

MARCH 2018

# U.S. FORECAST



**Institute for Economic  
Competitiveness**

UNIVERSITY OF CENTRAL FLORIDA

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# U.S. FORECAST 2018 - 2021

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## IN THIS U.S. FORECAST

- In the midst of producing a steady stream of nothing burgers, Washington, D.C. has prepared a something burger: an economic Big Mac known as the Tax Cut and Jobs Act. With the special sauce of regulatory reform, it will help feed what has been an anemic economic recovery.
- Average monthly payroll job growth, which has been decelerating for the past several years, will be boosted by tax reform over the next several months. However, it will begin to decelerate later in the forecast horizon as the recovery nears its end.
- Policy and political uncertainty, regulatory burden, and tepid economic growth have been hindering payroll job growth, which slowed to 1.6% in 2017 but will pick up from 2018-2020 to average 1.9% before easing to 1.1% in 2021.
- The foreign sector will continue to be a drag on U.S. growth. The recent weakening of the dollar will boost exports and depress imports, but faster GDP growth and higher interest rates will once again allow the dollar to rise. As a result, net exports will continue to fall through 2021. Uncertainty over trade deals and tariffs continue to cast a shadow over this sector.
- The Federal Reserve raised interest rates again in December of 2017; the next 25 basis point hike will happen in March. Stronger economic growth and higher inflation from Trump administration policies will prompt a faster pace of hikes over the next three years, with the federal funds rate hitting 4.25% by the end of the fourth quarter of 2021.
- Real GDP growth hit 2.3% in 2017 but will accelerate to 3.2% in 2018, then rise to 3.5% in 2019 before easing to 2.9% in 2020 and 2.4% in 2021, as the Federal Reserve tightens interest rates and gradually shrinks its balance sheet.
- The housing market continues to recover and will slowly improve through 2021 in the face of the headwind of rising interest rates. Housing starts will rise from 1.35 million in 2018 to 1.72 million in 2021.
- The headline unemployment rate (U-3) is expected to decline to 3.4% in late 2020. Job growth will be sufficient to keep up with labor force growth through the end of the forecast horizon. The economy is closing in on full employment and the faster wage growth that comes with it.
- Headline CPI inflation will accelerate in 2018, pushing the Fed to continue raising interest rates and shrink its balance sheet. Core CPI inflation will average 2.6% during 2018-2021.

Growing up in Pittsburgh, there were relatively few hamburger restaurants. There were some large national chains: McDonalds, Wendy's (which we referred to as Spendy's for their relatively higher prices), Burger Chef (home of the Funmeal, the original version of the Happy Meal, the last of which closed in 1996), Bob's Big Boy, and Burger King. There was a small regional chain, Winky's (home of the Big Wink, also now defunct), and other restaurants that had hamburgers on their menus.

Today, the number of hamburger joints seems to have grown exponentially. There are a large number of chains including, Smashburger, Red Robin, Five Guys, BurgerFi, Shake Shack, In-N-Out Burger, Cheeburger Cheeburger, Hardee's, Carl's Jr., Johnny Rockets, Steak 'n Shake, and White Castle—just to name the places where I have dined.

There are plenty more, including relative new kid on the block, Wahlburgers. (See what I did there?)

A search on Yelp for burger restaurants in the Orlando area yielded 1,779 results. By comparison, a search for Indian restaurants turned up 106, Chinese restaurants totaled 492, and pizza restaurants returned 1,513.

While some of these burger search results are questionable, including a sushi restaurant—I didn't have the stomach to check, for I feared it was accurate—that is a lot of burgers. I have to wonder if we are reaching market saturation when it comes to burger joints...if we have reached peak burger. I won't lose sleep over this question or flip out if another burger restaurant opens its doors (see what I did there?), as I know the invisible hand of markets will stop making patties whenever we reach that point.

I really don't have a beef with this proliferation of hamburger restaurants (see what...never mind); it's just something that has struck me in recent years, and I wonder when it will reach its peak.

Washington, D.C. has not been immune to this particular trend, but there seems to be a real specialty

when it comes to burgers in that part of our country. The most popular burger in the D.C. area appears to be the "nothing burger."

Apparently, the term "nothing burger" has its origins with a gossip columnist who used the term in 1953. Urban Dictionary's (do not go to that site) top definition of "nothing burger" is: "something lame, dead-end, a dud, insignificant; especially something with high expectations that turns out to be average, pathetic, or overhyped."

But back in the era of its origination, the use of the term as the number of hamburger restaurants was not widespread. Ironically, some of the actual hamburgers I have had at these restaurants would qualify as nothing burgers.

Nothing burgers are being produced in Washington, D.C. in remarkable quantities and seem to be served from both sides of the Russia collusion/meddling investigation. Every leak, memo, and counter-memo is immediately dismissed by the opposing party as a nothing burger.

In the midst of this fast food production of nothing burgers in Washington, D.C., there has been a special order of another type of burger. In absence of creativity, I would call this policy sandwich a something burger. This economic Big Mac is also known as the Tax Cuts and Jobs Act.

Some key provisions of this law include:

- Lowering individual taxes and setting the rates at 0%, 10%, 12%, 22%, 24%, 32%, 35%, and 37%.
- Increasing the standard deduction from \$6,500 and \$13,000 under current law to \$12,000 and \$24,000 for individuals and married couples, respectively.
- Expanding the Child Tax Credit from \$1,000 to \$2,000.
- Lowering the corporate tax rate to 21% (beginning Jan. 1, 2018) down from 35%, which was the highest in the industrialized world.



- A one-time repatriation tax on profits held overseas by U.S. companies at 15.5%.
- Providing small business tax relief, including a 20% tax deduction that applies to the first \$315,000 of joint income earned by all businesses organized as S corporations, partnerships, LLCs, and sole proprietorships.
- Allowing small businesses to immediately write off the full cost of new equipment.

The collective impact of this tax law will be significant, as it will raise the take-home pay of workers, which has not occurred in the recovery to date. It reduces the incentive of companies to move offshore and avoid the high corporate tax rates in the U.S., and it provides an incentive to bring back the hundreds of billions of dollars U.S. firms have been holding overseas, which can be used to invest in their domestic operations. Within the weeks following the passage of this law, Apple announced they would bring back \$252 billion in cash currently held abroad. This will generate \$38 billion in federal tax revenue and help finance capital expenditures of \$30 billion in the U.S., which will focus on investments with a direct impact on job creation and job preparedness (read productivity), according to Apple's CEO.

In the wake of the tax cut, hundreds of companies, large and small, announced \$1,000 bonuses and pay raises for their workers. These bonuses were quickly derided as “crumbs,” but when you read surveys that 63% of Americans can't afford a \$500 car repair or \$1,000 emergency room visit<sup>1</sup>, I'm sure these bonuses are more than welcome in the households that receive them.

The source of these crumbs, of course, is the something burger known as the Tax Cut and Jobs Act, to which has been added a special sauce—namely, regulatory reform. From changes to Dodd-Frank to the energy sector, deregulation has largely flown under the radar. In the 2017 fiscal year, there have been 22 deregulatory actions for every new regulatory action, saving \$8 billion in regulatory cost. Regulation has largely been ignored as a reason for the weak economic growth, but we have pointed to it repeatedly in this publication as a key reason the economy has not been able to sustain economic

growth in excess of 3.0% in any year of the recovery to date.

This history of weak economic growth is changing thanks to the tax cut something burger, and with the possibility of an infrastructure burger in the upcoming year—hopefully also slathered in the special sauce of deregulation—we may finally see the Super Sizing of the economic recovery.

## ANXIOUS INDEX

### *Fear of Recession Remains Lowest Since 2011*

The most recent release (1<sup>st</sup> quarter of 2018) of the Survey of Professional Forecasters by the Federal Reserve Bank of Philadelphia suggests that the 30 forecasters surveyed for the publication put a 9.08% chance that a decline in real GDP will occur in the 2<sup>nd</sup> quarter of 2018.

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 (a term coined by The *New York Times* reporter David Leonhardt) is the probability of a decline in real GDP in the quarter after a survey is taken. In the survey taken in early February of the 1<sup>st</sup> quarter of 2018, the index stands at 9.08, which means that forecasters believe there is a 9.08% chance that real GDP will decline in the 2<sup>nd</sup> quarter of 2018.

The forecasters also report a 5.81% chance that we are currently (as of the 1<sup>st</sup> quarter of 2018) experiencing a contraction in real GDP—nearly half a percentage point lower than the probability the forecasters assigned for the 4<sup>th</sup> quarter of 2017. According to the panel, the probability that real GDP growth will turn negative is averaging around 12.72% through the end of the 1<sup>st</sup> quarter of 2019, indicating that the forecasters' assignment of probability for a contraction in real GDP in the upcoming year is the lowest since the 3<sup>rd</sup> quarter of 2015.

Figure 1 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 more than four points lower than the average during the economic recovery (13.08).

1 <https://www.prnewswire.com/news-releases/63-of-americans-cant-afford-500-car-repair-or-1000-emergency-room-visit-300200097.html>

## GDP OUTLOOK

### *Real GDP Growth to Surge in Wake of Tax Cut and Jobs Act*

Beginning in February of this year, American workers saw something they have not experienced very often in this economic recovery: larger paychecks. Last month, the new IRS tax withholding guidelines issued in the wake of the new tax law went into effect. More take-home pay will lead to higher consumer spending and confidence and thus faster GDP growth.

In the 1<sup>st</sup> quarter of 2017, real GDP growth managed to increase at a weak 1.2% after expanding just 1.8% in the 4<sup>th</sup> quarter of 2016. It seemed like 2017 would be more of the same historically weak growth that has characterized this recovery. However in the 2<sup>nd</sup> quarter,

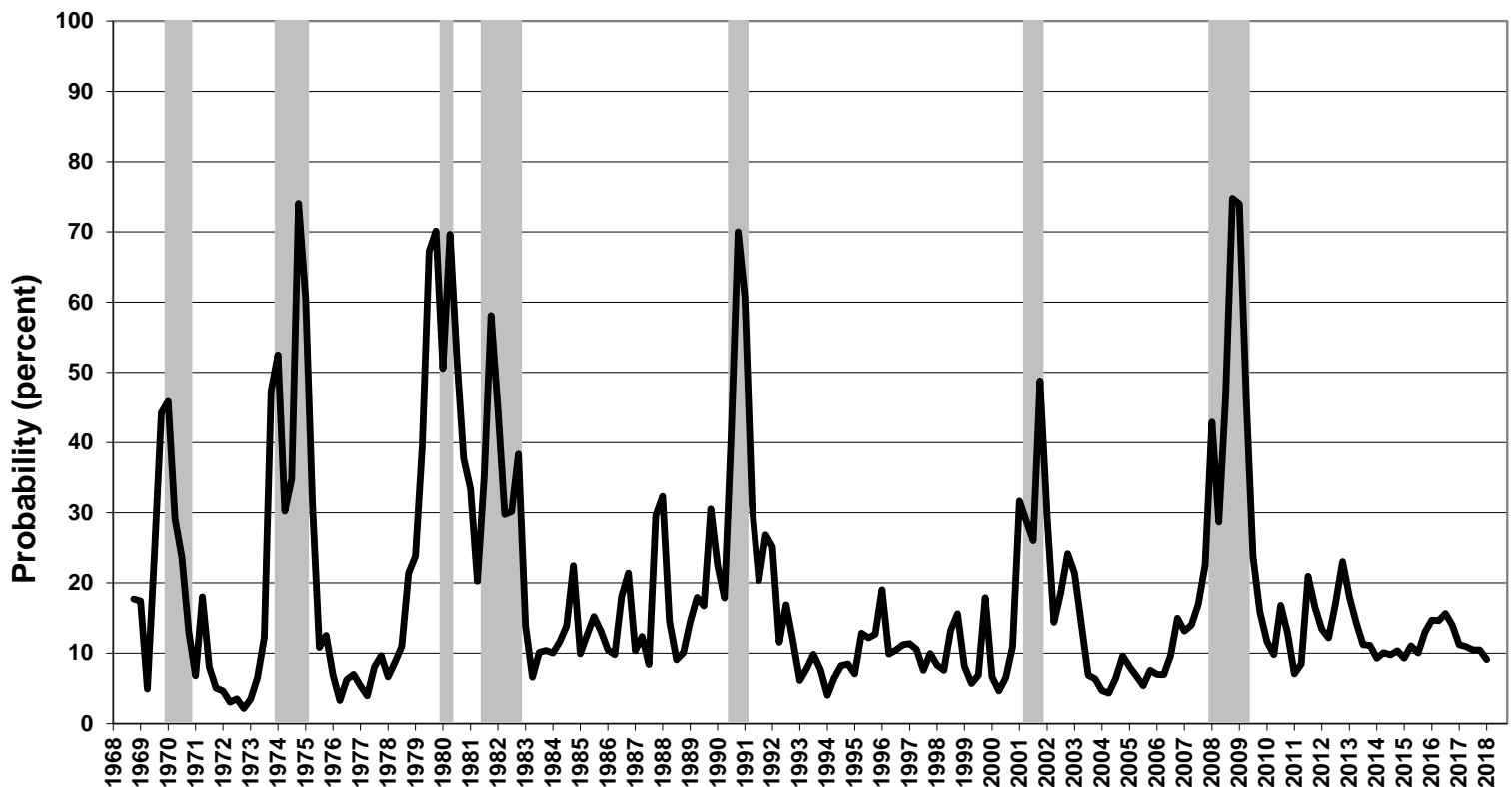
growth hit 3.1% and in the 3<sup>rd</sup> quarter, growth was 3.2%, but in the 4<sup>th</sup> quarter of 2017, growth slipped to 2.6%.

The Tax Cut and Jobs Act brings with it the possibility that 3.0%-plus growth could finally arrive in 2018 and accelerate into 2019. Our lackluster recovery was in desperate need of a policy adrenaline boost, and the tax reform law provides just what the doctor ordered.

Prior to the passage of the tax law, the boost in real GDP growth (not to mention the stock market) was largely driven by expectations of policies that are friendlier to economic growth. Tweeting and talking about policy cannot sustain economic growth without actual follow through. However, as the Trump administration continues the regulatory rollback and as tax reform translates into stronger business and consumer

Figure 1.

### The Anxious Index Probability of Decline in Real GDP in the Following Quarter Quarterly, 1968:Q4 to 2018:Q1



Source: Survey of Professional Forecasters, Philadelphia Federal Reserve Bank



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spending, economic growth will accelerate and the life span of this nearly nine-year-old economic recovery will be prolonged.

If an infrastructure spending bill is added to the mix, the strength and lifespan of the recovery will receive yet another boost.

The average rate of annual real GDP growth from 2010 through 2017 has been just 2.2%. Our forecast for average real GDP growth from 2018-2021 stands at 3.0%, with a projected acceleration of growth to levels greater than 3.0% in 2018 (3.2%) and 2019 (3.5%).

The probability of a recession taking place before our 2021 forecast horizon is real; no recovery lasts indefinitely, but recoveries also do not come with a preordained lifespan. Proposed economic policies will extend 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 will be able to delay the inevitable.

In 2018, we are expecting real GDP growth to accelerate to 3.2%. Growth will jump to 3.5% in 2019 before decelerating to 2.9% in 2020 and 2.4% in 2021. The projected growth rate for 2019 would be the first time the U.S. economy experienced annual growth at 3.5% or higher since 2004.

We expect the central bank to continue to take baby steps as it incrementally raises interest rates, and the frequency of these increases should average about three to four moves per year. As always, economic data will drive both the timing and the size of these interest rate changes, but the general pace of both interest rate hikes and reversing quantitative easing should remain gradual.

After raising rates in December of 2017, the Federal Reserve will do so again in March 2018. They will continue with rate hikes in 2018 and 2019 until the anticipated target rate reaches 4.5% in the third quarter of 2021. The path of interest rate hikes will deviate from this projection if growth deviates from our projected path or if there is a recession during the next four years, which is a real possibility.

The Fed has also begun the process of shrinking its \$4.5 trillion balance sheet, engorged by three rounds of quantitative easing, and like its efforts to raise the federal funds rate, we anticipate this to be a gradual process as well. In October, the Fed began allowing its Treasury

holdings to decline at a pace of \$6 billion per month, gradually rising to \$30 billion per month and its holdings of mortgage-backed securities to decline at \$4 billion per month rising to \$20 billion. These efforts have reduced the balance sheet to under \$4.4 trillion to date. However, like quantitative easing itself, this is uncharted water for monetary policy, and there is no blueprint on how best to carry this out. The possibility of a misstep in execution cannot be ruled out.

The change in leadership at the Federal Reserve is not having much of an impact on the pace and magnitude of interest rate hikes or balance sheet reductions. However, the Powell-led Fed will take a less hawkish stance on regulation, and this should free up the financial sector, allowing it to grow faster after seven-plus years of a heavy regulatory yoke.

## CONSUMER SPENDING

### *Rising Employment, Household Wealth, Disposable Incomes, Confidence, and Eventually Faster Wage and Salary Growth will all Encourage Consumers to Spend*

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 2014, real consumer spending growth was 2.9%; in 2015, it was 3.6%; in 2016, spending grew at 2.7%; and in 2017, consumer spending expanded again at 2.7%.

