U.S. FORECAST









About University of Central Florida (UCF)

The University of Central Florida is a public, multi-campus, metropolitan research university, dedicated to serving its surrounding communities with their diverse and expanding populations, technological corridors, and international partners. The mission of the university is to offer high-quality undergraduate and graduate education, student development, and continuing education; to conduct research and creative activities; to provide services that enhance the intellectual, cultural, environmental, and economic development of the metropolitan region; to address national and international issues in key areas; to establish UCF as a major presence; and to contribute to the global community.

About the College of Business

The College of Business advances the university's mission and goal in providing intellectual leadership through research, teaching, and service. The college is striving to enhance graduate programs, while maintaining the strong undergraduate base. The college delivers research and quality business education programs at the undergraduate, masters, doctoral, and executive levels to citizens of the state of Florida and to select clientele nationally and internationally.



We would like to recognize the following organizations for their support of the Institute for Economic Forecasting:







U.S. FORECAST 2019 - 2022

Published quarterly by the Institute for Economic Forecasting, College of Business, University of Central Florida

Copyright © 2019 Institute for Economic Forecasting. All rights reserved.

Publications of the Institute for Economic Forecasting are made possible by the following staff:

Dr. Sean Snaith, Director Aasiyah Alli, Researcher Sydney Boughan, Researcher James Bailey, Researcher Wesley Giotta, Researcher John Mosca, Researcher Alyssa Parker, Researcher Tamara Williams, Researcher Adam Wing, Researcher Isabella Yerby, Researcher

This forecast was prepared based upon assumptions reflecting the Institute for Economic Forecasting judgments as of the date it bears. Actual results could vary materially from the forecast. Neither the Institute for Economic Forecasting nor the University of Central Florida shall be held responsible as a consequence of any such variance. Unless approved by the Institute for Economic Forecasting, the publication or distribution of this forecast and the preparation, publication or distribution of any excerpts from this forecast are prohibited.

IN THIS U.S. FORECAST

- Has deregulation boosted productivity and economic growth in the U.S.? Robinson Crusoe would say yes.
- We are currently in the longest economic expansion in U.S. history and it is likely to continue for the next few years.
- Payroll job growth of 1.6% is expected in 2019 before easing to 1.2% in 2020 and 0.9% in 2021. For an economic recovery in its 10th year, we couldn't expect stronger job growth than this.
- U.S. consumers are in a fertile environment to fuel solid spending growth. Rising employment, ultra-low unemployment rates, stronger household balance sheets, rising disposable incomes, still-high levels of consumer confidence, and faster wage growth are building a foundation for an acceleration of consumption expenditures.
- Consumption spending will rise to 2.7% in 2019, then further accelerate to 3.7% in 2020 and to 3.8% in 2021.
- The Federal Reserve is currently in a holding pattern with regard to interest rate hikes. Stronger economic growth and eventual inflationary pressures from the Trump administration's policies will prompt further hikes over the next three years, with the federal funds rate hitting 3.5% by the end of the 4th quarter of 2021.
- Real GDP growth will accelerate to 3.1% in 2019 before easing to 3.0% in 2020 and 2.7% in 2021 as the Federal Reserve tries to keep the economy on track.
- The housing market continues to progress and will improve through 2021 in the face of the headwind from higher mortgage rates. Housing starts will rise from 1.25 million in 2018 to 1.36 million in 2021.
- The headline unemployment rate (U-3) is expected to decline to 3.1% in early 2020. Job growth will be sufficient to keep up with labor force growth through the end of the forecast horizon. The economy is very close to full employment and even faster wage growth will demonstrate that it has finally arrived.

Is the Productivity Slump Finally Over?

Recent data releases have put to bed, at least for now, the narrative that the U.S. economy is on the precipice of recession. They also affirm that the current economic expansion will go down in history as the longest period of growth the U.S. economy has ever experienced.

Although I remain a bit skeptical of data whose collection was interrupted by the partial federal government shutdown, the news taken at face value has been good.

One recent bit of good news was the data on the productivity of nonfarm workers which was released by the Bureau of Labor Statistics. The release showed that in the first quarter of 2019, labor productivity, or output per hour worked, increased by 3.6% at an annual rate. This was the second largest quarterly increase in the recovery to date, excluding the first few quarters immediately following the end of the recession as productivity typically surges as the economy exits a recession.

The year-over-year gains in productivity were strong as well, coming in at 2.4% - the largest gain since the 3rd quarter of 2010.

Productivity is an essential component of economic growth as well as wage and salary growth which, for much of this recovery, has been tepid.

Since the mid-2000's, productivity has been in a bit of a slump in the U.S., and this has been both a source of concern and a puzzle for economists (a similar puzzle emerged in the 1970s). Various explanations have been proffered to explain the slump in productivity, including measurement error in our macroeconomic data and demographic factors. The demographic explanation hinges on the share of younger workers in the economy who have less human capital and are therefore less productive than their older counterparts.

There is another factor, however, that gets far less scrutiny and can help explain both these productivity puzzles as well as the recent surge in productivity – regulation.

Economic models are generally simplifications of the complexity of the economy at large, but are nonetheless useful for understanding economic concepts.

One example of such a model that is used to study general equilibrium and welfare theorems in economics is the Robinson Crusoe economy.

The Robinson Crusoe model is an island economy where the sole resident, Mr. Crusoe, is both producer (of coconuts) and consumer. Productivity on the island would be measured in the number of coconuts harvested per hour and output equaling the total number of coconuts produced.

What factors might impact productivity on the island?

The demographic explanation suggests that as Mr. Crusoe gains experience, human capital and becomes better at climbing the trees as well as harvesting the coconuts, his productivity rises.

If Mr. Crusoe were provided with a boom lift that he could drive from tree to tree, his productivity would increase as a result of this investment and even more so if the lift were equipped with a GPS device that could guide him directly to the trees that are ready for harvest.

But what if a regulatory agency were added to this island economy? Suppose that this new agency, call

it the Coconut Farming Protection Bureau (CFPB), was formed with the goal to make coconut markets work for consumers, responsible providers, and the economy as a whole.

Suppose the bureau then issued two new regulations for the coconut industry, one aimed at protecting the sustainability of the island's coconut grove and the other at protecting the endangered Macaroon Loon that builds its nests in the coconut palms. The first rule requires Mr. Crusoe to measure and document the size of each coconut before it is harvested and the second requires documentation showing that any tree that is being harvested does not have a Macaroon Loon nesting in it.

Without debating the virtue of the CFPB goals to protect the coconut industry and the Macaroon Loon, what impact would such regulation have on the output of the island economy and the productivity of Mr. Crusoe? Because he would have to spend a portion of each hour that would normally be used for harvesting coconuts on compliance with the new regulations, both the output of the economy, the total number of coconuts harvested, and his productivity (the number of coconuts harvest per hour) would fall.

Regulations are not implemented in a vacuum; they have real impacts on the economy and this fact can help us understand historical productivity puzzles, and perhaps the recent jump in productivity.

In the 1970's, there were 43,198 pages added to the Code of Federal Regulations; from 2000 to 2016 an additional 50,121 pages were added bringing the total number of pages to over 185,000 in 2016.

The pace of regulation has slowed significantly in the Trump administration thus far. The total number of economically significant regulations to date is the lowest of any administration since Reagan during the same point in those administrations.

Investment in equipment has also been a factor. The average annual growth rate of investment spending on equipment during 2015-2016 was just

0.35% but during 2017-2018 it jumped to 7.7%—a boom in spending on boom lifts if you will, helping our worker's productivity and raising GDP growth.

Reduced regulatory burdens and more equipment appear to be boosting both output and productivity in the U.S.

It may be a bit premature to pop the champagne corks in celebration of the end of the productivity slump, but if you like piña coladas there is a good chance that more coconuts will be coming your way.

ANXIOUS INDEX

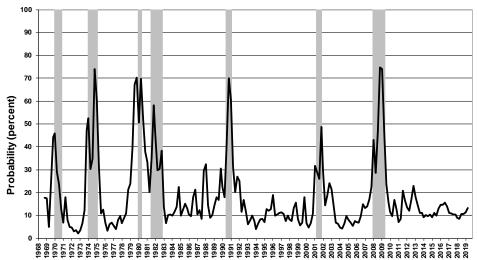
Fear of Recession Ticks up in the 2nd Quarter

The most recent release (2nd quarter of 2019) of the Survey of Professional Forecasters by the Federal Reserve Bank of Philadelphia states that the 33 forecasters surveyed for the publication put a 13.14% chance that a decline in real GDP will occur in the 3rd quarter of 2019.

One section of the Survey of Professional Forecasters asked panelists to estimate the probability that real GDP will decline in the quarter in which the survey is taken, as well as the probabilities of a decline in each of the following four quarters. The anxious index is the estimated probability of a decline in real GDP in the quarter after a survey is taken. In the survey taken in May for the 2nd quarter of 2019, the index stands at 13.14, meaning forecasters believe there is a 13.14% chance that real GDP will decline in the 3rd quarter of 2019.

The forecasters also report an 11.90% chance that we are currently (as of the 2nd quarter of 2019) experiencing a contraction in real GDP—4.8 percentage points lower than the probability the forecasters assigned for the 1st quarter of 2019. According to the panel, the probability that real GDP growth will turn negative is averaging around 17.80% through the end of the 2nd quarter of 2020, indicating that the forecasters' assignment of probability for a contraction in real GDP in the upcoming year is the highest since the 3rd quarter of 2016.

Figure 1. The Anxious Index Probability of Decline in Real GDP in the Following Quarter Quarterly, 1968:Q4 to 2019:Q2



Source: Survey of Professional Forecasters, Philadelphia Federal Reserve Bank

The Figure 1 above plots the historical values of the anxious index, where the gray bars indicate periods of recession in the U.S. economy. The current level of the anxious index is nearly 0.35 points higher than the average level during the economic recovery (12.79).

GDP OUTLOOK

Economy Now in the Longest Expansion in History with No Signs of Slowing

Because of the Tax Cuts and Jobs Act, American workers are now enjoying larger paychecks. More take-home pay will lead to higher consumer spending, and thus support already-high levels of consumer confidence and faster GDP growth. Reevaluation of the regulatory environment is also catalyzing economic growth and productivity.

The Tax Cuts and Jobs Act and deregulation have given rise to 3.0% growth that arrived in 2018 and has accelerated into 2019. Our uninspiring recovery was in desperate need of a policy boost, and the tax reform law provides just what the sluggish recovery needed.

Because the tax cuts have been coupled with

significant and ongoing regulatory rollbacks, the strength and lifespan of the recovery have received a boost. This economic recovery is now ten years old with no indication of a slowdown on the horizon.

The average rate of annual real GDP growth from 2010-2017 was just 2.2%. Our forecast for average real GDP growth from 2018-2021 stands at 2.9%, with a projected acceleration of growth to levels greater than or equal to 3.0% in 2019 (3.1%) and 2020 (3.0%).

The probability of a recession taking place before the end of our 2021 forecast horizon will rise over time; no recovery lasts indefinitely.

but recoveries also do not come with a pre-ordained expiration date. The economic policies of the Trump administration are extending the length of this recovery, but not indefinitely. All expansions give way to the next recession; no election or policy mix has ever prevented that from occurring, but the right policies can delay the inevitable, and just those types of policies are currently in place.

In 2019, we are expecting real GDP growth to accelerate to nearly 3.1%; growth will then ease to 3.0% in 2020, before decelerating to 2.7% in 2021.

We expect the Federal Reserve to continue to take a wait-and-see approach and intermittently raise interest rates, which may include a rate hike in 2019. As always, economic data will drive both the timing and the size of these interest rate changes, but the Fed has signaled that the general pace on both interest rate hikes and the undoing of quantitative easing will slow throughout this year. There is no reason for the Fed to upset the apple cart as long as inflation continues to remain in check.

The Fed continues the process of gradually shrinking its balance sheet, which was engorged by three rounds of quantitative easing. This will continue to be a gradual process as well. These

efforts have reduced the size of the balance sheet from over \$4.5 trillion to \$3.93 trillion to date. However, similar to quantitative easing itself, this is uncharted water for monetary policy; there is no previous playbook to follow on how best to carry this out and the Fed may put the brakes on this process as they have on interest rate hikes.

CONSUMER SPENDING

Jobs, Bigger Paychecks, and Confidence

The U.S. consumer has been playing the biggest role in supporting the economic expansion, tepid as it has been, over the past three years. In 2015, real consumer spending growth was 3.7% in 2016, spending then grew at 2.5% in 2017, and consumer spending expanded again at 2.6% in 2018.

In these three years, the contribution to GDP growth was outsized. Consumer spending contributed 86% in 2015, and 115% in 2016, to real GDP growth of 1.6%. If not for consumer spending, the U.S. economy would have contracted in 2016 as business investment tumbled. In 2017, consumers again provided the bulk of growth, accounting for 79% of the 2.2% growth and last year's consumers were 62% of GDP growth.

Continued strong gains in employment, an acceleration in the growth of wages and salaries, and improving household balance sheets via rising home prices and financial asset values will continue to provide a solid underpinning for continued consumer spending growth. The Tax Cuts and Jobs Act boosts consumer spending growth by raising disposable income; many workers began seeing larger paychecks after February of 2018 when the IRS released new income tax withholding guidelines.

These improving fundamentals and growth-oriented policies boosted consumption spending in the 2nd quarter to 3.8% and to 3.5% in the 3rd quarter of 2018. Though the following two quarters showed a deceleration in growth, that trend has already reversed itself. The economic environment for consumers should continue to support consumption spending going forward.

The next three years should show a steady acceleration of consumer spending growth. Consumer spending, the largest component of GDP, is critical in supporting real GDP growth and extending the life of this economic recovery. The Trump administration's economic policies have boosted business investment in a significant way, but consumers will still need to provide the momentum for this expansion going forward.

While other pillars that support consumer spending continue to strengthen, the labor market also continues its recovery as we close in on full employment. Stronger wage and salary growth have finally arrived as the labor market continues to tighten. The economy may not quite be at full employment just yet, but we are getting closer and closer with each passing month. As wage growth accelerates—accompanied by tax cuts that further raise consumers' disposable income—it will be the catalyst that takes consumer spending growth to a higher level.

In 2017, consumer spending growth decelerated to 2.5% from 2.7% in 2016 and then stabilized in 2018 at 2.6%. The economic policies aimed at stimulating economic growth by the Trump administration, as well as faster wage and salary growth, will help increase consumer spending growth going forward. Consumption spending growth is expected to be 2.7% in 2019, 3.7% in 2020, accelerating further to 3.8% in 2021.

INVESTMENT

Nonresidential fixed investment spending was unusually weak in 2016, expanding by only 0.5% after weak growth of just 1.5% in 2015. The unusual presidential election cycle carried with it a much higher level of uncertainty than a typical election. Many businesses chose to stay on the sideline when it came to investment spending, unsure of what tax, regulatory, and other economic policies might be put in place in 2017. The behavior of investment spending in 2016 was quite worrisome and close to what we would expect to see during a recession, even though no recession was taking place.

Investment spending during this historically weak economic recovery has generally been soft as well. We have discussed the role of uncertainty and the rapid growth in the regulatory burden as probable causes of this weakness in multiple issues of our U.S. Forecast publication. This environment of uncertainty worsened during the presidential political cycle, but with the election now over, the regulatory burden being significantly rolled back, and with the Tax Cuts and Jobs Act, the environment for investment spending has improved.

The Tax Cuts and Jobs Act significantly reduced the corporate tax rate and incentivized the repatriation of profits held by U.S. corporations overseas, which estimates put at \$4.33 trillion. In the first three quarters of 2018, \$571 billion was repatriated. Coupled with changes to allow smaller companies to immediately expense equipment instead of depreciating it, these provisions all help to boost investment spending, contributing to stronger economic growth in the next few years.

Spending on equipment and software contracted for the full year in 2016 by 1.4%. In 2017, we saw a 7.5 percentage point swing in investment of this type, as the full year rebounded to 6.1% growth and then to 7.5% in 2018. The outlook going forward will remain solid. Average growth in this type of investment spending is expected to be 5.7% over the 2018-2021 timeframe, having peaked at 7.5% in 2018.

Purchases of aircraft again contracted by 9.9% in 2016 but recovered by expanding to 10.2% in 2017. Over the next four years, spending on aircraft is expected to grow an average of 10.0%, but quarterto-quarter and even year-over-year volatility in this type of investment spending is the rule, not the exception. A single order from an airline can move this figure by tens of billions of dollars and the recent problems Boeing has been facing with its 737 Max planes will only add to the volatility. We expect a deceleration of growth in 2019 stemming from these problems, but a sharp rebound in 2020 as Boeing puts this episode behind it.

The 2016 slowdown in investment spending also reflected the negative impact of the oil prices falling

by nearly two-thirds. Consumers enjoyed the low prices at the gasoline pump, but oil producers shale and otherwise—cut back on investments as oil prices dropped below \$40 per barrel early in 2016. The rig count in the U.S. hit a more than seventy-year low of 404 in response to plunging oil prices. Oil prices recovered from these lows, and in October 2018, were above \$75 per barrel but now hover around \$60 per barrel. As a result, the U.S. May 2019 rig count was 987, down 59 year-overyear.

During 2015 and 2016, investment in mining and petroleum equipment contracted by 28.5% and 42.1%, respectively. In 2017, growth hit 44.1% and has come in at 29.1% for 2018. It will average 10.9% per year during 2018-2021. This is a strong recovery for a sector that has taken some hits from both markets and regulators. The approval of new pipelines by the Trump administration, though still held up, has given a boost to shale oil production in North Dakota. More rigs and more investment in petroleum inevitably means a higher supply that will dampen prices and future investment. The nearterm gusher in investment spending will ultimately slow to a trickle as a result, and in 2020, growth is expected to slow to 7.0% before dropping in 2021 to just 0.5%.

The weak start to 2016 and an environment of political uncertainty resulted in a further deceleration of nonresidential investment spending growth to 0.5%. Now, with the election two-plus years behind us and an increased investmentfriendly policy in place, business nonresidential investment growth hit 5.3% in 2017 and accelerated to 6.9% in 2018, before easing to 4.1% in 2019, rebounding to 5.8% in 2020, and easing to 5.5% in 2021.

Interest rates, while still low by historical standards, have increased as the Fed has pushed up the federal funds rate and continues the process of shrinking its \$4.0 trillion balance sheet. In time, higher interest rates will begin to drag on investment spending, as is the intention of tighter monetary policy. Higher forecasted rates are driving the modest deceleration of investment spending

growth rates in the final two years of our forecast horizon.

Business spending on industrial equipment will grow at an annual average rate of 4.9% from 2018-2021. Investment spending growth in computers and peripherals will also average 5.6% during 2018-2021. Spending on communications equipment should expand at an average annual rate of 7.4% during the same four-year span with spending accelerating in 2020 and 2021 with the rollout of 5G mobile internet technology.

Investment growth in nonresidential structures has fluctuated over the past three years. Growth turned negative in 2015 and contracted further in 2016, with spending declining by 2.9% and 4.8% in those two years. Investment in nonresidential structures grew faster in 2017 at 4.6%, and accelerated again in 2018, before wavering in 2019 and then accelerating again in 2020-2021. During 2018-2021, growth is expected to average 2.3% over those four years.

Residential fixed investment growth hit 10.2% in 2015, then eased in 2016 to 6.6%, before slipping further to 3.3% in 2017, and contracting slightly in 2018. Growth will average 0.3% through 2018-2021, accelerating to a peak growth rate of 2.7% in 2020. In the final year of our forecast (2021), real residential fixed investment will be dampened by both higher mortgage rates—which are expected to average 5.3% on a 30-year fixed mortgage that year—and the slower pace of price appreciation. In 2021, real residential fixed investment will be \$618.5 billion—\$246 billion less than its 2005 peak.

We expect housing starts to continue to gradually accelerate over the next several years, reaching a level slightly above 1.36 million in 2021. Average levels of annual housing starts from 2018-2021 will be 1.25 million.

GOVERNMENT SPENDING

Government spending has become a series of continuing resolutions, devoid of any policy discussions about priorities, problems, or serious policy objectives, and not surprisingly our public finances are adrift, and deficits are heading back toward the \$1 trillion mark.

