

# Executive Summary: US Economic Outlook

November 2020



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## Forecast overview

### A record Q3, and unemployment falls further—but GDP growth to fade without stimulus as infections rise

- Real GDP grew 33.1% in the third quarter, according to BEA’s advance estimate, published 29 October.<sup>1</sup> This was nearly identical to our final tracking estimate of 33.8%, and was easily the sharpest quarterly rise on record. Nevertheless, GDP remains 3.5% below the previous peak attained in the fourth quarter of 2019, and 5% below our pre-pandemic estimate of potential output.
- Based on data of all frequencies through early November, we project fourth-quarter growth of 3.7%. This is unrevised from last month as the negative effect of removing previously assumed stimulus (more below) was offset by other factors that included data on consumer spending for September that were stronger than expected and a sharp decline in federal spending for PPP loan processing fees that occurred not in the fourth quarter, as we had anticipated, but in the third quarter.
- We expect GDP to contract 3.6% this year, little revised from last month’s forecast and close to the “Blue Chip” consensus of 10 November (-3.7%). However, for 2021 we have revised down our forecast by 0.6 percentage point, to 3.1%, well below the consensus of 4%. The downward revision arose mainly from our decision to remove from the base forecast the fiscal stimulus previously assumed enacted in the fourth quarter until there emerges a clearer picture of pending legislation. Our optimistic scenario, which re-introduces the previously assumed stimulus in Q1 2021, shows GDP growth at 4.5% next year—above consensus.
- After the record third-quarter “bounce” we expect GDP growth to fade for several reasons. Overshoots on housing starts and consumer spending on durables will unwind over the next several quarters. Fiscal support of the expansion dwindles entering 2021. COVID-19 infections are surging. This will discourage certain spending and encourage state and local authorities to impose new restrictions on economic activity. State and local governments will restrain spending heading into their new fiscal years.
- Unemployment fell sharply in October to 6.9%, compelling us to lower our forecast of unemployment through 2023 despite having revised down projected GDP growth. Tighter labor markets imply higher core PCE inflation, which we now show flirting with 2% through 2026 and imparting some risk to our call that the Fed remains on hold until then.

#### Most components of private demand up sharply in Q3

- Q3 saw robust growth in PCE<sup>2</sup> (40.7%), residential investment (59.3%), equipment spending (70.1%), exports (59.7%), and imports (91.1%). GDP growth was restrained by declines in investment in intellectual property products (-1.0%), investment in nonresidential structures (-14.6%), and government consumption and gross investment (-4.5%). Rebounding inventory investment contributed 6.6 percentage points to Q3 growth as automakers ramped up production after a spring shutdown that, in the face of rebounding sales, left inventories depleted.

#### Fiscal support falls 50% in Q3, will decline 75% in Q4

- Special tables published by BEA show that, about as expected, earlier pandemic relief measures provided \$2.0 trillion of support to personal and business incomes in Q3, down from \$3.9 trillion in Q2. We expect that to fall further to \$0.6 trillion in Q4. While most forms of income support fell in Q3, PPP loan subsidies rose \$265 billion (annual rate) to \$893 billion. However, those subsidies will fall sharply in Q4 to approximately \$143 billion, and then to zero in 2021.

#### Whither stimulus—and other fiscal initiatives?

- With new Supreme Court Justice Barrett confirmed, Congress adjourned for the (now-contested) Presidential election, leaving in limbo negotiations over a fifth pandemic relief bill. Parties to the talks agree additional fiscal support is necessary. However, the timing and dimensions of poten-

tial legislation remain unclear, depending partly on the outcome of special elections in Georgia, scheduled for 5 January, that will determine control of the Senate. Accordingly, while awaiting legislative clarity, we’ve removed previously assumed stimulus from the base forecast. This resulted in a notable downward revision in our baseline projection for GDP in 2021 (see above). The outcome of those special elections will also dictate how much of the aggressive Biden-Harris fiscal agenda might eventually be enacted.

#### GDP-goods has recovered; slower recovery for services

- Partly as a result of catch-up spending and accelerator effects, GDP-goods surpassed its previous peak in Q3. GDP-services will recover more slowly. Consumer spending on services other than housing and utilities—which includes activities most susceptible to social distancing—does not regain its previous peak until mid-2023.

#### Forecasted inflation moving up; risk to the Fed call?

- Spikes in prices rebounding from pandemic-related declines, recovering energy prices, a weakening dollar, and tightening labor markets are nudging core PCE inflation towards the Fed’s 2% objective sooner than previously anticipated. This imparts some risk to our call that the Fed remains on hold until late 2026, especially if additional stimulus is enacted.

1. This forecast was issued on 9 November 2020. Unless otherwise noted, all quarterly growth rates are stated as compound annual rates, all expenditure components of GDP are chained 2012 dollars, and all annual growth rates are full-year over full-year percent changes.

2. PCE is the acronym for personal consumption expenditures.

## Forecast at a glance

Base forecast (November 2020) 2020:Q4 - 2024:Q4

|  | Major economic indicators                |        |        |        |        |        |   |       |       |       |       |       |   |        |        |        |        |        |
|--|--|--------|--------|--------|--------|--------|---|-------|-------|-------|-------|-------|---|--------|--------|--------|--------|--------|
|  | % change from prior quarter, annual rate |        |        |        |        |        | % change from prior year, or annual average |       |       |       |       |       | % change from fourth quarter of prior year, or fourth-quarter average |        |        |        |        |        |
|  | 2020.2                                   | 2020.3 | 2020.4 | 2021.1 | 2021.2 | 2021.3 | 2019  | 2020  | 2021  | 2022  | 2023  | 2024  | 2019.4  | 2020.4 | 2021.4 | 2022.4 | 2023.4 | 2024.4 |
| <b>Key indicators of real activity</b>   |  |        |        |        |        |        |   |       |       |       |       |       |   |        |        |        |        |        |
| Real gross domestic product              | -31.4                                    | 33.1   | 3.7    | 2.7    | 1.0    | 1.9    | 2.2   | -3.6  | 3.1   | 2.5   | 2.5   | 2.9   | 2.3   | -2.6   | 1.9    | 2.8    | 2.6    | 3.0    |
| Contributions to growth (% points):      |  |        |        |        |        |        |   |       |       |       |       |       |   |        |        |        |        |        |
| Final sales to domestic purchasers       | -28.5                                    | 29.6   | 2.9    | 1.5    | 1.3    | 1.5    | 2.4   | -2.9  | 2.7   | 1.9   | 2.2   | 2.8   | 2.4   | -2.0   | 1.5    | 2.1    | 2.4    | 3.0    |
| Net exports of goods & services          | 0.6                                      | -3.1   | 0.0    | 0.6    | -0.4   | 0.5    | -0.2  | 0.0   | -0.3  | 0.6   | 0.2   | 0.0   | 0.3   | -0.7   | 0.3    | 0.6    | 0.2    | -0.1   |
| Change in private inventories            | -3.5                                     | 6.6    | 0.8    | 0.6    | 0.1    | -0.2   | 0.0   | -0.6  | 0.7   | 0.0   | 0.0   | 0.1   | -0.4  | 0.2    | 0.1    | 0.1    | 0.0    | 0.1    |
| <b>Major components of real GDP</b>      |  |        |        |        |        |        |   |       |       |       |       |       |   |        |        |        |        |        |
| Personal consumption expend.             | -33.2                                    | 40.7   | 3.4    | 1.6    | 2.2    | 2.3    | 2.4   | -3.9  | 3.6   | 2.2   | 2.4   | 2.9   | 2.5   | -2.5   | 2.1    | 2.3    | 2.6    | 3.0    |
| Nonres. fixed investment                 | -27.2                                    | 20.3   | 3.1    | 3.1    | 0.1    | 1.0    | 2.9   | -4.8  | 1.9   | 3.4   | 4.6   | 5.4   | 1.4   | -4.2   | 1.6    | 4.5    | 4.8    | 5.6    |
| Residential investment                   | -35.6                                    | 59.3   | 20.0   | -4.8   | -7.1   | -5.2   | -1.7  | 4.8   | 2.9   | -3.1  | -1.1  | 0.4   | 1.6   | 10.0   | -5.0   | -2.1   | -0.4   | 0.9    |
| Change in private inventories *          | -287.0                                   | -1.0   | 41.2   | 72.5   | 79.2   | 69.3   | 48.5  | -81.9 | 70.1  | 78.3  | 81.3  | 95.2  | -1.1  | 41.2   | 59.3   | 90.5   | 83.3   | 100.9  |
| Exports of goods & services              | -64.4                                    | 59.7   | 12.9   | 16.9   | 1.0    | 10.2   | -0.1  | -13.4 | 7.5   | 8.9   | 6.6   | 5.5   | 0.4   | -12.7  | 9.6    | 8.3    | 6.1    | 5.1    |
| Imports of goods & services              | -54.1                                    | 91.1   | 9.3    | 7.5    | 3.7    | 3.9    | 1.1   | -10.4 | 8.2   | 2.4   | 3.7   | 4.4   | -1.9  | -5.0   | 5.1    | 2.1    | 3.8    | 4.7    |
| Gov't consump. & gross invest.           | 2.5                                      | -4.5   | -3.1   | 1.3    | 0.7    | 0.6    | 2.3   | 1.0   | -0.5  | 0.4   | 0.2   | 0.7   | 3.0   | -1.0   | 0.7    | 0.3    | 0.2    | 1.0    |
| <b>Prices, Productivity, &amp; Costs</b> |  |        |        |        |        |        |   |       |       |       |       |       |   |        |        |        |        |        |
| Pvt. housing starts (thous. units)       | 1079                                     | 1430   | 1455   | 1381   | 1372   | 1346   | 1295  | 1362  | 1357  | 1298  | 1274  | 1270  | 1433  | 1455   | 1327   | 1286   | 1268   | 1279   |
| Light vehicle sales (mil. units)         | 11.3                                     | 15.3   | 16.0   | 15.7   | 15.7   | 15.8   | 17.0  | 14.4  | 15.8  | 15.9  | 16.0  | 16.1  | 16.8  | 16.0   | 15.9   | 15.9   | 16.0   | 16.1   |
| Industrial production, total             | -42.9                                    | 39.8   | 3.2    | 1.8    | 0.1    | 0.6    | 0.9   | -7.4  | 1.8   | 2.6   | 2.8   | 3.0   | -0.7  | -6.4   | 0.9    | 3.5    | 2.7    | 3.1    |
| Industrial production, mfg               | -46.9                                    | 53.7   | 3.9    | 1.9    | -2.0   | -1.1   | -0.2  | -7.4  | 1.9   | 1.7   | 2.5   | 3.1   | -1.2  | -5.4   | -0.4   | 3.0    | 2.5    | 3.3    |
| Capacity utilization (mfg, %)            | 63.1                                     | 70.3   | 71.1   | 71.5   | 71.1   | 70.8   | 75.6  | 69.6  | 71.1  | 71.9  | 73.1  | 74.4  | 75.0  | 71.1   | 70.7   | 72.4   | 73.6   | 74.9   |
| Nonfarm payroll employ. (mil.)           | 133.7                                    | 140.8  | 143.2  | 145.8  | 147.1  | 148.1  | 150.9                                       | 142.4 | 147.5 | 151.3 | 153.4 | 155.1 | 151.8   | 143.2  | 149.0  | 152.3  | 154.0  | 155.7  |
| Average monthly chg. (thous.)            | -4427                                    | 1309   | 780    | 848    | 247    | 360    | 178   | -660  | 440   | 258   | 141   | 142   | 210   | 780    | 304    | 193    | 154    | 132    |
| Private nonfarm hours                    | -42.9                                    | 36.8   | 10.6   | 7.7    | 3.0    | 2.8    | 0.7   | -6.7  | 5.2   | 2.6   | 1.2   | 1.0   | 0.8   | -5.1   | 3.9    | 2.2    | 0.9    | 1.0    |
| Civilian unemployment rate (%)           | 13.0                                     | 8.8    | 6.8    | 6.0    | 5.8    | 5.6    | 3.7   | 8.1   | 5.7   | 4.7   | 4.4   | 4.0   | 3.5   | 6.8    | 5.4    | 4.5    | 4.3    | 3.9    |
| <b>Selected Financial Variables</b>      |  |        |        |        |        |        |   |       |       |       |       |       |   |        |        |        |        |        |
| Federal funds rate (%)                   | 0.06                                     | 0.09   | 0.10   | 0.10   | 0.10   | 0.10   | 2.16  | 0.38  | 0.10  | 0.10  | 0.11  | 0.12  | 1.64  | 0.10   | 0.10   | 0.10   | 0.11   | 0.13   |
| Yield on 10-Yr Treasury Notes (%)        | 0.69                                     | 0.65   | 0.80   | 0.88   | 0.93   | 0.99   | 2.14  | 0.88  | 0.97  | 1.24  | 1.45  | 1.63  | 1.79  | 0.80   | 1.06   | 1.34   | 1.50   | 1.72   |
| Baa corporate bond yield (%)             | 3.91                                     | 3.32   | 3.42   | 3.54   | 3.57   | 3.48   | 4.38  | 3.63  | 3.51  | 3.58  | 3.84  | 4.00  | 3.91  | 3.42   | 3.47   | 3.69   | 3.90   | 4.07   |
| Broad trade-wtd US\$ (Jan 2006=100)      | 122.2                                    | 117.7  | 115.6  | 113.9  | 111.8  | 109.9  | 115.7                                       | 118.3 | 111.1 | 106.8 | 106.4 | 107.1 | 116.4   | 115.6  | 108.6  | 106.3  | 106.6  | 107.4  |
| S&P 500 stock index, period end          | 3100                                     | 3363   | 3524   | 3482   | 3492   | 3529   | 3231  | 3524  | 3531  | 3552  | 3688  | 3875  | 3231  | 3524   | 3531   | 3552   | 3688   | 3875   |
| S&P 500 stock index, average             | 2929                                     | 3322   | 3366   | 3503   | 3487   | 3510   | 2912  | 3171  | 3508  | 3534  | 3611  | 3777  | 3086  | 3366   | 3530   | 3544   | 3668   | 3873   |
| <b>Incomes &amp; Related Measures</b>    |  |        |        |        |        |        |   |       |       |       |       |       |   |        |        |        |        |        |
| Corporate profits w/ IVA & CCAAdj        | -35.2                                    | 363.3  | -69.8  | -25.6  | 2.7    | 5.9    | 0.3   | -5.3  | -12.4 | 6.0   | 6.2   | 7.2   | 1.3   | -14.0  | -5.4   | 7.7    | 6.3    | 7.2    |
| Real disposable personal income          | 46.6                                     | -16.3  | -13.6  | -5.0   | -0.1   | 0.2    | 2.2   | 5.4   | -3.9  | 1.3   | 2.4   | 3.1   | 1.6   | 2.1    | -1.3   | 2.0    | 2.8    | 3.1    |
| Personal saving rate (%)                 | 25.7                                     | 15.8   | 11.9   | 10.2   | 9.7    | 9.2    | 7.6   | 15.7  | 9.4   | 8.6   | 8.5   | 8.7   | 7.3   | 11.9   | 8.6    | 8.4    | 8.6    | 8.7    |
| Fed. surplus (unified, FY, bil. \$)      | -8003                                    | -1550  | -2357  | -2233  | -705   | -1501  | -984  | -3132 | -1699 | -1063 | -929  | -993  | -1426   | -2357  | -1374  | -1208  | -1309  | -1277  |

\* billions of chained 2012 \$

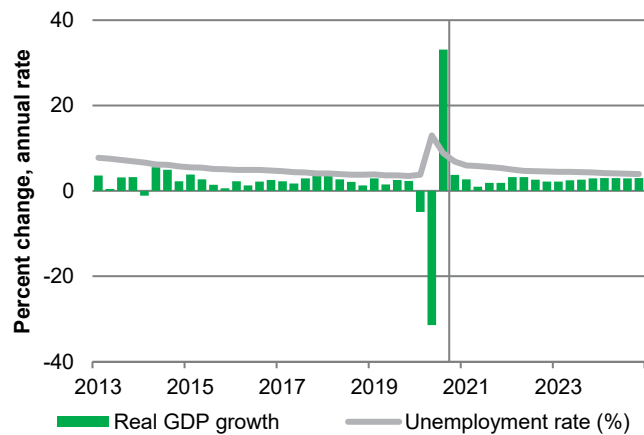
\*\* % change, not annualized

Source: IHS Markit

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## Forecast at a glance

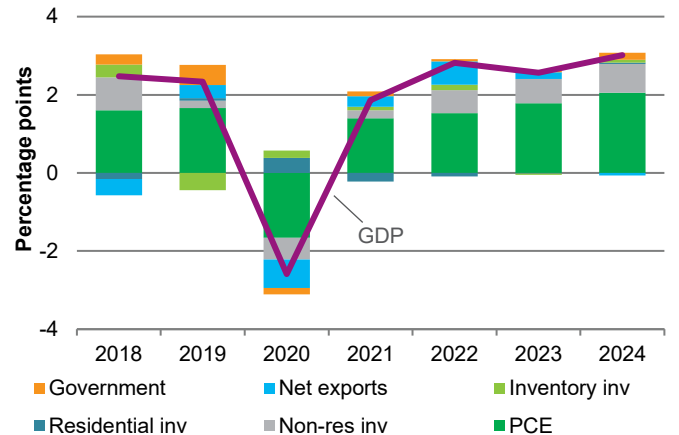
**Historic Q3 rebound; GDP 3.5% below prior peak**