In these three years, the contribution to GDP growth was outsized. Consumer spending contributed 81% of economic growth in 2014, 83% in 2015, and in 2016, it contributed 124% to real GDP growth of 1.6%. In other words, if not for consumer spending, the U.S. economy would have contracted in 2016. In 2017, consumers again provided the bulk of growth accounting for 82% of the 2.3% growth last year.

Continued solid gains in employment, more rapidly rising wages, and improving household balance sheets should continue to provide a solid underpinning for continued consumer spending growth. The Tax Cut and Jobs Act also boosts consumer spending growth by raising disposable income. These improving fundamentals and growth-oriented policies should boost consumption spending going forward well above the



depressed level seen in the 1<sup>st</sup> quarter of 2017, when growth was just 1.9%.

The next eight quarters should show a steady acceleration of consumer spending growth. In the 4<sup>th</sup> quarter of 2017, consumption spending growth accelerated to 3.8%, as consumer confidence opened up consumers' wallets for the strongest holiday shopping season in years. In the 1<sup>st</sup> and 2<sup>nd</sup> quarters of 2018, consumer spending growth should ease to 3.0% and then accelerate to 3.2%, respectively. In 2019, the pace of spending will ramp up, averaging 3.7% for the full year, which will end with 3.8% growth in the 4<sup>th</sup> quarter of 2019.

Consumer spending, the largest component of GDP, is critical in supporting real GDP growth if this recovery is going to last, and specifically if growth is to accelerate from the low levels that have characterized most of its eight years. The other main sectors of the economy have faced headwinds that have also suppressed growth. Business investment has been weak and government spending is currently doing little to boost GDP growth, but net exports will provide some lift due to the near-term weakening of the dollar. The Trump administration's economic policies will boost business investment in a significant way, but consumers will still need to provide the momentum for this expansion going forward.

While other pillars supporting consumer spending continue to solidify, the labor market also continues its recovery. As the labor market continues to tighten, stronger wage and salary growth have shown hints of reappearing. The economy may not yet be at full employment, but it is getting closer by the month. Once wage growth does accelerate—accompanied by tax cuts that raise consumers' disposable income—it will be the catalyst that takes consumer spending growth to a higher level.

As a result, consumer spending growth decelerated to around 2.7% in 2016 from 3.2% in 2015 and held at that level in 2017. The tax law and other economic policies aimed at stimulating economic growth by the Trump administration, as well as faster wage and salary growth, will help boost consumer spending growth going forward. Consumption spending growth is expected to rise to 3.1% in 2018, to 3.5% in 2019, and accelerate further to 3.7% in 2020 before easing to 3.1% in 2021.

## INVESTMENT

After decelerating for two years during 2014-2015, nonresidential fixed investment spending turned negative in 2016, contracting by 0.6%. The long and peculiar presidential election cycle carried with it a much higher level of uncertainty than is typical for an election, and 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 contraction in investment spending was very close to what we would expect to see during a recession, though no recession was taking place.

Investment spending in this historically weak economic recovery has generally been feeble. 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 and the regulatory burden already being rolled back, the environment for investment spending is improving markedly.

The Tax Cut and Jobs Act significantly reduces the corporate tax rate and incentivizes the repatriation of profits held by U.S. corporations overseas. Coupled with proposed changes to allow smaller companies to immediately expense equipment instead of depreciating it, these provisions will all help to boost investment spending contributing to stronger economic growth in the next few years.

Spending on equipment and software contracted in four consecutive quarters, beginning in the fourth quarter of 2015. The fourth quarter of 2016 pulled us back from the possibility of a fifth consecutive quarter of contraction, as spending on equipment and software increased by 1.8%. However, for the full year in 2016, this type of investment spending contracted by 3.4%. In 2017, we saw an 8.2 percentage point swing in investment of this type, as the full year rebounded to 4.8% growth. The outlook going forward should continue to strengthen substantially. Average growth in this type of investment spending is expected to be 7.6% over the 2018-2021 time frame.

Purchases of aircraft again contracted by a significant amount in 2016 for the full year; 2016 aircraft spending contracted 24.8% but recovered by 14.2% in 2017. Over

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the next four years, spending on aircraft is expected to grow an average of 12.4%, but quarterly volatility in this type of investment spending is the rule, not the exception.

The 2016 contraction in investment spending also reflected the negative impact of the price of oil 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 have recovered from these lows and are now hovering around \$60 per barrel. As a result, the U.S. March 2018 rig count was 981, up 225 year over year.

During 2015, investment in mining and petroleum equipment contracted by 27.9% and further contracted in 2016 by 42.0%. In 2017, growth hit 60.7% and will average 8.0% per year during 2018-2021. While this isn't a return to \$100-a-barrel-level boom in spending, it is a solid recovery for a sector that has taken some hits from both markets and regulators. The approval of new pipelines by the Trump administration have also given a boost to shale oil production in North Dakota.

Aircraft and oil rigs were not the only source of weakness in investment spending in 2015 and 2016. As noted earlier, in 2015, the pace of real private nonresidential fixed investment growth decelerated to 2.4%. The weak start to 2016 and an environment of uncertainty resulted in a further deceleration of investment spending growth to -0.6%. Now, with the election a year behind us and an increased likelihood of investment-friendly policies on the way, business nonresidential investment growth hit 4.7% in 2017 and will accelerate to 5.9% in 2018, rise to 7.8% in 2019, ease to 6.2% in 2020, and finally slow to 3.4% in 2021.

Interest rates are currently still quite low by historical standards, even as the Fed has begun to push up the federal funds rate at a faster pace going forward, as well as continuing the process of shrinking its \$4.5 trillion balance sheet. In time, higher interest rates will begin to drag on investment spending, as is the intention of tightening monetary policy. Higher rates are behind the 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 10.0% from 2018 through 2021. Investment spending growth in computers and peripherals will average 4.8% during 2018-2021. Spending on communications equipment should expand at an average annual rate of 3.6% during the same four year span.

Investment growth in nonresidential structures has fluctuated over the past three years. Growth turned negative in 2015, with investment contracting by 1.8%. This was followed by another year of negative growth in 2016, with spending declining 3.9%. Investment in nonresidential structures grew faster in 2017 at 5.3% but will again decelerate in 2018 before accelerating again into 2019 and 2020. During 2018-2021, growth is expected to average 5.1% over those four years.

Residential fixed investment growth hit 10.2% in 2015, but then eased in 2016 to 5.6% before slipping further to 1.7% in 2017. Growth will average 6.3% through 2018-2021, accelerating to a peak growth rate of 8.1% in 2018. 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 6.8% on a 30-year fixed mortgage that year—and a slowing pace of price appreciation. In 2021, real residential fixed investment will be \$762 billion—\$111 billion less than its 2005 peak at the height of the housing bubble.

We expect housing starts to continue to gradually accelerate over the next several years, reaching a level slightly above 1.72 million in 2021. Average levels of annual housing starts from 2018-2021 will be 1.6 million.

## GOVERNMENT SPENDING

In 2016, federal government spending growth was just above zero after contracting for five consecutive years. This modest growth in spending will be reversed over the next two years before growth returns in the final three years of our forecast. In 2018, spending should contract by under 0.4%, and in 2019, it will rise again by 0.6%. During the 2018-2021 period, federal government spending is expected to rise, growing at an annual average pace of 0.2%. Over the same time frame, state and local governments will oversee spending growth at an average rate of 1.4%.

The federal budget deficit jumped in 2016 to over \$587 billion and will continue to increase every year over our forecast horizon through 2021. This reversal in course occurred after four years, during which we saw deficits shrinking from nearly \$1.3 trillion in 2011 to \$439 billion in 2015. The recently passed Tax Cut and Jobs Act will grow not only the economy, but also federal budget deficits. In 2017, the deficit grew to \$665.8 billion but will surge in 2018, when it hits \$901.6 billion. The deficit will grow larger in 2019, as entitlement and military spending coupled with tax cuts pushes it to \$1.134 trillion before rising again in 2020 to more than \$1.2 trillion. The deficit will continue to grow in 2021, when government spending will exceed revenue by nearly \$1.27 trillion.

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 (60% 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 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.

We are projecting deficits through 2021 that once again will revisit the \$1 trillion-plus deficits that were the norm in 2009-2012. The amount that the projected deficits will add to the national debt over the next four years will be over \$4.50 trillion, pushing the national debt total to over \$25 trillion before interest. 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 were to rise more quickly than anticipated. Slower-than-projected economic growth would also push projected deficits higher, though the possibility of faster economic growth would help mitigate the growth of these deficits.

Currently, the national debt is over \$20.8 trillion and rising. This represents a debt of nearly \$172,129 per taxpayer and \$63,725 per citizen. The unfunded liabilities of the U.S. are even more stunning. 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 \$112 trillion in liabilities, boiling down to \$926,762 per taxpayer.<sup>2</sup>

## 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 0.73 percentage points off of real GDP growth. In 2016, the drag continued but lessened; net exports still reduced growth by 0.23 percentage points. Again, in 2017, net exports lowered real GDP growth by 0.18 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, and in 2017-2018, the dollar is giving back some of these gains. As the Fed raises interest rates and the U.S. economy experiences faster growth, we expect that the dollar will appreciate again in 2019 and 2020.

A stronger dollar boosts imports and reduces exports by making our goods and services more expensive to foreigners while simultaneously 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.

The effects of currency changes take time to work on actual quantity of trade flows, resulting in what is known as the J-curve effect on net exports, wherein an appreciation of the dollar initially decreases the trade deficit before eventually increasing it.

Overall, real export growth continues through the end of our 2021 forecast horizon and is expected to accelerate in 2018 before easing through the end of 2021. Real import growth is expected to accelerate through 2020 all the while remaining above export growth through 2021. Real export growth from 2018-2021 will average 6.0%, while real import growth will average 8.5% over the same time frame.

Real net exports will average -\$901.6 billion during 2018-2021, with the trade balance worsening in each



successive year and coming in at more than -\$1.13 trillion in 2021. The sizeable appreciation of the dollar during 2012-2015 and anticipated appreciation in 2019-2021, anticipated 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 January 2018 held steady at the December 2017 reading of 4.1%, the lowest level since December of 2000. The unemployment remained unchanged as there was very little change in either the number of unemployed people or the overall labor force. The labor force participation rate remained stable at 62.7%. The labor market turbulence stirred up by Hurricane Irma is no longer evident in the January jobs report.

The January jobs report exceeded expectations, as growth in payroll jobs showed businesses adding 200,000 jobs after December's 160,000 job gain. The 200,000 increase in payroll employment in January was well above the average growth in monthly payrolls for 2017 of 181,000, which was down from 2016's average of 195,000. Average payroll job growth for 2015 came in at 226,000, down from 2014's average growth of 250,000. This late in the economic cycle (the recovery has lasted 105 months and counting), a rapid acceleration in job growth seems unlikely, but an end to the multi-year deceleration is possible as a result of the Tax Cut and Jobs Act.

The January labor force participation rate of 62.7% remains depressed and is at its lowest point since February 1978. Since the end of the recession, the labor force participation rate is down 3.0 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 451,000 workers), as well as those classified as underemployed (currently nearly 5.0 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,

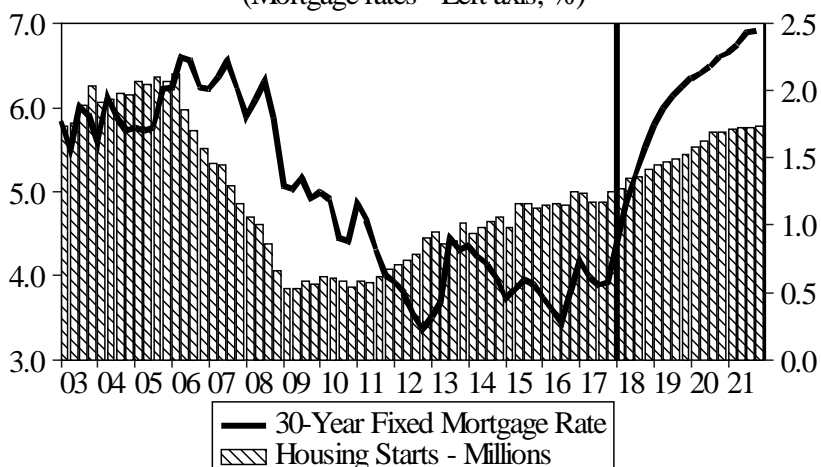
yet indicate a willingness to work (1.6 million workers). None of these 7.0 million workers are counted in the headline unemployment rate of 4.1%.

U-6 stands at 8.2% as of January 2018, up 0.1 percentage points from the December 2017 level and down 1.2 percentage points from the January 2017 level. The current level of U-6 is down 9.2 points from its peak of 17.1% in April 2010. U-6 remained in double digits for more than seven years. It has been in single digits for over two years beginning in October 2015 and is up 0.2 percentage points at the lowest level since December of 2006.

The spread between U-6 and U-3 measures of unemployment has ticked up to 4.1 percentage points, and is 3.6 points below the peak spread of 7.4 points that took place in September of 2011.

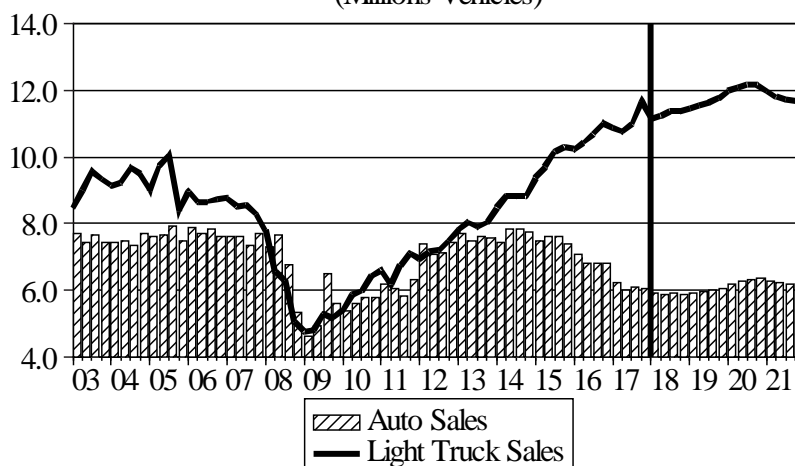
### 30-Year Mortgage Rates and Housing Starts

(Mortgage rates - Left axis, %)