In 2016, federal government spending growth was 0.4% after contracting for five consecutive years and was just 0.7% in 2017. This modest growth in spending will be significantly stronger over the next two years before growth decelerates in the final two years of our forecast. In 2018, it expanded by 2.6%, and in 2019, it will rise again by 4.8%. During the 2018-2021 period, federal government spending is expected to rise, growing at an annual average pace of 1.9%. Over the same time frame, state and local governments will oversee spending growth at an average rate of 1.2%.

The federal budget deficit jumped in 2017 to over \$665 billion and then to \$779 billion in 2018 and will continue to increase—surpassing \$1 trillion each year through the end of the forecast horizon in 2021. This is a reversal of course in fiscal policy after a four-year period in which we saw deficits shrinking from nearly \$1.3 trillion in 2011 to \$439 billion in 2015. While the Tax Cuts and Jobs Act has boosted growth not only of the economy but also government revenue, federal budget deficits have increased. In 2017, the deficit grew by \$78.4 billion, and it surged even higher in 2018, where it hit \$779.0 billion. The deficit will grow larger still in 2019, as entitlement and military spending push it to \$1.04 trillion before easing slightly in 2020 to \$1.0 trillion. The deficit will continue to grow in 2021, when government spending will exceed revenue by \$1.1 trillion.

As we have discussed in some length in previous forecasts, the U.S. continues to travel down an unsustainable fiscal path that will ultimately lead to a crisis. The existing structure of our entitlement programs (62% of the federal budget is mandatory spending), coupled with the demographics of an aging Baby Boomer generation, ensures that if no changes are made to these programs and/or how they are funded, we will eventually face a fiscal crisis. There has been no indication that the Trump administration, like those of its predecessors, will make any of the difficult but necessary changes to avoid this future crisis. This crisis-in-the-making is

even more concerning because of a misguided but growing belief among some lawmakers and even economists that deficits (and the debt) don't matter.

We are projecting deficits through 2021 that will soon surpass the \$1 trillion level—the type of deficits that were the norm during 2009-2012. The amount that the projected deficits will add to the national debt over the next three years will be more than \$3.0 trillion, pushing the national debt total to more than \$25 trillion. As interest rates in the economy rise, the burden of servicing this debt will rise as well. Tax cuts implemented by the Trump administration will help push this debt to even higher levels than we are currently projecting if interest rates rise more quickly than anticipated. Slower-than-projected economic growth would also push projected deficits higher, though the possibility of faster economic growth could help mitigate the growth of these deficits.

Currently, the national debt is over \$22.2 trillion and rising. This represents a debt of nearly \$181,643 per taxpayer and \$67,773 per citizen. The unfunded liabilities of the U.S. are even more remarkable. These include Social Security, Medicare parts A, B, and D, Federal debt held by the public, and federal employee and veteran benefits, representing more than \$123.9 trillion in liabilities, boiling down to more than \$1,009,000 per taxpayer.¹

NET EXPORTS

Net exports have been a drag on real GDP growth in the U.S. over the past three years. In 2015, net exports shaved 0.78 percentage points off of real GDP growth. In 2016, the drag continued but lessened; net exports still reduced growth by 0.30 percentage points. Again, in 2017, net exports lowered real GDP growth by 0.31 percentage points. In 2018, net exports reduced real GDP growth by 0.21 percentage points.

The U.S. dollar appreciated for five straight years against our major trading partners, including an outsized 16.1% appreciation in 2015. In 2016, this

trend moderated; in 2017 and 2018, the dollar continued to return some of these gains. However, as the Fed has raised interest rates and the U.S. economy experiences faster growth, we expect that the dollar will appreciate again in 2019 at a 2.4% pace.

A stronger dollar boosts imports and reduces exports by making our goods and services more expensive to foreigners while at the same time making imported goods and services less expensive to U.S. consumers. This results in a worsening of the trade deficit, which is the difference between the dollar value of exports and the dollar value of imports.

However, the effects of currency changes take time to work on the actual quantity of trade flows, resulting in what is known as the J-curve effect on net exports. Because of this effect, an appreciation of the dollar initially decreases the trade deficit before eventually increasing it. Why? Importers and exporters do not enter into contracts based on the total dollar value of the transaction, but rather the actual quantity of goods to be shipped (automobiles, flat screen televisions, etc.). As the exchange rate varies in the short run, the values of these shipments and, thus net exports vary as well. Over time, however, the quantities do adjust in response to the exchange rate fluctuations and this is what gives rise to the J-curve effect.

The current trade spat with China does impart some uncertainty into the outlook for foreign trade, but the overall impact will likely not be as large as some have suggested it will be and the pressure will continue to build on China to come to an agreement as the U.S. has greater leverage in this lopsided trade partnership.

Overall, real export growth continues through the end of our 2021 forecast horizon and is expected to accelerate in 2020 after easing in 2019 before easing again through the end of 2021. Real import growth is expected to decelerate through 2019 and slip below import growth that year before outpacing export growth again through 2021. Trade skirmishes notwithstanding, real export growth

¹ National debt data from: http://www.usdebtclock.org/

from 2018-2021 will average 4.5%, while real import growth will average 5.4% over the same time frame.

Real net exports will average more than -\$1.1 trillion during 2018-2021, with the trade balance worsening in each successive year, coming in at over -\$1.3 trillion in 2021. The sizeable appreciation of the dollar during 2012-2015 and another anticipated appreciation in 2019, projected wage and salary growth, and tax cuts, along with weaker global growth relative to the U.S., will dampen demand for U.S. goods and services abroad and simultaneously stimulate American consumers' appetite for imported goods and services.

UNEMPLOYMENT

The national headline unemployment rate (U-3) in April 2019 ticked down 0.2 percentage points from the March 2019 reading of 3.8%, the lowest level *since December of 1969*. The labor force participation rate decreased from 63.0% in March to 62.8% in January.

The April jobs report blew past expectations as growth in payroll jobs showed businesses adding 263,000 jobs after March's 189,000 job gain. The 263,000 increase in payroll employment in April was well above the average growth in monthly payrolls for 2018 of 223,000, which is up from 2017's average of 179,000 and higher than 2016's average monthly growth of 193,000. Average payroll job growth for 2015 came in at 226,000, down from 2014's average growth of 251,000. This late in the economic cycle—the recovery is closing in on ten years—a further acceleration in job growth is unlikely, but the recent uptick in growth is a result of the Tax Cuts and Jobs Act and other pro-growth policies of the Trump administration.

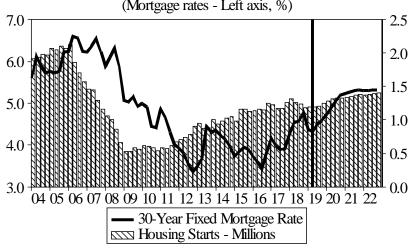
The April labor force participation rate of 62.8% remains depressed and is still below pre-recession levels. Since the end of the recession, the labor force participation rate is down 2.7 percentage points.

The Bureau of Labor Statistics (BLS) produces alternative measures of labor market weakness, including the broadest measure of unemployment (U-6). U-6 takes into account discouraged workers (currently 454,000 workers), as well as those classified as underemployed (currently over 4.6 million workers)—working part-time but not by choice—and workers who are marginally attached to the labor force, who have looked for work in the past 12 months but are not currently looking, yet indicate a willingness to work (1.4 million workers). None of these 6.4 million workers are counted in the headline unemployment rate of 3.8%.

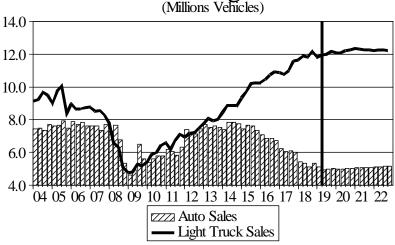
U-6 stands at 7.3% as of April 2019, holding steady at the March 2019 level, and down 0.8 percentage points from the start of the year. The current level of U-6 is down 9.8 points from its peak of 17.1% in April 2010. U-6 was stuck in double digits for more than seven years. It has now been in single digits for forty-four consecutive months, beginning in October 2015, and stands at the lowest level since March of 2001.

The spread between U-6 and U-3 measures of unemployment has ticked down to 3.5 percentage points, the lowest since September of 2008, and is 3.9 points below the peak spread of 7.4 points that took place in September of 2011.

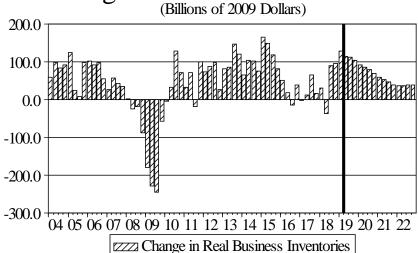
30-Year Mortgage Rates and Housing Starts (Mortgage rates - Left axis, %)



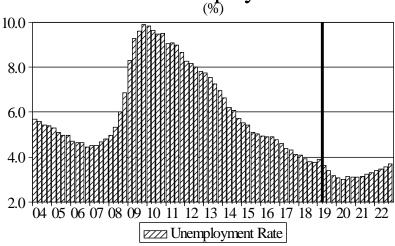
Automobile and Light Truck Sales (Millions Vehicles)



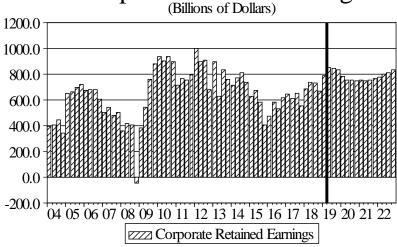
Change in Real Business Inventories



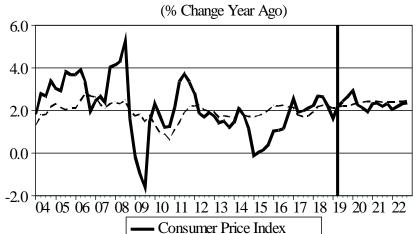
Civilian Unemployment Rate



Corporate Retained Earnings (Billions of Dollars)



Consumer Prices



Federal Budget Surplus (Billions of Dollars)

0.0
-200.0
-400.0
-600.0
-800.0
-1000.0
-1200.0
-1400.0
-1600.0
04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22

ZZZZ Federal Budget Surplus

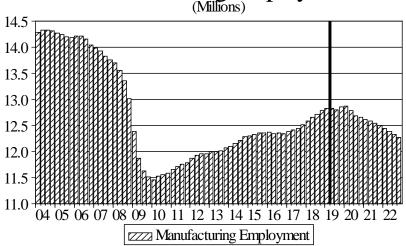
Federal Funds Rate

6.0 5.0-4.0-3.0-2.0-1.0-0.0-0.0-0.0-0.0-0.0-1.0-0.0-1

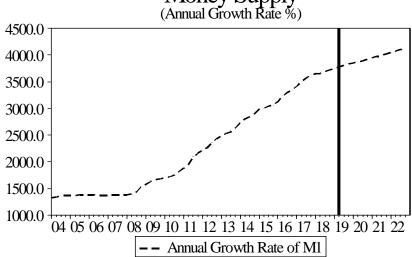
Industrial Production (2009=100)

120.0
115.0
110.0
105.0
100.0
95.0
90.0
85.0
04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22

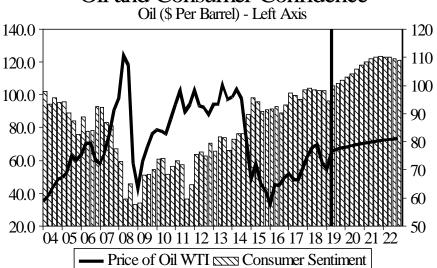
Manufacturing Employment (Millions)



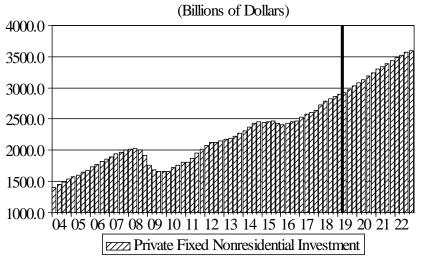
Money Supply (Annual Growth Rate %)



Oil and Consumer Confidence



Private Fixed Nonresidential Investment



Real After Tax Profits (Billions of Dollars)

(Billions of Dollars)

2200.0

1800.0

1600.0

1200.0

1000.0

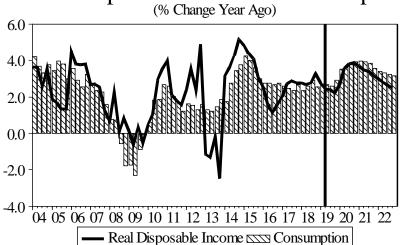
1000.0

600.0

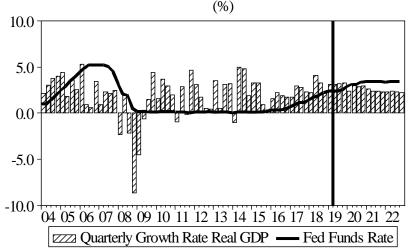
04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22

ZZZZ Real After Tax Profits

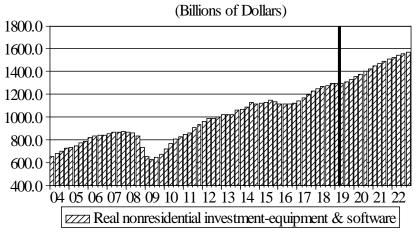
Real Disposable Income and Consumption



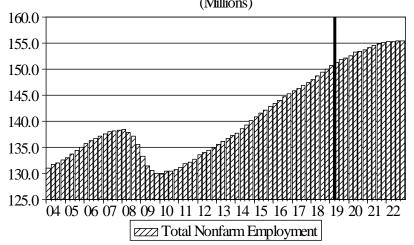
Real GDP Growth and Federal Funds Rate

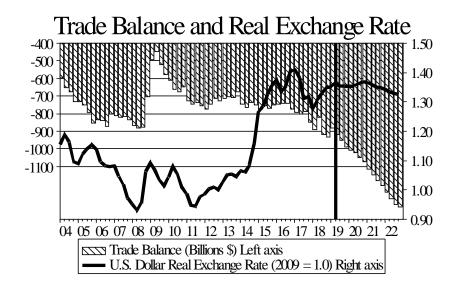


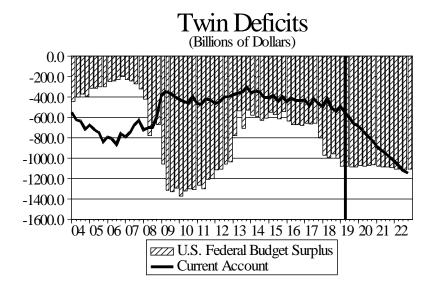
Real Investment Equipment & Software



Total Nonfarm Payroll Employment (Millions)







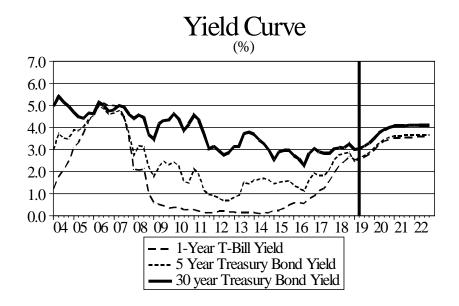


Table 1. Summary of the Long-Term Forecast of the U.S.