Source: IHS Markit, BEA, BLS

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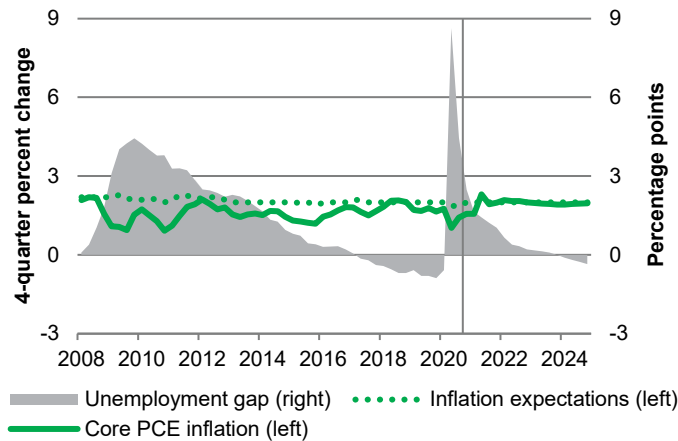
**Contributions to GDP growth (Q4/Q4)**



Source: IHS Markit, BEA

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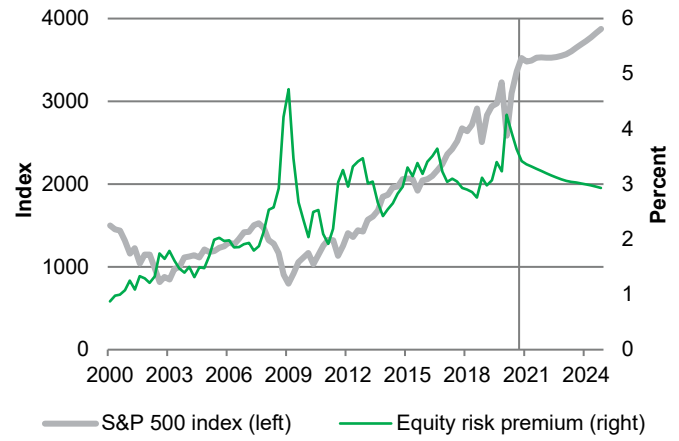
**Core inflation to average close to 2% through 2024**



Source: IHS Markit, Philly Fed, BEA, BLS

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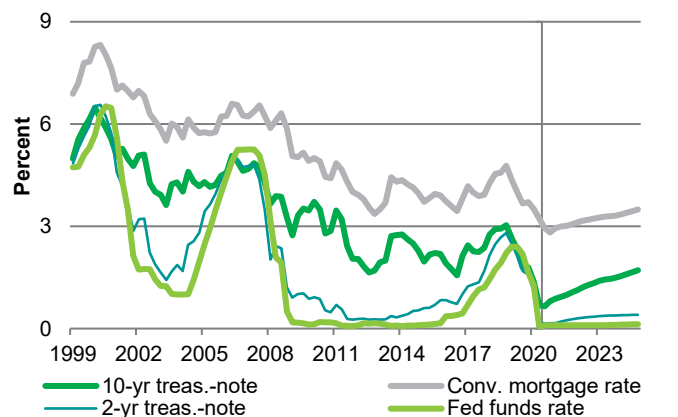
**Equities to continue to rebound gradually**



Source: IHS Markit, S&P

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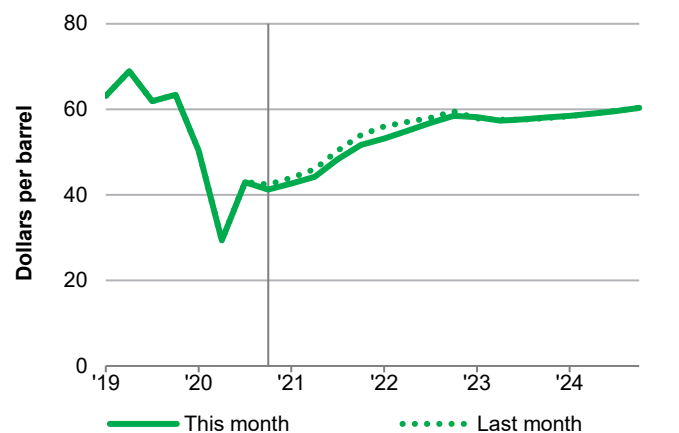
**Fed keeps funds rate pinned at 0 through 2026, term yields rise gradually**



Source: IHS Markit, FRB

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**Price of Brent crude oil**



Source: IHS Markit

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## What's new

### Growth over 2021-23 revised down with removal of stimulus

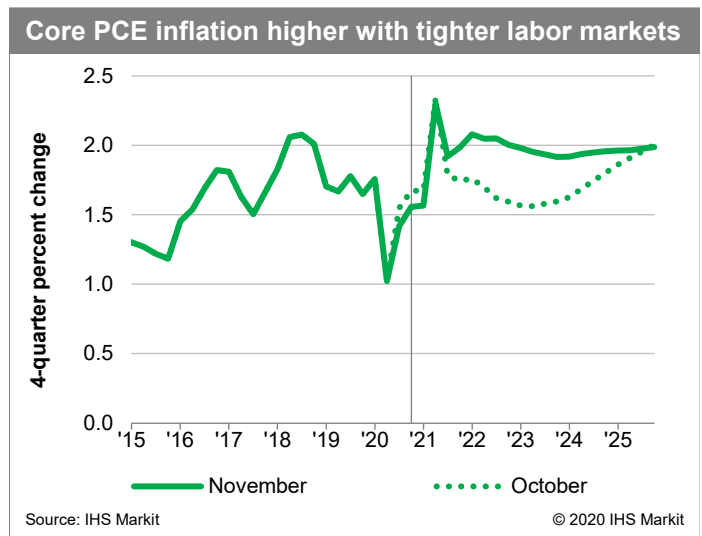
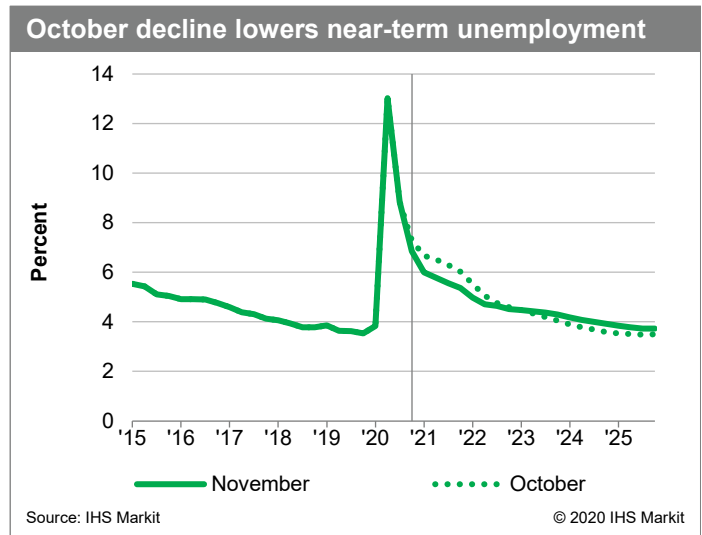
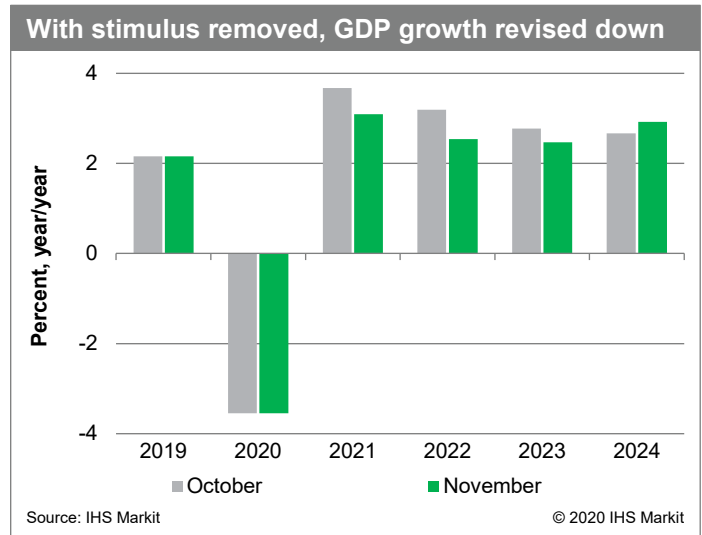
The November forecast launches from BEA's advance estimate of the National Accounts for the third quarter of 2020. This showed that real GDP grew 33.1%, close to our final tracking estimate of 33.8%. However, higher-frequency data through early November suggest output will decelerate sharply in Q4 when we show GDP advancing an unrevised 3.7%.

With a limited number of legislative days in Congress remaining this year, a government shutdown possible in mid-December, and the outcome of the Presidential election being contested by the Trump Administration, it appears a new pandemic relief bill may not be enacted until early next year. Accordingly, we have removed from the base forecast previously assumed fiscal stimulus (see Key Forecast Assumptions), relegating it to our optimistic scenario until the design and timing of any such measure becomes clear. The incremental effect on fourth-quarter growth was largely offset by other factors. However, the removal of assumed stimulus is the main reason for a downward revision in projected GDP growth for 2021, from 3.7% last month to 3.1% this month (see chart). With these revisions, GDP regains its pre-pandemic peak in Q1 2022, one quarter later than in last month's forecast.

The unemployment rate has also been revised down over the next two years, mainly due to the unexpectedly sharp drop in October to 6.9% (see chart). However, subsequent declines in unemployment are smaller than previously, so the economy regains full employment later than in last month's forecast. Declines in the unemployment rate will be limited by three factors: (1) the downward revisions to projected GDP growth; (2) the partial unwinding of the recent decline in the participation rate as the pandemic is brought under control; and (3) normalization of the household measure of employment to the establishment measure, which is now nearly complete.

A ramification of the downward revision in unemployment is an upward revision to core inflation rates over the next several years as a tighter labor market translates into additional upward pressure on wages and prices. Indeed, in this month's forecast core PCE inflation flirts with the Fed's 2% objective through 2025, tilting the risk of our Fed call towards an earlier monetary tightening. We will watch this issue closely, especially if significant new fiscal stimulus is enacted or, as recent press reports suggest, there is faster progress towards a highly effective vaccine than previously anticipated.

In light of the projected rebound in oil prices, our energy team has re-assessed its outlook for US production of crude oil, raising its forecast nearly 20% by 2025. The effect is to strengthen net exports of petroleum and products by roughly \$40 billion, both by raising exports of crude and lowering imports.



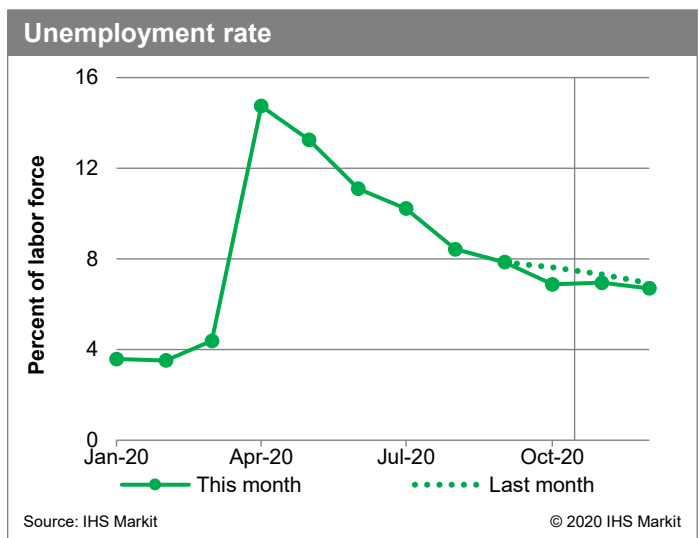
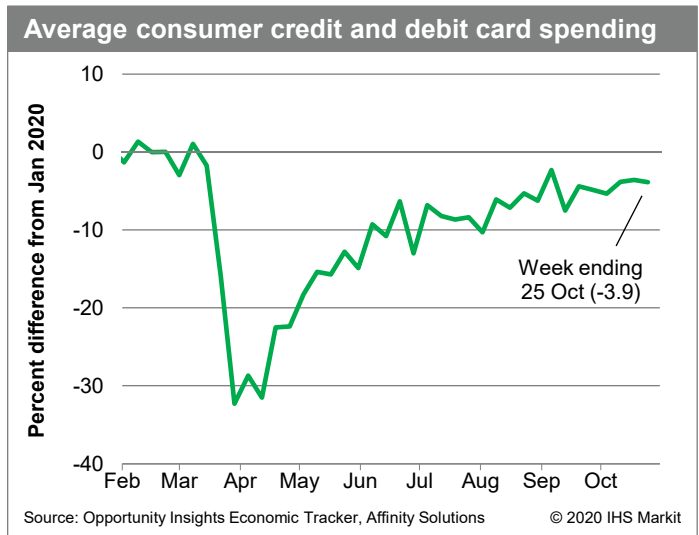
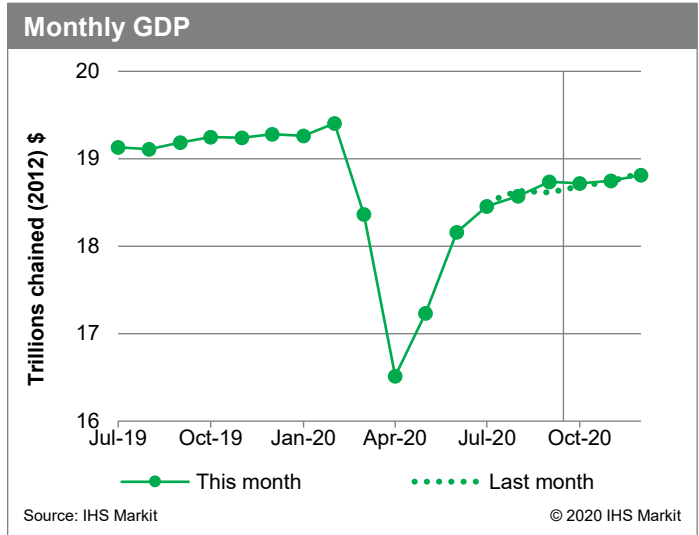
## The view just ahead

### GDP to stall in October well short of full recovery, as several high-frequency indicators have softened

After reaching a trough in April, the US economy began a robust recovery. Over May and June, GDP rose at an average pace of about 5% per month (not annualized). Since then, the recovery has slowed, with GDP rising 1.6% in July and at an average monthly pace of 0.8% per month over August and September. By September, the recovery in GDP had reversed roughly three-quarters of the spring decline but was still 3.4% below the February level.

Several high-frequency indicators, moreover, point to a further deceleration in October. Average consumer credit- and debit-card spending from the Opportunity Insights Economic Tracker was trending only modestly higher through the end of October, indicating that consumer spending broadly has all but stalled. The count of seated diners on the OpenTable platform, relative to year-ago levels, has declined for four consecutive weeks. This suggests that the recovery in the restaurant industry, one of the hardest hit by the pandemic, may have crested over the summer. With opportunities for outdoor dining diminishing as temperatures turn cooler, and with COVID-19 cases surging nationwide, the restaurant industry appears to be in for a difficult winter. After improving through mid-August, hotel revenues have plateaued (in year-over-year comparisons), and airport passenger traffic in early November has turned lower (again, in year-over-year comparisons). Finally, job postings (from Opportunity Insights) at the end of October remained well below the January average, suggesting that job gains may not improve materially in coming months. In our forecast, we expect the rate of decline in the unemployment rate to slow from an average rate of 1.3 percentage points per month since the peak in April to just 0.3 percentage point per month from November through March.