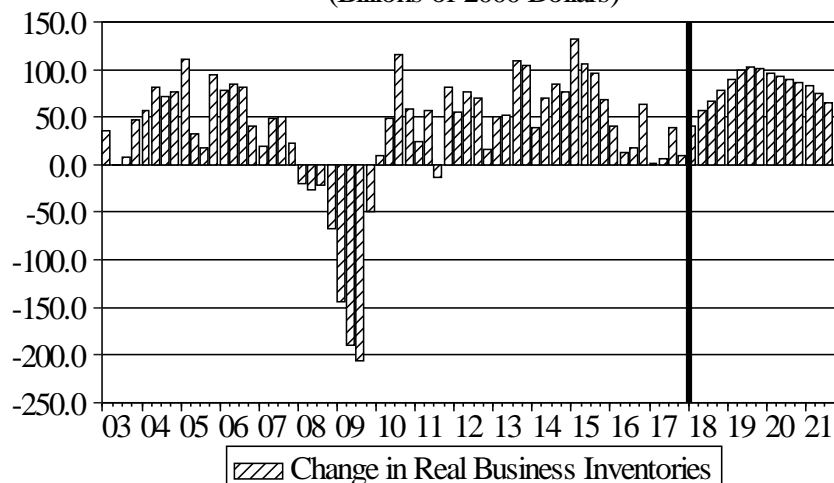
### Automobile and Light Truck Sales

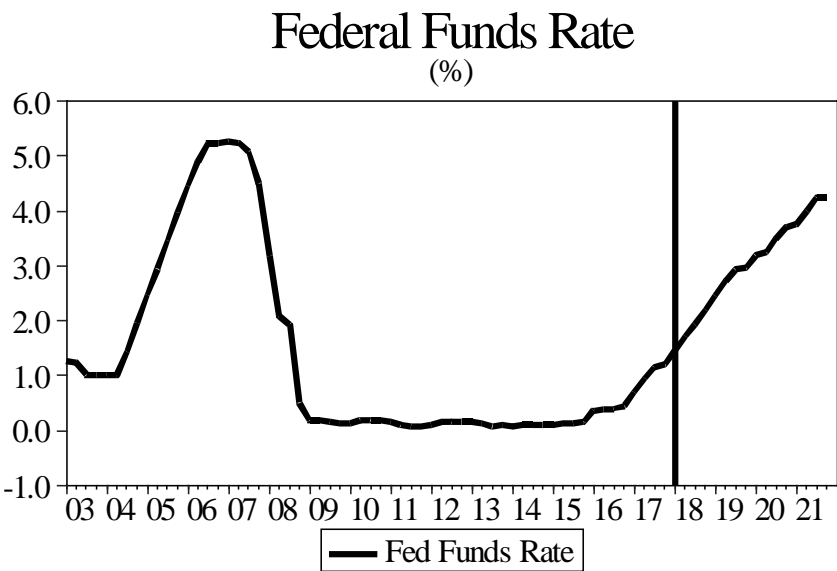
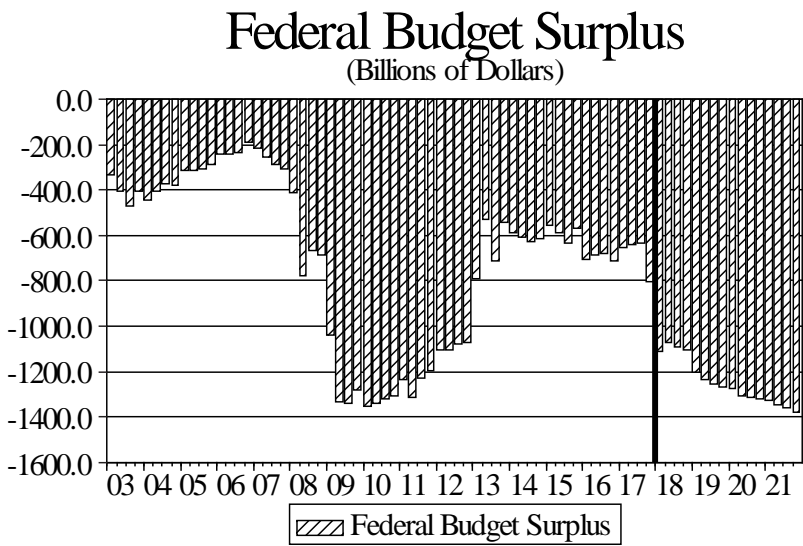
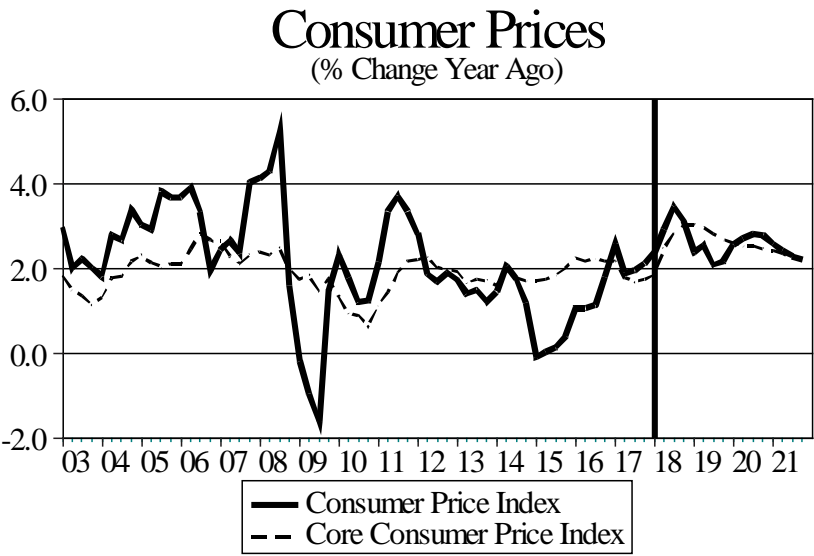
(Millions Vehicles)



### Change in Real Business Inventories

(Billions of 2000 Dollars)

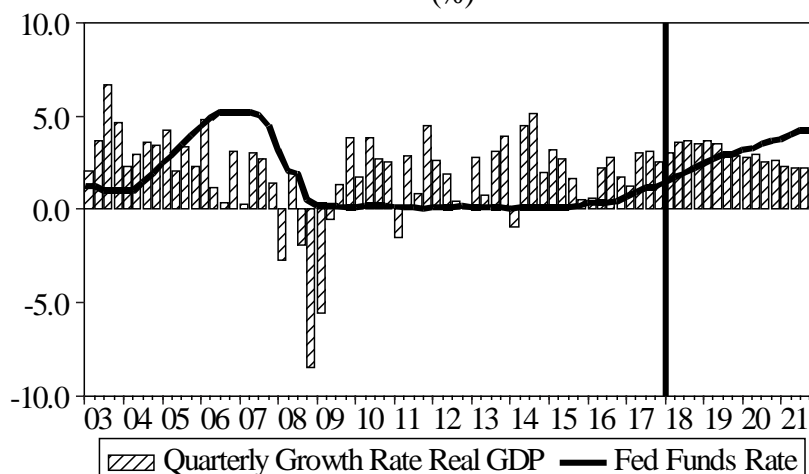






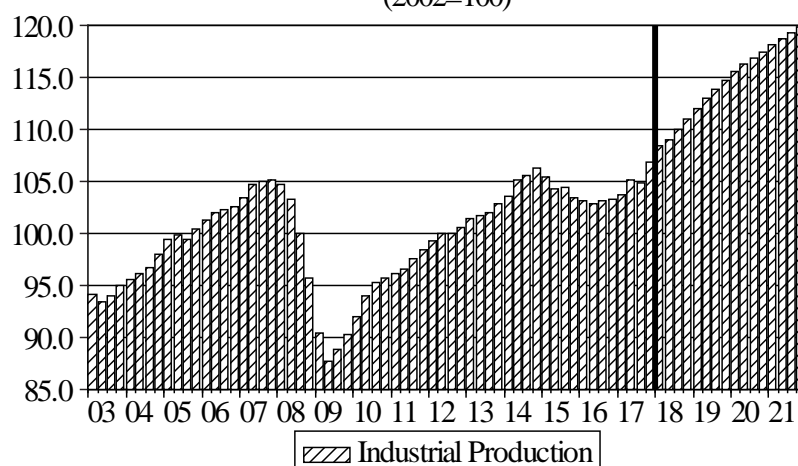
## Real GDP Growth and Federal Funds Rate

(%)



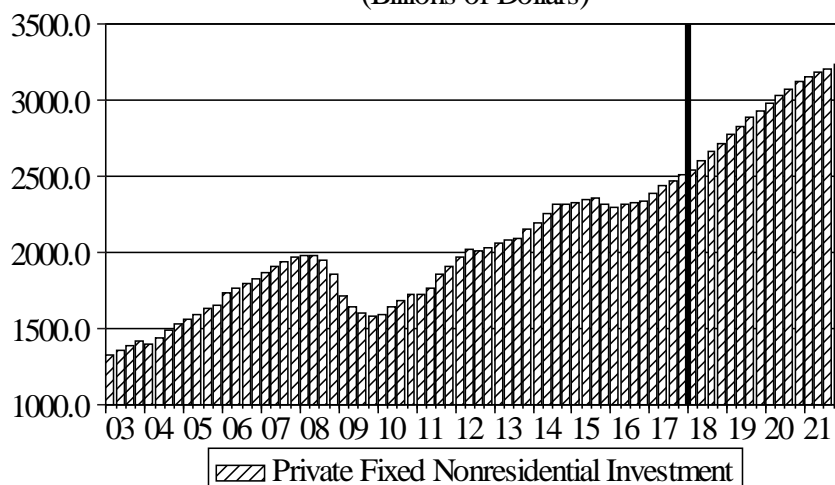
## Industrial Production

(2002=100)



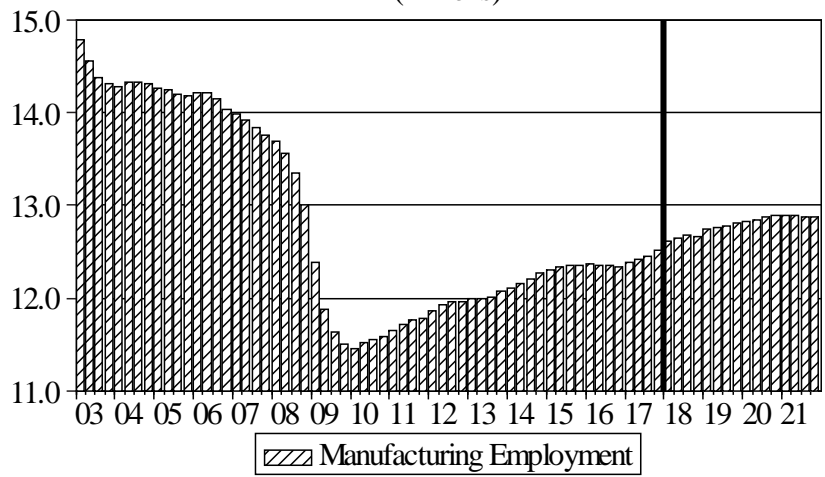
## Private Fixed Nonresidential Investment

(Billions of Dollars)



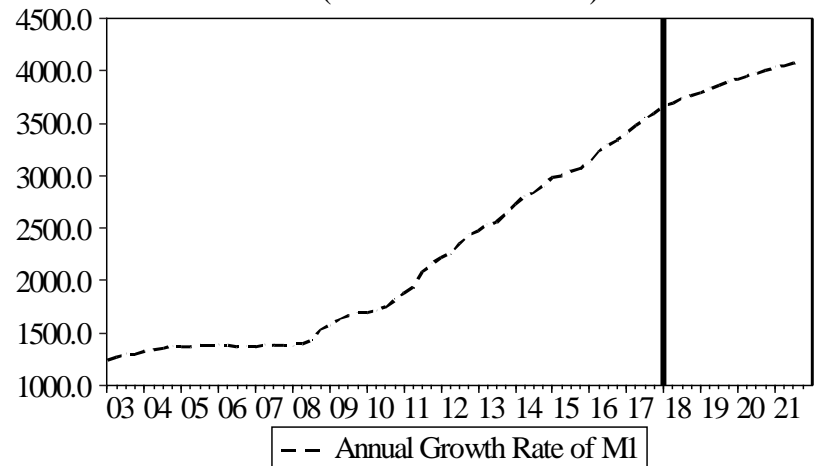
# Manufacturing Employment

(Millions)



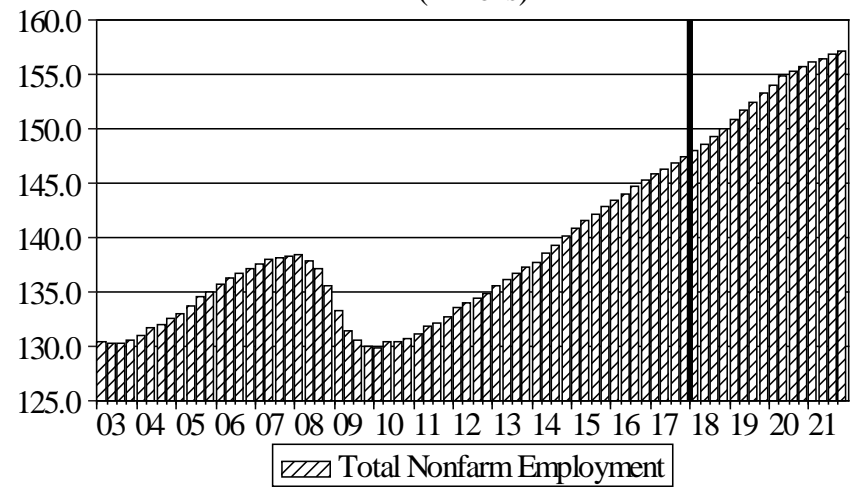
# Money Supply

(Annual Growth Rate %)

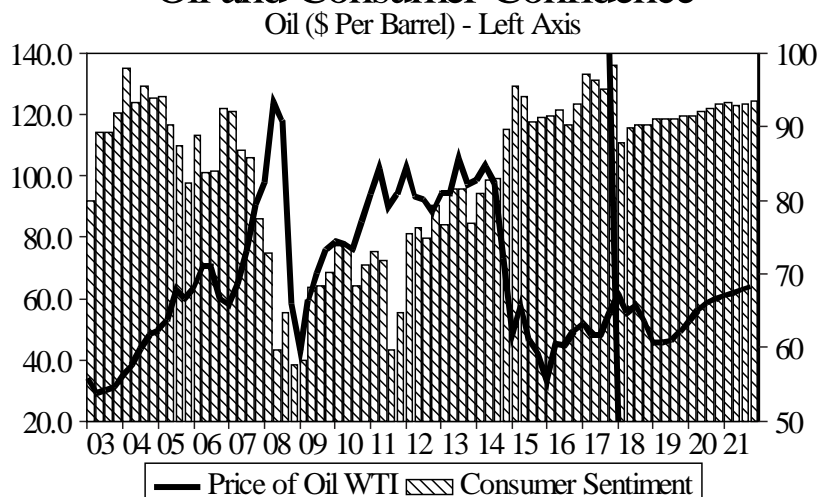


# Total Nonfarm Payroll Employment

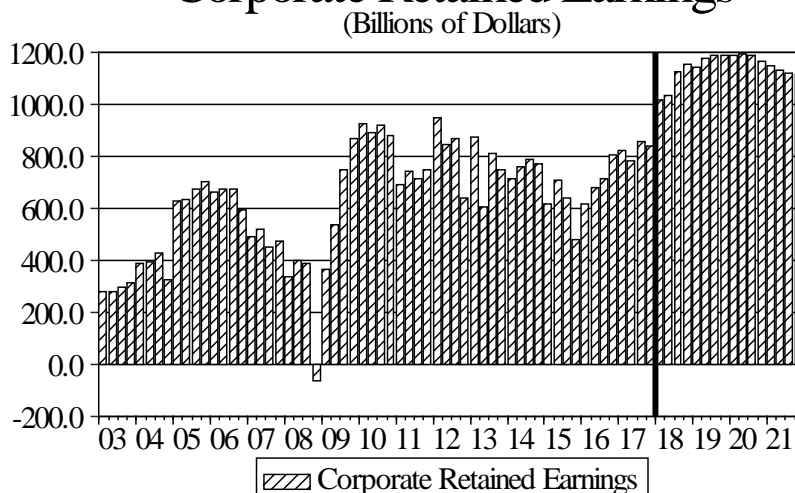
(Millions)



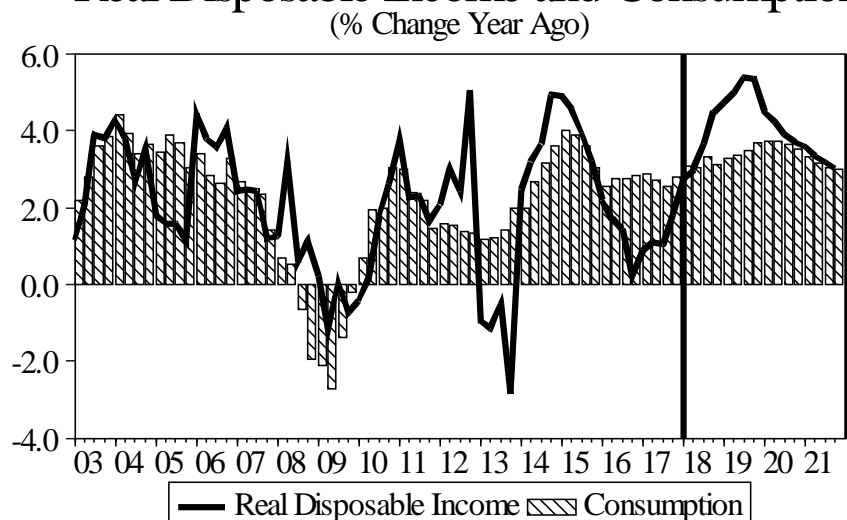
## Oil and Consumer Confidence



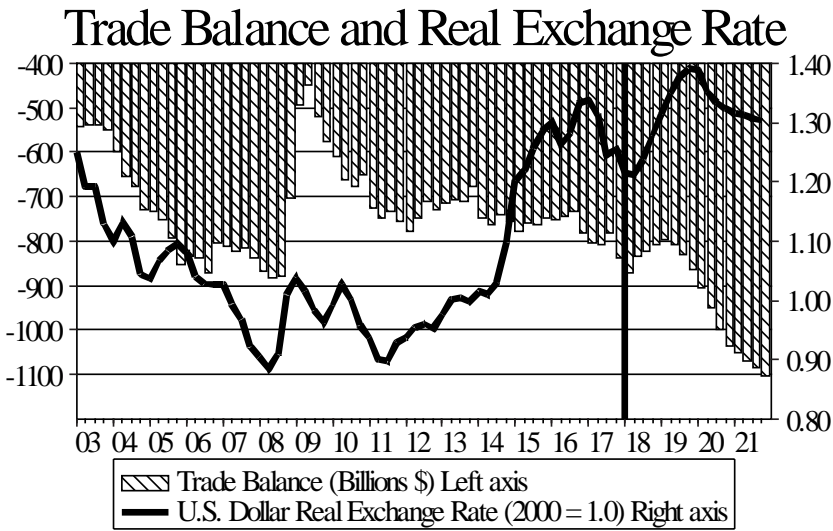
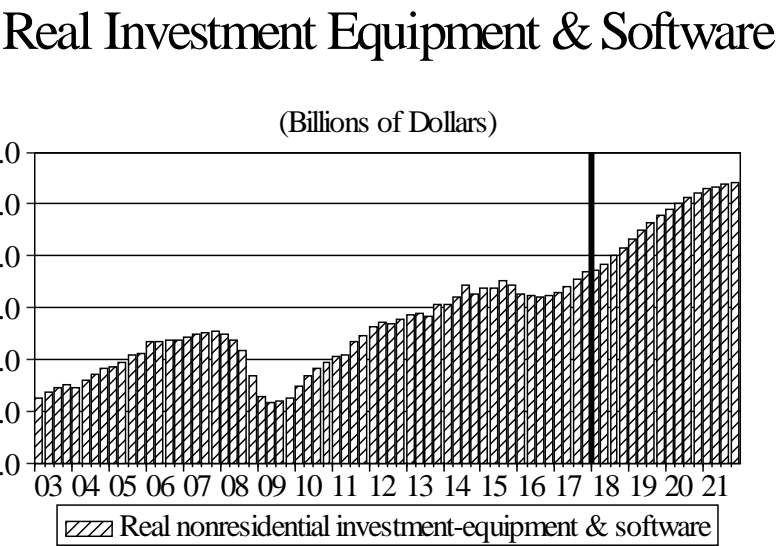
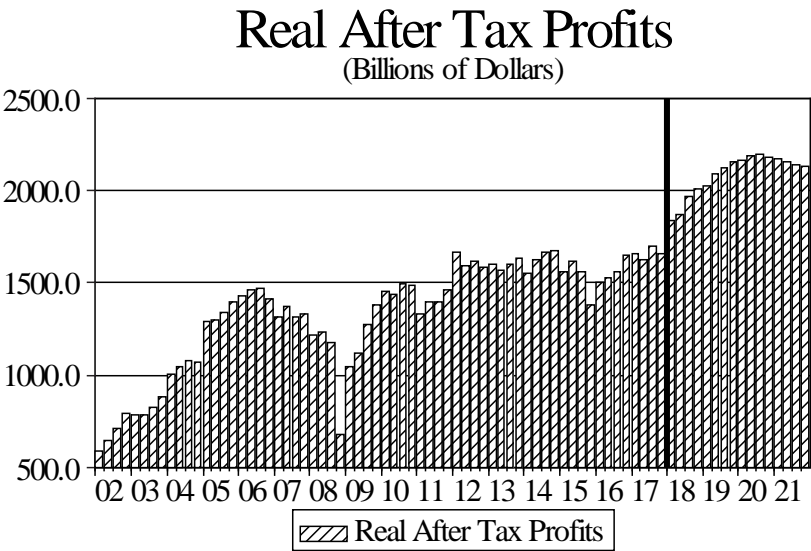
## Corporate Retained Earnings