| Table 1. Su | IIIIIIai | y Oi | tile i | Long | -ieii | II FOI | ecas | נ טו נו | ile 0.3 | | |
|--|----------------|----------------|----------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Forecast 2020 | 2021 |
| | | 2012 | 2013 | 2014 | 2013 | 2010 | 2017 | 2010 | 2013 | 2020 | 2021 |
| Composition of Real GDP, Percent Cha | - | | | | | | | | 1 | | |
| Gross Domestic Product | 1.6 | 2.3 | 1.8 | 2.4 | 2.9 | 1.6 | 2.2 | 2.9 | 3.1 | 3.0 | 2.7 |
| Final Sales of Domestic Product Total Consumption | 1.6 1.9 | 2.1 1.5 | 1.6 1.5 | 2.6 2.9 | 2.6 3.7 | 2.1 2.7 | 2.2 2.5 | 2.7 2.6 | 2.8 2.7 | 3.2 3.7 | 2.9 3.8 |
| Durables | 5.1 | 6.0 | 6.1 | 7.1 | 7.6 | 5.5 | 6.8 | 5.6 | 3.2 | 7.1 | 7.3 |
| Nondurables | 0.9 | 0.0 | 1.8 | 2.6 | 3.4 | 2.7 | 2.1 | 2.8 | 3.0 | 3.1 | 3.0 |
| Services | 1.7 | 1.2 | 0.6 | 2.4 | 3.2 | 2.3 | 2.0 | 2.1 | 2.6 | 3.4 | 3.6 |
| Nonresidential Fixed Investment | 8.6 | 9.6 | 4.1 | 6.9 | 1.8 | 0.5 | 5.3 | 6.9 | 4.1 | 5.8 | 5.5 |
| Equipment & Software | 13.5 | 11.1 | 4.7 | 6.8 | 3.1 | -1.4 | 6.1 | 7.5 | 2.8 | 6.3 | 6.2 |
| Information Processing Equipment | 4.9 | 9.3 | 6.2 | 4.8 | 6.7 | 4.4 | 11.9 | 9.5 | 2.2 | 6.1 | 7.3 |
| Computers & Peripherals | -0.1 | 10.5 | -0.5 | -0.3 | 0.9 | -0.5 | 10.5 | 8.2 | 1.3 | 6.2 | 6.7 |
| Communications Equipment | 9.3 | 9.3 | 12.7 | 12.7 | 16.1 | 12.6 | 19.3 | 11.5 | 2.7 | 6.8 | 8.5 |
| Industrial Equipment Transportation Equipment | 19.9 32.9 | 8.8 21.3 | -1.3 12.7 | 4.0 12.3 | 0.2 12.1 | -1.2 -4.7 | 6.6 -2.1 | 5.2 7.3 | 1.5 8.9 | 5.1 6.6 | 7.7 -0.7 |
| Aircraft | 13.5 | 21.3 | 5.7 | 15.0 | 2.2 | -4.7 -9.9 | 10.2 | 8.3 | 5.6 | 23.8 | -0.7 12.7 |
| Other Equipment | 27.9 | 19.6 | 6.6 | 14.3 | 10.9 | -22.3 | 0.9 | 15.1 | 11.2 | 2.8 | -1.3 |
| Structures | 2.7 | 13.5 | 1.3 | 10.7 | -2.9 | -4.8 | 4.6 | 5.0 | 0.0 | 2.6 | 1.8 |
| Commercial & Health Care | -0.3 | 8.5 | 3.6 | 12.9 | 10.7 | 17.7 | 3.4 | 0.6 | 0.3 | 5.8 | 4.7 |
| Manufacturing | -1.3 | 16.2 | 4.2 | 12.7 | 35.6 | -5.1 | -15.2 | -7.6 | 0.9 | 0.3 | 3.1 |
| Power & Communication | -7.6 | 21.4 | -4.3 | 18.3 | -2.4 | 0.5 | -1.0 | -0.7 | -11.5 | -12.0 | -7.3 |
| Mining & Petroleum | 26.4 | 12.9 | 1.6 | 6.9 | -28.5 | -42.1 | 44.1 | 29.1 | 6.9 | 7.0 | 0.5 |
| Other | -8.2 | 10.7 | 3.3 | 8.2 | 9.4 | 7.2 | 1.9 | 2.9 | 2.9 | 6.6 | 5.3 |
| Residential Fixed Investment | 0.0 | 12.9 | 12.5 | 3.8 | 10.2 | 6.6 | 3.3 | -0.3 | -2.4 | 2.7 | 1.4 |
| Exports | 7.2 | 3.4 | 3.6 | 4.3 | 0.6 | -0.1 | 3.0 | 4.0 | 2.8 | 5.1 | 3.8 |
| Imports Federal Government | 5.7 -2.6 | 2.7 -1.9 | 1.5 -5.5 | 5.1 -2.6 | 5.5 0.0 | 1.9 0.4 | 4.6 0.7 | 4.6 2.6 | 2.4 4.8 | 7.4 1.0 | 7.4 -0.8 |
| State & Local Government | -2.6 | -1.9 | -0.3 | 0.1 | 3.0 | 2.1 | -0.5 | 0.8 | 1.5 | 1.4 | -0.6 1.2 |
| State & Local Government | -5.5 | -2.2 | -0.5 | 0.1 | 3.0 | 2.1 | -0.5 | 0.0 | 1.5 | 1.4 | 1.2 |
| Billions of Dollars | | | | | | | | | | | |
| Real GDP | 15840.7 | 16197.0 | 16495.4 | 16899.8 | 17386.7 | 17659.2 | 18050.7 | 18566.4 | 19138.9 | 19709.0 | 20239.6 |
| Nominal GDP | 15542.6 | 16197.0 | 16784.9 | 17521.7 | 18219.3 | 18707.2 | 19485.4 | 20494.1 | 21483.9 | 22628.0 | 23790.9 |
| | | | | | | | | | | | |
| Prices & Wages, Percent Change, Annu | | | | | | | | | 1 | | |
| GDP Deflator | 2.1 | 1.9 | 1.8 | 1.9 | 1.0 | 1.1 | 1.9 | 2.2 | 1.7 | 2.3 | 2.4 |
| Consumer Prices Excl. Food & Energy | 3.1 1.7 | 2.1 2.1 | 1.5 1.8 | 1.6 1.8 | 0.1 1.8 | 1.3 2.2 | 2.1 1.8 | 2.4 2.1 | 2.2 | 2.3 2.4 | 2.3 2.4 |
| Producer Prices, Finished Goods | 6.0 | 1.9 | 1.2 | 1.9 | -3.3 | -1.0 | 3.2 | 3.1 | 1.5 | 2.4 | 1.8 |
| Employment Cost Index - Total Comp. | 2.2 | 1.9 | 1.9 | 2.1 | 2.1 | 2.1 | 2.5 | 2.9 | 2.5 | 3.2 | 3.6 |
| p.s, | | | | | | | | | | | |
| Other Measures | | | | | | | | | | | |
| Oil - WTI (\$ per barrel) | 95.1 | 94.2 | 97.9 | 93.3 | 48.7 | 43.2 | 51.0 | 64.9 | 63.6 | 69.1 | 71.1 |
| Productivity (% change) | 0.0 | 0.9 | 0.5 | 0.8 | 1.3 | 0.2 | 1.2 | 1.3 | 2.1 | 2.0 | 2.1 |
| Industrial Production (% change) | 3.1 | 3.0 | 2.0 | 3.1 | -1.0 | -1.9 | 2.3 | 4.0 | 2.5 | 1.7 | 1.3 |
| Factory Operating Rate | 73.5 | 74.5 | 74.4 | 75.2 | 75.3 | 74.2 | 75.1 | 76.6 | 77.3 | 76.8 | 75.6 |
| Nonfarm Inven. Chg. (Bil. of 2009 \$) Consumer Sentiment Index | 48.4 67.4 | 89.9 76.5 | 98.2 79.2 | 90.3 84.1 | 127.8 92.9 | 28.4 91.8 | 27.4 96.8 | 50.9 98.4 | 119.0 99.2 | 78.0 105.1 | 46.7 109.6 |
| Light Vehicle Sales (Million units) | 12.7 | 14.4 | 15.5 | 16.5 | 17.4 | 17.5 | 17.1 | 17.2 | 17.0 | 17.2 | 17.4 |
| Housing Starts (Million units) | 0.6 | 0.8 | 0.9 | 1.0 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.3 | 1.4 |
| Existing House Sales (Million units) | 3.8 | 4.1 | 4.5 | 4.3 | 4.6 | 4.8 | 4.9 | 4.7 | 4.7 | 4.8 | 4.8 |
| Unemployment Rate (%) | 8.9 | 8.1 | 7.4 | 6.2 | 5.3 | 4.9 | 4.4 | 3.9 | 3.5 | 3.1 | 3.2 |
| Payroll Employment (% change) | 1.2 | 1.7 | 1.6 | 1.9 | 2.1 | 1.8 | 1.6 | 1.7 | 1.6 | 1.2 | 0.9 |
| Federal Surplus (Unified, FY, bil. \$) | -1296.8 | -1089.2 | -680.2 | -483.6 | -439.1 | -587.4 | -665.8 | -779.0 | -1037.3 | -1003.4 | -1013.1 |
| Current Account Balance (Bil. \$) | -445.7 | -426.8 | -348.8 | -365.2 | -407.8 | -432.9 | -449.1 | -488.5 | -578.4 | -757.7 | -936.2 |
| Financial Markets NCA | | | | | | | | | | | |
| Financial Markets, NSA Federal Funds Rate (%) | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 1.0 | 1.8 | 2.4 | 3.1 | 3.4 |
| 3-Month Treasury Bill Rate (%) | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.4 | 0.9 | 1.9 | 2.4 | 3.1 | 3.5 |
| 1-Year Treasury Note Yield (%) | 0.1 | 0.1 | 0.1 | 0.0 | 0.3 | 0.6 | 1.2 | 2.3 | 2.6 | 3.3 | 3.5 |
| 5-Year Treasury Note Yield (%) | 1.5 | 0.8 | 1.2 | 1.6 | 1.5 | 1.3 | 1.9 | 2.7 | 2.7 | 3.4 | 3.6 |
| 10-Year Treasury Note Yield (%) | 2.8 | 1.8 | 2.4 | 2.5 | 2.1 | 1.8 | 2.3 | 2.9 | 2.8 | 3.4 | 3.7 |
| 30-Year Treasury Note Yield (%) | 3.9 | 2.9 | 3.4 | 3.3 | 2.8 | 2.6 | 2.9 | 3.1 | 3.1 | 3.8 | 4.1 |
| 30-Year Fixed Mortgage Rate (%) | 4.5 | 3.7 | 4.0 | 4.2 | 3.9 | 3.6 | 4.0 | 4.5 | 4.4 | 5.0 | 5.3 |
| S&P 500 Stock Index | 1268.9 | 1379.6 | 1642.5 | 1930.7 | 2061.2 | 2092.4 | 2448.2 | 2744.7 | 2956.5 | 3291.9 | 3402.8 |
| (% change) | 11.5 | 8.9 | 19.0 | 17.7 | 6.9 | 1.6 | 17.0 | 12.3 | 7.8 | 11.6 | 3.4 |
| Exchange Rate, Major Trading Partners | 1.0 | 1.0 | 1.0 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| (% change (negative = depreciation)) | -5.8 | 3.8 | 3.2 | 3.3 | 16.1 | 0.7 | -0.5 | -2.2 | 2.4 | -0.2 | -0.4 |
| Incomes | | | | | | | | | | | |
| Personal Income (Bil. of \$) | 13326.8 | 14010.1 | 14181.1 | 14991.8 | 15719.5 | 16125.1 | 16830.9 | 17582.4 | 18329.1 | 19400.2 | 20502.2 |
| (% change) | 6.2 | 5.1 | 1.2 | 5.7 | 4.9 | 2.6 | 4.4 | 4.5 | 4.2 | 5.8 | 5.7 |
| Disposable Income (Bil. of \$) | 11873.6 | 12501.2 | 12505.3 | 13206.4 | 13784.3 | 14170.9 | 14796.3 | 15532.1 | 16178.4 | 17089.7 | 18049.0 |
| (% change) | 5.0 | 5.3 | 0.0 | 5.6 | 4.4 | 2.8 | 4.4 | 5.0 | 4.2 | 5.6 | 5.6 |
| Real Disposable Income (Bil. Of 2009 \$) | 12099.9 | | 12339.1 | 12838.1 | | 13595.5 | 13949.3 | 14350.8 | 14703.1 | 15218.8 | 15741.6 |
| (% change) | 2.4 | 3.3 | -1.3 | 4.0 | 4.1 | 1.7 | 2.6 | 2.9 | 2.5 | 3.5 | 3.4 |
| Saving Rate (%) | 7.2 | 8.9 | 6.4 | 7.4 | 7.6 | 6.7 | 6.7 | 6.8 | 6.3 | 6.1 | 5.7 |
| After-Tax Profits (Billions of \$) | 1537.2 -1.6 | 1821.2 18.7 | 1788.7 -1.7 | 1855.2 3.7 | 1737.0 -6.3 | 1736.9 0.2 | 1831.2 5.6 | 1946.9 6.4 | 2099.9 7.9 | 2125.1 1.2 | 2194.6 3.3 |
| (% change) | -1.0 | 10.7 | -1.7 | 3.7 | -0.3 | 0.2 | 5.6 | 0.4 | 1 7.9 | 1.2 | 3.3 |

Table 2. Real Gross Domestic Product

| | | | | History | | | | | | Forecast | |
|----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Real GDP Billions 2009 \$ | | | | | | | | | | | |
| Gross Domestic Product | 15840.7 | 16197.0 | 16495.4 | 16899.8 | 17386.7 | 17659.2 | 18050.7 | 18566.4 | 19138.9 | 19709.0 | 20239.6 |
| Final Sales of Domestic Product | 15796.5 | 16125.8 | 16386.2 | 16809.9 | 17253.6 | 17617.5 | 18008.7 | 18502.4 | 19012.5 | 19611.6 | 20170.7 |
| Total Consumption | 10843.8 | 11006.8 | 11166.9 | 11494.3 | 11921.9 | 12248.2 | 12558.7 | 12887.6 | 13239.1 | 13731.2 | 14258.5 |
| Durables | 1079.7 | 1144.2 | 1214.1 | 1301.0 | 1399.4 | 1476.8 | 1577.9 | 1665.0 | 1718.8 | 1841.0 | 1975.2 |
| Nondurables | 2482.9 | 2493.5 | 2538.5 | 2603.7 | 2691.7 | 2763.9 | 2822.0 | 2899.7 | 2987.9 | 3081.5 | 3172.6 |
| Services | 7282.1 | 7369.1 | 7415.5 | 7594.0 | 7840.0 | 8022.5 | 8184.5 | 8359.4 | 8573.4 | 8864.9 | 9184.1 |
| Nonresidential Fixed Investment | 1935.4 | 2118.5 | 2206.0 | 2357.4 | 2399.7 | 2411.2 | 2538.1 | 2713.6 | 2824.3 | 2988.5 | 3151.8 |
| Equipment & Software | 886.2 | 983.4 | 1029.2 | 1098.7 | 1132.6 | 1116.2 | 1183.7 | 1271.9 | 1307.3 | 1390.2 | 1477.0 |
| Information Processing Equipment | 303.2 | 331.2 | 351.8 | 368.6 | 393.5 | 410.9 | 459.8 | 503.3 | 514.4 | 545.7 | 585.5 |
| Computers & Peripherals | 93.9 | 103.5 | 103.0 | 102.6 | 103.5 | 103.0 | 113.8 | 123.0 | 124.5 | 132.3 | 141.1 |
| Communications Equipment | 95.9 | 104.8 | 118.1 | 133.1 | 154.6 | 174.0 | 207.4 | 231.2 | 237.4 | 253.6 | 275.2 |
| Industrial Equipment | 194.9 | 211.2 | 208.4 | 216.6 | 217.0 | 214.4 | 228.6 | 240.6 | 244.2 | 256.5 | 276.4 |
| Transportation Equipment | 177.8 | 215.3 | 242.5 | 272.2 | 304.9 | 290.5 | 284.3 | 304.9 | 332.2 | 353.8 | 351.3 |
| Aircraft | 34.6 | 35.2 | 37.1 | 42.2 | 42.9 | 38.5 | 42.3 | 45.6 | 48.1 | 59.0 | 66.5 |
| Other Equipment | 50.6 | 60.3 | 64.3 | 73.5 | 81.1 | 63.0 | 62.9 | 72.3 | 80.4 | 82.5 | 81.4 |
| Structures | 424.1 | 479.4 | 485.5 | 536.9 | 520.9 | 494.7 | 517.5 | 543.3 | 543.4 | 557.3 | 567.4 |
| Commercial & Health | 95.8 | 103.8 | 107.5 | 121.3 | 134.1 | 157.9 | 162.9 | 163.8 | 164.3 | 173.8 | 181.9 |
| Manufacturing | 40.6 | 46.8 | 48.7 | 55.0 | 73.7 | 69.9 | 59.3 | 54.7 | 55.2 | 55.4 | 57.0 |
| Power & Communication | 84.6 | 102.4 | 97.8 | 112.5 | 108.7 | 109.0 | 107.3 | 106.4 | 94.1 | 82.6 | 76.6 |
| Mining & Petroleum | 136.7 | 152.9 | 155.4 | 166.0 | 117.7 | 66.9 | 94.8 | 122.2 | 130.2 | 139.1 | 139.7 |
| Other | 66.5 | 73.6 | 76.1 | 82.3 | 90.0 | 96.5 | 98.2 | 101.0 | 104.0 | 110.9 | 116.8 |
| Residential Fixed Investment | 382.5 | 432.0 | 485.5 | 504.2 | 555.3 | 591.3 | 611.1 | 609.2 | 594.4 | 610.2 | 618.5 |
| Exports | 2119.0 | 2191.3 | 2269.6 | 2367.0 | 2380.6 | 2378.1 | 2450.1 | 2546.9 | 2617.1 | 2750.0 | 2855.3 |
| Imports | 2687.1 | 2759.9 | 2802.4 | 2944.7 | 3105.5 | 3164.4 | 3308.7 | 3459.1 | 3543.3 | 3804.3 | 4086.1 |
| Federal Government | 1311.1 | 1286.5 | 1215.3 | 1183.2 | 1183.0 | 1187.8 | 1196.4 | 1227.5 | 1286.9 | 1299.0 | 1288.6 |
| State & Local Government | 1892.2 | 1850.5 | 1845.3 | 1848.1 | 1903.9 | 1942.8 | 1932.3 | 1947.6 | 1976.3 | 2004.1 | 2028.8 |

Table 3. Quarterly Summary of the Forecast of the U.S.

