here the author asks how market-based cooperation tends to take hold. Is there a basic change in the human being, or did behavior change, and if so, why?

Wrapping up the remaining chapter headings—and, thus, sins to be discussed—chapter 5 is titled, "Economics and/or Morality," chapter 6 is titled, "Equality of What?," and chapter 7 is titled, "Markets Are Not Perfect." As might be expected, given his background and experiences as a lecturer of note, Otteson does yeoman's work when discussing the morality of markets, emphasizing that no one would want to be a part of a market economy if markets were immoral and that, because of human values, which markets reflect, one cannot accurately say that markets are amoral. Morality prevails.

Otteson's book is good reading. It's even better for discussion. My Clemson book club recently did just that. The book was a winner, and I recommend it to readers.

Jonathan Rauch's *The Constitution of Knowledge: A Defense of Truth* provides a solid, highly readable, and timely presentation on deep philosophical questions—and tentative answers—such as, "What constitutes knowledge?" and "How does one get at determining truth?" At the Brookings Institution since 1996 and constantly engaged in a career-long effort to understand and explain America's political economy, Rauch launches his book by recounting a conversation about knowledge and truth involving Plato, Socrates, and Theaetetus some 2,600 years ago. As the conversation unfolds, one learns that truth and knowledge are not a destination assembled and discovered through life's experiences and accumulated scientific findings, but a journey—a process—that involves constant searching, testing, accepting, and rejecting of what one believed yesterday to be the truth. And confounding things further, one learns that knowledge is that which enough people who matter seem to agree or accept as truth. Once again, one finds that people are culture bound.

This is one of the book's fundamental points: knowledge and truth are social constructs, and, according to Rauch, they can create chaotic tensions where one group's current knowledge definition opposes another's definition, sometimes to the point of creating social environments where war is encouraged or creating less threatening but still harmful situations where open discourse—that is, one can say anything—is chilled and truth discovery is waylaid. Building on the work of Jonathan Haidt, Rauch points out that authoritarian governments and religions across the ages have fostered just such environments and meted out punishment and death accordingly. Rauch contends, and many, I think, would agree, that a milder, less deadly, similar environment exists in many large group situations across America today. And I should add that after witnessing the January 6 Capitol insurrection, I have small glimmers of what Thomas Hobbes described when he said life could be brutish and—for some—short.

In many settings, there are full-throated efforts to eliminate any tinge of racism (as defined by those who hold the erasers), to hold accountable any less than full endorsement of women's rights and hopes (somehow defined by the recognized scorekeepers), and to muzzle those who might, for example, by pointing to other data, question the latest United Nations' climate-change report. Rauch points out that, in some settings, such as university classrooms, those who might really think otherwise about the latest groupthink interpretation of data and trends—including both students and faculty—keep silent in order to keep their jobs and maintain their current coterie of friends. But keeping silent biases the ongoing conversation that heads toward the determination of knowledge and truth, and the more who do it, the larger the bias.

From this kind of discussion, Rauch builds his notion of the constitution of knowledge, which is definitely a social construct, never a written document; it is a set of norms, habits of the heart, and critical elements that keep open the windows and doors of a free society so that competing ideas can be heard, seen, and discussed. Developing and tracing the intellectual history of the constitution of knowledge, Rauch gingerly covers centuries of struggle over how truth is determined, the history of science, and indeed the notion of science itself. Here one finds cogently presented stories about the intersection of 17th-century philosopher Francis Bacon's notions regarding hypotheses and testing with John Locke's notions of natural rights to form reason-based, empirically verified conclusions. This is then layered with Hobbes's 17th-century conclusion that no matter how people go about their search for knowledge and truth, they will never arrive at certainty and that all knowledge, at best, will be tentative. It is out of these struggles that Rauch observes the evolution of a political constitution, a social constitution, and a knowledge constitution, at least as these three may be observed most vividly as complex social institutions at work in a free and open society. The richness of this discussion parallel's Brad Thompson's *America's Revolutionary Mind: A Moral History of the American Revolution and the Declaration That Defined It*.

Along with laying down a philosophical framework for his constitution of knowledge, Rauch gives solid treatment to man's evolutionary, tribal history, his dependence on group cooperation for survival, and thus the inevitable tendency now for individuals to look to the group and group leadership when taking a knowledge or truth position. There is then a tension between individual and group thought. His story here is reminiscent of Paul Rubin's *Darwinian Politics: The Evolutionary Origin of Freedom*. Specifically, individuals within the group develop a conforming confirmation bias that yields a truth position, even though the position in truth may be false.

This evolutionary development, if uninterrupted, nurtures beliefs that can become the hallmark of larger groups and communities of people who have lived on the same land for generations. But of course, there are interruptions that affect the formation of knowledge and truth. As Matt Ridley emphasizes in *The Rational Optimist: How Prosperity Evolves*, trade brings inevitable strangers to otherwise geographically isolated groups, and trade-bound group members venture out and come back with strange ideas. The degree to which groups tolerate those who think differently is an important marker of the vitality of the constitution of knowledge. And the value of gains from trade, which depend on interacting with others and their alien notions of truth, tends to grease the rails for an expanding constitution of knowledge.

In spite of all this, as Rauch notes, people find themselves now in a time when open group discussions and those taking contrary positions are frowned upon, if not turned away entirely. The rise of social media has reduced mass communication costs as well as the organizing and monitoring costs of groups that wish to perpetuate their truth interpretations. But as Rauch also points out, the presence of these same social media makes it possible for those who think differently to organize and communicate their knowledge preferences. The Heterodox Academy, an organization of academics who think differently and, therefore, diversely, is an example of such worth mentioning.

Rauch's latest book provides a large-picture discussion of knowledge, how it forms, and how it is pursued and believed across time and space. The constitution of knowledge framework he builds offers more than a thought-facilitating device for carrying his discussion forward. His idea of a knowledge constitution assists the reader in recognizing how customs, traditions, and deeply embedded social norms interact socially to determine what people think they believe and how those beliefs can change.

I recommend Rauch's book for those who like large-idea discussions.

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NOTES

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