## Real Disposable Income and Consumption

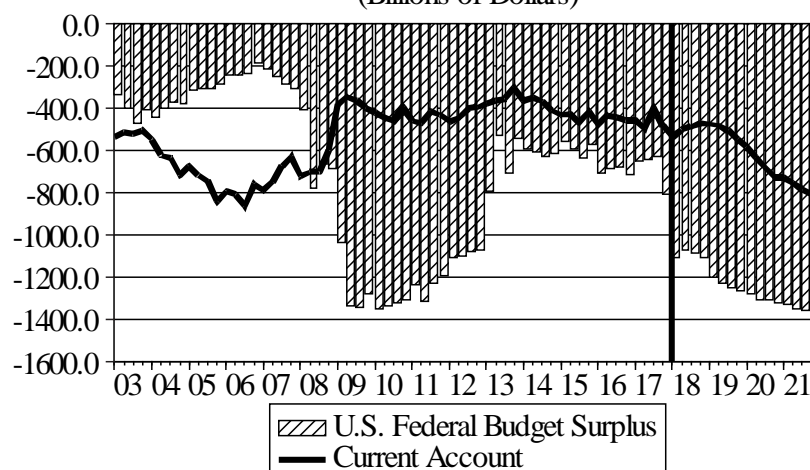






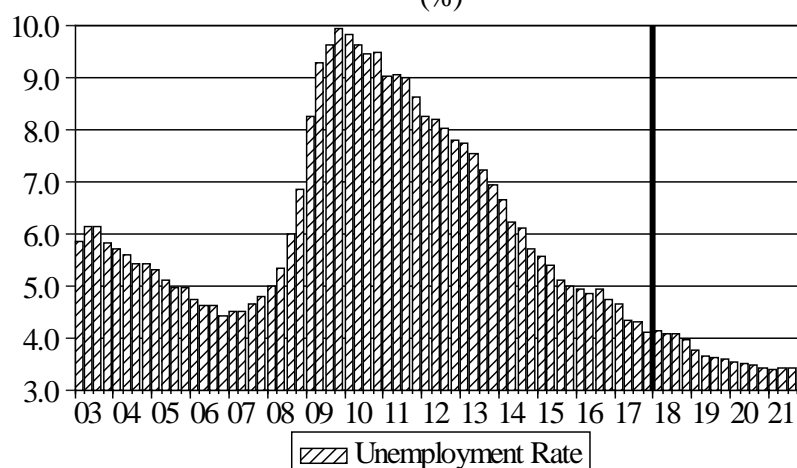
## Twin Deficits

(Billions of Dollars)



## Civilian Unemployment Rate

(%)



## Yield Curve

(%)

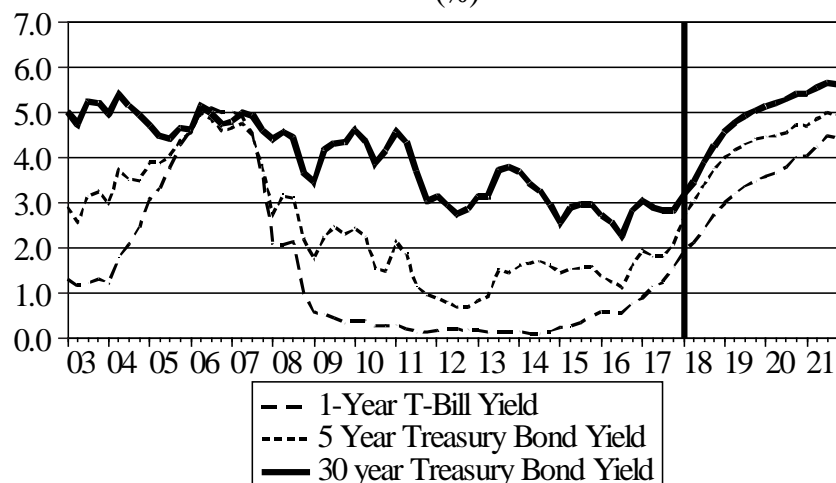


Table 1. Summary of the Long-Term Forecast of the U.S.

	2011	2012	2013	2014	2015	2016	2017	2018	Forecast		
Composition of Real GDP, Percent Change											
Gross Domestic Product	1.6	2.2	1.7	2.6	2.9	1.5	2.3	3.2	3.5	2.9	2.4
Final Sales of Domestic Product	1.7	2.1	1.5	2.7	2.6	1.9	2.4	2.9	3.3	3.0	2.5
Total Consumption	2.3	1.5	1.5	2.9	3.6	2.7	2.7	3.1	3.5	3.7	3.1
Durables	6.1	7.4	6.2	6.9	7.8	5.5	6.7	7.5	6.2	7.5	5.0
Nondurables	1.8	0.6	1.7	2.5	3.1	2.8	2.4	3.4	3.0	2.6	2.7
Services	1.8	0.8	0.6	2.4	3.2	2.3	2.2	2.4	3.2	3.4	3.0
Nonresidential Fixed Investment	7.6	9.1	3.5	6.9	2.4	-0.6	4.7	5.9	7.8	6.2	3.4
Equipment & Software	13.6	10.9	4.6	6.7	3.6	-3.4	4.8	7.9	10.7	7.7	4.1
Information Processing Equipment	1.6	6.0	4.9	3.7	4.3	1.8	7.6	8.1	7.8	5.4	4.0
Computers & Peripherals	-1.8	7.0	0.1	2.1	-3.5	-3.5	8.6	4.7	5.9	5.8	3.0
Communications Equipment	2.0	4.9	10.5	8.7	15.5	5.3	10.0	6.3	2.1	2.6	3.3
Industrial Equipment	21.0	9.4	-1.5	4.3	1.2	2.3	7.0	11.2	15.1	9.6	4.1
Transportation Equipment	37.6	23.5	12.8	13.3	12.3	-6.1	1.3	2.9	9.2	5.5	-0.7
Aircraft	28.4	7.5	8.5	13.8	6.3	-24.8	14.2	20.9	18.0	7.3	3.5
Other Equipment	33.0	21.8	5.8	16.1	10.4	-22.4	2.3	3.9	6.7	1.0	-0.8
Structures	2.3	13.3	1.4	10.6	-1.8	-3.9	5.3	2.8	7.0	7.2	3.5
Commercial & Health Care	-0.3	8.6	3.5	12.9	10.7	14.6	4.5	0.4	12.4	14.8	6.0
Manufacturing	-1.6	15.7	4.1	12.9	35.7	-6.4	-13.5	-5.7	27.3	3.7	-7.6
Power & Communication	-7.6	21.4	-4.3	17.3	-2.0	4.9	-6.2	-3.7	-0.8	1.0	-1.4
Mining & Petroleum	26.4	12.7	1.8	6.5	-27.9	-42.0	60.7	17.0	-2.7	4.7	13.1
Other	-9.1	9.5	4.3	7.1	10.6	7.4	2.0	7.5	5.4	5.3	2.0
Residential Fixed Investment	0.7	13.5	12.0	3.5	10.2	5.6	1.7	5.6	6.0	8.1	5.5
Exports	6.9	3.4	3.5	4.3	0.4	-0.3	3.4	7.6	6.9	4.8	4.5
Imports	5.6	2.2	1.1	4.5	5.0	1.3	3.9	7.9	9.1	10.1	6.8
Federal Government	-2.7	-1.9	-5.8	-2.4	-0.1	0.0	0.2	-0.4	0.6	0.5	0.0
State & Local Government	-3.3	-1.9	-0.8	0.5	2.3	1.2	0.1	1.0	1.7	1.5	1.4
Billions of Dollars											
Real GDP	15020.6	15354.6	15612.2	16013.3	16471.5	16716.2	17092.7	17643.2	18268.6	18798.9	19252.1
Nominal GDP	15517.9	16155.3	16691.5	17427.6	18120.7	18624.5	19386.8	20486.5	21764.8	22952.9	24054.0
Prices & Wages, Percent Change, Annual Rate											
GDP Deflator	2.1	1.8	1.6	1.8	1.1	1.3	1.8	2.4	2.6	2.5	2.3
Consumer Prices	3.1	2.1	1.5	1.6	0.1	1.3	2.1	3.0	2.3	2.7	2.4
Excl. Food & Energy	1.7	2.1	1.8	1.7	1.8	2.2	1.8	2.6	2.9	2.5	2.3
Producer Prices, Finished Goods	6.0	1.9	1.2	1.9	-3.3	-1.0	3.2	2.7	0.9	2.7	2.7
Employment Cost Index - Total Comp.	2.2	1.9	1.9	2.1	2.1	2.1	2.5	3.1	3.4	3.4	3.5
Other Measures											
Oil - WTI (\$ per barrel)	95.1	94.2	97.9	93.3	48.7	43.2	51.0	56.7	46.7	56.8	62.4
Productivity (% change)	0.1	0.9	0.3	1.0	1.2	0.0	1.2	2.0	2.0	1.7	1.6
Industrial Production (% change)	3.1	3.0	2.0	3.1	-0.7	-1.2	2.0	4.2	3.5	2.8	2.1
Factory Operating Rate	73.7	74.8	74.7	75.4	75.5	75.1	75.7	77.6	79.0	78.3	76.9
Nonfarm Inven. Chg. (Bil. of 2009 \$)	36.6	72.7	73.0	74.0	102.8	34.5	10.3	54.9	95.9	91.0	70.1
Consumer Sentiment Index	67.4	76.5	79.2	84.1	92.9	91.8	96.8	89.6	91.2	92.4	93.2
Light Vehicle Sales (Million units)	12.743	14.435	15.529	16.452	17.4	17.5	17.2	17.2	17.6	18.4	18.0
Housing Starts (Million units)	0.612	0.784	0.928	1.001	1.1	1.2	1.2	1.4	1.5	1.6	1.7
Existing House Sales (Million units)	3.792	4.125	4.475	4.333	4.6	4.8	4.9	5.1	5.2	5.5	5.7
Unemployment Rate (%)	8.9	8.1	7.4	6.2	5.3	4.9	4.4	4.1	3.7	3.5	3.4
Payroll Employment (% change)	1.2	1.7	1.6	1.9	2.1	1.8	1.6	1.6	2.1	1.9	1.1
Federal Surplus (Unified, FY, bil. \$)	-1297	-1089	-680	-484	-439.1	-587.4	-665.8	-901.6	-1133.7	-1207.0	-1267.0
Current Account Balance (Bil. \$)	-445	-426	-350	-374	-434.6	-451.7	-459.4	-499.5	-501.9	-656.1	-769.6
Financial Markets, NSA											
Federal Funds Rate (%)	0.10	0.14	0.11	0.09	0.1	0.4	1.0	1.8	2.8	3.4	4.1
3-Month Treasury Bill Rate (%)	0.05	0.09	0.06	0.03	0.1	0.3	0.9	1.8	2.6	3.2	3.7
1-Year Treasury Note Yield (%)	0.18	0.18	0.13	0.12	0.3	0.6	1.2	2.3	3.3	3.8	4.3
5-Year Treasury Note Yield (%)	1.52	0.76	1.17	1.64	1.5	1.3	1.9	3.2	4.2	4.6	4.9
10-Year Treasury Note Yield (%)	2.79	1.80	2.35	2.54	2.1	1.8	2.3	3.5	4.5	4.9	5.2
30-Year Treasury Note Yield (%)	3.91	2.92	3.45	3.34	2.8	2.6	2.9	3.7	4.8	5.3	5.6
30-Year Fixed Mortgage Rate (%)	4.46	3.66	3.98	4.17	3.9	3.6	4.0	5.0	6.0	6.5	6.8
S&P 500 Stock Index	1269	1380	1643	1931	2061	2092	2448	2862	2650	2627	2695
(% change)	11.5	8.9	19.0	17.7	6.9	1.6	17.0	17.2	-7.4	-0.8	2.6
Exchange Rate, Major Trading Partners	0.913	0.947	0.977	1.009	1.2	1.2	1.2	1.1	1.2	1.2	1.2
(% change (negative = depreciation))	-5.8	3.8	3.2	3.3	16.1	0.7	-0.5	-5.0	7.9	1.1	-2.0
Incomes											
Personal Income (Bil. of \$)	13255	13915	14074	14818	15553	15929	16417	17174	18287	19411	20451
(% change)	6.2	5.0	1.2	5.3	5.0	2.4	3.1	4.6	6.5	6.1	5.4
Disposable Income (Bil. of \$)	11801	12404	12396	13033	13615	13969	14377	15145	16164	17142	18042
(% change)	5.0	5.1	0.0	5.1	4.5	2.6	2.9	5.3	6.7	6.1	5.3
Real Disposable Income (Bil. Of 2009 \$)	11331	11688	11528	11939	12436	12609	12762	13206	13882	14450	14925
(% change)	2.5	3.1	-1.4	3.6	4.2	1.4	1.2	3.5	5.1	4.1	3.3
Saving Rate (%)	6.1	7.6	5.0	5.7	6.1	4.9	3.4	3.7	5.1	5.4	5.5
After-Tax Profits (Billions of \$)	1428	1683	1688	1744	1651	1688	1816	2129	2355	2486	2491
(% change)	-2.9	18.1	0.3	3.3	-5.1	2.8	7.7	17.2	10.7	5.6	0.2