| | Idbic | . J. C | * uai t | City | Juiii | illal y | OI C | | 71 6 6 | 131 01 | tile | 0.5. | | | | |
|---|-------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|-------------|-------------|--------------|-------------|----------------|----------------|-------------|
| | 2018Q1 | 2018Q2 | 2018Q3 | 2018Q4 | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 |
| | | | | | | | | | | | | | | | | |
| Composition of Real GDP, Percent Ch | • | | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.7 | 0.4 | 0.4 | 0.0 |
| Gross Domestic Product Final Sales of Domestic Product | 2.2 1.9 | 4.2 5.4 | 3.4 1.0 | 2.2 2.1 | 3.2 2.5 | 3.2 3.4 | 3.2 3.3 | 3.3 3.5 | 2.4 2.7 | 3.2 3.3 | 2.9 3.0 | 3.0 3.2 | 2.7 2.9 | 2.4 2.5 | 2.4 2.6 | 2.3 2.5 |
| Total Consumption | 0.5 | 3.8 | 3.5 | 2.5 | 1.2 | 3.5 | 3.2 | 3.8 | 3.7 | 3.8 | 3.9 | 4.3 | 4.0 | 3.6 | 3.5 | 3.3 |
| Durables | -2.0 | 8.6 | 3.7 | 3.6 | -5.3 | 10.0 | 5.6 | 7.3 | 6.2 | 7.3 | 7.7 | 8.4 | 7.9 | 6.2 | 6.2 | 5.9 |
| Nondurables | 0.1 | 4.0 | 4.6 | 2.1 | 1.7 | 4.4 | 3.1 | 2.9 | 3.1 | 3.0 | 3.0 | 3.5 | 2.8 | 2.9 | 2.8 | 2.6 |
| Services | 1.0 | 3.0 | 3.2 | 2.4 | 2.0 | 2.3 | 2.9 | 3.5 | 3.5 | 3.5 | 3.7 | 3.9 | 3.8 | 3.4 | 3.3 | 3.1 |
| Nonresidential Fixed Investment | 11.5 | 8.7 | 2.5 | 5.4 | 2.7 | 2.2 | 6.0 | 6.1 | 6.4 | 5.2 | 6.6 | 6.1 | 5.7 | 4.8 | 4.6 | 4.5 |
| Equipment & Software | 8.5 | 4.6 | 3.4 | 6.6 | 0.2 | -1.5 | 5.4 | 6.8 | 8.4 | 5.7 | 7.2 | 6.5 | 6.8 | 5.8 | 5.1 | 5.3 |
| Information Processing Equipment | 11.4 | 10.5 | 7.2 | -2.8 | 0.8 | 1.0 | 4.3 | 4.9 | 8.4 | 7.0 | 4.8 | 8.8 | 7.8 | 7.6 | 6.7 | 6.7 |
| Computers & Peripherals | 28.7 | 15.6 | -2.3 | -15.1 | 3.9 | 9.6 | 5.8 | 5.2 | 5.7 | 6.0 | 7.0 | 7.9 | 8.2 | 5.4 | 4.8 | 4.8 |
| Communications Equipment Industrial Equipment | 4.2 6.8 | 11.5 -3.2 | 12.8 9.5 | 1.4 5.5 | 3.9 1.3 | -7.6 -5.2 | 3.2 -0.3 | 5.9 4.6 | 11.4 9.7 | 8.9 6.5 | 5.7 2.7 | 10.4 10.5 | 8.8 9.0 | 9.0 9.6 | 7.6 4.3 | 7.4 7.6 |
| Transportation Equipment | 15.0 | 3.8 | -0.8 | 13.4 | 9.2 | 5.6 | 17.1 | 14.2 | 0.2 | 5.7 | 8.4 | -8.6 | 0.1 | -5.1 | 0.9 | 7.7 |
| Aircraft | 76.9 | -8.8 | -19.0 | 58.9 | -47.0 | 49.6 | 65.3 | 23.7 | 15.0 | 15.4 | 10.6 | 14.3 | 12.2 | 12.5 | 13.1 | 11.7 |
| Other Equipment | 2.0 | -2.4 | 42.2 | 5.3 | 9.4 | 8.5 | 9.7 | 7.7 | 0.1 | 5.2 | -7.5 | -6.0 | -1.4 | -10.1 | 10.4 | 27.0 |
| Structures | 13.9 | 14.5 | -3.4 | -3.9 | -0.8 | 0.7 | 1.9 | 3.0 | 3.0 | 2.6 | 2.5 | 2.6 | 1.6 | 1.0 | 1.6 | 0.8 |
| Commercial & Health Care | 14.0 | -4.6 | -5.6 | -6.9 | 6.8 | 2.6 | 2.2 | 3.6 | 7.0 | 9.7 | 6.5 | 6.3 | 4.0 | 2.8 | 2.5 | 3.8 |
| Manufacturing | -6.4 | -20.5 | 16.1 | 2.1 | -7.1 | 7.8 | 2.8 | 2.7 | 5.5 | -9.0 | -5.7 | 1.2 | 9.2 | 4.3 | 9.3 | -0.1 |
| Power & Communication | 22.9 | 10.6 | -8.7 | -14.1 | -6.3 | -15.4 | -24.4 | -10.8 | -20.3 | -1.5 | 1.6 | -7.8 | -5.5 | -10.6 | -12.6 | -14.3 |
| Mining & Petroleum | 31.0 | 95.7 | -10.4 | -2.7 | -1.1 | 6.6 | 22.7 | 11.8 | 7.7 | -1.1 | -1.6 | 3.1 | -3.3 | 1.5 | 4.5 | 2.9 |
| Other | 2.2 | 4.4 | 5.1 | 6.9 | -2.8 | 3.5 | 4.5 | 3.9 | 11.5 | 6.2 | 6.1 | 5.6 | 5.2 | 5.0 | 4.5 | 5.3 |
| Residential Fixed Investment | -3.4 3.6 | -1.3 9.3 | -3.6 -4.9 | -4.7 1.0 | -2.8 3.7 | -3.5 2.4 | 0.8 6.2 | 4.7 5.9 | 4.2 5.4 | 2.9 4.9 | 1.7 4.5 | 1.7 3.7 | 0.3 3.7 | 0.6 3.6 | 2.2 3.6 | 2.9 3.7 |
| Exports Imports | 3.0 | -0.6 | 9.3 | 1.8 2.0 | -3.7 | 3.5 | 6.4 | 8.1 | 7.9 | 7.6 | 7.6 | 7.5 | 7.6 | 7.5 | 6.9 | 5.7 6.6 |
| Federal Government | 2.6 | 3.7 | 3.5 | 1.1 | 0.0 | 16.8 | 5.5 | 4.5 | -7.1 | 4.0 | -2.1 | -1.8 | -0.6 | -0.7 | -0.7 | -1.2 |
| State & Local Government | 0.9 | 1.8 | 2.0 | -1.3 | 3.9 | 0.9 | 1.1 | 1.2 | 1.6 | 1.7 | 1.4 | 1.6 | 0.9 | 1.3 | 1.1 | 1.0 |
| | | | | | | | | | | | | | | | | |
| Billions of Dollars | | | | | | | | | | | | | | | | |
| Real GDP | 18324.0 | 18511.6 | 18665.0 | | 18912.3 | 19060.5 | 19212.8 | 19369.9 | 19487.1 | 19639.5 | 19781.5 | 19927.7 | 20059.6 | 20179.8 | 20300.9 | |
| Nominal GDP | 20041.0 | 20411.9 | 20658.2 | 20865.1 | 21062.7 | 21336.3 | 21619.5 | 21917.3 | 22179.0 | 22480.8 | 22776.7 | 23075.4 | 23375.9 | 23649.3 | 23929.7 | 24208.6 |
| Driver & Manage Barrant Change Ann | al Data | | | | | | | | | | | | | | | |
| Prices & Wages, Percent Change, Anr GDP Deflator | 2.0 | 3.0 | 1.8 | 1.7 | 0.9 | 2.0 | 2.1 | 2.2 | 2.4 | 2.3 | 2.4 | 2.3 | 2.6 | 2.3 | 2.3 | 2.4 |
| Consumer Prices | 3.2 | 2.1 | 2.0 | 1.7 | 0.9 | 4.4 | 3.0 | 2.2 | 1.9 | 1.7 | 2.4 | 1.7 | 3.4 | 1.8 | 1.8 | 2.4 |
| Excl. Food & Energy | 2.7 | 1.9 | 2.0 | 2.2 | 2.3 | 2.1 | 2.3 | 2.3 | 2.5 | 2.4 | 2.4 | 2.5 | 2.5 | 2.3 | 2.3 | 2.4 |
| Producer Prices, Finished Goods | 3.8 | 2.7 | 2.0 | 0.5 | -2.5 | 6.4 | 2.6 | 2.4 | 1.7 | 1.1 | 1.8 | 1.2 | 2.9 | 1.7 | 1.3 | 1.7 |
| Employment Cost Index - Total Comp. | 4.0 | 2.4 | 3.0 | 2.4 | 2.5 | 2.3 | 2.4 | 3.0 | 3.2 | 3.8 | 3.3 | 3.4 | 3.6 | 3.7 | 3.7 | 3.6 |
| | | | | | | | | | | | | | | | | |
| Other Key Measures | | | | | | | | | | | | | | | | |
| Oil - WTI (\$ per barrel) | 62.9 | 68.0 | 69.8 | 58.9 | 54.8 | 65.6 | 66.5 | 67.4 | 68.1 | 68.8 | 69.5 | 70.0 | 70.5 | 70.9 | 71.3 | 71.8 |
| Productivity (% change) | 0.7 | 2.9 | 1.9 | 1.3 | 3.6 | 0.8 | 2.2 | 2.3 | 1.5 | 2.1 | 2.6 | 2.2 | 2.0 | 1.9 | 2.1 | 2.2 |
| Industrial Production (% change) Factory Operating Rate | 2.3 76.1 | 4.6 76.4 | 5.2 76.9 | 4.0 77.0 | -0.3 76.6 | 1.5 77.1 | 3.6 77.7 | 2.5 77.8 | 0.7 77.2 | 1.4 76.9 | 1.6 76.6 | 1.6 76.3 | 1.1 76.0 | 1.0 75.7 | 1.1 75.4 | 1.2 75.2 |
| Nonfarm Inven. Chg. (Bil. of 2009 \$) | 35.9 | -31.0 | 95.4 | 103.3 | 135.5 | 120.9 | 117.8 | 101.9 | 87.8 | 82.0 | 76.0 | 66.1 | 56.2 | 50.0 | 43.5 | 37.3 |
| Consumer Sentiment Index | 98.9 | 98.3 | 98.1 | 98.1 | 94.5 | 99.8 | 100.8 | 101.8 | 103.0 | 104.3 | 105.8 | 107.4 | 108.4 | 109.5 | 110.0 | 110.3 |
| Light Vehicle Sales (Million units) | 17.1 | 17.2 | 16.9 | 17.5 | 16.9 | 16.9 | 17.0 | 17.2 | 17.1 | 17.1 | 17.2 | 17.3 | 17.4 | 17.4 | 17.3 | 17.3 |
| Housing Starts (Million units) | 1.3 | 1.3 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.4 | 1.4 | 1.4 |
| Existing House Sales (Million units) | 4.9 | 4.8 | 4.7 | 4.6 | 4.6 | 4.8 | 4.7 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.9 |
| Unemployment Rate (%) | 4.1 | 3.9 | 3.8 | 3.8 | 3.9 | 3.6 | 3.4 | 3.2 | 3.1 | 3.0 | 3.1 | 3.1 | 3.1 | 3.2 | 3.2 | 3.3 |
| Payroll Employment (% change) | 1.8 | 1.9 | 1.8 | 1.7 | 1.7 | 1.7 | 1.3 | 1.0 | 1.0 | 1.9 | 0.3 | 0.8 | 1.0 | 1.0 | 0.9 | 0.6 |
| Federal Surplus (NIPA Bil. \$) | -969.9 | -993.7 | -960.6 | -1002.2 | -1077.0 | -1082.2 | -1085.6 | -1085.7 | -1071.6 | -1078.0 | -1069.4 | -1063.3 | -1082.3 | -1086.2 | -1087.1 | -1091.9 |
| Current Account Balance (Bil. \$) | -495.7 | -414.3 | -506.4 | -537.5 | -491.4 | -555.7 | -605.5 | -661.0 | -692.2 | -735.4 | -781.2 | -821.9 | -880.1 | -921.0 | -952.9 | -990.7 |
| Financial Markets, NSA | | | | | | | | | | | | | | | | |
| Federal Funds Rate (%) | 1.4 | 1.7 | 1.9 | 2.2 | 2.4 | 2.4 | 2.4 | 2.5 | 2.9 | 3.2 | 3.1 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 |
| 3-Month Treasury Bill Rate (%) | 1.6 | 1.8 | 2.0 | 2.3 | 2.4 | 2.5 | 2.6 | 2.7 | 2.9 | 3.2 | 3.3 | 3.4 | 3.5 | 3.5 | 3.5 | 3.5 |
| 1-Year Treasury Note Yield (%) | 1.9 | 2.3 | 2.5 | 2.7 | 2.5 | 2.5 | 2.6 | 2.8 | 3.0 | 3.2 | 3.4 | 3.5 | 3.5 | 3.5 | 3.5 | 3.6 |
| 5-Year Treasury Note Yield (%) | 2.5 | 2.8 | 2.8 | 2.9 | 2.5 | 2.6 | 2.7 | 2.9 | 3.1 | 3.3 | 3.5 | 3.6 | 3.6 | 3.6 | 3.6 | 3.7 |
| 10-Year Treasury Note Yield (%) | 2.8 | 2.9 | 2.9 | 3.0 | 2.7 | 2.7 | 2.8 | 2.9 | 3.1 | 3.4 | 3.5 | 3.6 | 3.7 | 3.7 | 3.7 | 3.7 |
| 30-Year Treasury Note Yield (%) | 3.0 | 3.1 | 3.1 | 3.3 | 3.0 | 3.0 | 3.2 | 3.3 | 3.5 | 3.8 | 3.9 | 4.0 | 4.1 | 4.1 | 4.1 | 4.1 |
| 30-Year Fixed Mortgage Rate (%) | 4.3 | 4.5 | 4.6 | 4.8 | 4.4 | 4.3 | 4.5 | 4.6 | 4.7 | 4.9 | 5.1 | 5.2 | 5.2 | 5.3 | 5.3 | 5.3 |
| S&P 500 Stock Index | 2732.6 | 2703.2 | 2851.0 | 2692.0 | 2722.1 | 2919.2 | 3042.8 | 3141.8 | 3226.1 | 3284.6 | 3320.5 | 3336.2 | 3365.3 | 3392.9 | 3416.3 | 3436.5 |
| (% change) Exchange Rate, Major Trading Partners | 21.1 1.2 | -4.2 1.2 | 23.7 1.2 | -20.5 1.2 | 4.5 1.2 | 32.3 1.2 | 18.0 1.2 | 13.7 1.2 | 11.2 1.2 | 7.5 1.2 | 4.4 1.2 | 1.9 1.2 | 3.5 1.2 | 3.3 1.2 | 2.8 1.2 | 2.4 1.2 |
| (%change (negative = depreciation)) | -11.9 | 10.5 | 8.9 | 6.1 | -0.2 | 0.1 | -3.7 | 0.8 | -0.3 | -0.3 | 1.1 | 1.8 | -1.2 | -1.8 | -1.7 | -0.4 |
| (/schange (negative = depressation// | | | 0.0 | 0 | 0.2 | 0 | 0 | 0.0 | 0.0 | 0.0 | | | | | ••• | 0 |
| Incomes | | | | | | | | | | | | | | | | |
| Personal Income (Bil. of \$) | 17319.2 | 17466.7 | 17657.3 | | 18033.5 | 18193.0 | 18408.6 | 18681.2 | 18982.7 | 19269.7 | 19535.4 | 19812.8 | | 20374.7 | 20632.8 | 20888.7 |
| (% change) | 5.2 | 3.5 | 4.4 | 5.3 | 3.3 | 3.6 | 4.8 | 6.1 | 6.6 | 6.2 | 5.6 | 5.8 | 6.2 | 5.3 | 5.2 | 5.1 |
| Disposable Income (Bil. of \$) | | 15431.4 | | 15815.3 | 15931.4 | 16062.6 | | | | | | 17444.8 | | | 18162.5 | |
| (% change) | 7.0 | 3.8 | 4.2 | 5.8 | 3.0 | 3.3 | 4.6 | 5.8 | 6.4 | 5.9 | 5.5 | 5.7 | 6.2 | 5.3 | 5.1 | 5.0 |
| Real Disposable Income (Bil. of 2009 \$) | 14219.8 | 14282.0 | 14374.8 | 14526.7 | 14611.9 2.4 | 14632.7 0.6 | 14719.7 2.4 | 14848.2 3.5 | 15009.8 4.4 | 15158.3 | 15281.4 | 15425.6 | 15562.0 | 15684.7 3.2 | 15804.2 3.1 | 15915.6 |
| (% change) Saving Rate (%) | 4.4 7.2 | 1.8 6.7 | 2.6 6.4 | 4.3 6.8 | 7.0 | 6.3 | 6.1 | 6.0 | 4.4 6.1 | 4.0 6.2 | 6.0 | 3.8 5.9 | 3.6 5.8 | 5.7 | 3.1 5.7 | 2.9 5.6 |
| After-Tax Profits (Billions of \$) | 1899.0 | 1962.3 | 1980.2 | 1946.0 | 2028.9 | 2114.7 | 2123.7 | 2132.5 | 2113.6 | 2106.9 | 2133.6 | 2146.2 | 2173.1 | 2185.5 | 2199.5 | 2220.2 |
| (% change) | 38.4 | 14.0 | 3.7 | -6.7 | 18.2 | 18.0 | 1.7 | 1.7 | -3.5 | -1.3 | 5.2 | 2.4 | 5.1 | 2.3 | 2.6 | 3.8 |
| | | | | | | | | | | | | | | | | |

Table 4. Quarterly Gross Domestic Product

2018Q1 2018Q2 2018Q3 2018Q4 2019Q1 2019Q2 2019Q3 2019Q4 2020Q1 2020Q2 2020Q3 2020Q4 2021Q1 2021Q2 2021Q3 2021Q4

Real GDP Billions 2009 \$ Gross Domestic Product 18324.0 18511.6 18665.0 18765.3 18912.3 19060.5 19212.8 19369.9 19487.1 19639.5 19781.5 19927.7 20059.6 20179.8 20300.9 20418.2 Final Sales of Domestic Product 18274 4 18515 9 18562 1 18657 2 18774 2 18934 1 19088 0 19253 8 19381 6 19538 4 19685 7 19840 9 19982 0 20107 9 20235 1 20358 0 **Total Consumption** 12722.8 12842.0 12953.3 13032.3 13071.0 13184.0 13288.7 13412.5 13534.3 13660.0 13792.3 13938.1 14075.2 14199.8 14321.3 14437.9 Durables 1628.2 1662.3 1677.4 1692.2 1669.2 1709.4 1732.9 1763.6 1790.4 1822.3 1856.6 1894.6 1931.1 1960.6 1990.1 2018.9 Nondurables 2858.6 2886.7 2919.2 3002.0 3046.3 3069.1 3140.0 2934.3 2947.0 2979.0 3023.4 3091.9 3118.6 3162.4 3184.0 3204.1 Services 8267.9 8329.8 8394.9 8444.9 8487.6 8536.3 8597.3 8672.5 8747.4 8822.3 8901.9 8988.2 9071.9 9148.3 9222.5 9293 8 Nonresidential Fixed Investment 2654.0 2710.1 2727.0 2763.3 2782.0 2797.0 2837.9 2880.3 2925.4 2963.0 3010.5 3055.2 3097.7 3134.6 3170.0 3204.8 Equipment & Software 1250.9 1358.2 1447.5 1264.9 1275.6 1296.1 1296.7 1292.0 1309.2 1331.0 1377.3 1401.6 1423.9 1468.1 1486.4 1505.8 Information Processing Equipment 490.5 502.9 511.8 508.1 509.2 510.4 515.9 522.1 532.8 541.8 548.2 559.8 570.4 581.0 590.5 600.0 Computers & Peripherals 121.3 125.7 125.0 120.0 121.2 124.0 125.7 127.3 129.1 131.0 133.2 135.8 138.5 140.3 142.0 143.6 Communications Equipment 222.9 229.1 236.1 236.9 239.1 234.5 236.3 239.7 246.3 251.6 255.1 261.5 267.1 272.9 277.9 282.9 238.5 246.0 Industrial Equipment 236.6 242.0 245.3 242.8 242.6 245.3 251.1 255.1 256.8 263.2 269.0 275.2 278.1 283.3 Transportation Equipment 300.7 303.5 302.9 312.6 319.6 323.9 337.0 348.4 348.5 353.4 360.6 352.6 352.7 348.1 348.9 355.4 Aircraft 46.2 45.2 42.9 48.1 41.1 45.4 51.5 54.3 56.2 58.3 59.7 61.8 63.6 65.5 67.5 69.4 69.3 68.8 75.2 76.1 77.9 79.5 81.3 82.8 82.9 83.9 82.3 81.0 80.7 78.6 80.6 85.6 Other Equipment Structures 533.3 551.7 546.9 541.5 540.4 541.4 543.9 547.8 552.0 555.6 559.0 562.7 564.9 566.4 568.6 569.7 Commercial & Health 167.2 162.7 168.9 175.5 180.0 182.3 184.1 165.2 162.9 160.0 163.7 164.6 166.0 172.8 178.2 181.2 56.0 52.9 55.2 54.2 57.8 Manufacturing 54.9 55.2 55.6 56.0 56.7 55.4 54.6 54.7 56.0 56.6 57.8 Power & Communication 106.5 109.3 106.8 102.8 101.2 97.0 90.5 87.9 83.1 82.8 83.1 81.4 80.3 78.1 75.5 72.6 Mining & Petroleum 109.2 129.1 125.6 124.8 124.4 126.4 133.0 136.8 139.4 139.0 138.4 139.5 138.3 138.8 140.4 141.4 Other 99.2 100.2 101.5 103.2 102.5 103.4 104.5 105.5 108.4 110.1 111.7 113.3 114.7 116.1 117.4 118.9 Residential Fixed Investment 615.3 613.2 607.7 600.4 596.1 590.8 591.9 598.8 605.0 609.3 611.9 614.6 615.0 616.0 619.3 623.7 Exports 2517.8 2574.2 2542.2 2553.3 2576.5 2591.8 2630.9 2669.1 2704.2 2736.8 2766.9 2792.0 2817.2 2842.5 2867.8 2893.8 Imports 3420.1 3415.2 3491.9 3509.0 3475.8 3505.8 3560.9 3630.9 3700.3 3769.0 3839.0 3909.1 3981.1 4053.6 4121.9 4187.9 Federal Government 1213.1 1224.0 1234.7 1238.1 1237.9 1286.9 1304.1 1318.6 1294.4 1307.1 1300.2 1294.3 1292.3 1290.2 1287.9 1283.8 State & Local Government 1937 7 1946.6 1956.3 1949.8 1968.6 1973.2 1978 6 1984 7 1992 5 2000.7 2007 7 2015.5 2020.0 2026.3 2032 0 2036.9

Table 5. Annual Employment

| | History | | | | | | | | | Forecast | |
|-------------------------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|----------|--------|
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Millions | | | | | | | | | | | |
| Total Nonfarm Employment | 131.94 | 134.17 | 136.37 | 138.94 | 141.83 | 144.35 | 146.61 | 149.06 | 151.49 | 153.27 | 154.65 |
| Private Nonfarm | 109.85 | 112.25 | 114.53 | 117.07 | 119.80 | 122.12 | 124.26 | 126.62 | 128.94 | 130.39 | 131.70 |
| Mining | 0.74 | 0.80 | 0.81 | 0.84 | 0.76 | 0.62 | 0.63 | 0.68 | 0.71 | 0.73 | 0.74 |
| Construction | 5.53 | 5.65 | 5.86 | 6.15 | 6.46 | 6.73 | 6.97 | 7.29 | 7.51 | 7.67 | 7.89 |
| Manufacturing | 11.73 | 11.93 | 12.02 | 12.18 | 12.34 | 12.35 | 12.44 | 12.69 | 12.83 | 12.75 | 12.56 |
| Trade, Transportation and Utilities | 25.01 | 25.41 | 25.79 | 26.32 | 26.83 | 27.20 | 27.40 | 27.65 | 27.79 | 27.73 | 27.63 |
| Transportation & Warehousing | 4.31 | 4.42 | 4.50 | 4.66 | 4.88 | 5.02 | 5.19 | 5.42 | 5.59 | 5.64 | 5.68 |
| Financial Activities | 7.70 | 7.78 | 7.89 | 7.98 | 8.12 | 8.29 | 8.45 | 8.57 | 8.71 | 8.81 | 8.94 |
| Education & Health | 20.32 | 20.77 | 21.08 | 21.44 | 22.03 | 22.64 | 23.19 | 23.67 | 24.30 | 24.52 | 24.89 |
| Professional & Business Services | 17.39 | 17.99 | 18.58 | 19.12 | 19.69 | 20.11 | 20.51 | 21.00 | 21.58 | 22.44 | 23.18 |
| Information | 2.67 | 2.67 | 2.70 | 2.73 | 2.75 | 2.79 | 2.81 | 2.83 | 2.81 | 2.79 | 2.86 |
| Leisure & Hospitality | 13.35 | 13.77 | 14.26 | 14.69 | 15.15 | 15.66 | 16.05 | 16.35 | 16.71 | 16.97 | 17.05 |
| Government | 22.09 | 21.92 | 21.85 | 21.88 | 22.03 | 22.23 | 22.35 | 22.45 | 22.56 | 22.88 | 22.95 |
| Federal | 2.86 | 2.82 | 2.77 | 2.73 | 2.76 | 2.79 | 2.80 | 2.80 | 2.80 | 2.92 | 2.80 |
| State & Local | 19.23 | 19.10 | 19.08 | 19.14 | 19.27 | 19.44 | 19.55 | 19.65 | 19.76 | 19.96 | 20.15 |
| | | | | | | | | | | | |
| Growth Rates | | | | | | | | | ı | | |
| Total Nonfarm Employment | 1.22 | 1.69 | 1.64 | 1.88 | 2.08 | 1.78 | 1.57 | 1.67 | 1.63 | 1.17 | 0.90 |
| Private Nonfarm | 1.84 | 2.19 | 2.02 | 2.22 | 2.34 | 1.94 | 1.76 | 1.90 | 1.83 | 1.13 | 1.01 |
| Mining | 13.57 | 2.08 | 3.06 | 3.84 | -16.55 | -15.07 | 7.65 | 9.75 | 1.04 | 2.95 | 1.72 |
| Construction | 1.93 | 1.74 | 4.36 | 5.61 | 5.07 | 3.33 | 3.63 | 4.65 | 2.47 | 2.43 | 2.70 |
| Manufacturing | 1.76 | 1.47 | 0.97 | 1.70 | 0.67 | -0.12 | 1.38 | 2.16 | 0.55 | -1.55 | -1.26 |
| Trade, Transportation and Utilities | 1.92 | 1.49 | 1.82 | 2.13 | 1.52 | 1.34 | 0.54 | 1.06 | 0.01 | -0.25 | -0.67 |
| Transportation & Warehousing | 2.30 | 2.64 | 1.92 | 4.58 | 3.86 | 3.01 | 3.79 | 4.29 | 2.32 | 0.35 | 0.57 |
| Financial Activities | 0.47 | 1.29 | 1.22 | 1.51 | 1.83 | 2.08 | 1.73 | 1.42 | 1.73 | 1.08 | 1.36 |
| Education & Health | 1.92 | 1.99 | 1.35 | 2.09 | 2.97 | 2.73 | 2.08 | 2.17 | 2.54 | 0.69 | 1.52 |
| Professional & Business Services | 3.52 | 3.33 | 3.23 | 3.05 | 2.85 | 1.79 | 2.01 | 2.70 | 3.21 | 4.08 | 2.56 |
| Information | -0.41 | -0.18 | 1.91 | 0.33 | 0.97 | 2.01 | 0.11 | 0.45 | -1.43 | -0.03 | 3.50 |
| Leisure & Hospitality | 2.80 | 3.11 | 3.62 | 2.94 | 3.46 | 2.92 | 2.25 | 2.04 | 1.57 | 1.70 | 0.77 |
| Government | -1.38 | -0.38 | -0.27 | 0.46 | 0.67 | 0.97 | 0.40 | 0.46 | 0.58 | 1.05 | 0.74 |
| Federal | -0.85 | -1.04 | -2.52 | -0.09 | 0.96 | 1.51 | -0.31 | 0.05 | -0.09 | 3.90 | 0.00 |
| State & Local | -1.46 | -0.28 | 0.06 | 0.54 | 0.63 | 0.90 | 0.50 | 0.52 | 0.68 | 1.12 | 0.85 |