Still, there are some bright spots in the economy. Driven by low mortgage rates and some pent-up demand, single-family housing permits and starts have both surged past their pre-pandemic levels. Also, existing home sales are elevated, as are retail sales at the building materials group of stores, indicating elevated residential brokers' commissions and residential improvements in the fourth quarter. Taken together, these developments imply a robust quarter for residential investment in the fourth quarter. Light vehicle sales have been above 16.0 million for two consecutive months, helping to drive vehicle assemblies higher. Manufacturers' orders and shipments of nondefense capital goods excluding aircraft have also surged past their pre-pandemic levels, setting up the fourth quarter for robust growth of equipment investment. And all indications are that Boeing remains on track to resume deliveries of its 737 MAX line of aircraft by December.



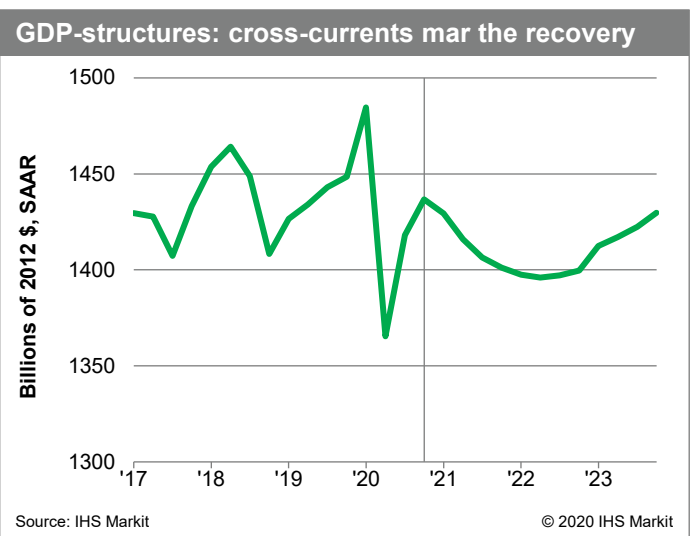
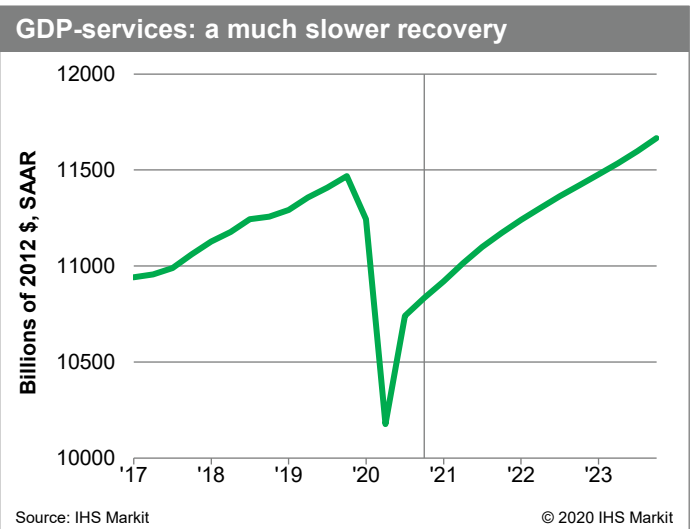
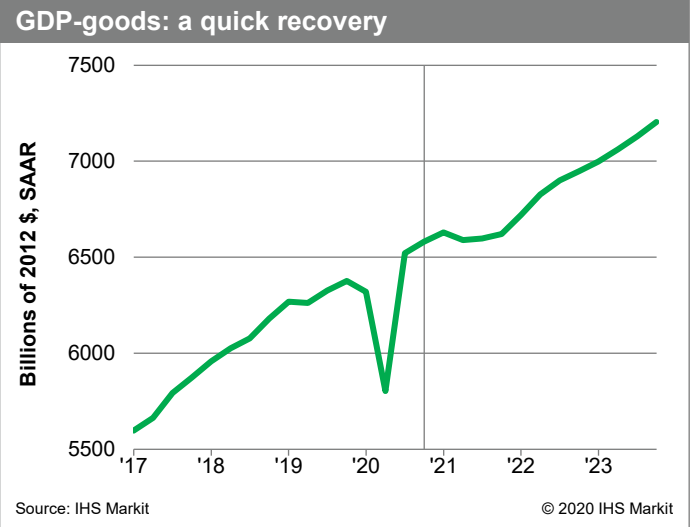
## Growth

### GDP to slow sharply in 2021 without extension of stimulus programs

GDP grew a record 33.1% in Q3, but at the monthly frequency much of the growth occurred in April and May. Since then, high-frequency data show an uneven sequential slowing of economic growth. This deceleration won't be reflected in quarterly averages until Q4, when we show GDP growth dropping to 3.7%. This is unrevised from last month's forecast, as the negative impact of removing previously assumed stimulus from the base forecast was offset by other factors.

Several factors contribute to a sharp deceleration of GDP in Q4 and into 2021. First, COVID-19 infection rates are rising as temperatures have cooled, activity moved indoors, and schools re-opened with some in-person learning. Some increase was anticipated, but the recent surge has exceeded our earlier expectations and will discourage consumer spending. Second, state and local governments are starting to respond to the rising infections by tightening restrictions on economic activity. Third, catch-up spending and accelerator effects have temporarily driven consumer spending on durable goods above the rising pre-pandemic trend. That overshoot is expected to unwind over the next several quarters. Similarly, housing starts are expected to crest early in 2021. Fourth, stimulus from previously enacted pandemic relief measures is fading, and we have removed from the base forecast our previous assumption of additional stimulus pending clarification on the timing and magnitude of any such legislation. Fifth, state and local governments are expected to restrain spending heading into their new fiscal years, most of which begin 1 July.

The recovery, already uneven across sectors, will remain so. By Q3, production of goods had fully recovered (chart, top). That strength partly reflects catch-up spending and accelerator effects. In addition, the production and consumption of goods is relatively immune to the disruptions and risks associated with the pandemic. Finally, spending on big-ticket consumer items, capital goods, and exports will benefit from the sharp drop in interest rates and decline in the dollar. The recovery in services will take much longer (chart, middle). Spending on services other than housing and utilities—which includes expenditures on health care, travel, and entertainment—likely cannot return to a new normal until a vaccine is not just available, but a significant percentage of the population is vaccinated. The recovery in GDP-structures will reflect crosscurrents. Residential investment will surpass its previous peak this year as construction shifts from urban to suburban areas and homebuyers take advantage of historically low mortgage rates. However, for currently assumed demographic trends, we expect this early surge in housing activity to fade, re-enforcing weakness in both nonresidential construction and state and local construction spending.





## Sector highlights

### Recent gains in consumer spending and employment likely to slow going forward

**Consumer markets:** Real personal consumption expenditures (PCE) increased 40.7% (annual rate) in the third quarter, according to BEA's advance estimate. This was a record rate of growth, but following its collapse in the first half of 2020, real PCE in the third quarter was still 3.3% below its late 2019 high-water mark. A significant deceleration in consumer spending is underway in the fourth quarter. High frequency data show that virus-sensitive spending softened in October—restaurants, hotels, transportation, and entertainment hit a wall amid rapidly rising COVID-19 cases and the arrival of cooler weather. On the other hand, spending on retail goods likely maintained positive momentum, thanks in part to Amazon Prime Day and the early kickoff to holiday shopping. The initial “V-shaped” recovery in retail spending, particularly for durable goods, is unsustainable. The ensuing phase of consumer recovery will be challenging as goods spending retreats over the next several months and many services go on ice for the winter. The dwindling likelihood of fiscal stimulus and income support before the end of the year further undermines the recovery, as a deficit of 10 million jobs looms large. We expect real PCE to grow 3.4% in the fourth quarter, followed by average quarterly growth of 2.1% in the four quarters of 2021. Real PCE will not recover its pre-pandemic peak until the first quarter of 2022.

**Labor markets:** The recovery in payroll employment continued at a solid pace in October but still has a long way to go. Nonfarm payroll employment rose 638 thousand, while the unemployment rate declined 1.0 percentage point to 6.9%. The headline increase in employment was restrained by a 268 thousand decline in government payrolls as private payrolls posted a solid gain of 906 thousand. Gains in overall payroll employment since April have reversed a little over half of the sharp drop in the spring. Even with the robust pace of payroll gains over the last few months, payrolls remain about 10 million below the pre-pandemic (February) level. If payroll gains were to continue at the recent clip (say, 900 thousand per month), it would take nearly one year to recover the February level of employment. However, given the diminution of fiscal support that has already occurred and that we expect to continue in coming months, it is likely that payroll gains will in fact slow, delaying the point at which payroll employment fully recovers. We project that after shedding 18.2 million jobs, on balance, in the second quarter (on a quarterly average basis) and gaining 7.1 million jobs in the third quarter, payroll gains will slow to 2.4 million in the fourth quarter. We expect the unemployment rate will continue to gradually decline over the coming years, reaching an average of 5.4% by the end of 2021.

**Business investment:** Real nonresidential (business) fixed investment is expected to fall 4.8% this year before turning up

1.9% next year and averaging growth of 4.8% over the following five. The near-term weakness broadly reflects a downward adjustment to the rate of expansion of business capacity in light of the recent weakness in sales; in our forecast, the level of final sales does not regain the pre-pandemic trend for several years. Also contributing to the slowing more specifically is the early year drop and only partial recovery (so far) in oil prices, which is weighing on investment spending in the energy sector. Going forward, a headwind on investment spending will be continued tightening of bank credit standards for both commercial and industrial loans and nonresidential commercial real-estate loans.

**Housing and construction:** The housing starts forecast is slightly stronger than last month, mostly reflecting incoming data. Single-family permits have rebounded by an unprecedented 453,000 units (annualized, seasonally adjusted) in five months, including a 7.8% in September surge, while the number of authorized un-started single-family homes has risen to levels last seen in 2008. In the forecast, housing starts rise to 1.362 million in 2020 (previously 1.356 million), and 1.357 million in 2021 (previously, 1.332 million). Forecasted home prices are also slightly stronger than last month. The CoreLogic home price index is expected to rise from 4.1% four-quarter growth in the first quarter to 8.0% (previously 3.0%) in the first quarter of 2021. Growth eventually settles in the 2.8–3.0% range (nominal) in the outer years. The adjustment is also a result of incoming data. Home prices have accelerated sharply as inventories have sunk to record lows. However, forces that will contain home price growth should soon emerge. We expect that as the pandemic wanes, more homeowners will respond to the home price surge by listing their homes, and the high unemployment rate and the end of forbearances will result in some homeowners becoming renters.

**International trade:** According to BEA's advance estimate, imports and exports surged in the third quarter of 2020 following record declines in the second quarter. On balance, net exports subtracted 3.1 percentage points from GDP growth in the third quarter, as import growth (+91.1%) outpaced export growth (+59.7%). Even with these solid rebounds, real exports of goods and services were still down 15% relative to the fourth quarter of 2019 and real imports were down 7%. The stronger recovery in imports reflects robust growth in domestic demand while lagging foreign demand has provided relatively less support for exports. After hitting a peak of 126.5 on 23 March, the nominal, broad dollar has since given back its appreciation relative to the end of 2019, with a reading of 114.7 as of 6 November. We expect the greenback to depreciate further over the first couple years of the forecast, falling to 106.2 by early 2023 before edging up to 107.4 by the end of 2024.

## Key forecast assumptions

### Further stimulus removed from base forecast; accommodative Fed policy; vaccine available in 2021

**COVID-19:** Rates of infection and death remain elevated until a vaccine becomes available in mid-2021, then begin to subside. PCE-services excluding housing and utilities regains the previous peak by late 2023 (see chart).

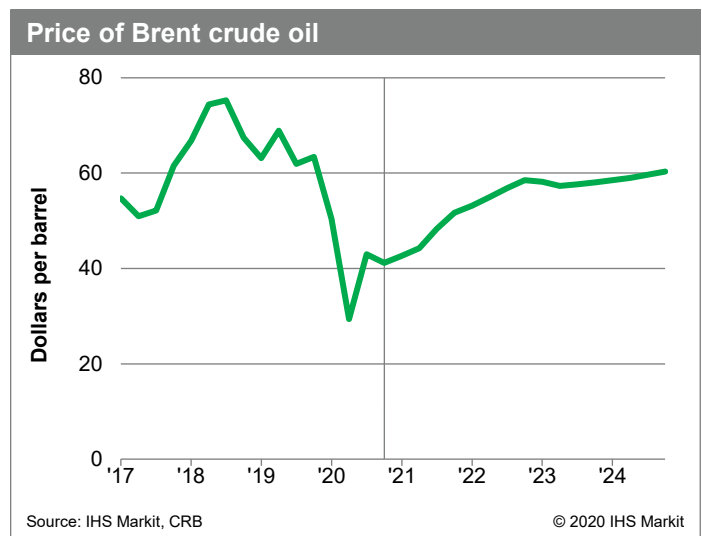
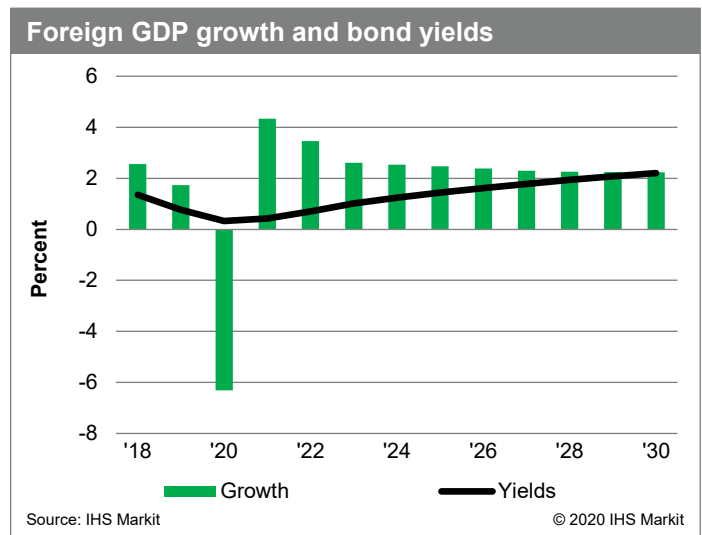
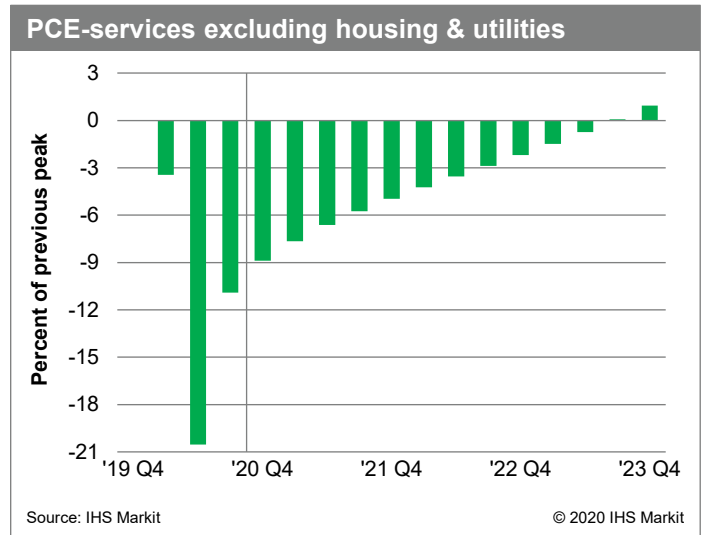
**Fiscal policy:** The forecast assumes: (a) the four pandemic relief measures enacted so far this year; (b) the short-term spending bill signed by the President on 30 September is extended after 11 December if/as necessary to prevent a government shutdown; (c) the debt ceiling is suspended (again) in March; (d) student loan forbearance is extended through December under the President’s Executive Order (EO) of 8 August; (e) \$42 billion is diverted from FEMA to replace lost wages under an EO of 8 August, with most of the funds disbursed in September and the rest in October. State and local governments are assumed to restrain growth of spending sufficiently through 2022 to prevent a deterioration of their deficits as a share of GDP. We’ve dropped from the base forecast a previous assumption of emergency unemployment benefits of \$300/week from October through December and \$270 billion of stimulus checks distributed during the fourth quarter. New stimulus is included in the optimistic scenario.

**Monetary policy:** The Fed maintains its policy rate near 0% until late 2026 when the economy is beyond full employment with inflation having exceeded 2%. The Fed has resurrected several credit facilities from 2008-09 and created new ones to support the economy and ensure normal functioning of financial markets. We assume the facilities are utilized, prove effective in narrowing credit spreads, and that the Fed quickly expands its holding of term Treasuries by nearly \$2 trillion. In addition, based on recent Fed communication, we assume the Fed tolerates inflation modestly above 2% after 2026 in order to establish its 2% objective as an average rather than a ceiling.