Table 2. Real Gross Domestic Product

	History								Forecast		
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Real GDP Billions 2009 \$</b>											
Gross Domestic Product	15020.6	15354.6	15612.2	16013.3	16471.5	16716.2	17092.7	17643.2	18268.6	18798.9	19252.1
Final Sales of Domestic Product	14979.0	15292.3	15521.1	15932.9	16354.3	16664.1	17060.0	17563.0	18150.0	18686.3	19159.4
Total Consumption	10263.5	10413.2	10565.4	10868.4	11264.3	11572.1	11888.9	12262.8	12686.6	13151.1	13562.5
Durables	1151.5	1236.2	1312.7	1403.1	1511.8	1595.1	1702.1	1828.9	1942.9	2088.9	2193.3
Nondurables	2263.2	2277.5	2316.1	2373.0	2446.8	2514.3	2575.7	2662.7	2741.3	2812.9	2889.0
Services	6851.4	6908.1	6951.3	7115.5	7340.1	7507.3	7672.5	7855.4	8104.1	8376.8	8624.4
Nonresidential Fixed Investment	1802.3	1964.1	2032.9	2172.7	2223.5	2210.4	2314.2	2451.0	2641.0	2803.0	2898.7
Equipment & Software	847.9	939.2	982.3	1047.4	1084.5	1047.8	1098.0	1184.9	1311.9	1412.1	1469.4
Information Processing Equipment	285.9	303.1	317.7	329.6	343.9	350.2	376.8	407.2	439.0	462.5	481.2
Computers & Peripherals	83.0	88.4	88.5	90.2	87.1	84.0	91.2	95.2	100.8	106.6	109.9
Communications Equipment	91.8	96.3	106.2	115.3	133.2	140.2	154.1	163.8	167.2	171.5	177.2
Industrial Equipment	183.3	199.8	196.7	205.0	207.3	212.1	226.9	252.5	290.4	318.0	330.9
Transportation Equipment	173.9	213.1	240.6	272.3	305.6	286.7	290.3	298.6	326.0	343.8	341.4
Aircraft	27.9	29.2	31.7	35.1	37.2	27.9	31.7	38.3	45.1	48.4	50.1
Other Equipment	48.1	58.1	61.3	71.1	77.8	60.3	61.3	63.3	67.5	68.2	67.6
Structures	374.7	423.1	428.8	474.0	465.4	446.4	470.1	483.0	517.0	554.1	573.2
Commercial & Health	94.7	102.8	106.4	120.2	132.9	152.3	158.6	159.1	178.8	205.1	217.3
Manufacturing	39.1	44.9	46.7	52.8	70.7	66.2	57.2	53.5	68.1	70.2	64.8
Power & Communication	74.1	89.7	85.7	98.5	95.2	99.5	93.2	89.7	88.9	89.8	88.5
Mining & Petroleum	110.9	123.8	126.0	134.2	95.9	54.5	86.1	99.6	96.9	101.4	114.6
Other	56.2	61.5	64.1	68.7	75.9	81.5	83.1	89.3	94.0	99.1	101.0
Residential Fixed Investment	384.5	436.5	488.3	505.2	556.9	587.4	597.5	630.6	668.4	722.9	762.5
Exports	1898.3	1963.2	2031.5	2118.4	2127.1	2120.1	2191.3	2358.6	2520.7	2641.3	2760.5
Imports	2357.7	2410.2	2436.4	2546.1	2672.4	2706.3	2812.8	3035.7	3312.7	3647.1	3892.2
Federal Government	1236.4	1213.5	1142.8	1115.0	1114.1	1114.6	1116.7	1111.9	1118.6	1124.6	1124.7
State & Local Government	1761.0	1728.1	1714.1	1723.0	1762.8	1783.6	1784.7	1801.6	1832.8	1860.2	1885.7

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

	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
<b>Composition of Real GDP, Percent Change, Annual Rate</b>																
Gross Domestic Product	2.6	3.1	3.7	3.7	3.6	3.8	3.6	3.1	2.9	2.8	3.0	2.6	2.6	2.3	2.2	2.2
Final Sales of Domestic Product	3.2	2.4	3.3	3.5	3.3	3.5	3.4	3.0	3.0	2.9	3.1	2.7	2.7	2.4	2.4	2.4
Total Consumption	3.8	3.0	3.2	3.2	3.0	3.6	3.6	3.7	3.8	3.8	3.6	3.4	3.3	2.9	2.9	3.0
Durables	14.2	3.1	7.7	6.6	4.5	6.4	6.7	6.1	7.4	9.2	7.6	6.9	6.1	3.8	3.6	4.7
Nondurables	5.2	3.6	2.6	2.2	3.1	3.4	3.0	2.9	2.7	2.3	2.5	2.7	2.6	2.6	2.9	2.9
Services	1.8	2.9	2.7	3.0	2.8	3.3	3.3	3.5	3.6	3.4	3.3	3.1	3.1	2.9	2.9	2.8
Nonresidential Fixed Investment	6.8	3.7	7.2	7.5	7.0	8.6	7.8	8.2	6.7	6.2	5.3	4.6	4.1	3.4	2.5	2.4
Equipment & Software	11.4	0.7	8.7	11.5	11.5	11.2	10.9	9.9	8.3	7.5	6.3	6.7	4.9	4.2	2.5	2.3
Information Processing Equipment	9.1	5.1	7.4	9.0	9.3	9.1	5.8	5.9	6.1	5.7	5.1	4.2	3.7	4.0	3.9	4.0
Computers & Peripherals	-26.8	16.6	3.0	2.9	6.0	4.1	9.0	8.4	7.5	5.7	5.0	2.3	2.0	3.7	2.6	3.0
Communications Equipment	39.4	-0.6	3.9	3.1	3.2	2.1	0.3	0.7	2.4	2.8	3.4	3.9	3.2	3.4	3.2	3.2
Industrial Equipment	2.6	7.2	21.3	19.1	15.9	14.8	12.5	13.2	11.3	10.1	7.8	6.5	3.6	4.5	2.9	2.1
Transportation Equipment	13.7	-11.9	3.2	2.9	16.8	6.6	14.3	8.4	2.9	5.6	4.3	4.9	3.6	-1.7	-4.7	-4.3
Aircraft	-36.8	69.7	27.2	18.3	5.7	27.2	27.1	7.8	6.8	5.0	6.5	5.8	4.1	3.2	2.1	2.5
Other Equipment	25.7	-11.8	-14.4	-14.0	33.1	6.6	9.3	5.7	-0.4	-1.2	-0.4	0.5	1.6	-1.4	-2.2	-2.1
Structures	1.4	4.2	6.7	4.7	1.9	9.9	6.9	11.2	8.2	7.9	6.6	3.1	4.4	2.7	3.1	3.5
Commercial & Health Care	0.5	3.8	5.1	4.1	-0.1	17.2	22.4	18.4	15.4	15.8	15.1	7.1	9.7	5.3	3.6	3.2
Manufacturing	-10.9	-5.8	-7.2	27.8	32.1	40.8	23.9	27.0	11.3	5.2	-10.8	-12.0	-9.8	-13.0	-4.6	4.7
Power & Communication	-10.9	-2.8	8.3	2.0	-9.7	3.0	-9.5	9.7	5.2	0.0	0.9	-3.2	-4.4	-0.5	1.5	-1.0
Mining & Petroleum	17.0	13.5	16.8	-8.2	-2.9	-3.0	-4.1	-3.5	-2.2	4.8	11.3	13.2	16.2	14.8	10.7	8.9
Other	9.9	9.0	5.5	11.9	8.0	3.0	1.3	5.8	6.5	6.7	5.7	3.6	2.1	0.3	1.1	2.2
Residential Fixed Investment	11.6	6.0	10.6	4.8	7.7	5.3	4.3	5.9	7.2	7.3	10.0	11.8	9.7	2.5	2.6	3.3
Exports	6.9	9.7	9.2	9.6	8.3	6.5	5.9	4.7	4.1	4.5	4.8	5.7	5.5	4.7	3.7	3.4
Imports	13.9	11.1	6.3	7.7	7.9	9.2	10.5	10.9	10.2	10.4	9.4	10.0	8.9	6.1	4.9	4.4
Federal Government	3.5	0.2	-7.7	0.5	0.3	0.5	4.7	0.1	-0.3	0.5	2.8	-2.4	-0.7	0.7	0.4	0.2
State & Local Government	2.6	0.3	1.1	1.0	1.8	2.1	1.9	1.8	1.6	1.4	1.3	1.3	1.4	1.4	1.4	1.3
<b>Billions of Dollars</b>																
Real GDP	17272.5	17405.1	17562.3	17724.0	17881.5	18046.8	18205.8	18344.8	18476.8	18604.1	18743.1	18863.1	18985.3	19094.6	19198.9	19305.7
Nominal GDP	19738.9	20020.7	20306.4	20647.8	20971.0	21299.6	21623.8	21922.1	22213.7	22516.8	22817.2	23095.8	23382.0	23661.7	23922.5	24186.1
<b>Prices &amp; Wages, Percent Change, Annual Rate</b>																
GDP Deflator	2.4	2.6	2.1	3.0	2.7	2.6	2.6	2.5	2.4	2.7	2.3	2.3	2.4	2.5	2.2	2.2
Consumer Prices	3.7	4.2	1.8	4.2	2.3	1.3	2.5	2.3	2.6	2.9	3.0	2.8	2.5	2.2	2.3	2.2
Excl. Food & Energy	2.3	2.9	3.0	3.2	3.1	2.9	2.8	2.6	2.5	2.5	2.5	2.5	2.4	2.2	2.3	2.2
Producer Prices, Finished Goods	6.6	3.8	-0.1	2.5	1.0	-0.6	1.0	1.7	2.5	3.0	3.3	3.1	2.7	2.5	2.5	2.5
Employment Cost Index - Total Comp.	1.9	4.4	2.7	3.2	3.4	3.5	3.4	3.5	3.4	3.2	3.4	3.5	3.4	3.4	3.5	3.5
<b>Other Key Measures</b>																
Oil - WTI (\$ per barrel)	55.4	61.2	55.4	57.6	52.5	45.5	45.7	46.4	49.1	52.7	56.2	58.5	59.9	60.9	61.9	62.9
Productivity (% change)	-0.1	2.2	3.1	2.9	2.3	1.7	1.7	1.7	1.6	1.6	1.9	1.5	1.6	1.4	1.5	1.6
Industrial Production (% change)	8.2	5.9	2.0	3.7	3.7	3.6	3.6	3.4	3.1	2.9	2.3	2.0	2.1	2.4	1.9	2.0
Factory Operating Rate	76.4	76.8	77.3	77.9	78.4	78.8	79.2	79.1	79.0	78.7	78.5	78.1	77.9	77.5	77.0	76.6
Nonfarm Inven. Chg. (Bil. of 2009 \$)	3.6	35.4	51.0	60.4	72.8	85.0	96.3	101.4	100.8	95.8	92.7	89.3	86.3	82.3	75.2	65.8
Consumer Sentiment Index	98.4	87.8	89.9	90.2	90.3	91.1	91.1	91.2	91.4	91.6	92.1	92.6	93.2	93.4	92.9	93.2
Light Vehicle Sales (Million units)	17.724	17.044	17.101	17.256	17.241	17.4	17.5	17.6	17.8	18.2	18.4	18.5	18.5	18.2	18.0	17.9
Housing Starts (Million units)	1.251	1.273	1.352	1.365	1.413	1.5	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7
Existing House Sales (Million units)	4.973	5.061	5.099	5.106	5.161	5.1	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.7	5.7	5.7
Unemployment Rate (%)	4.1	4.1	4.1	4.1	4.0	3.8	3.7	3.6	3.6	3.5	3.5	3.5	3.4	3.4	3.4	3.4
Payroll Employment (% change)	1.5	1.6	1.5	1.9	2.2	2.2	2.2	2.1	2.0	1.9	2.3	1.0	1.1	1.1	0.9	0.9
Federal Surplus (NIPA Bil. \$)	-806	-1108	-1071	-1088	-1106	-1200.9	-1232.9	-1252.8	-1267.3	-1277.9	-1304.8	-1311.0	-1322.0	-1329.7	-1349.7	-1359.3
Current Account Balance (Bil. \$)	-484	-536	-502	-488	-472	-475.0	-482.0	-506.8	-543.9	-584.8	-630.7	-679.4	-729.6	-729.9	-755.9	-785.9
<b>Financial Markets, NSA</b>																
Federal Funds Rate (%)	1.20	1.44	1.72	1.93	2.20	2.5	2.7	2.9	3.0	3.2	3.2	3.5	3.7	3.8	4.0	4.3
3-Month Treasury Bill Rate (%)	1.21	1.54	1.71	1.87	2.09	2.3	2.6	2.7	2.8	3.0	3.0	3.3	3.4	3.5	3.7	3.9
1-Year Treasury Note Yield (%)	1.55	1.92	2.12	2.41	2.72	3.0	3.2	3.4	3.5	3.6	3.6	3.8	4.0	4.0	4.2	4.5
5-Year Treasury Note Yield (%)	2.07	2.69	3.04	3.40	3.73	4.0	4.2	4.3	4.4	4.5	4.5	4.6	4.7	4.7	4.9	5.0
10-Year Treasury Note Yield (%)	2.37	2.95	3.33	3.71	4.05	4.3	4.5	4.6	4.7	4.8	4.8	4.9	5.0	5.0	5.1	5.3
30-Year Treasury Note Yield (%)	2.82	3.16	3.46	3.89	4.26	4.6	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.4	5.5	5.7
30-Year Fixed Mortgage Rate (%)	3.92	4.40	4.84	5.20	5.53	5.8	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9
S&P 500 Stock Index	2605	2822	2945	2894	2789	2702.8	2656.7	2624.5	2615.2	2615.1	2625.0	2630.7	2636.7	2662.0	2682.1	2707.7
(% change)	24.2	37.7	18.7	-6.8	-13.7	-11.7	-6.6	-4.8	-1.4	0.0	1.5	0.9	0.9	3.9	3.1	3.9
Exchange Rate, Major Trading Partners	1.144	1.104	1.096	1.112	1.139	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
(%change (negative = depreciation))	2.8	-13.3	-3.0	6.0	10.3	9.7	9.3	8.1	5.1	2.1	-7.6	-2.5	-1.6	-1.4	-1.4	-1.6
<b>Incomes</b>																
Personal Income (Bil. of \$)	16631	16824	17042	17284	17544	17860.4	18146.4	18431.7	18711.1	19004.7	19283.1	19544.7	19810.5	20088.5	20328.5	20573.1
(% change)	4.4	4.7	5.3	5.8	6.2	7.4	6.6	6.4	6.2	6.4	6.0	5.5	5.6	5.7	4.9	4.9
Disposable Income (Bil. of \$)	14544	14858	15028	15235	15461	15786.2	16039.0	16290.9	16538.0	16784.1	17030.4	17260.7	17493.1	17728.2	17939.8	18142.9
(% change)	3.9	8.9	4.7	5.6	6.1	8.7	6.6	6.4	6.2	6.1	6.0	5.5	5.5	5.5	4.9	4.6
Real Disposable Income (Bil. of 2009 \$)	12819	13026	13148	13253	13396	13641.7	13806.6	13966.7	14115.0	14256.1	14392.2	14514.3	14638.4	14768.5	14876.2	14975.4
(% change)	1.1	6.6	3.8	3.2	4.4	7.5	4.9	4.7	4.3	4.1	3.9	3.4	3.5	3.6	2.9	2.7
Saving Rate (%)	2.6	3.5	3.7	3.6	3.9	4.8	5.0	5.2	5.3	5.4	5.4	5.4	5.4	5.5	5.5	5.4
After-Tax Profits (Billions of \$)	1821	2023	2065	2183	2244	2267.1	2337.8	2387.8	2428.3	2450.1	2485.4	2502.3	2504.3	2498.5	2495.2	2486.5
(% change)	-7.7	52.1	8.7	24.7	11.7	4.2	13.1	8.8	7.0	3.6	5.9	2.7	0.3	-0.9	-0.5	-1.4