Table 6. Quarterly Employment

Table 6. Quarterly Employment

| | 2018Q1 | 2018Q2 | 2018Q3 | 2018Q4 | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Employment (Millions) | | | | | | | | | | | | | | | | |
| Total Nonfarm Employment | 148.05 | 148.74 | 149.41 | 150.06 | 150.67 | 151.32 | 151.79 | 152.18 | 152.58 | 153.31 | 153.43 | 153.75 | 154.13 | 154.52 | 154.86 | 155.09 |
| Private Nonfarm | 125.65 | 126.31 | 126.93 | 127.57 | 128.17 | 128.78 | 129.23 | 129.57 | 129.86 | 130.22 | 130.55 | 130.91 | 131.24 | 131.58 | 131.89 | 132.09 |
| Mining | 0.66 | 0.68 | 0.69 | 0.70 | 0.71 | 0.71 | 0.71 | 0.71 | 0.72 | 0.72 | 0.73 | 0.73 | 0.73 | 0.74 | 0.74 | 0.74 |
| Construction | 7.18 | 7.26 | 7.33 | 7.39 | 7.44 | 7.50 | 7.53 | 7.57 | 7.60 | 7.64 | 7.69 | 7.75 | 7.81 | 7.86 | 7.91 | 7.96 |
| Manufacturing | 12.59 | 12.66 | 12.72 | 12.79 | 12.82 | 12.83 | 12.79 | 12.86 | 12.88 | 12.78 | 12.68 | 12.66 | 12.62 | 12.58 | 12.54 | 12.50 |
| Trade, Transportation and Utilities | 27.55 | 27.61 | 27.68 | 27.76 | 27.82 | 27.80 | 27.76 | 27.77 | 27.74 | 27.76 | 27.71 | 27.70 | 27.71 | 27.69 | 27.61 | 27.51 |
| Transportation & Warehousing | 5.34 | 5.39 | 5.44 | 5.50 | 5.54 | 5.56 | 5.63 | 5.63 | 5.63 | 5.63 | 5.64 | 5.65 | 5.66 | 5.68 | 5.68 | 5.68 |
| Financial Activities | 8.52 | 8.55 | 8.58 | 8.61 | 8.63 | 8.68 | 8.75 | 8.76 | 8.77 | 8.80 | 8.83 | 8.86 | 8.89 | 8.92 | 8.95 | 8.98 |
| Education & Health | 23.48 | 23.59 | 23.74 | 23.86 | 24.01 | 24.25 | 24.49 | 24.46 | 24.43 | 24.48 | 24.54 | 24.63 | 24.74 | 24.85 | 24.95 | 25.00 |
| Professional & Business Services | 20.77 | 20.93 | 21.07 | 21.22 | 21.31 | 21.51 | 21.60 | 21.90 | 22.11 | 22.30 | 22.55 | 22.79 | 22.98 | 23.11 | 23.25 | 23.37 |
| Information | 2.82 | 2.83 | 2.83 | 2.83 | 2.82 | 2.81 | 2.82 | 2.79 | 2.80 | 2.81 | 2.79 | 2.79 | 2.82 | 2.85 | 2.87 | 2.88 |
| Leisure & Hospitality | 16.23 | 16.30 | 16.38 | 16.50 | 16.66 | 16.70 | 16.73 | 16.76 | 16.84 | 16.96 | 17.06 | 17.04 | 16.97 | 17.00 | 17.08 | 17.17 |
| Government | 22.39 | 22.43 | 22.48 | 22.48 | 22.51 | 22.54 | 22.57 | 22.62 | 22.72 | 23.08 | 22.88 | 22.84 | 22.89 | 22.93 | 22.97 | 23.01 |
| Federal | 2.79 | 2.79 | 2.80 | 2.80 | 2.80 | 2.80 | 2.80 | 2.80 | 2.85 | 3.15 | 2.89 | 2.80 | 2.80 | 2.80 | 2.80 | 2.80 |
| State & Local | 19.60 | 19.64 | 19.69 | 19.68 | 19.71 | 19.74 | 19.77 | 19.82 | 19.87 | 19.93 | 19.99 | 20.04 | 20.09 | 20.14 | 20.18 | 20.21 |
| | | | | | | | | | | | | | | | | |
| Growth Rates | | | | | | | | | | | | | | | | |
| Total Nonfarm Employment | 1.74 | 1.88 | 1.79 | 1.74 | 1.64 | 1.71 | 1.26 | 1.03 | 1.04 | 1.90 | 0.32 | 0.84 | 0.99 | 1.00 | 0.90 | 0.60 |
| Private Nonfarm | 2.01 | 2.09 | 1.96 | 2.04 | 1.86 | 1.92 | 1.38 | 1.06 | 0.89 | 1.13 | 1.00 | 1.11 | 1.02 | 1.03 | 0.93 | 0.60 |
| Mining | 9.38 | 13.98 | 7.99 | 6.18 | 3.66 | -2.01 | 2.60 | -0.19 | 4.75 | 2.41 | 2.69 | 1.81 | 0.46 | 3.22 | 2.12 | 1.04 |
| Construction | 6.55 | 4.74 | 3.91 | 3.07 | 3.09 | 2.75 | 1.98 | 1.96 | 1.63 | 2.26 | 2.56 | 3.19 | 3.03 | 2.63 | 2.60 | 2.43 |
| Manufacturing | 2.30 | 2.23 | 1.89 | 2.15 | 1.19 | 0.23 | -1.18 | 1.94 | 0.66 | -3.02 | -2.99 | -0.91 | -1.18 | -1.25 | -1.27 | -1.37 |
| Trade, Transportation and Utilities | 1.16 | 0.91 | 0.90 | 1.24 | 0.90 | -0.30 | -0.58 | 0.03 | -0.36 | 0.33 | -0.71 | -0.25 | 0.16 | -0.31 | -1.04 | -1.48 |
| Transportation & Warehousing | 4.92 | 3.76 | 3.77 | 4.72 | 2.74 | 1.72 | 4.87 | -0.04 | -0.11 | 0.31 | 0.64 | 0.54 | 0.94 | 0.86 | 0.57 | -0.11 |
| Financial Activities | 1.40 | 1.53 | 1.38 | 1.37 | 0.71 | 2.50 | 3.12 | 0.57 | 0.40 | 1.22 | 1.36 | 1.33 | 1.68 | 1.32 | 1.41 | 1.04 |
| Education & Health | 2.26 | 1.86 | 2.61 | 1.96 | 2.61 | 3.98 | 4.00 | -0.43 | -0.52 | 0.79 | 1.04 | 1.44 | 1.76 | 1.87 | 1.63 | 0.84 |
| Professional & Business Services | 2.20 | 3.03 | 2.79 | 2.77 | 1.69 | 3.91 | 1.65 | 5.59 | 3.93 | 3.55 | 4.44 | 4.41 | 3.33 | 2.31 | 2.39 | 2.19 |
| Information | -0.09 | 2.05 | -0.52 | 0.38 | -1.92 | -1.02 | 1.78 | -4.56 | 1.14 | 1.46 | -2.63 | -0.10 | 4.97 | 3.78 | 3.57 | 1.68 |
| Leisure & Hospitality | 1.51 | 1.82 | 1.97 | 2.87 | 3.93 | 1.09 | 0.57 | 0.69 | 2.05 | 2.90 | 2.24 | -0.37 | -1.70 | 0.91 | 1.74 | 2.12 |
| Government | 0.23 | 0.70 | 0.86 | 0.04 | 0.42 | 0.54 | 0.54 | 0.84 | 1.91 | 6.43 | -3.49 | -0.68 | 0.87 | 0.80 | 0.69 | 0.60 |
| Federal | -0.81 | 0.10 | 0.38 | 0.53 | -0.43 | 0.06 | 0.00 | 0.00 | 7.79 | 49.20 | -29.13 | -12.26 | 0.00 | 0.00 | 0.00 | 0.00 |
| State & Local | 0.38 | 0.79 | 0.93 | -0.03 | 0.54 | 0.61 | 0.61 | 0.96 | 1.10 | 1.15 | 1.13 | 1.09 | 0.99 | 0.91 | 0.79 | 0.69 |
| | | | | | | | | | | | | | | | | |

Table 7. Quarterly Implicit Price Deflators (2009=100)

| | 2018Q1 | 2018Q2 | 2018Q3 | 2018Q4 | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | | | | | | | | | | | | | | | |
| GDP | 109.3 | 110.2 | 110.7 | 111.1 | 111.4 | 111.9 | 112.5 | 113.2 | 113.8 | 114.5 | 115.1 | 115.8 | 116.5 | 117.2 | 117.9 | 118.6 |
| Consumption | 107.5 | 108.1 | 108.5 | 108.9 | 109.0 | 109.8 | 110.4 | 111.0 | 111.5 | 112.0 | 112.6 | 113.1 | 113.8 | 114.4 | 114.9 | 115.5 |
| Durables | 88.1 | 87.7 | 87.5 | 87.2 | 87.1 | 86.6 | 86.5 | 86.2 | 85.9 | 85.6 | 85.3 | 85.0 | 84.7 | 84.5 | 84.2 | 84.0 |
| Motor Vehicles | 97.6 | 97.3 | 98.1 | 98.2 | 97.8 | 97.7 | 97.9 | 98.1 | 98.2 | 98.4 | 98.6 | 98.8 | 99.0 | 99.1 | 99.3 | 99.5 |
| Furniture | 86.3 | 86.9 | 86.3 | 86.8 | 87.6 | 87.4 | 87.6 | 87.4 | 87.3 | 87.1 | 86.9 | 86.7 | 86.5 | 86.3 | 86.2 | 86.0 |
| Other Durables | 89.4 | 88.7 | 87.8 | 85.9 | 85.6 | 84.6 | 84.2 | 84.0 | 83.7 | 83.4 | 83.2 | 83.0 | 82.9 | 82.8 | 82.7 | 82.6 |
| Nondurables | 99.1 | 99.5 | 99.4 | 99.2 | 98.6 | 100.3 | 101.1 | 101.7 | 101.9 | 102.0 | 102.4 | 102.5 | 103.5 | 103.7 | 104.0 | 104.4 |
| Food | 103.1 | 103.4 | 103.5 | 103.6 | 104.3 | 105.1 | 105.8 | 106.3 | 106.9 | 107.4 | 107.9 | 108.4 | 108.9 | 109.4 | 109.9 | 110.3 |
| Clothing & Shoes | 100.2 | 100.3 | 98.6 | 98.4 | 99.1 | 98.8 | 99.1 | 99.1 | 99.1 | 99.1 | 99.1 | 99.1 | 99.1 | 99.1 | 99.2 | 99.2 |
| Gasoline & Oil | 77.0 | 77.6 | 79.3 | 77.8 | 71.7 | 81.5 | 84.9 | 86.2 | 85.0 | 83.3 | 83.9 | 82.0 | 85.9 | 84.8 | 83.7 | 83.8 |
| Fuel | 78.9 | 79.9 | 83.3 | 82.3 | 77.4 | 85.1 | 87.0 | 89.8 | 89.6 | 89.3 | 90.5 | 89.8 | 94.2 | 93.3 | 92.7 | 93.3 |
| Services | 113.8 | 114.6 | 115.3 | 116.1 | 116.5 | 117.2 | 117.8 | 118.6 | 119.4 | 120.3 | 121.1 | 121.9 | 122.7 | 123.6 | 124.4 | 125.2 |
| Housing | 118.0 | 119.1 | 120.1 | 121.0 | 122.0 | 123.1 | 124.1 | 125.1 | 126.1 | 127.1 | 128.0 | 129.0 | 129.9 | 130.8 | 131.7 | 132.6 |
| Electricity | 109.0 | 108.1 | 106.7 | 108.7 | 108.3 | 108.7 | 109.1 | 109.4 | 109.8 | 110.0 | 110.7 | 111.0 | 111.9 | 112.3 | 112.7 | 113.3 |
| Natural Gas | 105.6 | 105.0 | 103.0 | 103.4 | 104.9 | 104.4 | 105.0 | 104.5 | 104.1 | 103.3 | 104.3 | 104.0 | 105.9 | 106.3 | 106.1 | 106.7 |
| Water & Sewer | 122.9 | 124.3 | 125.4 | 127.1 | 127.3 | 128.4 | 129.7 | 130.5 | 131.4 | 132.2 | 133.2 | 134.3 | 135.5 | 136.9 | 138.4 | 139.8 |
| Telephone | 85.8 | 85.8 | 85.8 | 84.6 | 83.8 | 83.4 | 83.4 | 83.4 | 83.8 | 84.0 | 84.3 | 84.6 | 84.8 | 85.0 | 85.2 | 85.4 |
| Transportation | 105.4 | 106.3 | 107.2 | 108.7 | 108.0 | 108.4 | 109.0 | 109.7 | 110.3 | 110.8 | 111.4 | 112.0 | 112.6 | 113.2 | 113.9 | 114.4 |
| Other Services | 113.7 | 114.3 | 115.3 | 116.3 | 117.1 | 118.0 | 118.2 | 118.8 | 119.4 | 120.1 | 120.9 | 121.7 | 122.4 | 123.1 | 123.8 | 124.5 |

Table 8. Percent Change in Implicit Price Deflators

| | 2018Q1 | 2018Q2 | 2018Q3 | 2018Q4 | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | | | | | | | | | | | | | | | |
| GDP | 2.0 | 3.0 | 1.8 | 1.7 | 0.9 | 2.0 | 2.1 | 2.2 | 2.4 | 2.3 | 2.4 | 2.3 | 2.6 | 2.3 | 2.3 | 2.4 |
| Consumption | 2.5 | 2.0 | 1.6 | 1.5 | 0.6 | 2.7 | 2.2 | 2.2 | 1.9 | 1.8 | 2.1 | 1.8 | 2.5 | 2.0 | 1.9 | 2.1 |
| Durables | -1.1 | -1.6 | -0.9 | -1.5 | -0.4 | -2.3 | -0.7 | -1.2 | -1.5 | -1.5 | -1.4 | -1.3 | -1.2 | -1.2 | -1.2 | -1.2 |
| Motor Vehicles | -0.5 | -1.4 | 3.2 | 0.4 | -1.4 | -0.6 | 0.9 | 0.9 | 0.5 | 0.7 | 0.8 | 0.8 | 0.7 | 0.6 | 0.6 | 0.9 |
| Furniture | 0.2 | 2.9 | -2.6 | 2.3 | 3.5 | -0.8 | 1.0 | -1.0 | -0.6 | -0.9 | -1.0 | -0.9 | -0.6 | -0.8 | -0.8 | -0.8 |
| Other Durables | 1.9 | -2.8 | -4.3 | -8.4 | -1.3 | -4.3 | -2.1 | -0.9 | -1.3 | -1.4 | -1.1 | -1.0 | -0.5 | -0.5 | -0.6 | -0.6 |
| Nondurables | 3.9 | 1.4 | 0.0 | -1.0 | -2.4 | 7.3 | 3.2 | 2.1 | 8.0 | 0.5 | 1.7 | 0.4 | 3.8 | 1.0 | 1.0 | 1.6 |
| Food | 0.2 | 1.2 | 0.4 | 0.3 | 3.0 | 3.0 | 2.6 | 2.1 | 2.1 | 2.0 | 1.8 | 1.8 | 1.8 | 2.0 | 1.8 | 1.7 |
| Clothing & Shoes | 8.8 | 0.5 | -6.9 | -0.5 | 2.6 | -1.0 | 1.0 | 0.1 | 0.2 | 0.0 | -0.1 | -0.1 | 0.0 | 0.2 | 0.1 | 0.0 |
| Gasoline & Oil | 20.0 | 3.1 | 9.1 | -7.3 | -27.8 | 67.0 | 17.3 | 6.4 | -5.5 | -7.8 | 3.0 | -8.8 | 20.2 | -5.0 | -5.1 | 8.0 |
| Fuel | 38.9 | 5.2 | 18.0 | -4.6 | -21.9 | 46.3 | 9.4 | 13.3 | -1.0 | -1.3 | 5.4 | -2.9 | 21.2 | -3.8 | -2.7 | 3.0 |
| Services | 2.6 | 2.7 | 2.5 | 2.7 | 1.6 | 2.2 | 2.3 | 2.7 | 2.8 | 2.7 | 2.8 | 2.7 | 2.8 | 2.8 | 2.7 | 2.7 |
| Housing | 3.3 | 3.6 | 3.4 | 3.1 | 3.5 | 3.6 | 3.3 | 3.2 | 3.3 | 3.1 | 3.0 | 2.9 | 2.8 | 2.9 | 2.8 | 2.8 |
| Electricity | 1.5 | -3.2 | -4.9 | 7.4 | -1.1 | 1.5 | 1.2 | 1.2 | 1.4 | 1.0 | 2.3 | 1.3 | 3.0 | 1.8 | 1.4 | 2.0 |
| Natural Gas | 3.9 | -2.4 | -7.2 | 1.4 | 6.1 | -2.1 | 2.4 | -1.9 | -1.4 | -3.2 | 3.9 | -1.0 | 7.4 | 1.5 | -0.7 | 2.2 |
| Water & Sewer | 3.0 | 4.4 | 3.7 | 5.7 | 0.5 | 3.6 | 3.9 | 2.6 | 2.7 | 2.7 | 2.9 | 3.4 | 3.5 | 4.2 | 4.4 | 4.1 |
| Telephone | -1.4 | 0.1 | -0.2 | -5.5 | -3.7 | -1.5 | 0.0 | -0.1 | 1.8 | 1.2 | 1.3 | 1.2 | 1.1 | 1.1 | 0.8 | 0.9 |
| Transportation | -0.9 | 3.7 | 3.3 | 5.7 | -2.4 | 1.4 | 2.4 | 2.5 | 2.1 | 2.0 | 2.0 | 2.0 | 2.3 | 2.4 | 2.2 | 2.0 |
| Other Services | 3.9 | 2.0 | 3.4 | 3.8 | 2.5 | 3.2 | 0.8 | 1.9 | 2.1 | 2.4 | 2.6 | 2.7 | 2.5 | 2.2 | 2.2 | 2.3 |