**Tariffs:** The forecast includes those tariffs enacted by the US and China since 2017 and still in effect.

**Global growth:** Growth of real, trade-weighted foreign GDP contracts 6.3% (year/year) in 2020 before rebounding to 4.3% in 2021 as the COVID-19 pandemic recedes (see chart). The trade-weighted foreign bond yield dips to 0.3% in 2020 before gradually climbing to 2.2% by 2030.

**Oil prices:** The price of Brent crude oil dropped to \$29/barrel in Q2 as the global recession and price war between Saudi Arabia and Russia created an unprecedented surplus of oil. As global demand rebounds, OPEC+ countries restrict output, and US shale oil production slips, the price gradually recovers, reaching \$50 by late 2021—the approximate level at which US drilling and production stabilize (see chart).



## Alternative scenarios

### Two alternative outcomes for the US economy

*Our assessment of the economic risks associated with the continued threat from COVID-19, as reflected in the baseline forecast and these alternative scenarios, has changed relative to last month. We now see the upside and downside risks as roughly balanced. The likelihood of a fiscal stimulus package (which has been removed from the base forecast, but added to the Optimistic scenario) and the positive news confirming our prior assumptions about the timing of widespread use of a vaccine, together increase the probability of the Optimistic scenario. The sharply rising number of new COVID-19 cases, associated greater likelihood of renewed containment measures, and curtailed consumer spending, tend to increase the likelihood of the Pessimistic scenario. On balance, we now assign a 50% probability to our base-line forecast, a 25% probability to the Pessimistic, and a 25% probability to the Optimistic scenario.*

#### **Pessimistic Scenario: Recovery stumbles as trend in new cases continues to rise (25% probability)**

This pessimistic scenario is characterized by a weaker recovery in consumer spending than in the baseline forecast. Underlying this narrative are two assumptions. First, as a result of an upturn in new cases, hospitalizations, and deaths, the pace of “opening up” and its success in promoting economic activity partially reverses and remains slower than in the baseline. Second, rising cases and renewed containment measures result in some retrenchment in consumer spending over the next few quarters, which falls below the baseline path, removing support from the economic recovery. This slows the rise of spending, production, and employment more broadly. The persistence of the threat thus restrains the vigor of the recovery. In addition, this scenario assumes no new fiscal stimulus.

Surging cases lead to renewed caution on the part of consumers. Consumer spending declines slightly at the end of the year and in the first quarter, compared to modest increases in the base forecast. GDP rises at a 1.0% annualized rate in the fourth quarter but slips 0.6% in the first quarter, compared to 3.7% and 2.7% rates of increase, respectively, in the base forecast.

Business investment in equipment mounted a strong recovery in the third quarter, while investment in structures continued to decline. With GDP still 3.5% below the pre-pandemic peak, and GDP growth dropping to just 1.0% in the fourth quarter, business fixed investment growth slows to a crawl through 2021. Equipment investment growth slows but remains positive, while structures investment declines through 2022.

The unemployment rate peaked at 13.0% in second quarter, and declines at a slower pace than in the baseline, not falling below 5.0% until mid-2023. Inflation slumps. Core PCE inflation is pinned around 1.0% through 2023 before then rising, but it remains below the FOMC’s 2% target through mid-2028.

The recovery takes significantly longer than in the baseline. The previous peak in GDP is not passed until mid-2022, half a year later than in the base forecast.

#### **Optimistic Scenario: Fiscal stimulus drives faster recovery (25% probability)**

The optimistic scenario is characterized by a quicker recovery than in the baseline as a result of a new fiscal stimulus package. Also underlying this scenario is the assumption that a vaccine is ready for limited use in the fourth quarter of 2020 and for widespread use in the spring of next year. This renders the spread of COVID-19 and its health ramifications less threatening than in the base forecast. Despite the recent uptrend in new cases, this scenario assumes the daily number of new cases reverses course and begins to decline quickly. Guidelines for social distancing and masks are assumed to be mostly observed, which helps relax containment measures, thereby allowing a quicker rise in economic activity than in the baseline. As a result, consumers resume their pre-COVID spending patterns sooner than in the baseline forecast.

This scenario assumes that a new fiscal stimulus package is implemented early next year. The stimulus package includes \$270 billion worth of direct payments to households, the re-introduction of emergency unemployment benefits of \$300 per week, and an extension of the PUA and PEUC programs through the second quarter of 2021. The stimulus package boosts consumer spending compared to the base case, while also supporting personal savings, with the saving rate ending 2022 at 7.9%.

In this scenario, the fiscal stimulus and better COVID containment keeps economic activity above levels observed in the baseline. The previous peak in GDP is passed in mid-2021, half a year sooner than in the baseline. The unemployment rate spiked to 13.0% in the second quarter, but quickly falls to below 4.5% by early 2022. Core PCE inflation moves above the FOMC’s target in mid-2021, propelled by the fiscal stimulus, before declining as the boost from the fiscal stimulus wanes. As the unemployment rate declines below the NAIRU in mid-2022 and core inflation settles persistently, albeit modestly, above the FOMC’s target by mid-2021, the Fed begins to raise the federal funds rate in early 2024, almost three years earlier than in the baseline forecast.

## US Macro Forecast Snapshot

|                                    | Baseline (50%)  | Pessimistic (25%)   | Optimistic (25%)   |
|------------------------------------|---|---|--|
| <b>GDP growth</b>                  | GDP contracts 3.6% in 2020 as growth in the fourth quarter slows to a 3.7% rate in the absence of fiscal stimulus. Growth rebounds 3.1% in 2021 and 2.5% in 2022. GDP crosses previous peak level in early 2022 | GDP falls 3.7% in 2020 as the recovery stalls in the fourth quarter. GDP grows 1.6% in 2021 and 2.9% in 2022. GDP crosses previous peak level in mid-2022 | GDP contracts 3.5% in 2020 as fourth-quarter GDP growth scores a 5.2% rate. Growth rebounds 4.6% in 2021 and 2.5% in 2022. GDP crosses previous peak level in mid-2021 |
| <b>Consumer spending</b>           | Spending falls 3.9% in 2020 before bouncing back 3.6% in 2021 and 2.2% in 2022  | Spending plunges 4.1% in 2020 before bouncing back 2.0% in 2021 and 2.4% in 2022  | Falls 3.8% in 2020 and rises 5.2% in 2021 and 2.1% in 2022   |
| <b>Business fixed investment</b>   | Falls 4.8% in 2020. Recovers 1.9% in 2021 and grows 3.4% in 2022  | Plummets 5.0% in 2020, then rises 1.3% in 2021 and 4.0% in 2022   | Drops 4.7% in 2020, then increases by 4.8% in 2021 and 3.9% in 2022  |
| <b>Housing</b>                     | Housing starts grow from 1.30 million in 2019 to 1.36 million in 2020 and remain unchanged in 2021  | Housing starts grow from 1.30 million in 2019 to 1.36 million in 2020 and fall to 1.31 million in 2021  | Housing starts grow from 1.30 million in 2019 to 1.36 million in 2020 and surge to 1.45 million in 2021  |
| <b>Exports</b>                     | Fall 13.4% in 2020 before rebounding 7.5% in 2021 and 8.9% in 2022  | Fall 13.6% in 2020 before rebounding 4.8% in 2021 and 10.2% in 2022   | Fall 13.4% in 2020 before rebounding 8.1% in 2021 and 8.8% in 2022   |
| <b>Fiscal policy</b>               | Currently-legislated stimulus and EOs total approximately \$3 trillion through FY 2021 but no new stimulus assumed  | Same assumptions as in baseline   | Additional fiscal stimulus totaling approximately \$450 billion takes effect in early 2021   |
| <b>Monetary policy</b>             | Fed keeps the federal funds rate at the zero bound through late 2026; aggressive “quantitative easing” and liquidity enhancement measures   | Fed keeps the federal funds rate at the zero bound through 2029; aggressive “quantitative easing” and liquidity enhancement measures                      | Fed keeps the federal funds rate at the zero bound until early 2024; aggressive “quantitative easing” and liquidity enhancement measures                               |
| <b>Credit conditions</b>           | Continued tightening, then gradual easing starting in 2021  | Continued tightening, then gradual easing starting in 2022  | Continued tightening, then gradual easing starting in 2021   |
| <b>Productivity growth</b>         | Rises to 2.6% in 2020 before falling to -1.6% in 2021; recovers to 0.2% in 2022   | Rises to 2.6% in 2020 before falling to -1.8% in 2021; recovers to 0.3% in 2022   | Rises to 2.7% in 2020 but falls to -1.2% in 2021 before recovering to 0.5% in 2022   |
| <b>Consumer confidence</b>         | Recovers strongly in 2020 Q4, continuing to climb gradually through 2023  | Remains below the baseline over the entire forecast interval  | Outperforms baseline over the entire forecast interval   |
| <b>Oil prices (Dollars/barrel)</b> | Brent crude oil averages \$41 in 2020, \$47 in 2021, and \$56 in 2022   | Brent crude oil averages \$41 in 2020, \$45 in 2021, and \$50 in 2022   | Brent crude oil averages \$41 in 2020, \$49 in 2021, and \$59 in 2022  |
| <b>Stock markets</b>               | The S&P 500 (end-of-period) rises 4.9% in 2020, 11.6% in 2021, and 0.8% in 2022   | The S&P 500 rises 4.9% in 2020 and 6.5% in 2021; falls 1.1% in 2022   | The S&P 500 rises 5.3% in 2020 and accelerates to 14.1% growth in 2021 before slowing to 1.2% in 2022  |
| <b>Inflation (PCE)</b>             | Core personal consumption (PCE) price inflation is 1.4% in 2020, 1.9% in 2021, and 2.0% in 2022   | Core personal consumption (PCE) price inflation is 1.4% in 2020 and 2021; slows to 0.9% in 2022   | Core personal consumption (PCE) price inflation is 1.4% in 2020 and accelerates to 2.1% in 2021 and 2.3% in 2022   |
| <b>Foreign growth</b>              | In 2020, Eurozone GDP declines 8.1%, while China's growth slows to 1.9%   | Global economy suffers a more severe recession  | Global economy experiences a recession that is less severe than in the baseline  |
| <b>US dollar</b>                   | The real dollar depreciates from Q3 2020 through 2023 Q1 and gradually rises thereafter   | Depreciates from Q3 2020 through early 2023 and thereafter appreciates through the end of forecast  | Depreciates from Q3 2020 through late 2022 and thereafter appreciates through the end of forecast  |