Table 4. Quarterly Gross Domestic Product

	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
<b>Real GDP Billions 2009 \$</b>																
Gross Domestic Product	17272.5	17405.1	17562.3	17724.0	17881.5	18046.8	18205.8	18344.8	18476.8	18604.1	18743.1	18863.1	18985.3	19094.6	19198.9	19305.7
Final Sales of Domestic Product	17243.5	17344.6	17486.3	17637.7	17783.5	17937.8	18086.6	18221.3	18354.4	18486.9	18629.0	18752.2	18877.2	18990.3	19101.3	19217.1
Total Consumption	12028.1	12118.7	12215.5	12312.1	12404.8	12515.6	12627.5	12742.0	12861.6	12981.4	13097.5	13208.6	13316.8	13412.8	13510.5	13611.2
Durables	1770.6	1784.2	1817.4	1846.7	1867.2	1896.6	1927.4	1956.2	1991.4	2035.5	2073.0	2108.0	2139.2	2159.2	2178.3	2203.6
Nondurables	2614.4	2637.9	2654.7	2669.0	2689.3	2711.7	2731.9	2751.5	2770.1	2786.1	2803.3	2822.2	2840.1	2858.6	2879.0	2899.3
Services	7719.1	7773.8	7826.2	7883.6	7938.2	8001.9	8067.6	8137.7	8209.2	8277.6	8345.8	8409.7	8474.3	8534.2	8594.5	8654.0
Nonresidential Fixed Investment	2365.7	2387.0	2428.9	2473.0	2514.9	2567.4	2616.1	2668.4	2712.1	2753.2	2788.8	2820.7	2849.2	2872.8	2890.7	2908.2
Equipment & Software	1140.4	1142.5	1166.7	1198.7	1231.8	1265.0	1298.0	1328.9	1355.6	1380.3	1401.7	1424.6	1441.8	1456.7	1465.7	1474.0
Information Processing Equipment	390.3	395.1	402.3	411.1	420.4	429.6	435.7	442.0	448.6	454.8	460.5	465.3	469.5	474.1	478.7	483.5
Computers & Peripherals	90.5	94.0	94.7	95.4	96.8	97.8	99.9	101.9	103.8	105.3	106.5	107.1	107.7	108.6	109.3	110.1
Communications Equipment	161.9	161.7	163.2	164.5	165.8	166.6	166.8	167.1	168.1	169.3	170.7	172.3	173.7	175.2	176.5	177.9
Industrial Equipment	231.7	235.7	247.4	258.5	268.2	277.7	286.0	294.9	303.0	310.4	316.2	321.2	324.1	327.7	330.0	331.7
Transportation Equipment	302.4	292.9	295.2	297.3	309.1	314.1	324.7	331.4	333.8	338.3	341.8	346.0	349.0	347.5	343.4	339.6
Aircraft	31.2	35.7	37.9	39.5	40.0	42.5	45.2	46.0	46.8	47.3	48.1	48.8	49.3	49.7	49.9	50.2
Other Equipment	67.3	65.2	62.7	60.4	64.9	65.9	67.4	68.4	68.3	68.1	68.0	68.1	68.4	68.1	67.8	67.4
Structures	469.0	473.8	481.6	487.1	489.5	501.2	509.6	523.3	533.7	543.9	552.7	556.9	562.9	566.7	571.0	575.9
Commercial & Health	155.3	156.8	158.8	160.4	160.3	166.8	175.5	183.0	189.7	196.8	203.9	207.4	212.3	215.0	216.9	218.7
Manufacturing	52.4	51.6	50.7	53.9	57.8	62.9	66.4	70.5	72.4	73.3	71.3	69.0	67.3	65.0	64.2	65.0
Power & Communication	89.3	88.7	90.5	90.9	88.6	89.3	87.1	89.1	90.3	90.3	90.5	89.7	88.7	88.6	88.9	88.7
Mining & Petroleum	94.9	98.0	101.8	99.7	98.9	98.2	97.2	96.3	95.8	96.9	99.5	102.7	106.6	110.3	113.2	115.6
Other	84.8	86.7	87.9	90.4	92.1	92.8	93.1	94.4	95.9	97.5	98.8	99.7	100.2	100.3	100.6	101.1
Residential Fixed Investment	603.4	612.2	627.8	635.2	647.0	655.4	662.4	671.9	683.8	695.9	712.7	732.9	750.0	754.7	759.5	765.7
Exports	2229.5	2281.6	2332.4	2386.3	2434.2	2473.1	2508.9	2537.6	2563.2	2591.3	2621.9	2658.2	2693.9	2725.1	2750.1	2773.4
Imports	2882.1	2958.7	3004.5	3060.4	3119.2	3188.8	3269.5	3355.1	3437.5	3523.5	3603.8	3690.9	3770.1	3826.1	3872.2	3914.4
Federal Government	1127.2	1127.8	1105.5	1106.9	1107.6	1109.1	1121.8	1122.2	1121.4	1122.8	1130.5	1123.5	1121.5	1123.5	1124.6	1125.2
State & Local Government	1792.2	1793.7	1798.7	1803.1	1811.1	1820.6	1829.1	1837.1	1844.5	1851.0	1857.2	1863.2	1869.6	1876.3	1882.8	1889.0

**Table 5. Annual Employment**

	<i>History</i>								<i>Forecast</i>		
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Millions</b>											
Total Nonfarm Employment	131.94	134.17	136.37	138.94	141.82	144.35	146.62	148.97	152.09	154.92	156.62
Private Nonfarm	109.85	112.25	114.52	117.06	119.79	122.12	124.30	126.58	129.45	131.91	133.47
Mining	0.74	0.80	0.81	0.84	0.76	0.62	0.63	0.68	0.70	0.71	0.72
Construction	5.53	5.65	5.86	6.15	6.46	6.73	6.95	7.19	7.56	8.11	8.55
Manufacturing	11.73	11.93	12.02	12.18	12.34	12.35	12.44	12.65	12.77	12.86	12.88
Trade, Transportation and Utilities	25.07	25.47	25.85	26.38	26.89	27.26	27.49	27.67	27.95	28.21	28.29
Transportation & Warehousing	4.30	4.42	4.50	4.66	4.87	5.01	5.17	5.33	5.45	5.52	5.56
Financial Activities	7.70	7.78	7.89	7.98	8.12	8.29	8.45	8.62	8.77	8.95	9.03
Education & Health	20.32	20.77	21.08	21.44	22.02	22.64	23.19	23.61	23.86	24.04	24.24
Professional & Business Services	17.33	17.93	18.52	19.06	19.63	20.05	20.47	21.16	22.70	23.69	24.18
Information	2.67	2.67	2.70	2.73	2.75	2.79	2.79	2.74	2.73	2.74	2.79
Leisure & Hospitality	13.35	13.77	14.26	14.69	15.15	15.66	16.06	16.37	16.52	16.69	16.89
Government	22.09	21.92	21.85	21.88	22.03	22.23	22.32	22.39	22.64	23.02	23.15
Federal	2.86	2.82	2.77	2.73	2.76	2.79	2.81	2.80	2.80	2.93	2.80
State & Local	19.23	19.10	19.08	19.14	19.27	19.44	19.52	19.59	19.83	20.09	20.35
<b>Growth Rates</b>											
Total Nonfarm Employment	1.22	1.69	1.64	1.88	2.08	1.78	1.58	1.60	2.09	1.87	1.10
Private Nonfarm	1.84	2.19	2.02	2.22	2.34	1.94	1.79	1.84	2.26	1.90	1.19
Mining	13.57	2.08	3.06	3.81	-16.56	-15.18	8.68	6.90	1.20	2.18	2.32
Construction	1.93	1.74	4.36	5.58	5.03	3.32	3.25	3.48	6.77	7.13	4.32
Manufacturing	1.76	1.47	0.97	1.69	0.66	-0.12	1.41	1.21	1.10	0.66	-0.14
Trade, Transportation and Utilities	1.95	1.48	1.84	2.08	1.50	1.39	0.71	0.57	1.12	0.87	-0.01
Transportation & Warehousing	2.33	2.61	1.91	4.54	3.85	3.07	2.96	3.05	1.91	0.90	0.37
Financial Activities	0.47	1.29	1.22	1.52	1.83	2.08	1.83	2.32	1.63	1.86	0.22
Education & Health	1.92	1.99	1.35	2.09	2.96	2.72	2.09	1.64	0.99	0.57	0.88
Professional & Business Services	3.58	3.27	3.16	3.16	2.88	1.83	2.21	5.12	6.84	3.26	1.55
Information	-0.41	-0.18	1.91	0.39	1.01	1.96	-1.22	-1.92	-0.45	1.47	1.70
Leisure & Hospitality	2.80	3.11	3.62	2.95	3.46	2.93	2.31	1.69	0.74	1.09	1.30
Government	-1.38	-0.38	-0.27	0.47	0.67	1.00	0.12	0.62	1.20	1.15	1.18
Federal	-0.85	-1.04	-2.52	-0.06	0.95	1.46	-0.15	-0.01	0.00	3.89	0.00
State & Local	-1.46	-0.28	0.06	0.55	0.63	0.93	0.16	0.71	1.37	1.23	1.34



Table 6. Quarterly Employment

	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
<b>Employment (Millions)</b>																
Total Nonfarm Employment	147.4	148.0	148.6	149.3	150.1	150.9	151.7	152.5	153.2	154.0	154.8	155.2	155.7	156.1	156.5	156.8
Private Nonfarm	125.1	125.7	126.2	126.9	127.6	128.4	129.1	129.8	130.5	131.1	131.6	132.2	132.7	133.0	133.3	133.6
Mining	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Construction	7.0	7.1	7.2	7.2	7.3	7.4	7.5	7.6	7.8	7.9	8.0	8.2	8.3	8.4	8.5	8.6
Manufacturing	12.5	12.6	12.6	12.7	12.7	12.7	12.8	12.8	12.8	12.8	12.9	12.9	12.9	12.9	12.9	12.9
Trade, Transportation and Utilities	27.6	27.6	27.6	27.7	27.7	27.9	27.9	28.0	28.1	28.1	28.2	28.3	28.3	28.3	28.3	28.3
Transportation & Warehousing	5.2	5.3	5.3	5.4	5.4	5.4	5.4	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6
Financial Activities	8.5	8.5	8.6	8.6	8.7	8.7	8.7	8.8	8.8	8.9	8.9	9.0	9.0	9.0	9.0	9.0
Education & Health	23.4	23.5	23.6	23.7	23.7	23.7	23.8	23.9	24.0	24.0	24.0	24.1	24.1	24.2	24.2	24.3
Professional & Business Services	20.6	20.8	20.9	21.3	21.7	22.1	22.6	22.9	23.2	23.4	23.6	23.8	23.9	24.1	24.1	24.2
Information	2.8	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8
Leisure & Hospitality	16.2	16.3	16.3	16.4	16.5	16.5	16.5	16.5	16.6	16.6	16.7	16.7	16.8	16.8	16.9	16.9
Government	22.3	22.3	22.4	22.4	22.5	22.5	22.6	22.7	22.7	22.9	23.2	23.0	23.0	23.1	23.1	23.2
Federal	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.9	3.2	2.9	2.8	2.8	2.8	2.8
State & Local	19.5	19.5	19.6	19.6	19.7	19.7	19.8	19.9	19.9	20.0	20.1	20.1	20.2	20.2	20.3	20.4
<b>Growth Rates</b>																
Total Nonfarm Employment	1.50	1.56	1.52	1.86	2.17	2.2	2.2	2.1	2.0	1.9	2.3	1.0	1.1	1.1	0.9	0.9
Private Nonfarm	1.79	1.83	1.72	2.02	2.36	2.4	2.3	2.2	2.1	1.8	1.6	1.8	1.4	1.1	0.9	0.8
Mining	4.87	7.84	9.24	5.82	3.97	1.1	1.1	0.4	2.1	1.8	1.7	2.7	2.5	1.7	2.8	2.5
Construction	4.10	5.41	2.75	2.27	3.31	5.8	6.2	7.1	7.3	7.0	7.2	7.0	6.7	5.0	4.2	4.2
Manufacturing	2.06	3.11	1.05	0.92	-0.26	2.4	0.8	0.2	1.0	0.8	0.6	0.9	0.3	0.0	-0.1	-0.1
Trade, Transportation and Utilities	1.30	0.53	0.29	0.37	1.10	1.7	0.6	1.2	1.0	1.0	0.7	1.3	0.5	0.1	-0.2	0.0
Transportation & Warehousing	3.65	2.67	4.43	2.40	2.68	1.9	1.7	2.2	1.8	1.0	0.6	1.1	0.8	1.0	0.3	0.1
Financial Activities	1.30	1.68	2.35	2.61	2.63	0.9	0.7	2.1	2.8	2.4	1.9	1.8	1.3	0.6	0.3	0.2
Education & Health	1.36	1.93	1.80	1.52	1.33	0.2	1.3	1.1	1.3	0.4	0.4	0.7	0.8	1.0	0.9	0.8
Professional & Business Services	2.18	1.98	3.40	6.75	8.34	8.1	8.2	6.4	4.6	4.0	3.5	3.0	2.6	2.1	1.2	1.3
Information	-1.24	-2.85	-1.38	-2.83	-0.62	0.6	2.6	-2.8	-2.2	2.6	0.7	1.5	1.2	2.3	2.2	1.5
Leisure & Hospitality	2.18	1.85	2.25	1.45	1.22	0.4	0.5	0.8	1.2	1.0	1.0	1.3	1.0	0.9	1.7	1.4
Government	-0.10	0.04	0.43	0.94	1.08	1.2	1.2	1.3	1.2	2.1	6.5	-3.4	-0.5	1.2	1.2	1.2
Federal	-0.28	-0.05	0.00	0.00	0.00	0.0	0.0	0.0	0.0	7.8	49.1	-29.1	-12.2	0.0	0.0	0.0
State & Local	-0.08	0.06	0.49	1.08	1.24	1.3	1.4	1.4	1.4	1.3	1.2	1.2	1.2	1.4	1.4	1.3

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

	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
GDP	114.3	115.0	115.6	116.5	117.3	118.0	118.8	119.5	120.2	121.0	121.7	122.4	123.2	123.9	124.6	125.3
Consumption	113.5	114.1	114.3	115.0	115.4	115.7	116.2	116.6	117.2	117.7	118.3	118.9	119.5	120.0	120.6	121.2
Durables	85.9	85.7	85.6	85.3	84.9	84.5	84.0	83.6	83.2	82.8	82.5	82.2	82.0	81.8	81.6	81.4
Motor Vehicles	108.3	109.2	109.6	109.8	109.8	109.7	109.7	109.8	109.9	110.1	110.4	110.9	111.4	111.9	112.4	113.0
Furniture	80.8	80.4	80.3	80.2	80.1	80.0	79.8	79.5	79.2	78.9	78.5	78.2	77.9	77.6	77.3	77.1
Other Durables	100.8	100.5	100.8	100.9	100.9	100.9	100.7	100.6	100.5	100.6	100.7	100.9	101.1	101.3	101.4	101.5
Nondurables	110.5	110.7	109.6	110.4	110.3	109.8	109.8	109.9	110.3	110.9	111.6	112.2	112.8	113.2	113.7	114.1
Food	109.9	110.2	110.5	110.9	111.3	111.5	111.6	111.8	112.1	112.4	112.8	113.3	113.8	114.3	114.7	115.1
Clothing & Shoes	101.9	101.2	101.4	101.3	101.1	100.8	100.4	100.2	100.0	100.0	100.0	100.0	100.0	99.9	99.8	99.7
Gasoline & Oil	116.2	117.2	103.0	107.5	104.0	96.7	95.7	95.5	97.3	101.4	105.2	107.9	109.6	110.9	112.1	113.4
Fuel	108.7	112.8	108.8	109.5	107.8	104.4	104.1	104.6	106.9	110.6	114.6	117.5	119.6	121.1	122.7	124.3
Services	119.7	120.6	121.4	122.2	123.0	123.8	124.6	125.4	126.2	126.9	127.7	128.5	129.3	130.0	130.8	131.6
Housing	121.4	122.4	123.4	124.3	125.3	126.2	127.2	128.1	129.0	129.9	130.7	131.5	132.3	133.0	133.8	134.5
Electricity	110.7	111.4	112.1	112.8	113.5	113.6	114.1	114.6	115.1	115.4	115.9	116.7	117.3	117.5	118.2	118.9
Natural Gas	89.3	91.1	92.4	93.0	94.1	92.9	93.5	94.2	94.7	93.6	94.2	95.5	96.0	94.7	95.7	96.8
Water & Sewer	144.9	146.1	147.6	149.0	150.4	151.9	153.4	154.8	156.2	157.7	159.1	160.5	161.9	163.4	164.8	166.3
Telephone	85.4	85.8	86.1	86.4	86.4	86.4	86.5	86.5	86.5	86.6	86.6	86.7	86.7	86.8	86.9	87.0
Transportation	114.0	114.5	115.0	115.7	116.3	116.9	117.5	118.1	118.8	119.4	120.1	120.8	121.5	122.2	122.9	123.6
Other Services	121.0	121.5	122.4	123.5	124.3	125.1	126.1	127.0	128.0	129.0	130.0	130.9	132.0	133.0	134.0	135.1

Table 8. Percent Change in Implicit Price Deflators

	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3
GDP	2.4	2.6	2.1	3.0	2.7	2.6	2.6	2.5	2.4	2.7	2.3	2.3	2.4	2.5	2.2	2.2
Consumption	2.8	2.1	0.8	2.3	1.6	1.1	1.6	1.6	1.8	1.9	2.0	2.0	2.0	1.8	1.9	1.9
Durables	-1.8	-0.5	-0.9	-1.2	-1.7	-2.1	-2.3	-2.1	-1.9	-1.8	-1.4	-1.2	-1.1	-1.1	-1.1	-1.0
Motor Vehicles	1.3	3.3	1.6	0.7	0.0	-0.3	-0.3	0.4	0.6	0.7	1.3	1.5	1.8	1.9	2.0	2.0
Furniture	-3.9	-2.2	-0.6	-0.3	-0.5	-0.7	-0.9	-1.4	-1.6	-1.7	-1.6	-1.6	-1.5	-1.5	-1.4	-1.5
Other Durables	0.9	-1.0	1.0	0.5	0.1	-0.2	-0.8	-0.5	-0.1	0.3	0.6	0.7	0.8	0.7	0.4	0.5
Nondurables	4.0	0.8	-3.8	2.9	-0.2	-2.1	0.1	0.4	1.4	2.4	2.5	2.2	1.9	1.6	1.6	1.6
Food	-0.1	1.1	0.8	1.6	1.4	0.8	0.5	0.7	1.0	1.1	1.5	1.7	1.7	1.7	1.5	1.3
Clothing & Shoes	-5.4	-2.9	0.9	-0.5	-0.8	-1.3	-1.3	-1.0	-0.6	-0.3	0.1	-0.1	-0.1	-0.5	-0.2	-0.3
Gasoline & Oil	54.4	3.4	-40.4	18.8	-12.3	-25.3	-4.1	-0.7	7.5	17.9	16.0	10.6	6.6	4.7	4.5	4.6
Fuel	61.5	16.0	-13.3	2.5	-6.2	-12.1	-1.0	1.9	9.0	14.9	15.1	10.5	7.3	5.4	5.2	5.4
Services	3.1	3.0	2.6	2.7	2.7	2.6	2.6	2.6	2.6	2.4	2.5	2.5	2.5	2.3	2.4	2.4
Housing	3.6	3.6	3.0	3.1	3.1	3.0	3.1	3.0	2.8	2.7	2.6	2.5	2.4	2.4	2.3	2.2
Electricity	3.6	2.6	2.6	2.5	2.5	0.3	1.7	1.9	1.8	0.8	2.1	2.6	2.1	0.7	2.4	2.4
Natural Gas	1.9	8.1	5.8	2.4	4.8	-5.0	2.9	3.1	1.9	-4.3	2.4	5.4	2.4	-5.2	4.3	4.4
Water & Sewer	3.5	3.4	4.0	3.9	3.9	4.0	4.0	3.8	3.7	3.7	3.7	3.6	3.6	3.6	3.6	3.5
Telephone	3.3	2.0	1.2	1.5	0.1	0.1	0.1	0.1	0.0	0.2	0.2	0.4	0.2	0.3	0.4	0.5
Transportation	3.5	1.5	1.9	2.5	2.2	1.9	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.3	2.3	2.4
Other Services	1.2	1.8	2.9	3.6	2.7	2.7	3.0	3.1	3.1	3.2	3.1	3.0	3.1	3.2	3.1	3.1