Table 9. Annual Implicit Price Deflators (2009=100)

| | | | | History | | | | | F | orecasi | <u>t</u> |
|------------------|-------|-------|-------|---------|-------|-------|-------|-------|-------|---------|----------|
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | | | | | | | | | 1 | | |
| GDP | 98.1 | 100.0 | 101.8 | 103.7 | 104.8 | 105.9 | 107.9 | 110.3 | 112.2 | 114.8 | 117.5 |
| Consumption | 98.1 | 100.0 | 101.3 | 102.9 | 103.1 | 104.2 | 106.1 | 108.2 | 110.0 | 112.3 | 114.7 |
| Durables | 101.3 | 100.0 | 98.0 | 95.5 | 93.4 | 91.2 | 89.1 | 87.6 | 86.6 | 85.4 | 84.4 |
| Motor Vehicles | 98.7 | 100.0 | 100.5 | 100.6 | 100.5 | 99.4 | 98.2 | 97.8 | 97.9 | 98.5 | 99.2 |
| Furniture | 100.0 | 100.0 | 98.1 | 94.7 | 92.4 | 90.0 | 87.5 | 86.6 | 87.5 | 87.0 | 86.2 |
| Other Durables | 100.8 | 100.0 | 97.9 | 94.4 | 90.8 | 90.4 | 89.5 | 87.9 | 84.6 | 83.3 | 82.7 |
| Nondurables | 97.7 | 100.0 | 100.1 | 100.6 | 97.1 | 95.9 | 97.4 | 99.3 | 100.4 | 102.2 | 103.9 |
| Food | 97.7 | 100.0 | 101.0 | 102.9 | 104.1 | 103.0 | 102.9 | 103.4 | 105.4 | 107.6 | 109.6 |
| Clothing & Shoes | 96.5 | 100.0 | 101.0 | 101.3 | 100.0 | 99.8 | 99.2 | 99.4 | 99.0 | 99.1 | 99.2 |
| Gasoline & Oil | 96.6 | 100.0 | 97.2 | 93.5 | 68.7 | 61.0 | 68.9 | 77.9 | 81.1 | 83.5 | 84.5 |
| Fuel | 98.6 | 100.0 | 98.8 | 98.3 | 69.8 | 58.0 | 66.9 | 81.1 | 84.8 | 89.8 | 93.4 |
| Services | 97.8 | 100.0 | 102.3 | 104.9 | 106.8 | 109.3 | 112.0 | 115.0 | 117.5 | 120.7 | 124.0 |
| Housing | 97.8 | 100.0 | 102.3 | 105.0 | 108.2 | 111.8 | 115.6 | 119.5 | 123.6 | 127.6 | 131.2 |
| Electricity | 100.0 | 100.0 | 102.1 | 105.8 | 106.4 | 105.2 | 107.5 | 108.1 | 108.9 | 110.4 | 112.6 |
| Natural Gas | 110.8 | 100.1 | 104.9 | 112.3 | 99.0 | 96.6 | 104.3 | 104.2 | 104.7 | 103.9 | 106.2 |
| Water & Sewer | 95.0 | 100.0 | 104.4 | 108.1 | 112.8 | 116.8 | 120.7 | 124.9 | 129.0 | 132.8 | 137.6 |
| Telephone | 99.9 | 100.0 | 99.3 | 98.2 | 95.8 | 95.2 | 87.1 | 85.5 | 83.5 | 84.2 | 85.1 |
| Transportation | 98.1 | 100.0 | 101.0 | 102.3 | 102.5 | 103.4 | 104.7 | 106.9 | 108.8 | 111.1 | 113.5 |
| Other Services | 97.5 | 100.0 | 102.9 | 105.4 | 107.5 | 109.6 | 111.9 | 114.9 | 118.0 | 120.5 | 123.5 |

Table 10. Percent Change in Implicit Price Deflators

| | | | 1 | History | | | | | F | orecast | |
|------------------|------|------|------|---------|-------|------|------|------|------|---------|------|
| - | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | | | | | | | | | | | |
| GDP | 2.0 | 2.1 | 1.8 | 1.6 | 0.9 | 1.5 | 2.0 | 2.1 | 1.8 | 2.3 | 2.4 |
| Consumption | 2.7 | 1.8 | 1.2 | 1.2 | 0.3 | 1.6 | 1.8 | 1.9 | 1.9 | 1.9 | 2.1 |
| Durables | -0.3 | -1.6 | -2.2 | -2.6 | -2.0 | -2.9 | -1.9 | -1.3 | -1.1 | -1.4 | -1.2 |
| Motor Vehicles | 3.5 | 0.8 | 0.5 | -0.3 | -0.2 | -1.5 | -1.1 | 0.4 | 0.0 | 0.7 | 0.7 |
| Furniture | 0.0 | -0.2 | -2.9 | -3.0 | -2.4 | -2.8 | -3.0 | 0.7 | 0.7 | -0.9 | -0.8 |
| Other Durables | 2.5 | -2.1 | -2.5 | -3.6 | -4.0 | 0.5 | -1.0 | -3.4 | -2.2 | -1.2 | -0.5 |
| Nondurables | 5.9 | 1.9 | -0.6 | -0.4 | -3.1 | 0.4 | 1.6 | 1.1 | 2.5 | 0.8 | 1.8 |
| Food | 5.1 | 1.3 | 0.7 | 2.8 | 0.3 | -1.8 | 0.7 | 0.5 | 2.7 | 1.9 | 1.8 |
| Clothing & Shoes | 4.2 | 2.6 | 0.3 | -0.3 | -1.3 | 0.0 | -1.5 | 0.5 | 0.7 | 0.0 | 0.1 |
| Gasoline & Oil | 19.9 | 4.8 | -5.3 | -10.6 | -16.8 | 7.6 | 15.1 | 6.2 | 15.7 | -4.8 | 2.7 |
| Fuel | 26.2 | 3.4 | -0.3 | -8.8 | -29.1 | 8.5 | 17.3 | 14.4 | 11.8 | 0.1 | 4.4 |
| Services | 2.2 | 2.3 | 2.5 | 2.3 | 1.8 | 2.7 | 2.4 | 2.6 | 2.2 | 2.8 | 2.7 |
| Housing | 1.9 | 2.3 | 2.4 | 2.8 | 3.2 | 3.5 | 3.3 | 3.3 | 3.4 | 3.1 | 2.8 |
| Electricity | 2.6 | -0.7 | 3.1 | 3.1 | -0.6 | 0.4 | 2.3 | 0.2 | 0.7 | 1.5 | 2.1 |
| Natural Gas | -2.5 | -4.3 | 2.2 | 6.6 | -12.1 | 6.7 | 4.1 | -1.1 | 1.1 | -0.4 | 2.6 |
| Water & Sewer | 4.7 | 5.7 | 3.7 | 4.1 | 3.9 | 3.3 | 3.2 | 4.2 | 2.6 | 2.9 | 4.1 |
| Telephone | -2.3 | 8.0 | -1.0 | -2.4 | 0.0 | -3.0 | -7.7 | -1.8 | -1.3 | 1.4 | 1.0 |
| Transportation | 3.7 | 1.2 | 1.6 | 1.1 | -0.4 | 1.1 | 2.0 | 2.9 | 1.0 | 2.0 | 2.2 |
| Other Services | 2.9 | 2.3 | 3.1 | 2.3 | 1.8 | 2.0 | 2.1 | 3.3 | 2.1 | 2.4 | 2.3 |

Table 11. Personal Income and its Components

History

| | | | | | | | | | . 0.0000 | |
|------------|--|---|--|---|--|--|--|--|--|---|
| 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| ent Dollar | 'S | | | | | | | | | |
| 13326.8 | 14010.1 | 14181.1 | 14991.8 | 15719.5 | 16125.1 | 16830.9 | 17582.4 | 18329.1 | 19400.2 | 20502.2 |
| 8225.9 | 8566.7 | 8834.2 | 9248.1 | 9696.8 | 9956.2 | 10407.2 | 10855.9 | 11338.8 | 11961.1 | 12627.1 |
| 1107.3 | 1125.9 | 1194.7 | 1228.1 | 1272.8 | 1294.2 | 1348.1 | 1389.8 | 1429.0 | 1497.6 | 1580.6 |
| 1164.4 | 1286.4 | 1315.2 | 1377.5 | 1365.5 | 1381.8 | 1462.0 | 1541.8 | 1588.1 | 1653.0 | 1694.3 |
| 64.9 | 60.9 | 88.3 | 70.1 | 56.4 | 37.5 | 38.9 | 37.0 | 26.5 | 38.1 | 66.8 |
| 478.6 | 518.0 | 557.0 | 608.4 | 651.8 | 694.8 | 730.2 | 759.9 | 804.5 | 886.8 | 956.7 |
| 681.5 | 835.1 | 793.3 | 953.4 | 1033.3 | 1075.7 | 1108.6 | 1151.7 | 1191.1 | 1291.7 | 1370.9 |
| 1269.4 | 1330.5 | 1273.0 | 1347.8 | 1438.1 | 1440.9 | 1523.0 | 1616.5 | 1621.6 | 1711.9 | 1837.0 |
| 2358.7 | 2363.0 | 2424.3 | 2540.3 | 2683.0 | 2778.1 | 2859.7 | 2980.7 | 3185.0 | 3355.9 | 3524.8 |
| 423.9 | 437.2 | 578.0 | 607.1 | 635.6 | 658.5 | 693.3 | 729.9 | 768.3 | 806.9 | 848.4 |
| | | | | | | | | _ | | |
| 6.2 | 5.1 | 1.2 | 5.7 | 4.9 | 2.6 | 4.4 | 4.5 | 4.2 | 5.8 | 5.7 |
| 3.8 | 4.1 | 3.1 | 4.7 | 4.9 | 2.7 | 4.5 | 4.3 | 4.4 | 5.5 | 5.6 |
| 2.2 | 1.7 | 6.1 | 2.8 | 3.6 | 1.7 | 4.2 | 3.1 | 2.8 | 4.8 | 5.5 |
| 8.8 | 10.6 | 2.2 | 4.7 | -0.9 | 1.2 | 5.8 | 5.5 | 3.0 | 4.1 | 2.5 |
| 70.6 | -6.1 | 45.6 | -19.4 | -19.2 | -33.4 | 4.3 | -3.9 | -25.7 | 52.9 | 81.3 |
| 21.3 | 3.9 | 9.8 | 8.3 | 7.5 | 5.1 | 5.9 | 3.2 | 8.6 | 9.9 | 6.9 |
| 23.6 | 46.5 | -7.5 | 22.4 | 3.7 | 4.9 | 2.4 | 6.5 | 2.9 | 8.7 | 4.7 |
| 3.8 | 3.9 | -2.7 | 6.9 | 6.8 | 0.7 | 8.9 | 4.4 | 0.0 | 6.9 | 7.4 |
| 0.4 | 1.1 | 2.5 | 6.2 | 4.6 | 3.5 | 2.9 | 4.8 | 7.1 | 5.3 | 5.0 |
| -13.1 | 4.8 | 44.8 | 5.4 | 4.4 | 3.8 | 5.4 | 5.4 | 5.5 | 5.1 | 5.1 |
| | ent Dollar 13326.8 8225.9 1107.3 1164.4 64.9 478.6 681.5 1269.4 2358.7 423.9 6.2 3.8 2.2 8.8 70.6 21.3 23.6 3.8 0.4 | ent Dollars 13326.8 14010.1 8225.9 8566.7 1107.3 1125.9 1164.4 1286.4 64.9 60.9 478.6 518.0 681.5 835.1 1269.4 1330.5 2358.7 2363.0 423.9 437.2 6.2 5.1 3.8 4.1 2.2 1.7 8.8 10.6 70.6 -6.1 21.3 3.9 23.6 46.5 3.8 3.9 0.4 1.1 | ent Dollars 13326.8 14010.1 14181.1 8225.9 8566.7 8834.2 1107.3 1125.9 1194.7 1164.4 1286.4 1315.2 64.9 60.9 88.3 478.6 518.0 557.0 681.5 835.1 793.3 1269.4 1330.5 1273.0 2358.7 2363.0 2424.3 423.9 437.2 578.0 6.2 5.1 1.2 3.8 4.1 3.1 2.2 1.7 6.1 8.8 10.6 2.2 70.6 -6.1 45.6 21.3 3.9 9.8 23.6 46.5 -7.5 3.8 3.9 -2.7 0.4 1.1 2.5 | ent Dollars 13326.8 14010.1 14181.1 14991.8 8225.9 8566.7 8834.2 9248.1 1107.3 1125.9 1194.7 1228.1 1164.4 1286.4 1315.2 1377.5 64.9 60.9 88.3 70.1 478.6 518.0 557.0 608.4 681.5 835.1 793.3 953.4 1269.4 1330.5 1273.0 1347.8 2358.7 2363.0 2424.3 2540.3 423.9 437.2 578.0 607.1 6.2 5.1 1.2 5.7 3.8 4.1 3.1 4.7 2.2 1.7 6.1 2.8 8.8 10.6 2.2 4.7 70.6 -6.1 45.6 -19.4 21.3 3.9 9.8 8.3 23.6 46.5 -7.5 22.4 3.8 3.9 -2.7 6.9 0.4 1.1 2.5 6.2 | Part Dollars 13326.8 14010.1 14181.1 14991.8 15719.5 8225.9 8566.7 8834.2 9248.1 9696.8 1107.3 1125.9 1194.7 1228.1 1272.8 1164.4 1286.4 1315.2 1377.5 1365.5 64.9 60.9 88.3 70.1 56.4 478.6 518.0 557.0 608.4 651.8 681.5 835.1 793.3 953.4 1033.3 1269.4 1330.5 1273.0 1347.8 1438.1 2358.7 2363.0 2424.3 2540.3 2683.0 423.9 437.2 578.0 607.1 635.6 6.2 5.1 1.2 5.7 4.9 3.8 4.1 3.1 4.7 4.9 2.2 1.7 6.1 2.8 3.6 8.8 10.6 2.2 4.7 -0.9 70.6 -6.1 45.6 -19.4 -19.2 21.3 3.9 9.8 8.3 7.5 23.6 46.5 -7.5 22.4 3.7 3.8 3.9 -2.7 6.9 6.8 0.4 1.1 2.5 6.2 4.6 | Part Dollars 13326.8 14010.1 14181.1 14991.8 15719.5 16125.1 8225.9 8566.7 8834.2 9248.1 9696.8 9956.2 1107.3 1125.9 1194.7 1228.1 1272.8 1294.2 1164.4 1286.4 1315.2 1377.5 1365.5 1381.8 64.9 60.9 88.3 70.1 56.4 37.5 478.6 518.0 557.0 608.4 651.8 694.8 681.5 835.1 793.3 953.4 1033.3 1075.7 1269.4 1330.5 1273.0 1347.8 1438.1 1440.9 2358.7 2363.0 2424.3 2540.3 2683.0 2778.1 423.9 437.2 578.0 607.1 635.6 658.5 658.5 6.2 1.7 6.1 2.8 3.6 1.7 8.8 10.6 2.2 4.7 -0.9 1.2 70.6 -6.1 45.6 -19.4 -19.2 -33.4 21.3 3.9 9.8 8.3 7.5 5.1 23.6 46.5 -7.5 22.4 3.7 4.9 3.8 3.9 -2.7 6.9 6.8 0.7 0.4 1.1 2.5 6.2 4.6 3.5 | Part Dollars 13326.8 14010.1 14181.1 14991.8 15719.5 16125.1 16830.9 8225.9 8566.7 8834.2 9248.1 9696.8 9956.2 10407.2 1107.3 1125.9 1194.7 1228.1 1272.8 1294.2 1348.1 1164.4 1286.4 1315.2 1377.5 1365.5 1381.8 1462.0 64.9 60.9 88.3 70.1 56.4 37.5 38.9 478.6 518.0 557.0 608.4 651.8 694.8 730.2 681.5 835.1 793.3 953.4 1033.3 1075.7 1108.6 1269.4 1330.5 1273.0 1347.8 1438.1 1440.9 1523.0 2358.7 2363.0 2424.3 2540.3 2683.0 2778.1 2859.7 423.9 437.2 578.0 607.1 635.6 658.5 693.3 6.2 5.1 1.2 5.7 4.9 2.6 4.4 3.8 4.1 3.1 4.7 4.9 2.7 4.5 2.2 1.7 6.1 2.8 3.6 1.7 4.2 8.8 10.6 2.2 4.7 -0.9 1.2 5.8 70.6 -6.1 45.6 -19.4 -19.2 -33.4 4.3 21.3 3.9 9.8 8.3 7.5 5.1 5.9 23.6 46.5 -7.5 22.4 3.7 4.9 2.4 3.8 3.9 -2.7 6.9 6.8 0.7 8.9 0.4 1.1 2.5 6.2 4.6 3.5 2.9 | Part Dollars 13326.8 14010.1 14181.1 14991.8 15719.5 16125.1 16830.9 17582.4 8225.9 8566.7 8834.2 9248.1 9696.8 9956.2 10407.2 10855.9 1107.3 1125.9 1194.7 1228.1 1272.8 1294.2 1348.1 1389.8 1164.4 1286.4 1315.2 1377.5 1365.5 1381.8 1462.0 1541.8 64.9 60.9 88.3 70.1 56.4 37.5 38.9 37.0 478.6 518.0 557.0 608.4 651.8 694.8 730.2 759.9 681.5 835.1 793.3 953.4 1033.3 1075.7 1108.6 1151.7 1269.4 1330.5 1273.0 1347.8 1438.1 1440.9 1523.0 1616.5 2358.7 2363.0 2424.3 2540.3 2683.0 2778.1 2859.7 2980.7 423.9 437.2 578.0 607.1 635.6 658.5 693.3 729.9 6.2 5.1 1.2 5.7 4.9 2.6 4.4 4.5 3.8 4.1 3.1 4.7 4.9 2.7 4.5 4.3 2.2 1.7 6.1 2.8 3.6 1.7 4.2 3.1 8.8 10.6 2.2 4.7 -0.9 1.2 5.8 5.5 70.6 -6.1 45.6 -19.4 -19.2 -33.4 4.3 -3.9 21.3 3.9 9.8 8.3 7.5 5.1 5.9 3.2 23.6 46.5 -7.5 22.4 3.7 4.9 2.4 6.5 3.8 3.9 -2.7 6.9 6.8 0.7 8.9 4.4 0.4 1.1 2.5 6.2 4.6 3.5 2.9 4.8 | Part Dollars 13326.8 14010.1 14181.1 14991.8 15719.5 16125.1 16830.9 17582.4 8225.9 8566.7 8834.2 9248.1 9696.8 9956.2 10407.2 10855.9 11338.8 1107.3 1125.9 1194.7 1228.1 1272.8 1294.2 1348.1 1389.8 1429.0 1164.4 1286.4 1315.2 1377.5 1365.5 1381.8 1462.0 1541.8 1588.1 64.9 60.9 88.3 70.1 56.4 37.5 38.9 37.0 26.5 478.6 518.0 557.0 608.4 651.8 694.8 730.2 759.9 804.5 681.5 835.1 793.3 953.4 1033.3 1075.7 1108.6 1151.7 1191.1 1269.4 1330.5 1273.0 1347.8 1438.1 1440.9 1523.0 1616.5 1621.6 2358.7 2363.0 2424.3 2540.3 2683.0 2778.1 2859.7 2980.7 3185.0 423.9 437.2 578.0 607.1 635.6 658.5 693.3 729.9 768.3 6.2 5.1 1.2 5.7 4.9 2.6 4.4 4.5 4.2 3.8 4.1 3.1 4.7 4.9 2.7 4.5 4.3 4.4 2.2 1.7 6.1 2.8 3.6 1.7 4.2 3.1 2.8 8.8 10.6 2.2 4.7 -0.9 1.2 5.8 5.5 3.0 70.6 -6.1 45.6 -19.4 -19.2 -33.4 4.3 -3.9 -25.7 21.3 3.9 9.8 8.3 7.5 5.1 5.9 3.2 8.6 23.6 46.5 -7.5 22.4 3.7 4.9 2.4 6.5 2.9 3.8 3.9 -2.7 6.9 6.8 0.7 8.9 4.4 0.0 0.4 1.1 2.5 6.2 4.6 3.5 2.9 4.8 7.1 | Part Dollars 13326.8 14010.1 14181.1 14991.8 15719.5 16125.1 16830.9 17582.4 8225.9 8566.7 8834.2 9248.1 9696.8 9956.2 10407.2 10855.9 11338.8 11961.1 1107.3 1125.9 1194.7 1228.1 1272.8 1294.2 1348.1 1389.8 1429.0 1497.6 1164.4 1286.4 1315.2 1377.5 1365.5 1381.8 1462.0 1541.8 1588.1 1653.0 64.9 60.9 88.3 70.1 56.4 37.5 38.9 37.0 26.5 38.1 478.6 518.0 557.0 608.4 651.8 694.8 730.2 759.9 804.5 886.8 681.5 835.1 793.3 953.4 1033.3 1075.7 1108.6 1151.7 1191.1 1291.7 1269.4 1330.5 1273.0 1347.8 1438.1 1440.9 1523.0 1616.5 1621.6 1711.9 2358.7 2363.0 2424.3 2540.3 2683.0 2778.1 2859.7 2980.7 3185.0 3355.9 423.9 437.2 578.0 607.1 635.6 658.5 693.3 729.9 768.3 806.9 6.2 5.1 1.2 5.7 4.9 2.6 4.4 4.5 4.2 5.8 3.8 4.1 3.1 4.7 4.9 2.7 4.5 4.3 4.4 5.5 2.2 1.7 6.1 2.8 3.6 1.7 4.2 3.1 2.8 4.8 8.8 10.6 2.2 4.7 -0.9 1.2 5.8 5.5 3.0 4.1 70.6 -6.1 45.6 -19.4 -19.2 -33.4 4.3 -3.9 -25.7 52.9 21.3 3.9 9.8 8.3 7.5 5.1 5.9 3.2 8.6 9.9 23.6 46.5 -7.5 22.4 3.7 4.9 2.4 6.5 2.9 8.7 3.8 3.9 -2.7 6.9 6.8 0.7 8.9 4.4 0.0 6.9 0.4 1.1 2.5 6.2 4.6 3.5 2.9 4.8 7.1 5.3 |