## Alternative Scenarios of the US Economy

|   | Annual rates |        |        |        |        | Annual averages |         |         |         |         | Q4/Q4     |        |        |        |        |
|---|--------------|--------|--------|--------|--------|-----------------|---------|---------|---------|---------|-----------|--------|--------|--------|--------|
|   | 2020:3       | 2020:4 | 2021:1 | 2021:2 | 2021:3 | 2019            | 2020    | 2021    | 2022    | 2023    | 2019      | 2020   | 2021   | 2022   | 2023   |
| <b>Pessimistic: Recovery stumbles as trend in new cases continues to rise (Prob. = 25%)</b> |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| <b>Composition of Real GDP, Percent Change</b>  |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| Gross Domestic Product  | 33.1         | 1.0    | -0.6   | 0.3    | 1.5    | 2.2             | -3.7    | 1.6     | 2.9     | 2.6     | 2.3       | -3.2   | 0.8    | 3.5    | 2.5    |
| Total Consumption   | 40.7         | -0.1   | -1.9   | 2.4    | 1.9    | 2.4             | -4.1    | 2.0     | 2.4     | 2.7     | 2.5       | -3.3   | 1.1    | 2.7    | 2.7    |
| Nonresidential Fixed Investment   | 20.3         | 1.0    | 1.9    | 1.5    | -0.1   | 2.9             | -5.0    | 1.3     | 4.0     | 5.1     | 1.4       | -4.7   | 1.0    | 6.0    | 4.9    |
| Residential Fixed Investment  | 59.3         | 19.1   | -1.8   | -9.8   | -11.8  | -1.7            | 4.8     | 1.7     | -5.8    | 0.0     | 1.6       | 9.8    | -8.0   | -2.7   | 1.3    |
| Exports   | 59.7         | 9.4    | 9.3    | -2.2   | 14.4   | -0.1            | -13.6   | 4.8     | 10.2    | 10.6    | 0.4       | -13.4  | 7.5    | 11.2   | 9.4    |
| Imports   | 91.1         | 7.5    | -10.8  | 0.1    | 4.1    | 1.1             | -10.5   | 2.2     | 3.1     | 10.2    | -1.9      | -5.4   | -1.0   | 5.8    | 9.4    |
| Federal Government  | -6.2         | -3.2   | 1.1    | 1.6    | 1.4    | 4.0             | 4.2     | 0.3     | 0.2     | -1.3    | 4.8       | 1.8    | 1.0    | -0.3   | -1.6   |
| State & Local Government  | -3.3         | -3.0   | -0.1   | -1.0   | 0.1    | 1.3             | -0.9    | -1.5    | 1.1     | 1.8     | 1.9       | -2.7   | 0.0    | 1.7    | 1.8    |
| <b>Prices &amp; Wages, Percent Change</b>   |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| Consumer Prices   | 5.2          | 2.3    | 0.4    | 2.2    | 1.9    | 1.8             | 1.3     | 1.7     | 1.6     | 1.4     | 2.0       | 1.2    | 1.5    | 1.5    | 1.3    |
| Producer Prices, Finished Goods   | 7.1          | 2.0    | -0.8   | 3.6    | 3.5    | 0.8             | -1.4    | 1.5     | 2.2     | 1.3     | 0.9       | -1.6   | 2.1    | 1.9    | 1.0    |
| Employment Cost Index - Total Comp.   | 2.0          | 2.4    | 1.0    | 1.3    | 1.4    | 2.7             | 2.5     | 1.6     | 2.0     | 2.1     | 2.7       | 2.3    | 1.5    | 2.1    | 2.2    |
| <b>Other Key Measures, Percent Change</b>   |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| Productivity  | 4.9          | -5.2   | -3.7   | -3.9   | -2.0   | 1.7             | 2.6     | -1.8    | 0.3     | 1.1     | 1.9       | 2.3    | -2.7   | 1.6    | 1.0    |
| Total Industrial Production   | 39.8         | 0.7    | -1.2   | 0.2    | 1.3    | 0.9             | -7.5    | 0.7     | 2.8     | 2.5     | -0.7      | -6.9   | 0.6    | 3.3    | 2.5    |
| Payroll Employment  | 22.9         | 5.4    | 3.4    | 3.6    | 2.8    | 1.4             | -5.7    | 2.3     | 2.3     | 1.7     | 1.4       | -6.0   | 3.1    | 1.9    | 1.6    |
| <b>Incomes, Percent Change</b>  |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| Personal Income   | -10.2        | -11.7  | -7.1   | 1.8    | 2.4    | 3.9             | 5.7     | -2.9    | 2.9     | 3.6     | 3.5       | 2.6    | -0.3   | 3.2    | 4.0    |
| After-Tax Profits (Four-qr.% change)  | 24.9         | -13.1  | -5.3   | 5.1    | -32.7  | 1.8             | -4.1    | -13.0   | 4.8     | 8.2     | 5.3       | -13.1  | -9.7   | 11.6   | 6.0    |
|   | Levels       |        |        |        |        | Annual averages |         |         |         |         | Q4 values |        |        |        |        |
| <b>Other Key Measures</b>   |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| Brent Crude, Spot Price (\$/bbl)  | 42.97        | 41.20  | 43.25  | 44.15  | 47.03  | 64.34           | 41.00   | 45.42   | 49.50   | 55.48   | 63.38     | 41.20  | 47.23  | 53.20  | 56.95  |
| Nonfarm Inven. Chg. (Bil.2012 \$)   | -4.9         | 37.0   | -67.5  | -112.0 | -121.9 | 62.2            | -79.9   | -100.8  | -55.1   | -6.8    | 11.5      | 37.0   | -101.6 | -18.3  | 6.0    |
| Consumer Sentiment Index  | 75.7         | 70.0   | 48.6   | 52.1   | 57.2   | 96.0            | 79.1    | 54.6    | 64.5    | 73.9    | 97.2      | 70.0   | 60.3   | 66.5   | 79.2   |
| Light Vehicle Sales (Mil. units, saar)  | 15.33        | 15.96  | 15.43  | 15.41  | 15.47  | 16.95           | 14.39   | 15.47   | 15.40   | 15.23   | 16.85     | 15.96  | 15.58  | 15.33  | 15.21  |
| Housing Starts (Mil. units, saar)   | 1.430        | 1.435  | 1.359  | 1.328  | 1.289  | 1.295           | 1.357   | 1.310   | 1.226   | 1.226   | 1.433     | 1.435  | 1.266  | 1.217  | 1.230  |
| Unemployment Rate (%)   | 8.8          | 7.0    | 6.7    | 6.5    | 6.3    | 3.7             | 8.2     | 6.4     | 5.6     | 5.0     | 3.5       | 7.0    | 6.0    | 5.4    | 4.8    |
| Federal Surplus (Unified, FY, bil. \$)  | -387.6       | -545.2 | -502.4 | -197.0 | -368.0 | -984.4          | -3131.9 | -1612.6 | -1371.6 | -1165.4 | -356.6    | -545.2 | -411.8 | -332.9 | -309.7 |
| <b>Financial Markets, NSA, Quarter Average</b>  |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| Federal Funds Rate (%)  | 0.09         | 0.09   | 0.10   | 0.10   | 0.10   | 2.16            | 0.38    | 0.10    | 0.10    | 0.10    | 1.64      | 0.09   | 0.10   | 0.10   | 0.10   |
| 10-Year Treasury Note Yield (%)   | 0.65         | 0.78   | 0.82   | 0.86   | 0.88   | 2.14            | 0.87    | 0.87    | 0.95    | 0.98    | 1.79      | 0.78   | 0.91   | 0.96   | 0.99   |
|   | Annual rates |        |        |        |        | Annual averages |         |         |         |         | Q4/Q4     |        |        |        |        |
| <b>Optimistic: Fiscal stimulus drives faster recovery (Prob. = 25%)</b>                     |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| <b>Composition of Real GDP, Percent Change</b>  |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| Gross Domestic Product  | 33.1         | 5.2    | 5.7    | 3.0    | 2.5    | 2.2             | -3.5    | 4.6     | 2.5     | 2.6     | 2.3       | -2.2   | 3.3    | 2.5    | 2.8    |
| Total Consumption   | 40.7         | 4.9    | 5.3    | 4.1    | 2.4    | 2.4             | -3.8    | 5.2     | 2.1     | 2.6     | 2.5       | -2.1   | 3.5    | 1.9    | 3.0    |
| Nonresidential Fixed Investment   | 20.3         | 6.3    | 7.8    | 4.1    | 3.3    | 2.9             | -4.7    | 4.8     | 3.9     | 4.5     | 1.4       | -3.5   | 4.7    | 4.1    | 4.9    |
| Residential Fixed Investment  | 59.3         | 20.2   | 1.9    | -1.4   | -3.8   | -1.7            | 4.8     | 6.1     | -3.3    | -1.9    | 1.6       | 10.1   | -1.5   | -3.2   | -1.3   |
| Exports   | 59.7         | 12.9   | 18.2   | 2.1    | 11.0   | -0.1            | -13.4   | 8.1     | 8.8     | 6.9     | 0.4       | -12.7  | 10.3   | 8.2    | 6.3    |
| Imports   | 91.1         | 10.4   | 12.8   | 9.4    | 6.2    | 1.1             | -10.4   | 11.1    | 1.8     | 2.6     | -1.9      | -4.8   | 8.2    | 0.2    | 3.5    |
| Federal Government  | -6.2         | -3.2   | 1.1    | 1.2    | 0.7    | 4.0             | 4.2     | 0.1     | -0.2    | -1.9    | 4.8       | 1.8    | 0.9    | -1.0   | -2.1   |
| State & Local Government  | -3.3         | -3.0   | 1.4    | 0.4    | 0.6    | 1.3             | -0.9    | -0.8    | 0.9     | 1.4     | 1.9       | -2.7   | 0.8    | 1.1    | 1.6    |
| <b>Prices &amp; Wages, Percent Change</b>   |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| Consumer Prices   | 5.2          | 2.5    | 2.1    | 3.2    | 3.2    | 1.8             | 1.3     | 2.6     | 2.9     | 2.4     | 2.0       | 1.3    | 2.9    | 2.7    | 2.2    |
| Producer Prices, Finished Goods   | 7.1          | 2.4    | 2.9    | 4.2    | 4.0    | 0.8             | -1.4    | 2.8     | 3.3     | 2.2     | 0.9       | -1.6   | 3.7    | 2.9    | 1.9    |
| Employment Cost Index - Total Comp.   | 2.0          | 2.5    | 2.1    | 2.7    | 2.8    | 2.7             | 2.6     | 2.4     | 3.4     | 3.7     | 2.7       | 2.4    | 2.7    | 3.6    | 3.7    |
| <b>Other Key Measures, Percent Change</b>   |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| Productivity  | 4.9          | -3.7   | -4.6   | -2.3   | -1.1   | 1.7             | 2.7     | -1.2    | 0.5     | 2.0     | 1.9       | 2.7    | -1.9   | 1.3    | 2.4    |
| Total Industrial Production   | 39.8         | 4.7    | 4.3    | 2.5    | 2.1    | 0.9             | -7.3    | 3.4     | 2.8     | 2.4     | -0.7      | -6.0   | 2.7    | 3.1    | 2.2    |
| Payroll Employment  | 22.9         | 7.6    | 9.9    | 5.5    | 3.7    | 1.4             | -5.6    | 4.7     | 2.4     | 1.2     | 1.4       | -5.5   | 5.3    | 1.7    | 1.0    |
| <b>Incomes, Percent Change</b>  |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| Personal Income   | -10.2        | -9.8   | 0.2    | 4.0    | 3.5    | 3.9             | 5.9     | -0.1    | 3.8     | 4.4     | 3.5       | 3.1    | 2.6    | 4.1    | 4.7    |
| After-Tax Profits (Four-qr.% change)  | 24.9         | -8.9   | -1.7   | 12.0   | -26.0  | 1.8             | -3.0    | -6.7    | 6.3     | 11.2    | 5.3       | -8.9   | -2.2   | 6.9    | 12.6   |
|   | Levels       |        |        |        |        | Annual averages |         |         |         |         | Q4 values |        |        |        |        |
| <b>Other Key Measures</b>   |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| Brent Crude, Spot Price (\$/bbl)  | 42.97        | 42.70  | 44.70  | 47.00  | 50.80  | 64.34           | 41.37   | 49.20   | 58.73   | 60.77   | 63.38     | 42.70  | 54.30  | 61.49  | 61.04  |
| Nonfarm Inven. Chg. (Bil. 2012 \$)  | -4.9         | 42.9   | 76.6   | 109.6  | 121.4  | 62.2            | -78.4   | 104.2   | 89.7    | 75.3    | 11.5      | 42.9   | 109.1  | 86.3   | 78.8   |
| Consumer Sentiment Index  | 75.7         | 81.1   | 83.6   | 84.8   | 88.3   | 96.0            | 81.9    | 86.6    | 92.8    | 95.3    | 97.2      | 81.1   | 89.6   | 93.7   | 95.8   |
| Light Vehicle Sales (Mil. units, saar)  | 15.33        | 16.07  | 15.93  | 15.70  | 15.57  | 16.95           | 14.42   | 15.72   | 16.06   | 16.17   | 16.85     | 16.07  | 15.70  | 16.22  | 16.17  |
| Housing Starts (Mil. units, saar)   | 1.430        | 1.461  | 1.457  | 1.470  | 1.444  | 1.295           | 1.364   | 1.445   | 1.355   | 1.308   | 1.433     | 1.461  | 1.407  | 1.336  | 1.292  |
| Unemployment Rate (%)   | 8.8          | 6.8    | 5.5    | 5.0    | 4.7    | 3.7             | 8.1     | 4.9     | 4.2     | 4.0     | 3.5       | 6.8    | 4.5    | 4.1    | 3.9    |
| Federal Surplus (Unified, FY, bil. \$)  | -387.6       | -535.5 | -473.6 | -160.2 | -325.2 | -984.4          | -3131.9 | -1494.6 | -1205.8 | -1026.3 | -356.6    | -535.5 | -367.1 | -293.0 | -279.2 |
| <b>Financial Markets, NSA, Quarter Average</b>  |              |        |        |        |        |                 |         |         |         |         |           |        |        |        |        |
| Federal Funds Rate (%)  | 0.09         | 0.10   | 0.10   | 0.11   | 0.11   | 2.16            | 0.38    | 0.11    | 0.12    | 0.12    | 1.64      | 0.10   | 0.11   | 0.12   | 0.13   |
| 10-Year Treasury Note Yield (%)   | 0.65         | 0.81   | 0.94   | 1.00   | 1.06   | 2.14            | 0.88    | 1.04    | 1.37    | 1.69    | 1.79      | 0.81   | 1.14   | 1.52   | 1.75   |

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## Monthly Economic Indicators

|  | Sep.<br>2019 | Oct.<br>2019 | Mar.<br>2020 | Apr.<br>2020 | May.<br>2020 | Jun.<br>2020 | Jul.<br>2020 | Aug.<br>2020 | Sep.<br>2020 | Oct.<br>2020 | 2017    | 2018    | 2019    |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|---------|---------|
| <b>Industrial Markets</b>                |              |              |              |              |              |              |              |              |              |              |         |         |         |
| Industrial Prod. Total (2012=100.0)      | 109.5        | 109.0        | 104.5        | 91.3         | 91.9         | 97.6         | 101.7        | 102.2        | 101.5        |              | 104.4   | 108.6   | 109.5   |
| Percent Change                           | -0.3         | -0.4         | -4.4         | -12.7        | 0.7          | 6.2          | 4.2          | 0.4          | -0.6         |              | 2.3     | 3.9     | 0.9     |
| Percent Change Year Earlier              | -0.2         | -0.8         | -4.7         | -16.3        | -15.8        | -10.7        | -6.8         | -7.0         | -7.3         |              |         |         |         |
| Capacity Utilization, Manufacturing (%)  | 75.1         | 74.6         | 71.4         | 60.1         | 62.2         | 67.0         | 69.8         | 70.7         | 70.5         |              | 75.1    | 76.6    | 75.6    |
| Unemployment Rate (%)                    | 3.5          | 3.6          | 4.4          | 14.7         | 13.3         | 11.1         | 10.2         | 8.4          | 7.9          | 6.9          | 4.3     | 3.9     | 3.7     |
| Payroll Employment (Mil.)                | 151.368      | 151.553      | 151.090      | 130.303      | 133.028      | 137.809      | 139.570      | 141.063      | 141.735      | 142.373      | 146.589 | 148.891 | 150.935 |
| Change (Mil.)                            | 0.208        | 0.185        | -1.373       | -20.787      | 2.725        | 4.781        | 1.761        | 1.493        | 0.672        | 0.638        | 2.260   | 2.302   | 2.045   |
| Leading Indicator (2016=1.000)           | 1.116        | 1.114        | 1.035        | 0.969        | 0.998        | 1.029        | 1.05         | 1.065        | 1.072        |              | 1.039   | 1.098   | 1.115   |
| Percent Change                           | -0.2         | -0.2         | -7.4         | -6.4         | 3.0          | 3.1          | 2.0          | 1.4          | 0.7          |              | 3.9     | 5.7     | 1.6     |
| New Orders, Mfg. (Bil. \$)               | 494.4        | 494.7        | 441.8        | 382.3        | 411.7        | 438.2        | 466.9        | 469.8        | 475.0        |              | 464.3   | 495.8   | 495.1   |
| Percent Change                           | -0.5         | 0.1          | -11.0        | -13.5        | 7.7          | 6.4          | 6.5          | 0.6          | 1.1          |              | 5.9     | 6.8     | -0.1    |
| Inv. Chg., Mfg. & Trade (Bil. \$)        | -3.1         | 2.2          | -6.8         | -27.3        | -46.5        | -20.9        | 1.8          | 5.0          |              |              | 58.9    | 93.2    | 37.2    |
| Merchandise Trade Bal. (Bil. \$)         | -71.1        | -66.3        | -64.9        | -70.7        | -75.4        | -71.0        | -80.0        | -83.1        | -79.4        |              | -792.4  | -872.0  | -854.4  |
| <b>Consumer Markets</b>                  |              |              |              |              |              |              |              |              |              |              |         |         |         |
| Disposable Income (Bil. 2012\$)          | 14934        | 14936        | 14949        | 17259        | 16398        | 16071        | 16164        | 15641        | 15750        |              | 14061   | 14566   | 14883   |
| Percent Change                           | 0.1          | 0.0          | -1.4         | 15.5         | -5.0         | -2.0         | 0.6          | -3.2         | 0.7          |              | 3.1     | 3.6     | 2.2     |
| Personal Income (Bil. \$)                | 18645        | 18694        | 18763        | 21062        | 20183        | 19944        | 20130        | 19634        | 19804        |              | 16949   | 17852   | 18552   |
| Percent Change                           | 0.2          | 0.3          | -1.8         | 12.2         | -4.2         | -1.2         | 0.9          | -2.5         | 0.9          |              | 4.9     | 5.3     | 3.9     |
| Personal Saving Rate (%)                 | 7.3          | 7.2          | 12.9         | 33.6         | 24.5         | 18.7         | 18.1         | 14.8         | 14.3         |              | 7.2     | 7.8     | 7.5     |
| Consumer Expenditures (Bil. \$)          | 14673        | 14728        | 13878        | 12112        | 13165        | 14015        | 14229        | 14377        | 14578        |              | 13340   | 13993   | 14545   |
| Percent Change                           | 0.2          | 0.4          | -6.7         | -12.7        | 8.7          | 6.5          | 1.5          | 1.0          | 1.4          |              | 4.5     | 4.9     | 3.9     |
| Retail Sales (Bil. \$)                   | 521.3        | 524.9        | 483.9        | 412.8        | 488.2        | 530.0        | 535.9        | 539.0        | 549.3        |              | 5750.5  | 6004.8  | 6215.7  |
| Percent Change                           | -0.6         | 0.7          | -8.2         | -14.7        | 18.3         | 8.6          | 1.1          | 0.6          | 1.9          |              | 4.7     | 4.4     | 3.5     |
| Non-Auto. Retail Sales (Bil. \$)         | 417.8        | 419.9        | 406.0        | 344.3        | 386.7        | 419.2        | 425.9        | 428.2        | 434.5        |              | 4575.9  | 4813.3  | 4979.1  |
| Percent Change                           | -0.2         | 0.5          | -3.8         | -15.2        | 12.3         | 8.4          | 1.6          | 0.5          | 1.5          |              | 5.0     | 5.2     | 3.4     |
| New Light-Vehicle Sales (Mil.)           | 17.1         | 16.8         | 11.4         | 8.7          | 12.1         | 13.0         | 14.6         | 15.1         | 16.3         | 16.2         | 17.1    | 17.2    | 17.0    |
| Housing Starts (Mil.)                    | 1.274        | 1.34         | 1.269        | 0.934        | 1.038        | 1.265        | 1.487        | 1.388        | 1.415        |              | 1.207   | 1.248   | 1.295   |
| New Home Sales (Mil.)                    | 0.726        | 0.706        | 0.612        | 0.57         | 0.698        | 0.84         | 0.965        | 0.994        | 0.959        |              | 0.616   | 0.614   | 0.685   |
| Existing Home Sales (Mil.)               | 5.410        | 5.410        | 5.270        | 4.330        | 3.910        | 4.700        | 5.860        | 5.980        | 6.540        |              | 5.527   | 5.334   | 5.330   |
| Chg. Consumer Install. Credit (Bil. \$)  | 12.8         | 12.9         | -13.9        | -64.6        | -13.4        | 19.7         | 14.7         | -6.9         | 16.2         |              | 192.3   | 185.1   | 182.5   |
| <b>Prices and Wages</b>                  |              |              |              |              |              |              |              |              |              |              |         |         |         |
| CPI, All Urban Consumers                 | 2.566        | 2.572        | 2.580        | 2.559        | 2.558        | 2.572        | 2.587        | 2.597        | 2.602        |              | 2.451   | 2.511   | 2.557   |
| Percent Change Year Earlier              | 1.7          | 1.8          | 1.5          | 0.4          | 0.2          | 0.7          | 1.0          | 1.3          | 1.4          |              | 2.1     | 2.4     | 1.8     |
| Core Cons. Price Defl. (2012=100.0)      | 112.3        | 112.4        | 113.0        | 112.5        | 112.8        | 113.1        | 113.5        | 113.8        | 114.0        |              | 107.9   | 110.0   | 111.9   |
| Percent Change Year Earlier              | 1.7          | 1.7          | 1.7          | 0.9          | 1.0          | 1.1          | 1.3          | 1.4          | 1.5          |              | 1.7     | 2.0     | 1.7     |
| PPI, Finished Goods                      | 2.052        | 2.065        | 2.024        | 1.963        | 2.004        | 2.012        | 2.027        | 2.026        | 2.03         |              | 1.981   | 2.041   | 2.057   |
| Percent Change Year Earlier              | 0.0          | -0.1         | -1.6         | -5.0         | -3.0         | -2.1         | -1.7         | -1.4         | -1.1         |              | 3.2     | 3.0     | 0.8     |
| PPI, Industrial Commodities (NSA)        | 1.995        | 1.991        | 1.928        | 1.847        | 1.858        | 1.907        | 1.930        | 1.943        | 1.956        |              | 1.937   | 2.037   | 2.007   |
| Percent Change Year Earlier              | -3.4         | -4.1         | -4.6         | -9.1         | -8.4         | -5.1         | -4.2         | -2.9         | -2.0         |              | 4.9     | 5.2     | -1.5    |
| Avg. Private Hourly Earnings (\$)        | 23.7         | 23.76        | 24.1         | 25.12        | 24.97        | 24.73        | 24.64        | 24.78        | 24.77        | 24.82        | 22.05   | 22.70   | 23.51   |
| Percent Change Year Earlier              | 3.7          | 3.8          | 3.5          | 7.7          | 6.6          | 5.4          | 4.7          | 4.8          | 4.5          | 4.5          | 2.3     | 3.0     | 3.5     |
| Brent Crude, Spot Price (\$/bbl.)        | 62.83        | 59.71        | 31.93        | 18.47        | 29.42        | 40.27        | 43.24        | 44.76        | 40.91        | 40.19        | 54.83   | 70.96   | 64.34   |
| Percent Change Year Earlier              | -20.4        | -20.4        | -51.7        | -74.1        | -58.7        | -37.4        | -32.3        | -24.2        | -34.9        | -32.7        | 23.9    | 29.4    | -9.3    |
| Henry Hub Spot Natural Gas (\$/mmbtu)    | 2.80         | 2.81         | 3.28         | 4.15         | 3.96         | 3.12         | 2.69         | 2.95         | 2.64         | 2.64         | 2.23    | 2.99    | 2.93    |
| Percent Change Year Earlier              | -9.0         | -9.6         | 13.8         | 37.6         | 40.8         | -20.3        | 1.0          | 9.3          | -5.5         | -6.0         | -30.7   | 33.7    | -1.8    |
| <b>Financial Markets, Period Average</b> |              |              |              |              |              |              |              |              |              |              |         |         |         |
| Federal Funds Rate (%)                   | 2.04         | 1.83         | 0.65         | 0.05         | 0.05         | 0.08         | 0.09         | 0.10         | 0.09         | 0.09         | 1.00    | 1.83    | 2.16    |
| 3-Month T-Bill Rate (%)                  | 1.89         | 1.65         | 0.29         | 0.14         | 0.13         | 0.16         | 0.13         | 0.10         | 0.11         | 0.10         | 0.93    | 1.94    | 2.06    |
| Commercial Bank Prime Rate (%)           | 5.15         | 4.99         | 3.78         | 3.25         | 3.25         | 3.25         | 3.25         | 3.25         | 3.25         | 3.25         | 4.10    | 4.90    | 5.28    |
| 10-Year Treasury Note Yield (%)          | 1.70         | 1.71         | 0.87         | 0.66         | 0.67         | 0.73         | 0.62         | 0.65         | 0.68         | 0.79         | 2.33    | 2.91    | 2.14    |
| Conv. Mortgage Rate, FHLMC (%)           | 3.61         | 3.67         | 3.45         | 3.33         | 3.23         | 3.16         | 3.02         | 2.94         | 2.89         | 2.83         | 3.99    | 4.54    | 3.94    |
| M1 Money Supply (Bil. \$)                | 3903         | 3923         | 4257         | 4799         | 5035         | 5215         | 5332         | 5391         | 5502         |              | 3524    | 3678    | 3841    |
| Percent Change                           | 1.3          | 0.5          | 6.3          | 12.7         | 4.9          | 3.6          | 2.2          | 1.1          | 2.1          |              | 7.8     | 3.8     | 6.0     |
| M2 Money Supply (Bil. \$)                | 15023        | 15150        | 15990        | 17020        | 17868        | 18163        | 18322        | 18404        | 18648        |              | 13583   | 14107   | 14828   |
| Percent Change                           | 0.6          | 0.8          | 3.5          | 6.4          | 5.0          | 1.7          | 0.9          | 0.4          | 1.3          |              | 4.7     | 3.7     | 6.5     |