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

	<i>History</i>								<i>Forecast</i>		
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
GDP	103.3	105.2	106.9	108.8	110.0	111.4	113.4	116.1	119.1	122.1	124.9
Consumption	104.1	106.1	107.5	109.2	109.5	110.8	112.7	114.7	116.4	118.6	120.9
Durables	97.7	96.4	94.6	92.4	90.4	88.5	86.6	85.4	83.8	82.4	81.5
Motor Vehicles	108.9	110.2	110.8	110.8	110.8	109.7	108.6	109.6	109.8	110.7	112.7
Furniture	94.2	94.0	92.1	88.8	86.8	84.5	82.2	80.3	79.6	78.4	77.2
Other Durables	103.6	104.2	104.0	102.2	99.6	100.8	101.2	100.8	100.7	100.8	101.5
Nondurables	109.2	111.8	111.9	112.7	109.0	107.8	109.6	110.3	109.9	111.9	113.9
Food	104.3	106.7	107.8	109.8	111.0	109.9	109.8	110.7	111.8	113.1	114.9
Clothing & Shoes	101.1	104.6	105.4	105.6	104.3	103.9	103.3	101.2	100.4	100.0	99.7
Gasoline & Oil	149.3	154.7	149.7	145.5	107.0	95.3	107.5	107.9	96.3	106.0	112.8
Fuel	148.8	150.7	148.9	148.2	105.3	87.7	100.7	109.7	105.0	115.6	123.5
Services	103.5	105.8	108.3	110.9	113.1	115.9	118.6	121.8	125.0	128.1	131.2
Housing	101.4	103.5	106.0	108.8	112.1	115.9	119.9	123.8	127.6	131.1	134.2
Electricity	101.8	101.8	104.0	107.9	108.5	107.3	109.6	112.5	114.4	116.3	118.5
Natural Gas	95.1	85.7	90.1	96.2	84.8	82.7	89.3	92.6	93.8	94.8	96.2
Water & Sewer	111.8	118.0	123.3	127.9	133.7	138.6	143.4	148.3	154.1	159.8	165.5
Telephone	97.5	97.7	97.1	96.3	94.1	93.7	86.3	86.2	86.5	86.6	86.9
Transportation	104.8	106.8	108.3	109.5	109.9	111.2	113.1	115.4	117.8	120.5	123.2
Other Services	105.6	108.3	111.2	113.8	115.9	118.0	120.2	122.9	126.6	130.5	134.6



Table 10. Percent Change in Implicit Price Deflators

	History								Forecast		
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
GDP	1.9	1.9	1.6	1.6	1.1	1.5	1.9	2.6	2.5	2.4	2.3
Consumption	2.7	1.8	1.2	1.2	0.4	1.6	1.7	1.7	1.5	2.0	1.9
Durables	-0.5	-1.6	-2.1	-2.4	-1.9	-2.7	-1.7	-1.1	-2.1	-1.4	-1.1
Motor Vehicles	3.3	0.7	0.4	-0.2	-0.1	-1.4	-0.7	1.4	0.1	1.3	1.9
Furniture	-0.2	-0.4	-3.0	-3.0	-2.3	-2.9	-3.0	-0.9	-1.2	-1.6	-1.5
Other Durables	3.2	-0.5	-0.6	-1.9	-2.7	2.3	-0.1	0.2	-0.4	0.6	0.6
Nondurables	5.9	1.9	-0.5	-0.3	-3.0	0.5	1.6	-0.1	0.0	2.2	1.6
Food	5.1	1.2	0.7	2.7	0.3	-1.7	0.6	1.2	0.7	1.5	1.4
Clothing & Shoes	4.4	2.3	0.1	-0.4	-1.3	-0.1	-1.5	-0.8	-1.0	-0.1	-0.3
Gasoline & Oil	20.4	4.9	-4.5	-10.3	-17.5	7.7	16.8	-7.6	-5.7	12.8	4.6
Fuel	26.2	3.1	-1.2	-7.9	-29.6	6.9	18.4	-0.3	-0.6	11.9	5.4
Services	2.1	2.3	2.3	2.3	1.9	2.7	2.3	2.8	2.6	2.5	2.4
Housing	1.9	2.2	2.4	2.7	3.2	3.6	3.3	3.2	3.0	2.5	2.3
Electricity	2.4	-0.6	3.2	3.1	-0.6	0.4	2.4	2.6	1.4	1.9	1.9
Natural Gas	-1.6	-4.1	2.4	6.1	-12.4	6.4	4.3	5.3	0.7	1.5	1.7
Water & Sewer	4.9	6.0	3.8	4.4	4.1	3.5	3.2	3.8	3.9	3.6	3.5
Telephone	-1.5	0.1	-0.5	-2.1	0.2	-2.8	-7.1	1.2	0.1	0.2	0.4
Transportation	3.1	1.3	1.7	1.0	0.1	1.2	2.3	2.0	2.1	2.3	2.3
Other Services	2.8	2.2	2.9	2.2	1.6	1.9	1.8	2.7	3.0	3.1	3.2

Table 11. Personal Income and its Components

	History								Forecast		
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Personal Income Billions Current Dollars</b>											
Personal Income	13254.5	13915.1	14073.7	14818.2	15553.0	15928.7	16416.9	17173.9	18287.4	19410.8	20451.2
Wages & Salaries	8269.0	8609.9	8842.4	9256.5	9708.3	9978.6	10294.7	10775.8	11375.7	12011.0	12630.3
Other Labor Income	1142.0	1165.3	1199.0	1231.7	1278.0	1309.8	1345.8	1383.6	1447.4	1520.8	1585.9
Nonfarm Income	1068.1	1179.8	1197.0	1247.7	1265.1	1298.7	1350.5	1423.0	1515.7	1574.8	1606.7
Farm Income	75.5	61.6	87.8	68.1	53.7	43.2	35.1	29.9	53.0	72.0	67.3
Rental Income	485.3	525.3	567.1	611.7	662.5	707.3	744.5	788.7	827.0	841.5	848.4
Dividends	682.2	834.9	794.4	941.9	1019.8	962.5	965.3	1018.5	1151.9	1272.1	1332.9
Interest Income	1231.6	1288.8	1261.6	1303.3	1367.3	1415.3	1475.9	1563.0	1702.6	1906.3	2155.0
Transfer Payments	2360.5	2366.3	2428.0	2544.4	2684.4	2768.4	2851.5	2934.3	3090.2	3241.8	3403.7
Personal Social Insurance Tax	423.9	437.2	577.8	607.3	636.6	661.7	691.4	722.6	759.5	802.0	846.8
<b>Percent Change, Annual Rate</b>											
Personal Income	6.2	5.0	1.2	5.3	5.0	2.4	3.1	4.6	6.5	6.1	5.4
Wages & Salaries	3.9	4.1	2.7	4.7	4.9	2.8	3.2	4.7	5.6	5.6	5.2
Other Labor Income	2.5	2.0	2.9	2.7	3.8	2.5	2.7	2.8	4.6	5.1	4.3
Nonfarm Income	8.2	10.5	1.5	4.2	1.4	2.7	4.0	5.4	6.5	3.9	2.0
Farm Income	66.2	-18.5	43.1	-21.4	-20.8	-19.3	-18.9	-12.6	76.5	39.1	-6.5
Rental Income	20.8	4.4	8.9	8.0	8.5	5.5	5.7	6.2	3.4	1.2	0.7
Dividends	23.5	46.3	-8.2	21.9	0.5	-4.7	2.5	9.0	13.8	8.1	2.6
Interest Income	3.3	5.1	-2.7	4.7	5.0	4.4	4.6	6.5	10.8	12.6	13.3
Transfer Payments	0.4	1.2	2.5	6.0	4.4	3.1	3.0	3.6	5.3	4.9	5.0
Personal Social Insurance Tax	-13.5	5.2	43.9	5.7	5.1	2.5	5.5	4.6	5.4	5.6	5.6

Table 12. Personal Consumption Expenditures (Current Dollars)

2017Q4 2018Q1 2018Q2 2018Q3 2018Q4 2019Q1 2019Q2 2019Q3 2019Q4 2020Q1 2020Q2 2020Q3 2020Q4 2021Q1 2021Q2 2021Q3

**Consumer Expenditures by Type Billions Current Dollars***Consumer spending on...*

all goods & services	13647.1	13823.3	13962.1	14154.0	14316.8	14483.0	14669.2	14862.4	15069.4	15283.4	15498.3	15708.0	15913.8	16100.8	16292.8	16490.2
durable goods	1520.5	1529.9	1555.0	1575.3	1586.1	1602.5	1619.3	1634.8	1656.1	1685.1	1710.0	1733.6	1754.6	1766.1	1776.9	1792.8
furniture and appliances	348.2	355.2	363.6	368.0	371.9	374.4	376.4	378.2	381.0	385.4	391.1	397.4	403.9	409.4	414.1	418.3
information processing equipment	130.1	132.0	134.3	135.7	136.4	138.0	140.2	141.8	143.2	144.6	146.2	147.8	149.9	151.7	153.3	154.8
motor vehicles and parts	519.0	514.4	521.1	531.3	533.7	543.3	552.4	560.7	573.3	591.0	603.1	613.4	620.0	618.3	617.3	621.2
other durable goods	165.5	168.1	173.3	175.1	176.8	178.2	179.4	180.6	181.9	183.4	185.2	187.1	189.3	191.2	192.9	194.5
nondurables	2888.0	2919.6	2909.7	2946.8	2967.6	2976.7	2999.5	3024.4	3055.2	3090.9	3129.1	3167.3	3202.4	3236.4	3272.2	3308.4
clothing & shoes	406.6	410.4	414.2	416.9	421.9	427.0	431.0	435.1	439.2	443.7	448.1	452.6	456.8	459.8	462.7	465.8
fuel oil & coal	22.3	22.5	21.7	21.9	21.5	20.8	20.9	20.9	21.4	22.1	22.9	23.4	23.7	23.9	24.1	24.3
gasoline & motor oil	305.7	309.4	273.2	284.8	278.3	262.4	261.7	262.7	268.1	279.0	289.3	296.7	301.8	305.7	309.5	313.4
food	956.3	968.3	972.5	978.8	985.7	992.4	998.1	1004.1	1010.1	1015.6	1022.7	1030.0	1037.4	1044.8	1051.6	1058.3
other nondurable goods	1197.0	1209.0	1228.1	1244.4	1260.3	1274.1	1287.8	1301.6	1316.4	1330.4	1346.2	1364.6	1382.6	1402.3	1424.1	1446.6

**Consumer Expenditures by Type Billions 2009 Dollars***Consumer spending on...*

all goods & services	12028.1	12118.7	12215.5	12312.1	12404.8	12515.6	12627.5	12742.0	12861.6	12981.4	13097.5	13208.6	13316.8	13412.8	13510.5	13611.2
durable goods	1770.6	1784.2	1817.4	1846.7	1867.2	1896.6	1927.4	1956.2	1991.4	2035.5	2073.0	2108.0	2139.2	2159.2	2178.3	2203.6
furniture and appliances	430.6	441.8	452.9	458.7	464.1	468.0	471.7	475.7	481.1	488.7	498.0	508.1	518.3	527.3	535.3	542.8
information processing equipment	225.2	231.0	238.4	244.5	249.9	258.1	268.3	277.8	287.0	296.1	305.5	314.5	324.4	334.1	343.8	353.5
motor vehicles and parts	479.1	471.1	475.5	483.9	486.1	495.1	503.8	510.9	521.6	536.8	546.1	553.3	556.8	552.7	549.0	549.8
other durable goods	165.7	169.0	174.0	175.8	177.5	179.3	181.1	182.7	184.3	185.9	187.5	189.3	191.2	193.0	194.6	196.2
nondurables	2614.4	2637.9	2654.7	2669.0	2689.3	2711.7	2731.9	2751.5	2770.1	2786.1	2803.3	2822.2	2840.1	2858.6	2879.0	2899.3
clothing & shoes	398.9	405.6	408.4	411.6	417.3	423.8	429.2	434.3	439.0	443.8	448.1	452.7	456.9	460.4	463.7	467.2
fuel oil & coal	20.5	20.0	19.9	20.0	20.0	19.9	20.0	20.0	20.0	20.0	20.0	19.9	19.8	19.8	19.7	19.6
gasoline & motor oil	262.9	264.0	265.4	264.9	267.5	271.4	273.5	275.0	275.6	275.2	275.0	275.0	275.3	275.7	276.1	276.4
food	869.8	878.4	880.4	882.6	885.8	890.0	894.0	897.8	901.0	903.5	906.5	909.2	911.9	914.4	917.0	919.8
other nondurable goods	1073.8	1081.8	1092.4	1101.8	1111.0	1119.4	1128.3	1137.7	1147.8	1156.9	1167.2	1178.9	1189.7	1202.0	1216.2	1230.0

**Real Consumer Expenditures Annual Growth Rate***Consumer spending on...*

all goods & services	3.7	3.0	3.2	3.2	3.0	3.6	3.6	3.6	3.8	3.7	3.6	3.4	3.3	2.9	2.9	3.0
durable goods	13.5	3.1	7.5	6.4	4.4	6.3	6.5	6.0	7.2	8.9	7.4	6.7	5.9	3.7	3.5	4.6
furniture and appliances	14.8	10.4	10.1	5.1	4.7	3.4	3.2	3.4	4.5	6.4	7.6	8.1	8.1	6.9	6.1	5.6
information processing equipment	19.0	10.3	12.8	10.2	8.9	13.1	15.9	14.0	13.3	12.7	12.7	11.8	12.7	11.9	11.5	11.3
motor vehicles and parts	15.7	-6.7	3.7	7.1	1.8	7.4	7.0	5.7	8.4	11.7	6.9	5.2	2.5	-2.9	-2.6	0.6
other durable goods	10.9	8.2	11.7	4.1	4.0	3.9	4.1	3.5	3.5	3.5	3.4	3.8	4.0	3.7	3.5	3.2
nondurables	5.1	3.6	2.5	2.2	3.0	3.3	3.0	2.9	2.7	2.3	2.5	2.7	2.5	2.6	2.9	2.8
clothing & shoes	12.6	6.7	2.8	3.1	5.6	6.2	5.1	4.8	4.3	4.3	3.9	4.1	3.8	3.0	2.8	3.0
fuel oil & coal	17.7	-10.4	-0.7	0.9	-0.5	-0.3	2.1	-1.2	0.2	0.3	-0.6	-1.1	-1.6	-1.8	-1.8	-2.1
gasoline & motor oil	-4.0	1.7	2.0	-0.6	3.9	5.8	3.1	2.2	0.9	-0.6	-0.4	0.0	0.5	0.5	0.6	0.5
food	7.6	4.0	1.0	1.0	1.5	1.9	1.8	1.7	1.4	1.1	1.3	1.2	1.2	1.1	1.1	1.2
other nondurable goods	2.9	3.0	4.0	3.5	3.4	3.0	3.2	3.4	3.6	3.2	3.6	4.1	3.7	4.2	4.8	4.6

Table 13. Personal Consumption Expenditures (2009 Dollars)

	History								Forecast		
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Consumer Expenditures by Type Billions Current Dollars</b>											
<i>Consumer spending on...</i>											
all goods & services	10689.3	11050.6	11361.2	11863.7	12332.3	12820.7	13393.7	14064.0	14771.0	15600.9	16394.3
durable goods	1125.3	1191.9	1241.7	1296.4	1367.1	1411.0	1474.5	1561.6	1628.2	1720.8	1786.8
furniture and appliances	260.7	271.4	281.6	294.3	311.5	325.2	339.0	364.7	377.5	394.4	415.9
information processing equipment	91.9	98.6	101.7	105.8	110.8	116.3	125.4	134.6	140.8	147.2	154.1
motor vehicles and parts	363.5	395.8	416.1	441.9	472.2	480.8	498.1	525.1	557.4	606.9	621.2
other durable goods	121.4	127.3	133.1	137.8	143.4	148.6	158.5	173.3	180.0	186.3	193.6
nondurables	2471.1	2547.2	2592.8	2674.1	2666.0	2710.4	2822.5	2935.9	3014.0	3147.4	3290.4
clothing & shoes	338.9	354.3	363.6	376.0	385.5	393.7	400.5	415.8	433.1	450.3	464.2
fuel oil & coal	29.2	26.4	26.6	28.0	21.2	18.5	19.7	21.9	21.0	23.0	24.2
gasoline & motor oil	380.4	390.5	385.6	369.8	283.9	255.2	284.6	286.4	263.7	291.7	311.6
food	829.1	848.8	857.5	884.4	899.0	915.1	938.0	976.3	1001.2	1026.4	1054.8
other nondurable goods	893.5	927.3	959.5	1015.9	1076.5	1128.0	1179.8	1235.4	1295.0	1356.0	1435.6