Forecast

Table 12. Personal Consumption Expenditures (Current Dollars)

2018Q1 2018Q2 2018Q3 2018Q4 2019Q1 2019Q2 2019Q3 2019Q4 2020Q1 2020Q2 2020Q3 2020Q4 2021Q1 2021Q2 2021Q3 2021Q4

| Consumer | Expenditures | hy Tyne | Rillions | Current | Dollars |
|----------|--------------|---------|----------|---------|---------|

| Consumer spending on | | | | | | | | | | | | | | | | |
|----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| all goods & services | 13679.6 | 13875.6 | 14067.3 | 14255.9 | 14466.4 | 14662.9 | 14857.8 | 15058.6 | 15259.5 | 15444.8 | 15658.7 | 15852.4 | 16067.5 | 16277.6 | 16486.4 | 16696.3 |
| durable goods | 1434.5 | 1458.7 | 1479.3 | 1504.3 | 1527.1 | 1543.6 | 1558.3 | 1575.3 | 1592.9 | 1609.0 | 1629.0 | 1646.1 | 1666.1 | 1684.4 | 1702.3 | 1720.2 |
| furniture and appliances | 324.1 | 331.3 | 335.1 | 337.9 | 344.8 | 349.8 | 353.4 | 357.2 | 362.1 | 366.3 | 371.2 | 376.0 | 381.3 | 386.2 | 390.7 | 395.4 |
| information processing equipment | 136.6 | 139.2 | 143.0 | 147.6 | 150.2 | 152.3 | 154.3 | 156.3 | 157.8 | 159.4 | 161.0 | 162.6 | 164.4 | 166.2 | 167.9 | 169.7 |
| motor vehicles and parts | 498.5 | 504.6 | 513.0 | 518.5 | 522.5 | 529.1 | 533.9 | 540.4 | 547.5 | 554.4 | 563.6 | 571.2 | 580.6 | 588.5 | 596.3 | 604.1 |
| other durable goods | 152.3 | 156.8 | 157.4 | 162.8 | 166.7 | 168.7 | 170.4 | 172.3 | 173.9 | 175.2 | 176.6 | 177.9 | 179.5 | 181.2 | 183.0 | 184.7 |
| nondurables | 2833.2 | 2870.8 | 2907.3 | 2951.8 | 3002.3 | 3037.7 | 3069.0 | 3097.3 | 3123.9 | 3139.6 | 3176.6 | 3195.5 | 3233.7 | 3269.5 | 3301.6 | 3333.2 |
| clothing & shoes | 385.5 | 394.8 | 398.6 | 401.1 | 406.8 | 410.5 | 414.9 | 419.3 | 423.2 | 426.2 | 428.8 | 431.5 | 433.5 | 435.5 | 437.3 | 439.2 |
| fuel oil & coal | 19.5 | 21.3 | 21.9 | 23.7 | 26.0 | 27.7 | 27.8 | 27.7 | 27.4 | 26.5 | 26.9 | 26.2 | 26.8 | 27.4 | 27.7 | 28.0 |
| gasoline & motor oil | 321.0 | 325.7 | 330.6 | 351.7 | 361.5 | 369.9 | 374.2 | 371.9 | 367.1 | 353.0 | 357.8 | 345.6 | 352.1 | 356.8 | 358.1 | 359.0 |
| food | 988.3 | 998.0 | 1008.8 | 1013.9 | 1021.9 | 1029.9 | 1038.3 | 1047.6 | 1057.3 | 1067.4 | 1078.0 | 1088.7 | 1099.1 | 1108.6 | 1117.9 | 1127.1 |
| other nondurable goods | 1118.8 | 1131.0 | 1147.3 | 1161.2 | 1186.1 | 1199.6 | 1213.8 | 1230.8 | 1248.9 | 1266.5 | 1285.2 | 1303.5 | 1322.3 | 1341.1 | 1360.5 | 1379.9 |

Consumer Expenditures by Type Billions 2009 Dollars

| Consumer spending on | | | | | | | | | | | | | | | | |
|----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| all goods & services | 12722.8 | 12842.0 | 12968.5 | 13062.7 | 13167.5 | 13273.4 | 13381.4 | 13497.4 | 13615.1 | 13732.1 | 13849.2 | 13967.4 | 14080.1 | 14187.8 | 14295.3 | 14401.4 |
| durable goods | 1628.2 | 1662.3 | 1690.1 | 1727.4 | 1752.6 | 1777.7 | 1800.7 | 1826.6 | 1853.0 | 1880.8 | 1911.2 | 1940.5 | 1971.3 | 1999.3 | 2027.1 | 2054.7 |
| furniture and appliances | 375.5 | 381.1 | 388.0 | 392.1 | 398.0 | 404.5 | 409.3 | 414.8 | 421.3 | 427.8 | 434.7 | 442.0 | 449.3 | 455.9 | 462.3 | 468.7 |
| information processing equipment | 185.6 | 192.2 | 197.5 | 204.7 | 210.7 | 217.1 | 222.9 | 228.1 | 232.7 | 238.3 | 243.7 | 249.2 | 255.0 | 261.0 | 267.0 | 273.4 |
| motor vehicles and parts | 510.7 | 518.6 | 523.5 | 530.4 | 532.6 | 538.3 | 542.2 | 547.9 | 554.1 | 561.2 | 569.9 | 577.7 | 586.5 | 593.5 | 600.5 | 607.3 |
| other durable goods | 181.1 | 188.2 | 192.5 | 200.3 | 205.2 | 208.3 | 211.1 | 214.4 | 217.1 | 219.7 | 222.4 | 225.1 | 227.9 | 230.9 | 233.9 | 236.9 |
| nondurables | 2858.6 | 2886.7 | 2923.7 | 2943.5 | 2974.1 | 2992.2 | 3011.8 | 3033.7 | 3056.1 | 3079.7 | 3100.7 | 3124.4 | 3143.8 | 3162.7 | 3181.9 | 3200.8 |
| clothing & shoes | 384.7 | 393.4 | 404.4 | 406.6 | 411.3 | 414.9 | 419.2 | 423.5 | 427.6 | 431.0 | 434.0 | 437.2 | 439.5 | 441.9 | 443.9 | 446.0 |
| fuel oil & coal | 24.8 | 26.7 | 26.3 | 29.7 | 29.4 | 29.3 | 28.9 | 28.7 | 28.6 | 28.5 | 28.5 | 28.6 | 28.7 | 28.8 | 28.9 | 28.9 |
| gasoline & motor oil | 416.9 | 419.7 | 416.9 | 413.1 | 414.0 | 413.4 | 414.0 | 416.0 | 418.2 | 422.0 | 422.2 | 425.7 | 425.2 | 424.9 | 425.2 | 425.6 |
| food | 958.6 | 965.2 | 974.6 | 979.0 | 985.1 | 989.4 | 994.1 | 999.2 | 1004.5 | 1009.7 | 1015.0 | 1020.4 | 1025.2 | 1029.7 | 1034.2 | 1038.5 |
| other nondurable goods | 1061.4 | 1069.5 | 1087.3 | 1100.1 | 1118.2 | 1128.6 | 1138.5 | 1148.9 | 1159.6 | 1170.7 | 1182.4 | 1193.8 | 1205.5 | 1216.9 | 1228.4 | 1239.7 |

Real Consumer Expenditures Annual Growth Rate

| Consumer spending on | | | | | | | | | | | | | | | | |
|----------------------------------|-------|------|------|------|------|------|------|------|------|------|-----|-----|------|------|-----|-----|
| all goods & services | 0.5 | 3.7 | 3.9 | 2.9 | 3.2 | 3.2 | 3.3 | 3.5 | 3.5 | 3.4 | 3.4 | 3.4 | 3.2 | 3.1 | 3.0 | 3.0 |
| durable goods | -2.0 | 8.4 | 6.7 | 8.8 | 5.9 | 5.7 | 5.2 | 5.7 | 5.8 | 6.0 | 6.5 | 6.1 | 6.4 | 5.7 | 5.5 | 5.4 |
| furniture and appliances | 1.7 | 6.0 | 7.3 | 4.2 | 6.0 | 6.6 | 4.8 | 5.3 | 6.3 | 6.2 | 6.5 | 6.7 | 6.6 | 5.9 | 5.6 | 5.5 |
| information processing equipment | 8.1 | 14.2 | 10.9 | 14.7 | 11.7 | 12.2 | 10.7 | 9.3 | 8.1 | 9.6 | 9.1 | 9.1 | 9.3 | 9.4 | 9.3 | 9.6 |
| motor vehicles and parts | -13.3 | 6.2 | 3.7 | 5.3 | 1.6 | 4.3 | 2.9 | 4.2 | 4.6 | 5.1 | 6.2 | 5.4 | 6.1 | 4.8 | 4.7 | 4.5 |
| other durable goods | 5.1 | 15.7 | 9.0 | 16.3 | 9.8 | 6.1 | 5.3 | 6.2 | 5.1 | 4.9 | 4.9 | 4.8 | 5.1 | 5.2 | 5.1 | 5.1 |
| nondurables | 0.1 | 3.9 | 5.1 | 2.7 | 4.2 | 2.4 | 2.6 | 2.9 | 3.0 | 3.1 | 2.7 | 3.1 | 2.5 | 2.4 | 2.4 | 2.4 |
| clothing & shoes | -7.6 | 9.1 | 11.2 | 2.2 | 4.6 | 3.5 | 4.2 | 4.1 | 3.9 | 3.2 | 2.7 | 3.0 | 2.2 | 2.1 | 1.8 | 1.9 |
| fuel oil & coal | -26.4 | 30.6 | -6.3 | 50.8 | -3.7 | -1.7 | -4.8 | -3.3 | -1.3 | -0.8 | 0.3 | 0.5 | 1.1 | 1.3 | 1.3 | 1.1 |
| gasoline & motor oil | -1.7 | 2.7 | -2.7 | -3.7 | 0.9 | -0.6 | 0.6 | 1.9 | 2.1 | 3.7 | 0.2 | 3.3 | -0.4 | -0.3 | 0.3 | 0.3 |
| food | 2.2 | 2.8 | 4.0 | 1.8 | 2.5 | 1.8 | 1.9 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 1.9 | 1.8 | 1.7 | 1.7 |
| other nondurable goods | 2.0 | 3.1 | 6.8 | 4.8 | 6.8 | 3.8 | 3.6 | 3.7 | 3.8 | 3.9 | 4.1 | 3.9 | 4.0 | 3.8 | 3.8 | 3.7 |

Table 13. Personal Consumption Expenditures (2009 Dollars)

| | History Forecast | | | | | | | | | | | |
|---|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | |
| | | | | | | | | | | | | |
| Consumer Expenditures by Type Billions Current Dollars | | | | | | | | | | | | |
| Consumer spending on | | | | | | | | | 1 | | | |
| all goods & services | 10641.1 | 11006.8 | 11317.2 | 11824.0 | 12294.5 | 12766.9 | 13321.4 | 13969.6 | 14761.4 | 15553.9 | 16382.0 | |
| durable goods | 1093.5 | 1144.2 | 1189.4 | 1242.4 | 1306.6 | 1346.6 | 1406.5 | 1469.2 | 1551.1 | 1619.3 | 1693.2 | |
| furniture and appliances | 246.9 | 253.9 | 263.6 | 274.2 | 288.1 | 301.3 | 315.4 | 332.1 | 351.3 | 368.9 | 388.4 | |
| information processing equipment | 101.8 | 107.9 | 111.0 | 114.6 | 119.2 | 123.8 | 131.6 | 141.6 | 153.3 | 160.2 | 167.0 | |
| motor vehicles and parts | 365.2 | 396.6 | 417.5 | 442.3 | 473.9 | 483.7 | 498.2 | 508.6 | 531.5 | 559.2 | 592.4 | |
| other durable goods | 121.8 | 126.9 | 129.7 | 135.2 | 139.3 | 139.9 | 145.9 | 157.3 | 169.5 | 175.9 | 182.1 | |
| nondurables | 2424.6 | 2493.5 | 2540.6 | 2619.2 | 2613.1 | 2649.7 | 2749.6 | 2890.8 | 3051.6 | 3158.9 | 3284.5 | |
| clothing & shoes | 332.6 | 345.2 | 350.5 | 358.0 | 366.3 | 373.0 | 379.7 | 395.0 | 412.9 | 427.4 | 436.4 | |
| fuel oil & coal | 27.0 | 24.1 | 25.3 | 26.4 | 19.7 | 15.9 | 17.0 | 21.6 | 27.3 | 26.8 | 27.5 | |
| gasoline & motor oil | 386.8 | 397.8 | 393.0 | 376.9 | 289.5 | 258.9 | 290.0 | 332.3 | 369.4 | 355.9 | 356.5 | |
| food | 819.5 | 846.2 | 864.0 | 897.6 | 921.0 | 944.2 | 965.8 | 1002.3 | 1034.4 | 1072.8 | 1113.2 | |
| other nondurable goods | 858.7 | 880.2 | 907.8 | 960.2 | 1016.6 | 1057.6 | 1097.2 | 1139.6 | 1207.6 | 1276.0 | 1351.0 | |
| Consumer Expenditures by Type Billions 2009 Dollars Consumer spending on | | | | | | | | | | | | |
| all goods & services | 10843.8 | 11006.8 | 11166.9 | 11494.3 | 11921.9 | 12248.2 | 12558.7 | 12899.0 | 13329.9 | 13790.9 | 14241.2 | |
| durable goods | 1079.7 | 1144.2 | 1214.1 | 1301.0 | 1399.4 | 1476.8 | 1577.9 | 1677.0 | 1789.4 | 1896.3 | 2013.1 | |
| furniture and appliances | 246.9 | 253.9 | 268.8 | 289.5 | 311.8 | 334.7 | 360.4 | 384.2 | 406.6 | 431.5 | 459.1 | |
| information processing equipment | 94.8 | 107.9 | 119.5 | 130.7 | 142.0 | 158.5 | 175.5 | 195.0 | 219.7 | 241.0 | 264.1 | |
| motor vehicles and parts | 370.1 | 396.6 | 415.3 | 439.8 | 471.4 | 486.5 | 507.2 | 520.8 | 540.2 | 565.7 | 596.9 | |
| other durable goods | 119.9 | 126.9 | 134.0 | 147.5 | 160.8 | 162.9 | 172.5 | 190.5 | 209.7 | 221.1 | 232.4 | |
| nondurables | 2482.9 | 2493.5 | 2538.5 | 2603.7 | 2691.7 | 2763.9 | 2822.0 | 2903.1 | 3002.9 | 3090.2 | 3172.3 | |
| clothing & shoes | 344.6 | 345.2 | 347.1 | 353.4 | 366.1 | 373.9 | 382.9 | 397.3 | 417.2 | 432.5 | 442.8 | |
| fuel oil & coal | 27.4 | 24.1 | 25.6 | 26.8 | 28.3 | 27.5 | 25.4 | 26.9 | 29.1 | 28.6 | 28.8 | |
| gasoline & motor oil | 400.3 | 397.8 | 404.2 | 403.2 | 421.6 | 424.4 | 420.9 | 416.7 | 414.4 | 422.0 | 425.2 | |
| food | 839.0 | 846.2 | 855.5 | 872.1 | 884.9 | 916.8 | 938.9 | 969.4 | 992.0 | 1012.4 | 1031.9 | |
| other nondurable goods | 871.6 | 880.2 | 906.1 | 947.6 | 991.7 | 1018.4 | 1045.1 | 1079.6 | 1133.6 | 1176.6 | 1222.6 | |
| 3 | | | | | | | | | , | | | |
| Real Consumer Expenditures Ann | ual Growt | h Rate | | | | | | | | | | |
| Consumer spending on | | | | | | | | | | | | |
| all goods & services | 1.2 | 1.6 | 1.9 | 3.8 | 3.0 | 2.8 | 2.7 | 2.8 | 3.3 | 3.5 | 3.1 | |
| durable goods | 3.6 | 6.4 | 5.1 | 9.2 | 6.0 | 6.8 | 7.7 | 5.6 | 5.7 | 6.2 | 5.9 | |
| furniture and appliances | 3.5 | 2.4 | 7.3 | 8.5 | 7.7 | 6.3 | 9.6 | 4.9 | 5.8 | 6.6 | 6.0 | |
| information processing equipment | 18.7 | 13.4 | 7.7 | 12.2 | 6.2 | 13.3 | 10.4 | 12.5 | 11.4 | 9.3 | 9.7 | |
| motor vehicles and parts | 0.4 | 7.8 | 1.4 | 9.6 | 4.3 | 7.3 | 5.0 | 0.7 | 3.3 | 5.4 | 5.1 | |
| other durable goods | 3.0 | 8.4 | 6.2 | 10.9 | 7.7 | 0.2 | 8.5 | 12.1 | 7.0 | 5.0 | 5.2 | |
| nondurables | -0.2 | 0.7 | 2.8 | 3.0 | 3.0 | 2.0 | 3.1 | 3.0 | 3.1 | 3.0 | 2.4 | |
| clothing & shoes | 0.6 | 0.3 | 0.9 | 3.9 | 2.5 | 1.4 | 4.7 | 4.0 | 4.2 | 3.2 | 2.0 | |
| fuel oil & coal | -15.0 | 7.1 | 23.2 | -1.1 | 8.8 | 1.9 | 4.5 | 16.4 | -3.3 | -0.3 | 1.2 | |
| gasoline & motor oil | -2.1 | -1.2 | 2.7 | 1.4 | 3.6 | -1.2 | 0.1 | -1.3 | 0.7 | 2.3 | 0.0 | |
| food | -0.7 | 1.6 | 1.6 | 1.5 | 1.4 | 4.4 | 2.8 | 2.7 | 2.1 | 2.1 | 1.8 | |
| other nondurable goods | 1.3 | 1.2 | 4.4 | | 4.5 | 1.0 | 3.6 | 4.2 | 4.4 | 3.9 | 3.8 | |
| 5 | _ | | | | _ | _ | _ | | • | _ | | |