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## Monthly Economic Indicators

|   | Sep.<br>2019 | Oct.<br>2019 | Mar.<br>2020 | Apr.<br>2020 | May.<br>2020 | Jun.<br>2020 | Jul.<br>2020 | Aug.<br>2020 | Sep.<br>2020 | Oct.<br>2020 | 2017    | 2018    | 2019    |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|---------|---------|
| <b>Industrial Markets</b>                             |              |              |              |              |              |              |              |              |              |              |         |         |         |
| Industrial Prod. Total (2012=100.0)                   | 109.5        | 109.0        | 104.5        | 91.3         | 91.9         | 97.6         | 101.7        | 102.2        | 101.5        |              | 104.4   | 108.6   | 109.5   |
| Percent Change (Q4/Q4 for Annual Values)              | -0.3         | -0.4         | -4.4         | -12.7        | 0.7          | 6.2          | 4.2          | 0.4          | -0.6         |              | 3.6     | 4.0     | -0.7    |
| Percent Change Year Earlier                           | -0.2         | -0.8         | -4.7         | -16.3        | -15.8        | -10.7        | -6.8         | -7.0         | -7.3         |              |         |         |         |
| Capacity Utilization, Manufacturing (%)               | 75.1         | 74.6         | 71.4         | 60.1         | 62.2         | 67.0         | 69.8         | 70.7         | 70.5         |              | 75.1    | 76.6    | 75.6    |
| Unemployment Rate (%)                                 | 3.5          | 3.6          | 4.4          | 14.7         | 13.3         | 11.1         | 10.2         | 8.4          | 7.9          | 6.9          | 4.3     | 3.9     | 3.7     |
| Payroll Employment (Mil.)                             | 151.368      | 151.553      | 151.090      | 130.303      | 133.028      | 137.809      | 139.570      | 141.063      | 141.735      | 142.373      | 146.589 | 148.891 | 150.935 |
| Change (Mil.)   | 0.208        | 0.185        | -1.373       | -20.787      | 2.725        | 4.781        | 1.761        | 1.493        | 0.672        | 0.638        | 2.260   | 2.302   | 2.045   |
| Leading Indicator (2016=1.000)                        | 1.116        | 1.114        | 1.035        | 0.969        | 0.998        | 1.029        | 1.05         | 1.065        | 1.072        |              | 1.039   | 1.098   | 1.115   |
| Percent Change (Q4/Q4 for Annual Values)              | -0.2         | -0.2         | -7.4         | -6.4         | 3.0          | 3.1          | 2.0          | 1.4          | 0.7          |              | 5.5     | 4.7     | 0.2     |
| New Orders, Mfg. (Bil. \$)                            | 494.4        | 494.7        | 441.8        | 382.3        | 411.7        | 438.2        | 466.9        | 469.8        | 475.0        |              | 464.3   | 495.8   | 495.1   |
| Percent Change (Q4/Q4 for Annual Values)              | -0.5         | 0.1          | -11.0        | -13.5        | 7.7          | 6.4          | 6.5          | 0.6          | 1.1          |              | 7.0     | 3.9     | -0.7    |
| Inv. Chg., Mfg. & Trade (Bil. \$)                     | -3.1         | 2.2          | -6.8         | -27.3        | -46.5        | -20.9        | 1.8          | 5.0          |              |              | 58.9    | 93.2    | 37.2    |
| Merchandise Trade Bal. (Bil. \$)                      | -71.1        | -66.3        | -64.9        | -70.7        | -75.4        | -71.0        | -80.0        | -83.1        | -79.4        |              | -792.4  | -872.0  | -854.4  |
| <b>Consumer Markets</b>                               |              |              |              |              |              |              |              |              |              |              |         |         |         |
| Disposable Income (Bil. 2012\$)                       | 14934        | 14936        | 14949        | 17259        | 16398        | 16071        | 16164        | 15641        | 15750        |              | 14061   | 14566   | 14883   |
| Percent Change (Q4/Q4 for Annual Values)              | 0.1          | 0.0          | -1.4         | 15.5         | -5.0         | -2.0         | 0.6          | -3.2         | 0.7          |              | 3.4     | 3.7     | 1.6     |
| Personal Income (Bil. \$)                             | 18645        | 18694        | 18763        | 21062        | 20183        | 19944        | 20130        | 19634        | 19804        |              | 16949   | 17852   | 18552   |
| Percent Change (Q4/Q4 for Annual Values)              | 0.2          | 0.3          | -1.8         | 12.2         | -4.2         | -1.2         | 0.9          | -2.5         | 0.9          |              | 5.5     | 4.8     | 3.5     |
| Personal Saving Rate (%)                              | 7.3          | 7.2          | 12.9         | 33.6         | 24.5         | 18.7         | 18.1         | 14.8         | 14.3         |              | 7.2     | 7.8     | 7.5     |
| Consumer Expenditures (Bil. \$)                       | 14673        | 14728        | 13878        | 12112        | 13165        | 14015        | 14229        | 14377        | 14578        |              | 13340   | 13993   | 14545   |
| Percent Change (Q4/Q4 for Annual Values)              | 0.2          | 0.4          | -6.7         | -12.7        | 8.7          | 6.5          | 1.5          | 1.0          | 1.4          |              | 4.7     | 4.4     | 4.0     |
| Retail Sales (Bil. \$)                                | 521.3        | 524.9        | 483.9        | 412.8        | 488.2        | 530.0        | 535.9        | 539.0        | 549.3        |              | 575.0   | 6004.8  | 6215.7  |
| Percent Change (Q4/Q4 for Annual Values)              | -0.6         | 0.7          | -8.2         | -14.7        | 18.3         | 8.6          | 1.1          | 0.6          | 1.9          |              | 5.4     | 3.0     | 4.0     |
| Non-Auto. Retail Sales (Bil. \$)                      | 417.8        | 419.9        | 406.0        | 344.3        | 386.7        | 419.2        | 425.9        | 428.2        | 434.5        |              | 4575.9  | 4813.3  | 4979.1  |
| Percent Change (Q4/Q4 for Annual Values)              | -0.2         | 0.5          | -3.8         | -15.2        | 12.3         | 8.4          | 1.6          | 0.5          | 1.5          |              | 6.1     | 3.6     | 3.7     |
| New Light-Vehicle Sales (Mil.)                        | 17.1         | 16.8         | 11.4         | 8.7          | 12.1         | 13.0         | 14.6         | 15.1         | 16.3         | 16.2         | 17.1    | 17.2    | 17.0    |
| Housing Starts (Mil.)                                 | 1.274        | 1.34         | 1.269        | 0.934        | 1.038        | 1.265        | 1.487        | 1.388        | 1.415        |              | 1.207   | 1.248   | 1.295   |
| New Home Sales (Mil.)                                 | 0.726        | 0.706        | 0.612        | 0.57         | 0.698        | 0.84         | 0.965        | 0.994        | 0.959        |              | 0.616   | 0.614   | 0.685   |
| Existing Home Sales (Mil.)                            | 5.410        | 5.410        | 5.270        | 4.330        | 3.910        | 4.700        | 5.860        | 5.980        | 6.540        |              | 5.527   | 5.334   | 5.330   |
| Chg. Consumer Install. Credit (Bil. \$)               | 12.8         | 12.9         | -13.9        | -64.6        | -13.4        | 19.7         | 14.7         | -6.9         | 16.2         |              | 192.3   | 185.1   | 182.5   |
| <b>Prices and Wages</b>                               |              |              |              |              |              |              |              |              |              |              |         |         |         |
| CPI, All Urban Consumers                              | 2.566        | 2.572        | 2.580        | 2.559        | 2.558        | 2.572        | 2.587        | 2.597        | 2.602        |              | 2.451   | 2.511   | 2.557   |
| Percent Change Year Earlier (Q4/Q4 for Annual Values) | 1.7          | 1.8          | 1.5          | 0.4          | 0.2          | 0.7          | 1.0          | 1.3          | 1.4          |              | 2.1     | 2.2     | 2.0     |
| Core Cons. Price Defl. (2012=100.0)                   | 112.3        | 112.4        | 113.0        | 112.5        | 112.8        | 113.1        | 113.5        | 113.8        | 114.0        |              | 107.9   | 110.0   | 111.9   |
| Percent Change Year Earlier (Q4/Q4 for Annual Values) | 1.7          | 1.7          | 1.7          | 0.9          | 1.0          | 1.1          | 1.3          | 1.4          | 1.5          |              | 1.7     | 2.0     | 1.6     |
| PPI, Finished Goods                                   | 2.052        | 2.065        | 2.024        | 1.963        | 2.004        | 2.012        | 2.027        | 2.026        | 2.03         |              | 1.981   | 2.041   | 2.057   |
| Percent Change Year Earlier (Q4/Q4 for Annual Values) | 0.0          | -0.1         | -1.6         | -5.0         | -3.0         | -2.1         | -1.7         | -1.4         | -1.1         |              | 3.5     | 2.3     | 0.9     |
| PPI, Industrial Commodities (NSA)                     | 1.995        | 1.991        | 1.928        | 1.847        | 1.858        | 1.907        | 1.930        | 1.943        | 1.956        |              | 1.937   | 2.037   | 2.007   |
| Percent Change Year Earlier (Q4/Q4 for Annual Values) | -3.4         | -4.1         | -4.6         | -9.1         | -8.4         | -5.1         | -4.2         | -2.9         | -2.0         |              | 4.9     | 4.2     | -2.8    |
| Avg. Private Hourly Earnings (\$)                     | 23.7         | 23.76        | 24.1         | 25.12        | 24.97        | 24.73        | 24.64        | 24.78        | 24.77        | 24.82        | 22.05   | 22.70   | 23.51   |
| Percent Change Year Earlier (Q4/Q4 for Annual Values) | 3.7          | 3.8          | 3.5          | 7.7          | 6.6          | 5.4          | 4.7          | 4.8          | 4.5          | 4.5          | 2.3     | 3.4     | 3.5     |
| Brent Crude, Spot Price (\$/bbl.)                     | 62.83        | 59.71        | 31.93        | 18.47        | 29.42        | 40.27        | 43.24        | 44.76        | 40.91        | 40.19        | 54.83   | 70.96   | 64.34   |
| Percent Change Year Earlier (Q4/Q4 for Annual Values) | -20.4        | -20.4        | -51.7        | -74.1        | -58.7        | -37.4        | -32.3        | -24.2        | -34.9        | -32.7        | 20.3    | 9.6     | -6.0    |
| Henry Hub Spot Natural Gas (\$/mmbtu)                 | 2.80         | 2.81         | 3.28         | 4.15         | 3.96         | 3.12         | 2.69         | 2.95         | 2.64         | 2.64         | 2.23    | 2.99    | 2.93    |
| Percent Change Year Earlier (Q4/Q4 for Annual Values) | -9.0         | -9.6         | 13.8         | 37.6         | 40.8         | -20.3        | 1.0          | 9.3          | -5.5         | -6.0         | -13.8   | 23.6    | -4.3    |
| <b>Financial Markets, Period Average</b>              |              |              |              |              |              |              |              |              |              |              |         |         |         |
| Federal Funds Rate (%)                                | 2.04         | 1.83         | 0.65         | 0.05         | 0.05         | 0.08         | 0.09         | 0.10         | 0.09         | 0.09         | 1.00    | 1.83    | 2.16    |
| 3-Month T-Bill Rate (%)                               | 1.89         | 1.65         | 0.29         | 0.14         | 0.13         | 0.16         | 0.13         | 0.10         | 0.11         | 0.10         | 0.93    | 1.94    | 2.06    |
| Commercial Bank Prime Rate (%)                        | 5.15         | 4.99         | 3.78         | 3.25         | 3.25         | 3.25         | 3.25         | 3.25         | 3.25         | 3.25         | 4.10    | 4.90    | 5.28    |
| 10-Year Treasury Note Yield (%)                       | 1.70         | 1.71         | 0.87         | 0.66         | 0.67         | 0.73         | 0.62         | 0.65         | 0.68         | 0.79         | 2.33    | 2.91    | 2.14    |
| Conv. Mortgage Rate, FHLMC (%)                        | 3.61         | 3.67         | 3.45         | 3.33         | 3.23         | 3.16         | 3.02         | 2.94         | 2.89         | 2.83         | 3.99    | 4.54    | 3.94    |
| M1 Money Supply (Bil. \$)                             | 3903         | 3923         | 4257         | 4799         | 5035         | 5215         | 5332         | 5391         | 5502         |              | 3524    | 3678    | 3841    |
| Percent Change (Q4/Q4 for Annual Values)              | 1.3          | 0.5          | 6.3          | 12.7         | 4.9          | 3.6          | 2.2          | 1.1          | 2.1          |              | 8.1     | 3.0     | 6.1     |
| M2 Money Supply (Bil. \$)                             | 15023        | 15150        | 15990        | 17020        | 17868        | 18163        | 18322        | 18404        | 18648        |              | 13583   | 14107   | 14828   |
| Percent Change (Q4/Q4 for Annual Values)              | 0.6          | 0.8          | 3.5          | 6.4          | 5.0          | 1.7          | 0.9          | 0.4          | 1.3          |              | 4.9     | 3.5     | 6.7     |