**Consumer Expenditures by Type Billions 2009 Dollars**

<i>Consumer spending on...</i>											
all goods & services	10263.5	10413.2	10565.4	10868.4	11264.3	11572.1	11888.9	12262.8	12686.6	13151.1	13562.5
durable goods	1151.5	1236.2	1312.7	1403.1	1511.8	1595.1	1702.1	1828.9	1942.9	2088.9	2193.3
furniture and appliances	276.6	288.7	305.8	331.3	359.0	384.7	412.6	454.4	474.1	503.3	538.7
information processing equipment	108.0	125.2	139.4	153.8	169.7	191.7	215.4	240.9	272.8	310.1	348.8
motor vehicles and parts	333.8	359.1	375.7	398.7	426.0	438.5	458.7	479.1	507.8	548.2	551.3
other durable goods	115.1	120.2	126.4	134.8	145.4	148.3	157.7	174.1	181.8	188.5	195.3
nondurables	2263.2	2277.5	2316.1	2373.0	2446.8	2514.3	2575.7	2662.7	2741.3	2812.9	2889.0
clothing & shoes	335.3	338.9	344.9	356.1	369.7	378.7	387.7	410.7	431.6	450.4	465.4
fuel oil & coal	19.6	17.5	17.8	18.9	20.1	21.1	19.5	20.0	20.0	19.9	19.6
gasoline & motor oil	254.7	252.5	257.6	254.2	265.4	267.9	264.7	265.5	273.9	275.1	276.3
food	795.1	795.7	795.2	805.8	810.2	832.4	854.3	881.8	895.7	907.8	918.4
other nondurable goods	863.2	880.7	908.2	949.5	993.0	1025.9	1060.4	1096.8	1133.3	1173.2	1222.9

**Real Consumer Expenditures Annual Growth Rate**

<i>Consumer spending on...</i>											
all goods & services	1.5	1.3	2.0	3.6	3.0	2.8	2.8	3.1	3.7	3.5	3.0
durable goods	4.9	7.3	5.3	8.7	6.4	7.0	7.6	5.5	6.6	7.4	4.4
furniture and appliances	5.8	3.1	7.5	9.5	7.9	6.3	9.5	7.8	3.6	7.8	6.0
information processing equipment	13.9	16.7	7.3	13.6	7.7	15.7	11.9	11.0	14.9	13.0	12.1
motor vehicles and parts	1.5	7.4	2.5	8.7	4.1	8.0	5.0	1.6	7.3	6.8	-0.6
other durable goods	3.2	8.1	3.6	7.7	7.3	1.2	10.4	7.2	3.8	3.7	3.3
nondurables	0.4	0.8	2.6	2.8	2.8	2.5	3.2	2.9	3.0	2.5	2.8
clothing & shoes	1.1	0.9	2.5	5.7	2.0	2.3	4.8	4.6	5.2	4.1	2.9
fuel oil & coal	-12.6	5.5	14.0	1.2	9.4	6.5	4.8	-2.6	0.2	-0.8	-2.0
gasoline & motor oil	-3.1	-0.9	3.3	-0.2	4.4	-1.2	-0.8	1.8	3.1	-0.1	0.6
food	-0.4	0.6	0.6	0.7	0.6	4.0	3.1	1.9	1.7	1.2	1.2
other nondurable goods	2.8	1.9	4.1	5.1	4.4	2.2	4.0	3.5	3.3	3.7	4.5

Table 14. Business Fixed Investment

	<i>History</i>								<i>Forecast</i>		
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Billions Current Dollars</b>											
Business Fixed Investment	1812.1	2007.7	2094.4	2268.3	2336.2	2316.3	2449.6	2630.6	2854.7	3051.5	3194.3
Producers Dur. Equipment	838.2	937.9	982.8	1046.5	1081.9	1043.9	1098.0	1197.9	1320.0	1419.4	1483.2
Nonresidential Structures	381.6	448.0	463.6	537.5	537.5	516.2	558.6	590.2	649.6	711.1	752.3
Non-Farm Buildings	170.2	191.6	203.8	234.4	280.8	311.5	320.2	332.2	386.2	437.2	462.2
Commercial	66.8	75.6	84.2	102.9	116.8	141.0	151.7	155.8	180.7	216.1	235.6
Industrial	39.0	45.8	48.8	57.0	77.7	73.1	64.8	62.6	81.8	87.1	83.1
Other Buildings	64.5	70.2	70.7	74.6	86.3	97.4	103.6	113.8	123.7	134.0	143.4
Utilities	90.7	112.2	108.9	126.3	125.5	129.6	125.4	127.0	132.6	138.1	140.4
Mines & Wells	112.3	134.1	139.4	163.1	118.4	63.4	101.7	118.4	117.6	121.1	136.0
<b>Billions 2009 Dollars</b>											
Business Fixed Investment	1802.3	1964.1	2032.9	2172.7	2223.5	2210.4	2314.2	2451.0	2641.0	2803.0	2898.7
Producers Dur. Equipment	847.9	939.2	982.3	1047.4	1084.5	1047.8	1098.0	1184.9	1311.9	1412.1	1469.4
Nonresidential Structures	374.7	423.1	428.8	474.0	465.4	446.4	470.1	483.0	517.0	554.1	573.2
Non-Farm Buildings	172.3	188.8	196.0	218.2	256.3	279.0	277.4	276.8	313.6	345.0	354.5
Commercial	67.3	73.9	80.5	95.9	106.7	126.7	133.2	132.6	149.9	174.3	185.0
Industrial	39.1	44.9	46.7	52.8	70.7	66.2	57.2	53.5	68.1	70.2	64.8
Other Buildings	65.9	70.0	68.6	69.4	78.7	85.8	86.6	90.1	95.4	100.6	104.7
Utilities	82.8	99.1	95.1	108.8	106.4	109.4	102.5	100.0	100.5	101.5	100.3
Mines & Wells	110.9	123.8	126.0	134.2	95.9	54.5	86.1	99.6	96.9	101.4	114.6
<b>Annual Growth Rate</b>											
Business Fixed Investment	10.9	6.9	5.8	7.7	0.4	0.7	7.7	8.0	8.1	6.3	3.8
Producers Dur. Equipment	14.4	8.4	5.8	5.0	3.2	-3.4	9.3	9.4	8.9	6.9	3.0
Nonresidential Structures	15.3	7.8	9.5	15.0	-8.6	4.4	7.5	7.3	11.7	7.9	5.2
Non-Farm Buildings	14.7	7.3	9.8	20.8	11.2	14.0	-1.3	8.5	19.2	9.6	4.6
Commercial	14.7	9.9	18.7	20.3	9.8	27.1	-1.8	6.0	23.5	16.3	5.5
Industrial	37.4	8.1	9.1	37.8	15.0	-7.4	-12.1	14.7	29.2	-3.6	0.3
Other Buildings	3.6	4.5	1.7	12.0	12.2	14.9	7.8	9.3	7.8	8.6	5.9
Utilities	2.4	18.4	17.5	-1.7	16.3	11.2	-8.0	5.7	6.0	1.6	1.9
Mines & Wells	36.6	1.9	8.0	28.9	-47.8	-29.3	116.7	5.4	-2.9	9.8	11.9



Table 15. Government Receipts and Expenditures

	History								Forecast		
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Federal Government Receipts and Expenditures</b>											
Receipts	2574.1	2699.1	3138.4	3291.2	3441.4	3452.1	3569.4	3355.6	3480.0	3693.7	3928.1
Personal Tax and Nontax Receipts	1129.1	1164.7	1302.0	1403.0	1528.5	1540.5	1595.1	1559.4	1618.1	1735.7	1845.4
Corp. Profits Tax Accruals	299.4	363.1	378.1	436.6	437.1	401.2	393.1	158.3	143.6	145.4	172.0
Indirect Business Tax and Nontax Accruals	108.6	115.1	124.8	135.4	140.2	137.0	132.1	137.7	142.4	150.2	157.2
Contributions for Social Insurance	904.0	938.1	1091.3	1140.9	1193.4	1230.2	1285.7	1343.9	1412.5	1491.6	1575.0
Expenditures	3818.3	3789.1	3782.2	3901.4	4028.0	4149.4	4252.4	4448.9	4718.5	4997.6	5282.4
Purchases Goods & Services	1303.5	1292.5	1229.5	1218.1	1224.0	1231.5	1260.7	1280.7	1315.6	1350.6	1380.5
National Defense	836.9	817.8	767.0	745.6	731.6	728.9	744.5	751.4	770.7	790.9	808.7
Other	466.5	474.7	462.5	472.5	492.4	502.6	516.2	529.4	544.8	559.7	571.7
Transfer Payments	2327.0	2300.8	2346.2	2448.7	2572.8	2648.4	2708.4	2803.3	2952.7	3100.9	3256.1
To Persons	1779.9	1783.6	1823.5	1881.9	1967.2	2018.4	2076.3	2157.9	2289.8	2413.5	2550.5
To Foreigners	57.6	55.3	53.8	52.8	53.3	53.6	52.1	53.5	55.5	57.3	58.3
Grants in Aid to State & Local Gov't	472.5	444.0	450.0	494.8	532.1	555.5	558.2	569.6	584.0	604.9	620.9
Net Interest	398.0	401.6	393.4	416.8	412.1	447.8	472.7	559.6	650.1	749.4	855.4
Subsidies less Surplus of Gov't Entities	66.7	66.5	69.9	65.6	61.5	64.8	64.8	65.6	65.7	64.4	63.5
Surplus (+) or Deficit (-)	-1244.1	-1090.1	-643.8	-610.2	-586.7	-697.3	-683.0	-1093.3	-1238.5	-1303.9	-1354.2
<b>State and Local Government Receipts and Expenditures</b>											
Receipts	2030.5	2057.2	2136.8	2236.7	2350.7	2416.3	2486.1	2591.4	2712.5	2844.0	2974.6
Personal Tax/Nontax Receipts	1368.3	1416.1	1481.4	1526.7	1584.1	1628.7	1694.1	1775.7	1870.8	1968.1	2069.4
Corporate Profits	324.1	346.7	375.9	382.6	409.4	419.6	444.8	469.0	505.8	533.0	564.1
Indirect Business Tax and Nontax Accruals	50.2	52.5	55.5	57.8	59.2	58.1	53.2	57.6	66.1	71.4	73.6
Contributions for Social Insurance	18.2	18.0	18.5	19.6	19.8	20.3	20.5	21.3	22.4	23.6	24.8
Federal Grants-In-Aid	472.5	444.0	450.0	494.8	532.1	555.5	558.2	569.6	584.0	604.9	620.9
Expenditures	2246.42	2277.93	2327.30	2405.62	2497.02	2583.67	2668.71	2739.39	2850.4	2983.6	3117.7
Purchases Goods & Services	1865.3	1866.1	1886.6	1938.9	1994.9	2036.3	2092.6	2171.6	2267.9	2379.2	2495.8
Transfer Payments	582.1	558.0	571.3	625.0	680.0	695.6	698.9	716.6	737.2	764.6	787.4
Interest Received	125.9	141.4	141.8	121.3	122.3	136.6	137.1	141.3	146.8	157.4	168.6
Net Subsidies	17.9	10.8	10.3	10.4	10.1	7.1	7.4	4.5	3.2	1.3	-0.6
Dividends Received	2.6	3.3	3.6	3.8	4.2	4.6	4.7	5.0	5.2	5.4	5.6
Surplus (+) or Deficit (-)	-215.9	-220.8	-190.5	-168.9	-146.4	-167.4	-182.7	-148.0	-137.9	-139.6	-143.1

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

	History								Forecast		
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Billions of Dollars</b>											
Net Exports Goods & Services	-580.0	-565.7	-492.0	-509.5	-524.0	-521.2	-570.9	-552.4	-457.4	-538.6	-581.4
Current Account	-444.6	-426.2	-349.5	-373.8	-434.6	-451.7	-459.4	-499.5	-501.9	-656.1	-769.6
Exports -Goods & Services	2106.4	2198.2	2276.6	2373.6	2264.9	2214.6	2343.9	2610.0	2802.4	2994.0	3193.0
Merchandise Balance	-740.6	-741.2	-702.2	-751.5	-761.9	-752.5	-806.9	-833.9	-824.3	-972.5	-1076.9
Food, Feed & Beverage	126.25	133.05	136.16	143.72	127.74	130.56	136.51	149.81	163.2	170.7	178.1
Industrial Supplies Excl Petroleum	485.3	483.2	492.4	500.7	417.4	386.8	454.4	529.8	519.0	543.6	577.0
Motor Vehicles & Parts	133.0	146.2	152.7	159.8	151.9	150.3	158.2	172.5	193.3	198.2	206.3
Capital Goods, Excl. MVP	494.2	527.5	534.8	551.8	539.8	519.8	533.8	587.8	630.2	670.6	703.6
Computer Equipment	48.5	49.2	48.1	48.8	46.8	45.1	46.2	49.8	47.3	45.6	44.9
Other	365.4	383.9	381.7	389.8	373.4	353.8	366.6	405.3	441.9	484.0	519.3
Consumer Goods, Excl. MVP	174.7	181.0	188.1	198.4	197.4	193.4	198.4	223.5	246.4	261.1	277.7
Other Consumer	53.4	55.1	58.6	63.6	62.9	65.1	66.0	76.5	81.6	88.0	95.1
Services	639.5	672.2	713.9	755.7	767.7	768.5	796.5	870.1	968.7	1061.8	1155.1
<b>Billions of Dollars</b>											
Imports -Goods & Services	2686.4	2763.8	2768.6	2883.2	2789.0	2735.8	2914.8	3162.4	3259.8	3532.6	3774.3
Merchandise	2244.7	2305.8	2301.5	2396.1	2290.5	2224.2	2380.8	2598.0	2682.4	2927.3	3135.8
Food, Feed & Beverage	108.3	111.1	116.0	126.8	128.8	131.0	139.3	134.7	130.2	139.6	147.1
Petroleum & Products	462.1	434.3	387.8	353.6	197.2	159.6	202.4	204.9	160.5	164.9	178.0
Industrial Supplies Excl Petroleum	292.7	288.8	291.3	316.2	290.5	277.2	304.7	350.2	361.8	397.1	429.2
Motor Vehicles & Parts	255.2	298.5	309.6	329.5	350.0	351.0	360.4	361.8	364.0	386.4	403.3
Capital Goods, Excl. MVP	513.4	551.8	559.0	598.8	606.8	593.9	644.4	729.8	776.9	839.7	883.1
Computer Equipment	119.7	122.3	121.2	122.0	120.3	114.5	128.8	128.2	128.2	131.4	134.0
Other	358.2	389.4	390.8	423.5	431.3	429.4	464.3	547.0	590.1	648.6	689.6
Consumer Goods, Excl. MVP	515.9	518.8	532.9	558.7	596.6	585.4	606.1	676.6	702.6	764.8	825.0
Other Consumer	97.1	102.4	105.0	112.4	120.7	126.1	123.6	140.1	186.3	234.9	270.1
Services	441.6	458.0	467.1	487.1	498.5	511.6	534.0	564.3	577.4	605.3	638.5
<b>Billions 2009 Dollars</b>											
Net Exports Goods & Services	-459.4	-447.1	-404.9	-427.7	-545.3	-586.2	-621.5	-677.1	-792.0	-1005.7	-1131.7
Exports G & S	1898.3	1963.2	2031.5	2118.4	2127.1	2120.1	2191.3	2358.6	2520.7	2641.3	2760.5
Imports G & S	2357.7	2410.2	2436.4	2546.1	2672.4	2706.3	2812.8	3035.7	3312.7	3647.1	3892.2
<b>Exports &amp; Imports % Change</b>											
Exports G & S	8.7	3.4	5.6	1.7	-6.7	1.6	8.0	12.0	5.5	7.8	5.6
Imports G & S	10.9	0.3	1.2	4.3	-5.6	2.9	7.9	6.2	3.9	10.0	5.0
Real Exports G & S	4.2	2.2	6.0	3.1	-1.8	0.7	5.0	9.2	5.3	5.1	3.7
Real Imports G & S	3.5	0.3	2.5	6.3	2.9	2.7	4.7	8.2	10.2	9.7	4.9

Sean Snaith, Ph.D., is the director of the University of Central Florida's Institute for Economic Competitiveness 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.

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