Table 14. Business Fixed Investment

| | | | | History | | Forecast | | | | | |
|---------------------------|--------|--------|--------|---------|--------|----------|--------|--------|----------|--------|--------|
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| D.III. | | | | | | | | | | | |
| Billions Current Dollars | 4007.5 | 0440.5 | 0044.5 | 00040 | 0440.7 | 04404 | 0507.0 | 0700 0 | 1 0000 0 | 0400.0 | 2000 0 |
| Business Fixed Investment | 1907.5 | 2118.5 | 2211.5 | 2394.3 | 2449.7 | 2442.1 | 2587.9 | 2796.3 | 2998.3 | 3182.8 | 3362.2 |
| Producers Dur. Equipment | 881.3 | 983.4 | 1027.0 | 1090.8 | 1118.3 | 1090.9 | 1150.4 | 1233.7 | 1315.5 | 1386.4 | 1450.0 |
| Nonresidential Structures | 404.5 | 479.4 | 492.5 | 577.1 | 572.2 | 545.7 | 585.4 | 635.1 | 676.5 | 723.1 | 774.3 |
| Non-Farm Buildings | 170.5 | 191.8 | 204.1 | 234.9 | 281.7 | 318.6 | 323.6 | 334.7 | 356.2 | 388.5 | 427.8 |
| Commercial | 67.0 | 75.6 | 84.3 | 103.0 | 116.9 | 144.5 | 153.6 | 161.6 | 170.5 | 188.9 | 210.0 |
| Industrial | 39.6 | 46.8 | 49.9 | 58.1 | 79.3 | 75.7 | 65.8 | 62.0 | 65.1 | 68.2 | 73.2 |
| Other Buildings | 63.9 | 69.4 | 70.0 | 73.8 | 85.5 | 98.4 | 104.2 | 111.1 | 120.6 | 131.3 | 144.6 |
| Utilities | 90.7 | 112.2 | 108.9 | 126.3 | 125.5 | 124.7 | 126.3 | 129.9 | 127.6 | 137.6 | 148.7 |
| Mines & Wells | 124.7 | 152.9 | 155.6 | 187.8 | 136.5 | 74.4 | 107.4 | 141.6 | 161.7 | 162.1 | 160.4 |
| Billions 2009 Dollars | | | | | | | | | | | |
| Business Fixed Investment | 1935.4 | 2118.5 | 2206.0 | 2357.4 | 2399.7 | 2411.2 | 2538.1 | 2710.2 | 2859.5 | 2994.2 | 3122.4 |
| Producers Dur. Equipment | 886.2 | 983.4 | 1029.2 | 1098.7 | 1132.6 | 1116.2 | 1183.7 | 1267.7 | 1337.3 | 1401.1 | 1459.5 |
| Nonresidential Structures | 424.1 | 479.4 | 485.5 | 536.9 | 520.9 | 494.7 | 517.5 | 542.5 | 558.6 | 582.2 | 607.1 |
| Non-Farm Buildings | 175.0 | 191.8 | 199.3 | 222.0 | 261.0 | 289.6 | 285.1 | 281.7 | 292.8 | 313.0 | 332.3 |
| Commercial | 69.0 | 75.6 | 82.5 | 98.2 | 109.2 | 132.9 | 137.9 | 140.1 | 144.9 | 157.8 | 169.1 |
| Industrial | 40.6 | 46.8 | 48.7 | 55.0 | 73.7 | 69.9 | 59.3 | 53.6 | 54.4 | 55.6 | 57.7 |
| Other Buildings | 65.4 | 69.4 | 68.0 | 68.9 | 78.2 | 86.9 | 87.8 | 87.9 | 93.1 | 99.5 | 105.3 |
| Utilities | 93.6 | 112.2 | 107.6 | 123.1 | 120.5 | 119.1 | 117.3 | 116.1 | 107.6 | 107.5 | 108.3 |
| Mines & Wells | 136.7 | 152.9 | 155.4 | 166.0 | 117.7 | 66.9 | 94.8 | 123.0 | 135.5 | 136.9 | 141.2 |
| Assessed Ossessella Data | | | | | | | | | | | |
| Annual Growth Rate | 44.7 | 7.4 | 5.0 | 7.0 | 0.0 | 4.5 | 7.0 | 0.5 | 70 | | |
| Business Fixed Investment | 11.7 | 7.1 | 5.9 | 7.9 | -0.9 | 1.5 | 7.2 | 8.5 | 7.3 | 5.7 | 5.7 |
| Producers Dur. Equipment | 13.2 | 8.8 | 4.5 | 5.3 | 1.0 | -2.1 | 9.2 | 6.0 | 6.9 | | 4.7 |
| Nonresidential Structures | 16.6 | 8.4 | 10.2 | 16.1 | -10.2 | 3.5 | 6.3 | 9.8 | 7.6 | 6.6 | 7.4 |
| Non-Farm Buildings | 14.7 | 7.3 | 10.8 | 21.0 | 11.4 | 15.1 | -1.1 | 4.2 | 9.5 | 8.6 | 10.2 |
| Commercial | 14.6 | 9.6 | 19.7 | 20.2 | 10.0 | 28.4 | -0.1 | 5.8 | 10.7 | 9.2 | 11.4 |
| Industrial | 38.0 | 8.5 | 11.1 | 38.6 | 15.2 | -7.2 | -11.5 | -2.2 | 5.9 | 6.3 | 7.1 |
| Other Buildings | 3.3 | 4.4 | 2.3 | 12.3 | 11.6 | 17.8 | 5.1 | 6.2 | 10.0 | 9.1 | 10.1 |
| Utilities | 2.4 | 18.4 | 25.8 | -6.4 | 13.8 | 10.0 | -7.2 | 8.1 | -0.8 | 8.6 | 9.6 |
| Mines & Wells | 40.3 | 4.2 | 4.9 | 34.1 | -47.9 | -31.8 | 89.6 | 33.3 | 10.7 | -0.6 | -1.1 |

Table 15. Government Receipts and Expenditures

| | | | | History | | | | | Forecast | | |
|--|-----------|---------|--------|---------|--------|--------|--------|------------|----------|---------|-------------|
| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | | | | | | | | | | | |
| Federal Government Receipts and Expenditures | | | | | | | | | | | |
| Receipts | 2572.8 | 2700.3 | 3139.0 | 3292.2 | 3446.3 | 3475.5 | 3558.8 | 3509.1 | 3725.1 | 3927.4 | 4125.1 |
| Personal Tax and Nontax Receipts | 1130.3 | 1165.8 | 1302.3 | 1403.1 | 1528.3 | 1545.7 | 1613.4 | 1617.5 | 1713.8 | 1822.4 | 1924.3 |
| Corp. Profits Tax Accruals | 224.0 | 274.7 | 298.4 | 339.6 | 329.6 | 327.1 | 284.6 | 156.7 | 173.7 | 187.7 | 200.5 |
| Indirect Business Tax and Nontax Accruals | 108.6 | 115.2 | 125.5 | 136.3 | 140.4 | 137.7 | 131.5 | 161.9 | 216.5 | 229.9 | 240.6 |
| Contributions for Social Insurance | 903.2 | 938.0 | 1091.8 | 1140.3 | 1191.4 | 1225.0 | 1283.2 | 1348.0 | 1409.6 | 1477.4 | 1549.0 |
| Expenditures | 3814.7 | 3779.0 | 3776.9 | 3894.0 | 4015.2 | 4140.6 | 4254.2 | 4478.9 | 4720.5 | 4962.0 | 5183.4 |
| Purchases Goods & Services | 1298.9 | 1286.5 | 1226.6 | 1214.2 | 1220.9 | 1232.2 | 1265.2 | 1325.1 | 1422.7 | 1466.7 | 1485.9 |
| National Defense | 834.0 | 814.2 | 764.2 | 742.5 | 729.5 | 727.3 | 743.9 | 779.8 | 839.6 | 869.3 | 884.3 |
| Other | 465.0 | 472.4 | 462.4 | 471.6 | 491.3 | 504.9 | 521.3 | 545.3 | 583.1 | 597.4 | 601.5 |
| Transfer Payments | 2326.6 | 2299.5 | 2344.4 | 2446.9 | 2573.3 | 2656.7 | 2725.2 | 2839.7 | 2971.9 | 3129.9 | 3283.0 |
| To Persons | 1779.5 | 1781.8 | 1821.5 | 1879.5 | 1966.8 | 2024.1 | 2091.7 | 2178.5 | 2292.6 | 2428.5 | 2559.7 |
| To Foreigners | 57.6 | 55.3 | 53.9 | 52.8 | 52.7 | 54.7 | 52.4 | 55.3 | 55.5 | 57.3 | 58.3 |
| Grants in Aid to State & Local Gov't | 472.5 | 444.4 | 450.1 | 495.1 | 533.4 | 557.1 | 559.3 | 582.9 | 600.3 | 618.9 | 638.5 |
| Net Interest | 399.2 | 401.2 | 393.4 | 415.3 | 402.9 | 428.3 | 452.9 | 513.1 | 551.9 | 594.9 | 644.1 |
| Subsidies less Surplus of Gov't Entities | 65.8 | 65.4 | 69.3 | 64.8 | 60.3 | 63.0 | 62.8 | 66.6 | 62.1 | 60.8 | 60.0 |
| Surplus (+) or Deficit (-) | -1242.0 | -1078.6 | -637.9 | -601.8 | -568.9 | -665.1 | -695.4 | -969.8 | -995.4 | -1034.6 | -1058.3 |
| State and Local Government Receipts and | d Expendi | tures | | | | | | | | | |
| Receipts | 2030.4 | 2056.3 | 2145.6 | 2259.4 | 2368.6 | 2421.9 | 2484.2 | 2598.1 | 2723.7 | 2853.7 | 2985.0 |
| Personal Tax/Nontax Receipts | 1366.4 | 1414.7 | 1490.6 | 1543.5 | 1592.8 | 1628.5 | 1689.8 | 1770.4 | 1864.0 | 1959.2 | 2054.5 |
| Corporate Profits | 322.9 | 343.1 | 373.5 | 382.3 | 406.9 | 408.6 | 421.2 | 440.3 | 460.0 | 490.2 | 516.8 |
| Indirect Business Tax and Nontax Accruals | 48.4 | 50.7 | 53.9 | 56.6 | 56.3 | 53.9 | 52.9 | 60.5 | 70.0 | 75.7 | 80.6 |
| Contributions for Social Insurance | 17.9 | 17.2 | 17.7 | 18.7 | 19.2 | 20.0 | 20.6 | 21.7 | 22.5 | 23.6 | 24.7 |
| Federal Grants-In-Aid | 472.5 | 444.4 | 450.1 | 495.1 | 533.4 | 557.1 | 559.3 | 582.9 | 600.3 | 618.9 | 638.5 |
| Expenditures | 2305.4 | 2339.1 | 2411.0 | 2496.1 | 2592.2 | 2667.8 | 2743.3 | 2833.1 | 2933.6 | 3059.5 | 3194.6 |
| Purchases Goods & Services | 1849.4 | 1850.5 | 1905.8 | 1952.9 | 2013.3 | 2058.8 | 2109.2 | 2206.5 | 2304.0 | 2403.5 | 2510.9 |
| Transfer Payments | 576.5 | 550.1 | 560.8 | 616.2 | 673.7 | 689.0 | 690.7 | 721.6 | 745.2 | 770.0 | 796.0 |
| Interest Received | 198.6 | 215.9 | 205.9 | 196.0 | 200.9 | 213.7 | 217.2 | 209.6 | 206.0 | 211.3 | 218.1 |
| Net Subsidies | 13.7 | 8.1 | 6.3 | 4.4 | 2.8 | 1.2 | 3.5 | 3.8 | 1.1 | -1.9 | -4.9 |
| Dividends Received | 3.4 | 4.1 | 4.7 | 5.1 | 5.2 | 5.5 | 5.9 | 5.6 6.4 | 6.8 | 7.1 | -4.9 7.4 |
| | -275.1 | -282.8 | -265.4 | -236.7 | -223.6 | -245.8 | -259.1 | -235.0 | -209.9 | -205.7 | -209.7 |
| Surplus (+) or Deficit (-) | -2/5.1 | -202.0 | -205.4 | -230.7 | -223.0 | -245.6 | -209.1 | -233.0 | I -208.8 | -205.7 | -209.7 |

Table 16. U.S. Exports and Imports of Goods and Services

| | | | | | Forecast | | | | | | |
|------------------------------------|--------|--------|--------|--------|----------|--------|--------|--------|---------|---------|---------|
| _ | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| | | | | | | | | | | | |
| Billions of Dollars | | | | | | | | | 1 | | |
| Net Exports Goods & Services | -579.5 | -568.6 | -490.8 | -508.3 | -521.4 | -520.6 | -578.4 | -631.7 | -766.1 | -807.2 | -853.9 |
| Current Account | -445.7 | -426.8 | -348.8 | -365.2 | -407.8 | -432.9 | -449.1 | -489.8 | -639.1 | -668.2 | -749.4 |
| Exports -Goods & Services | 2103.0 | 2191.3 | 2273.4 | 2371.0 | 2265.0 | 2217.6 | 2350.2 | 2544.5 | 2707.6 | 2895.3 | 3037.1 |
| Merchandise Balance | -741.0 | -741.1 | -700.5 | -749.9 | -761.9 | -751.1 | -807.5 | -892.1 | -1058.7 | -1148.7 | -1243.0 |
| Food, Feed & Beverage | 126.2 | 133.0 | 136.2 | 143.7 | 127.7 | 130.5 | 132.7 | 143.2 | 131.7 | 146.6 | 155.8 |
| Industrial Supplies Excl Petroleum | 485.3 | 483.2 | 492.4 | 500.7 | 418.1 | 387.3 | 456.2 | 538.2 | 611.4 | 691.9 | 745.5 |
| Motor Vehicles & Parts | 133.0 | 146.2 | 152.7 | 159.8 | 151.9 | 150.3 | 157.6 | 161.5 | 169.8 | 178.3 | 180.5 |
| Capital Goods, Excl. MVP | 494.2 | 527.5 | 534.8 | 551.8 | 539.8 | 519.9 | 533.6 | 563.5 | 593.9 | 588.7 | 581.1 |
| Computer Equipment | 48.5 | 49.2 | 48.1 | 48.8 | 46.8 | 45.1 | 46.0 | 48.6 | 49.4 | 54.8 | 56.9 |
| Other | 365.4 | 383.9 | 381.7 | 389.8 | 373.5 | 353.9 | 366.5 | 384.7 | 407.1 | 395.6 | 385.7 |
| Consumer Goods, Excl. MVP | 174.7 | 181.0 | 188.1 | 198.4 | 197.3 | 193.3 | 197.1 | 203.2 | 202.2 | 213.8 | 217.1 |
| Other Consumer | 48.8 | 50.7 | 55.1 | 60.5 | 59.5 | 61.3 | 58.6 | 68.0 | 72.8 | 80.0 | 88.5 |
| Services | 640.7 | 669.7 | 714.2 | 756.1 | 770.7 | 774.9 | 814.3 | 866.8 | 925.9 | 996.0 | 1068.5 |
| | | | | | | | | | | | |
| Billions of Dollars | | | | | | | | | • | | |
| Imports -Goods & Services | 2682.5 | 2759.9 | 2764.2 | 2879.3 | 2786.5 | 2738.1 | 2928.6 | 3176.2 | 3473.7 | 3702.5 | 3891.1 |
| Merchandise | 2240.5 | 2301.4 | 2296.4 | 2391.5 | 2287.3 | 2221.0 | 2378.5 | 2589.1 | 2855.0 | 3060.8 | 3224.2 |
| Food, Feed & Beverage | 108.3 | 111.1 | 116.0 | 126.8 | 128.8 | 131.0 | 138.8 | 147.8 | 152.6 | 166.2 | 176.0 |
| Petroleum & Products | 462.1 | 434.3 | 387.8 | 353.6 | 197.2 | 159.6 | 199.6 | 252.3 | 296.4 | 277.9 | 269.6 |
| Industrial Supplies Excl Petroleum | 292.8 | 288.9 | 291.3 | 316.3 | 290.8 | 277.8 | 306.3 | 342.6 | 434.2 | 484.9 | 515.6 |
| Motor Vehicles & Parts | 255.2 | 298.5 | 309.6 | 329.5 | 350.0 | 351.1 | 359.8 | 371.8 | 370.6 | 373.8 | 390.5 |
| Capital Goods, Excl. MVP | 513.4 | 551.8 | 559.0 | 598.8 | 607.2 | 593.9 | 643.6 | 698.4 | 709.7 | 752.1 | 805.6 |
| Computer Equipment | 119.7 | 122.3 | 121.2 | 122.0 | 120.3 | 114.6 | 128.5 | 145.0 | 148.3 | 153.6 | 155.7 |
| Other | 358.2 | 389.4 | 390.8 | 423.5 | 431.6 | 429.3 | 463.7 | 500.5 | 499.7 | 530.8 | 580.5 |
| Consumer Goods, Excl. MVP | 515.9 | 518.8 | 532.9 | 558.7 | 596.4 | 585.2 | 603.9 | 650.7 | 761.2 | 866.1 | 917.7 |
| Other Consumer | 92.8 | 97.9 | 99.9 | 107.8 | 116.9 | 122.5 | 126.4 | 125.4 | 130.4 | 139.7 | 149.3 |
| Services | 441.9 | 458.5 | 467.8 | 487.8 | 499.1 | 517.2 | 550.0 | 587.1 | 618.7 | 641.7 | 666.9 |
| | | | | | | | | | | | |
| Billions 2009 Dollars | | | | | | | | | | | |
| Net Exports Goods & Services | -568.1 | -568.6 | -532.8 | -577.7 | -724.9 | -786.2 | -858.7 | -915.0 | -1063.1 | -1192.1 | -1317.0 |
| Exports G & S | 2119.0 | 2191.3 | 2269.6 | 2367.0 | 2380.6 | 2378.1 | 2450.1 | 2555.4 | 2662.5 | 2804.5 | 2898.3 |
| Imports G & S | 2687.1 | 2759.9 | 2802.4 | 2944.7 | 3105.5 | 3164.4 | 3308.7 | 3470.3 | 3725.6 | 3996.6 | 4215.3 |
| | | | | | | | | | | | |
| Exports & Imports % Change | | | | | | | | | | | |
| Exports G & S | 9.1 | 3.2 | 5.9 | 1.7 | -6.6 | 1.8 | 8.4 | 6.5 | 7.7 | 5.8 | 5.1 |
| Imports G & S | 10.9 | 0.3 | 1.1 | 4.4 | -5.5 | 2.9 | 8.5 | 7.9 | 9.2 | 5.3 | 5.4 |
| Real Exports G & S | 4.6 | 2.1 | 6.1 | 3.1 | -1.5 | 0.9 | 4.7 | 3.4 | 5.6 | 4.4 | 3.4 |
| Real Imports G & S | 3.8 | 0.6 | 3.1 | 6.8 | 3.4 | 3.1 | 5.5 | 4.8 | 7.8 | 6.6 | 5.1 |
| | | | | | | | | | | | |

Sean Snaith, Ph.D., is the director of the University of Central Florida's Institute for Economic Forecasting and a nationally recognized economist in the field of business and economic forecasting.

Snaith is the recipient of multiple awards for the accuracy of his forecasts, his research and his teaching. He has served as a consultant for local governments and multinational corporations such as Compaq, Dell and IBM. Before joining UCF's College of Business, he held teaching positions at Pennsylvania State University, American University in Cairo, the University of North Dakota and the University of the Pacific.

Snaith is frequently interviewed in international, national and regional media. He has been quoted in *The Wall Street Journal, USA Today, The New York Times, The Economist* and *The Guardian* and has appeared on CNBC, Fox Business Network, The Nightly News with Brian Williams, Al Jazeera, the BBC and CBC, China Central TV, Sky News, Nippon TV and the Business News Network, based in Toronto.

Snaith is a sought-after speaker known for his engaging and humorous presentations. He has built a national reputation for his unique ability to explain complex subject matter in a digestible manner. He earned praise from one business editor for having "an uncanny knack of making economics not only understandable but interesting."

Snaith is a member of several economic organizations and national economic forecasting panels, including *The Wall Street Journal's*Economic Forecasting Survey, the Associated Press' Economy Survey, CNNMoney.com's Survey of Leading Economists, *USA Today's* Survey of Top Economists, Federal Reserve Bank of Philadelphia's Survey of Professional Forecasters, Bloomberg and Reuters.

Snaith holds a B.S. in Economics from Allegheny College and an M.A. and Ph.D. in Economics from Pennsylvania State University.



Sean M. Snaith, PhDDirector, Institute for Economic Forecasting

P 407.823.1451 E ssnaith@ucf.edu

Follow us:

- @ucfbusiness
- f ucfcba
- in ucfbusinessalumni
- ucfbusiness





UNIVERSITY OF CENTRAL FLORIDA
INSTITUTE FOR ECONOMIC FORECASTING
P.O. BOX 161400
ORLANDO, FLORIDA 32816

PH 407.823.1453 • FX 407.823.1454

WWW.IEC.UCF.EDU