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## Summary of the US Economy

|   | 2020:2  | 2020:3  | 2020:4  | 2021:1  | 2021:2  | 2021:3  | 2021:4  | 2022:1  | 2022:2  | 2022:3  | 2022:4  | 2023:1  | 2023:2  |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Composition of Real GDP, Percent Change, Annual Rate</b> |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Gross Domestic Product                                      | -31.4   | 33.1    | 3.7     | 2.7     | 1.0     | 1.9     | 1.9     | 3.2     | 3.3     | 2.6     | 2.2     | 2.2     | 2.5     |
| Final Sales of Domestic Product                             | -28.1   | 25.5    | 2.9     | 2.1     | 0.9     | 2.0     | 2.1     | 3.2     | 3.1     | 2.4     | 2.1     | 2.4     | 2.6     |
| Gross Domestic Income                                       | -33.5   | 33.1    | 4.9     | 2.7     | 1.0     | 1.9     | 1.9     | 3.2     | 3.3     | 2.6     | 2.2     | 2.2     | 2.5     |
| Avg. of GDP and GDI   | -32.5   | 33.1    | 4.3     | 2.7     | 1.0     | 1.9     | 1.9     | 3.2     | 3.3     | 2.6     | 2.2     | 2.2     | 2.5     |
| Total Consumption   | -33.2   | 40.7    | 3.4     | 1.6     | 2.2     | 2.3     | 2.3     | 2.2     | 2.3     | 2.2     | 2.3     | 2.4     | 2.6     |
| Durables  | -1.7    | 82.2    | -1.4    | -6.7    | -1.1    | 0.5     | 1.2     | 1.7     | 2.3     | 2.5     | 2.9     | 3.2     | 3.7     |
| Nondurables   | -15.0   | 28.8    | -3.9    | -1.4    | -0.7    | 0.3     | 1.1     | 1.4     | 1.8     | 1.8     | 1.8     | 1.9     | 2.1     |
| Services  | -41.8   | 38.4    | 6.7     | 4.0     | 3.6     | 3.2     | 2.8     | 2.5     | 2.4     | 2.3     | 2.3     | 2.4     | 2.5     |
| Nonresidential Fixed Investment                             | -27.2   | 20.3    | 3.1     | 3.1     | 0.1     | 1.0     | 2.1     | 4.3     | 5.1     | 4.6     | 4.1     | 4.2     | 4.6     |
| Equipment   | -35.9   | 70.1    | 11.3    | 3.5     | -1.5    | -0.9    | 0.3     | 2.8     | 4.0     | 3.1     | 2.1     | 2.1     | 2.5     |
| Information Processing Equipment                            | 29.3    | 53.1    | -2.3    | -2.0    | 2.7     | 2.2     | 3.0     | 1.1     | 3.2     | 1.8     | -1.1    | -0.7    | -0.5    |
| Industrial Equipment  | -23.0   | 18.1    | 13.4    | 6.6     | -14.7   | -3.2    | 2.6     | -3.0    | -10.2   | -1.2    | 1.0     | 7.3     | 7.0     |
| Transportation equipment                                    | -84.9   | 258.5   | 27.8    | 17.6    | -8.0    | 22.2    | 11.0    | 10.8    | 12.6    | 8.9     | 18.0    | 12.7    | 9.6     |
| Aircraft  | -99.1   | 408.5   | 62.3    | 1344.6  | -8.8    | -2.8    | -0.2    | 46.3    | 35.2    | 27.2    | 29.7    | 15.2    | 3.7     |
| Other Equipment   | -34.4   | 57.5    | 19.3    | -2.7    | 12.8    | -21.5   | -15.5   | 3.3     | 10.5    | 3.2     | -6.9    | -8.4    | -4.1    |
| Intellectual Property Products                              | -11.4   | -1.0    | 1.3     | 3.0     | 1.7     | 3.1     | 4.5     | 7.0     | 7.3     | 6.6     | 6.0     | 6.0     | 6.4     |
| Structures  | -33.6   | -14.6   | -10.2   | 2.3     | 1.0     | 1.5     | 1.6     | 2.7     | 3.6     | 4.3     | 5.1     | 5.8     | 5.9     |
| Commercial & Health Care                                    | -8.9    | -6.6    | -31.3   | -10.0   | 10.2    | 1.9     | 7.0     | 7.4     | 4.5     | -0.4    | 2.0     | 12.7    | 8.6     |
| Manufacturing   | -22.4   | 5.8     | -28.3   | 4.3     | -9.5    | -4.3    | 8.2     | 31.4    | 19.4    | 21.9    | 41.1    | 13.4    | 5.1     |
| Power & Communication                                       | -16.5   | -3.9    | 33.5    | 7.5     | -6.2    | -6.4    | -12.2   | -24.0   | -11.6   | -6.1    | -16.4   | -13.0   | 0.0     |
| Mining & Petroleum  | -82.1   | -67.3   | -18.2   | 62.0    | 27.9    | 31.7    | 28.3    | 13.6    | 10.5    | 10.6    | 13.1    | 10.0    | 6.6     |
| Other   | -27.8   | -7.2    | 1.7     | -8.1    | -8.6    | -0.6    | -6.2    | 12.5    | 7.3     | 9.1     | 7.8     | 7.8     | 7.9     |
| Residential Fixed Investment                                | -35.6   | 59.3    | 20.0    | -4.8    | -7.1    | -5.2    | -2.9    | -2.7    | -2.4    | -1.6    | -1.7    | -1.2    | -0.5    |
| Exports   | -64.4   | 59.7    | 12.9    | 16.9    | 1.0     | 10.2    | 10.8    | 10.7    | 8.0     | 7.5     | 7.0     | 6.7     | 6.1     |
| Imports   | -54.1   | 91.1    | 9.4     | 7.5     | 3.8     | 3.9     | 5.4     | -0.2    | -0.5    | 4.5     | 4.8     | 3.8     | 3.1     |
| Federal Government  | 16.4    | -6.2    | -3.2    | 1.1     | 1.2     | 0.7     | -0.7    | -0.4    | -0.9    | -0.5    | -2.2    | -2.2    | -2.4    |
| State & Local Government                                    | -5.4    | -3.3    | -3.0    | 1.4     | 0.4     | 0.6     | 0.7     | 0.8     | 1.0     | 1.2     | 1.4     | 1.5     | 1.6     |
| <b>Billions of Dollars</b>                                  |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Real GDP  | 17302.5 | 18584.0 | 18755.5 | 18880.5 | 18928.3 | 19015.4 | 19105.3 | 19258.4 | 19413.4 | 19539.9 | 19644.9 | 19752.7 | 19874.0 |
| Nominal GDP   | 19520.1 | 21157.6 | 21458.2 | 21695.7 | 21871.4 | 22079.1 | 22298.2 | 22584.7 | 22878.6 | 23143.0 | 23388.5 | 23640.5 | 23906.3 |
| <b>Prices &amp; Wages, Percent Change, Annual Rate</b>      |         |         |         |         |         |         |         |         |         |         |         |         |         |
| GDP Deflator  | -1.8    | 3.6     | 1.9     | 1.8     | 2.2     | 2.0     | 2.1     | 1.9     | 2.0     | 2.0     | 2.1     | 2.1     | 2.0     |
| Consumer Prices   | -3.5    | 5.2     | 2.3     | 1.6     | 2.7     | 2.9     | 3.0     | 2.4     | 2.6     | 2.4     | 2.5     | 2.2     | 1.8     |
| Producer Prices, Finished Goods                             | -11.4   | 7.1     | 2.0     | 2.1     | 3.4     | 3.8     | 3.7     | 2.7     | 2.6     | 2.6     | 2.5     | 2.3     | 1.7     |
| Employment Cost Index - Total Comp.                         | 1.7     | 2.0     | 2.8     | 2.0     | 2.3     | 2.2     | 2.9     | 3.5     | 3.5     | 3.3     | 3.5     | 3.5     | 3.5     |
| <b>Other Key Measures</b>                                   |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Brent Crude, Spot Price (\$/bbl)                            | 29.38   | 42.97   | 41.20   | 42.67   | 44.25   | 48.33   | 51.67   | 53.17   | 55.00   | 56.83   | 58.50   | 58.21   | 57.33   |
| Productivity (%ch., saar)                                   | 10.6    | 4.9     | -5.4    | -4.6    | -2.4    | -1.0    | -0.4    | 0.3     | 1.0     | 1.6     | 0.9     | 1.5     | 1.9     |
| Total Industrial Production (%ch., saar)                    | -42.9   | 39.8    | 3.2     | 1.8     | 0.1     | 0.6     | 1.1     | 3.8     | 4.5     | 3.4     | 2.5     | 2.4     | 2.6     |
| Factory Operating Rate                                      | 63.1    | 70.3    | 71.1    | 71.5    | 71.1    | 70.8    | 70.7    | 71.1    | 71.7    | 72.2    | 72.4    | 72.6    | 72.9    |
| Nonfarm Inven. Chg. (Bil. 2012 \$)                          | -280.8  | -4.9    | 36.1    | 66.8    | 74.2    | 63.6    | 53.0    | 56.6    | 66.2    | 81.6    | 84.8    | 78.4    | 74.0    |
| Consumer Sentiment Index                                    | 74.1    | 75.7    | 80.9    | 81.9    | 83.1    | 84.6    | 85.9    | 87.9    | 88.6    | 89.5    | 89.9    | 90.8    | 91.4    |
| Light Vehicle Sales (Mil. units, saar)                      | 11.28   | 15.33   | 16.00   | 15.69   | 15.73   | 15.81   | 15.86   | 15.82   | 15.83   | 15.86   | 15.91   | 15.92   | 15.95   |
| Housing Starts (Mil. units, saar)                           | 1.079   | 1.430   | 1.455   | 1.381   | 1.372   | 1.346   | 1.327   | 1.315   | 1.302   | 1.290   | 1.286   | 1.280   | 1.276   |
| Exist. House Sales (Total, Mil. saar)                       | 4.313   | 6.127   | 6.397   | 5.918   | 5.880   | 5.889   | 5.914   | 5.909   | 5.887   | 5.835   | 5.747   | 5.643   | 5.561   |
| Unemployment Rate (%)                                       | 13.0    | 8.8     | 6.8     | 6.0     | 5.8     | 5.6     | 5.4     | 5.0     | 4.7     | 4.6     | 4.5     | 4.5     | 4.4     |
| Payroll Employment (%ch., saar)                             | -40.0   | 22.9    | 7.1     | 7.3     | 3.6     | 2.9     | 2.5     | 3.1     | 2.6     | 1.5     | 1.6     | 1.2     | 1.1     |
| Federal Surplus (Unified, nsa, bil. \$)                     | -2000.9 | -387.6  | -539.9  | -486.5  | -178.9  | -346.4  | -387.1  | -446.5  | -128.6  | -312.7  | -308.0  | -387.8  | -96.5   |
| Current Account Balance (Bil. \$)                           | -682.2  | -815.5  | -771.0  | -716.3  | -728.8  | -709.2  | -700.4  | -643.1  | -597.8  | -588.0  | -578.2  | -550.4  | -515.1  |
| <b>Financial Markets, NSA, Quarter Average</b>              |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Federal Funds Rate (%)                                      | 0.06    | 0.09    | 0.10    | 0.10    | 0.10    | 0.10    | 0.10    | 0.10    | 0.10    | 0.10    | 0.10    | 0.10    | 0.10    |
| 3-Month Treasury Bill Rate (%)                              | 0.14    | 0.11    | 0.11    | 0.11    | 0.10    | 0.10    | 0.10    | 0.09    | 0.09    | 0.09    | 0.09    | 0.09    | 0.09    |
| 10-Year Treasury Note Yield (%)                             | 0.69    | 0.65    | 0.80    | 0.88    | 0.93    | 0.99    | 1.06    | 1.13    | 1.21    | 1.28    | 1.34    | 1.40    | 1.44    |
| 30-Year Fixed Mortgage Rate (%)                             | 3.24    | 2.95    | 2.82    | 2.95    | 3.00    | 3.02    | 3.06    | 3.12    | 3.16    | 3.20    | 3.23    | 3.26    | 3.29    |
| S&P 500 Stock Index   | 2929    | 3322    | 3366    | 3503    | 3487    | 3510    | 3530    | 3530    | 3529    | 3532    | 3544    | 3562    | 3589    |
| (Four-Quarter % change)                                     | 1.6     | 12.3    | 9.1     | 14.1    | 19.1    | 5.7     | 4.9     | 0.8     | 1.2     | 0.6     | 0.4     | 0.9     | 1.7     |
| Exchange Rate, Broad Index of Partners                      | 1.334   | 1.285   | 1.261   | 1.244   | 1.220   | 1.200   | 1.185   | 1.174   | 1.167   | 1.163   | 1.160   | 1.159   | 1.161   |
| (% change, annual rate)                                     | 15.8    | -13.9   | -7.1    | -5.5    | -7.5    | -6.4    | -4.9    | -3.8    | -2.2    | -1.3    | -1.0    | -0.3    | 0.5     |
| <b>Incomes</b>  |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Personal Income (% ch., saar)                               | 34.2    | -10.2   | -10.4   | -2.5    | 2.3     | 2.5     | 2.2     | 4.6     | 4.3     | 3.9     | 3.8     | 4.8     | 4.5     |
| Real Disposable Income (%ch., saar)                         | 46.6    | -16.3   | -13.7   | -4.9    | -0.2    | 0.1     | -0.2    | 2.3     | 2.2     | 1.8     | 1.7     | 2.9     | 2.7     |
| Saving Rate (%)   | 25.7    | 15.8    | 11.8    | 10.2    | 9.7     | 9.2     | 8.6     | 8.7     | 8.6     | 8.5     | 8.4     | 8.5     | 8.6     |
| After-Tax Profits (Billions of \$)                          | 1557    | 2399    | 1782    | 1648    | 1661    | 1690    | 1689    | 1719    | 1756    | 1793    | 1812    | 1888    | 1908    |
| (Four-quarter % change)                                     | -19.7   | 24.9    | -10.9   | -5.3    | 6.7     | -29.6   | -5.2    | 4.3     | 5.7     | 6.1     | 7.3     | 9.9     | 8.7     |

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## Summary of the US Economy

|  | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2021    | 2022    | 2023    | 2024    | 2025    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Composition of Real GDP, Percent Change</b> |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Gross Domestic Product                         | 1.8     | 2.5     | 3.1     | 1.7     | 2.3     | 3.0     | 2.2     | -3.6    | 3.1     | 2.5     | 2.5     | 2.9     | 3.0     |
| Final Sales of Domestic Product                | 1.6     | 2.7     | 2.8     | 2.3     | 2.4     | 2.8     | 2.2     | -2.9    | 2.4     | 2.5     | 2.5     | 2.9     | 3.0     |
| Gross Domestic Income                          | 1.3     | 3.2     | 2.7     | 0.9     | 2.5     | 2.6     | 1.8     | -3.5    | 3.1     | 2.5     | 2.5     | 2.9     | 3.0     |
| Avg. of GDP and GDI                            | 1.6     | 2.9     | 2.9     | 1.3     | 2.4     | 2.8     | 2.0     | -3.5    | 3.1     | 2.5     | 2.5     | 2.9     | 3.0     |
| Total Consumption                              | 1.5     | 3.0     | 3.8     | 2.8     | 2.6     | 2.7     | 2.4     | -3.9    | 3.6     | 2.2     | 2.4     | 2.9     | 3.2     |
| Durables                                       | 6.1     | 7.2     | 7.6     | 5.8     | 6.9     | 6.8     | 4.8     | 6.3     | 5.2     | 1.5     | 3.3     | 4.8     | 5.3     |
| Nondurables                                    | 1.8     | 2.6     | 3.4     | 2.5     | 2.6     | 2.7     | 3.1     | 2.2     | 1.0     | 1.2     | 1.9     | 2.4     | 2.6     |
| Services                                       | 0.6     | 2.4     | 3.3     | 2.4     | 2.0     | 2.1     | 1.8     | -7.1    | 4.1     | 2.7     | 2.5     | 2.8     | 3.0     |
| Nonresidential Fixed Investment                | 4.1     | 7.2     | 2.3     | 0.5     | 3.7     | 6.9     | 2.9     | -4.8    | 1.9     | 3.4     | 4.6     | 5.4     | 5.6     |
| Equipment                                      | 4.7     | 7.0     | 3.0     | -1.7    | 3.2     | 8.0     | 2.1     | -5.6    | 6.4     | 1.8     | 2.6     | 3.8     | 4.8     |
| Information Processing Equipment               | 6.2     | 5.2     | 6.2     | 4.5     | 7.4     | 8.6     | 3.0     | 6.7     | 6.9     | 2.0     | 0.1     | 1.1     | 2.4     |
| Industrial Equipment                           | -1.4    | 3.9     | 0.1     | -1.4    | 5.5     | 8.2     | 2.1     | -4.8    | 1.1     | -3.7    | 4.2     | 11.1    | 11.6    |
| Transportation equipment                       | 10.8    | 11.1    | 10.5    | -5.8    | -1.6    | 5.8     | -0.4    | -23.5   | 13.8    | 11.5    | 10.7    | -3.4    | -5.5    |
| Aircraft                                       | 5.5     | 13.4    | 1.7     | -10.6   | 33.6    | 8.7     | -27.8   | -48.2   | 74.4    | 21.1    | 15.4    | 3.3     | 4.9     |
| Other Equipment                                | 2.2     | 7.9     | -6.6    | -5.6    | 0.6     | 9.6     | 3.5     | -3.4    | 3.8     | -2.8    | -2.9    | 9.4     | 11.7    |
| Intellectual Property Products                 | 5.4     | 4.8     | 3.8     | 7.6     | 4.2     | 7.8     | 6.4     | 0.0     | 1.1     | 5.7     | 6.4     | 7.0     | 6.8     |
| Structures                                     | 1.3     | 11.0    | -0.9    | -4.4    | 4.2     | 3.7     | -0.6    | -10.9   | -5.6    | 2.7     | 5.4     | 5.7     | 5.3     |
| Commercial & Health Care                       | 3.6     | 12.9    | 12.1    | 16.7    | 3.2     | 1.3     | -2.3    | -4.2    | -8.4    | 4.9     | 7.1     | 5.2     | 4.8     |
| Manufacturing                                  | 4.2     | 12.9    | 34.4    | -4.9    | -13.4   | -1.8    | 4.6     | -11.9   | -7.8    | 16.5    | 15.4    | 2.1     | -0.1    |
| Power & Communication                          | -4.4    | 15.0    | 3.4     | 2.2     | -4.6    | -5.7    | 3.5     | 6.9     | 2.8     | -13.7   | -8.4    | 5.4     | 6.8     |
| Mining & Petroleum                             | 1.6     | 8.0     | -28.6   | -42.1   | 38.8    | 25.2    | -2.1    | -39.1   | -10.7   | 18.0    | 9.0     | 5.7     | 7.4     |
| Other  | 3.3     | 8.3     | 10.5    | 7.2     | 3.8     | 1.3     | -3.4    | -13.2   | -6.8    | 4.1     | 8.5     | 9.6     | 7.3     |
| Residential Fixed Investment                   | 12.4    | 3.8     | 10.2    | 6.6     | 4.0     | -0.6    | -1.7    | 4.8     | 2.9     | -3.1    | -1.1    | 0.4     | 1.0     |
| Exports  | 3.6     | 4.2     | 0.4     | 0.3     | 3.9     | 3.0     | -0.1    | -13.4   | 7.5     | 8.9     | 6.6     | 5.5     | 4.4     |
| Imports  | 1.5     | 5.0     | 5.2     | 1.7     | 4.7     | 4.1     | 1.1     | -10.4   | 8.3     | 2.4     | 3.7     | 4.4     | 4.8     |
| Federal Government                             | -5.5    | -2.6    | 0.0     | 0.6     | 0.3     | 2.8     | 4.0     | 4.2     | 0.1     | -0.4    | -1.9    | -1.2    | 0.0     |
| State & Local Government                       | -0.3    | 0.2     | 2.9     | 2.6     | 1.2     | 1.2     | 1.3     | -0.9    | -0.8    | 0.9     | 1.4     | 1.9     | 1.6     |
| <b>Billions of Dollars</b>                     |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Real GDP                                       | 16495.4 | 16912.0 | 17432.2 | 17730.5 | 18144.1 | 18687.8 | 19091.7 | 18413.2 | 18982.4 | 19464.1 | 19945.3 | 20527.9 | 21142.2 |
| Nominal GDP                                    | 16784.9 | 17527.3 | 18238.3 | 18745.1 | 19543.0 | 20611.9 | 21433.2 | 20924.3 | 21986.1 | 22998.7 | 24055.8 | 25274.9 | 26579.6 |
| <b>Prices &amp; Wages, Percent Change</b>      |         |         |         |         |         |         |         |         |         |         |         |         |         |
| GDP Deflator                                   | 1.8     | 1.8     | 1.0     | 1.0     | 1.9     | 2.4     | 1.8     | 1.2     | 1.9     | 2.0     | 2.1     | 2.1     | 2.1     |
| Consumer Prices                                | 1.5     | 1.6     | 0.1     | 1.3     | 2.1     | 2.4     | 1.8     | 1.3     | 2.3     | 2.6     | 2.2     | 2.1     | 2.2     |
| Producer Prices, Finished Goods                | 1.2     | 1.9     | -3.3    | -1.0    | 3.2     | 3.0     | 0.8     | -1.4    | 2.4     | 3.0     | 2.2     | 1.8     | 1.9     |
| Employment Cost Index - Total Comp.            | 1.9     | 2.1     | 2.1     | 2.1     | 2.5     | 2.9     | 2.7     | 2.6     | 2.3     | 3.1     | 3.4     | 3.4     | 3.2     |
| <b>Other Key Measures</b>                      |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Brent Crude, Spot Price (\$/bbl)               | 108.74  | 99.83   | 52.68   | 44.24   | 54.83   | 70.96   | 64.34   | 41.00   | 46.73   | 55.87   | 57.82   | 59.38   | 62.65   |
| Productivity (%ch.)                            | 0.5     | 0.9     | 1.6     | 0.3     | 1.2     | 1.4     | 1.7     | 2.6     | -1.6    | 0.2     | 1.6     | 2.3     | 2.5     |
| Total Industrial Production (%ch.)             | 2.0     | 3.1     | -1.0    | -2.0    | 2.3     | 3.9     | 0.9     | -7.4    | 1.8     | 2.6     | 2.8     | 3.0     | 3.0     |
| Factory Operating Rate                         | 74.4    | 75.2    | 75.3    | 74.2    | 75.1    | 76.6    | 75.6    | 69.6    | 71.1    | 71.9    | 73.1    | 74.4    | 75.6    |
| Nonfarm Inven. Chg. (Bil. 2012 \$)             | 98.2    | 90.1    | 136.5   | 30.2    | 21.0    | 59.3    | 62.2    | -80.1   | 64.4    | 72.3    | 76.7    | 91.6    | 103.8   |
| Consumer Sentiment Index                       | 79.2    | 84.1    | 92.9    | 91.8    | 96.8    | 98.4    | 96.0    | 81.8    | 83.9    | 89.0    | 91.5    | 91.7    | 91.8    |
| Light Vehicle Sales (Mil. units)               | 15.53   | 16.45   | 17.40   | 17.46   | 17.14   | 17.21   | 16.95   | 14.40   | 15.77   | 15.86   | 15.98   | 16.10   | 16.27   |
| Housing Starts (Mil. units)                    | 0.928   | 1.000   | 1.107   | 1.177   | 1.207   | 1.248   | 1.295   | 1.362   | 1.357   | 1.298   | 1.274   | 1.270   | 1.290   |
| Exist. House Sales (Total, Mil. units)         | 5.078   | 4.923   | 5.228   | 5.437   | 5.527   | 5.334   | 5.330   | 5.580   | 5.900   | 5.844   | 5.576   | 5.498   | 5.498   |
| Unemployment Rate (%)                          | 7.4     | 6.2     | 5.3     | 4.9     | 4.4     | 3.9     | 3.7     | 8.1     | 5.7     | 4.7     | 4.4     | 4.0     | 3.8     |
| Payroll Employment (%ch.)                      | 1.6     | 1.9     | 2.1     | 1.8     | 1.6     | 1.6     | 1.4     | -5.6    | 3.6     | 2.6     | 1.4     | 1.1     | 0.9     |
| Federal Surplus (Unified, FY, bil. \$)         | -559.5  | -487.4  | -475.4  | -581.6  | -680.9  | -873.0  | -1022.0 | -3315.3 | -1398.9 | -1195.8 | -1066.9 | -926.9  | -934.7  |
| Current Account Balance (Bil. \$)              | -336.9  | -367.8  | -407.4  | -394.9  | -365.3  | -449.7  | -480.2  | -678.7  | -713.7  | -601.8  | -505.0  | -436.0  | -424.7  |
| <b>Financial Markets, NSA, Quarter Average</b> |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Federal Funds Rate (%)                         | 0.11    | 0.09    | 0.13    | 0.40    | 1.00    | 1.83    | 2.16    | 0.38    | 0.10    | 0.10    | 0.11    | 0.12    | 0.13    |
| 3-Month Treasury Bill Rate (%)                 | 0.06    | 0.03    | 0.05    | 0.32    | 0.93    | 1.94    | 2.06    | 0.37    | 0.10    | 0.09    | 0.10    | 0.11    | 0.11    |
| 10-Year Treasury Note Yield (%)                | 2.35    | 2.54    | 2.14    | 1.84    | 2.33    | 2.91    | 2.14    | 0.88    | 0.97    | 1.24    | 1.45    | 1.63    | 1.87    |
| 30-Year Fixed Mortgage Rate (%)                | 3.98    | 4.17    | 3.85    | 3.65    | 3.99    | 4.54    | 3.94    | 3.13    | 3.01    | 3.17    | 3.29    | 3.42    | 3.61    |
| S&P 500 Stock Index                            | 1643    | 1931    | 2061    | 2092    | 2448    | 2745    | 2912    | 3171    | 3508    | 3534    | 3611    | 3777    | 3983    |
| (Percent change)                               | 19.1    | 17.5    | 6.8     | 1.5     | 17.0    | 12.1    | 6.1     | 8.9     | 10.6    | 0.7     | 2.2     | 4.6     | 5.4     |
| Exchange Rate, Broad Index of Partners         | 1.012   | 1.044   | 1.180   | 1.235   | 1.231   | 1.222   | 1.263   | 1.291   | 1.212   | 1.166   | 1.161   | 1.169   | 1.179   |
| (% change, annual rate)                        | 1.2     | 3.1     | 13.1    | 4.6     | -0.3    | -0.7    | 3.3     | 2.3     | -6.1    | -3.8    | -0.4    | 0.6     | 0.9     |
| <b>Incomes</b>                                 |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Personal Income (% ch.)                        | 1.2     | 5.7     | 4.9     | 2.8     | 4.9     | 5.3     | 3.9     | 5.8     | -1.4    | 3.6     | 4.4     | 5.1     | 5.2     |
| Real Disposable Income (%ch.)                  | -1.3    | 4.1     | 4.2     | 2.0     | 3.1     | 3.6     | 2.2     | 5.4     | -3.9    | 1.3     | 2.4     | 3.1     | 3.1     |
| Saving Rate (%)                                | 6.4     | 7.4     | 7.6     | 6.9     | 7.2     | 7.9     | 7.6     | 15.7    | 9.4     | 8.6     | 8.6     | 8.7     | 8.7     |
| After-Tax Profits (Billions of \$)             | 1789    | 1857    | 1732    | 1749    | 1872    | 1904    | 1939    | 1869    | 1672    | 1770    | 1926    | 2109    | 2296    |
| (Percent change)                               | -1.8    | 3.8     | -6.8    | 1.0     | 7.0     | 1.7     | 1.8     | -3.6    | -10.6   | 5.9     | 8.8     | 9.5     | 8.9     |

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## Summary of the US Economy

|  | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    | 2020    | 2021    | 2022    | 2023    | 2024    | 2025    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Composition of Real GDP, Percent Change (Q4/Q4)</b> |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Gross Domestic Product                                 | 2.6     | 2.9     | 2.2     | 2.1     | 2.7     | 2.5     | 2.3     | -2.6    | 1.9     | 2.8     | 2.6     | 3.0     | 2.9     |
| Final Sales of Domestic Product                        | 2.0     | 3.2     | 2.1     | 2.3     | 2.8     | 2.2     | 2.8     | -2.7    | 1.8     | 2.7     | 2.6     | 2.9     | 2.9     |
| Gross Domestic Income                                  | 1.5     | 4.2     | 1.4     | 1.2     | 2.9     | 2.4     | 1.9     | -2.5    | 1.9     | 2.8     | 2.6     | 3.0     | 2.9     |
| Avg. of GDP and GDI                                    | 2.0     | 3.5     | 1.8     | 1.6     | 2.8     | 2.4     | 2.1     | -2.5    | 1.9     | 2.8     | 2.6     | 3.0     | 2.9     |
| Total Consumption                                      | 1.9     | 3.8     | 3.1     | 2.7     | 2.9     | 2.4     | 2.5     | -2.5    | 2.1     | 2.3     | 2.6     | 3.0     | 3.2     |
| Durables   | 5.0     | 9.2     | 6.0     | 7.0     | 8.1     | 4.2     | 5.7     | 11.5    | -1.6    | 2.3     | 4.0     | 5.0     | 5.5     |
| Nondurables  | 2.8     | 3.2     | 2.8     | 2.0     | 3.7     | 2.3     | 2.7     | 3.0     | -0.2    | 1.7     | 2.1     | 2.5     | 2.7     |
| Services   | 1.1     | 3.2     | 2.7     | 2.3     | 1.8     | 2.1     | 1.9     | -6.2    | 3.4     | 2.4     | 2.6     | 2.9     | 3.1     |
| Nonresidential Fixed Investment                        | 5.4     | 6.9     | -0.1    | 1.8     | 4.8     | 6.5     | 1.4     | -4.2    | 1.6     | 4.5     | 4.8     | 5.6     | 5.6     |
| Equipment  | 5.4     | 5.6     | 1.5     | -2.2    | 7.5     | 7.0     | -1.3    | 0.7     | 0.3     | 3.0     | 2.8     | 4.2     | 5.0     |
| Information Processing Equipment                       | 5.8     | 6.4     | 6.5     | 3.5     | 9.8     | 5.5     | 1.9     | 13.8    | 1.4     | 1.3     | 0.1     | 1.5     | 2.9     |
| Industrial Equipment                                   | -2.7    | 4.3     | 1.0     | -1.2    | 8.8     | 7.6     | -2.6    | -0.6    | -2.5    | -3.5    | 8.2     | 12.4    | 11.1    |
| Transportation equipment                               | 10.8    | 9.4     | 6.6     | -7.4    | 4.4     | 6.5     | -5.1    | -17.0   | 10.0    | 12.5    | 6.3     | -6.0    | -6.2    |
| Aircraft   | 22.9    | -0.9    | -14.1   | 9.6     | 29.7    | 17.6    | -41.7   | -46.9   | 89.1    | 34.4    | 6.9     | 3.3     | 5.0     |
| Other Equipment  | 6.8     | 1.7     | -10.1   | -4.9    | 6.5     | 9.3     | -0.3    | 3.4     | -7.6    | 2.3     | -1.1    | 12.2    | 12.2    |
| Intellectual Property Products                         | 4.5     | 6.9     | 3.3     | 6.4     | 4.9     | 9.4     | 4.6     | -2.3    | 3.1     | 6.7     | 6.5     | 7.0     | 6.5     |
| Structures   | 6.7     | 9.3     | -7.3    | 3.5     | 0.0     | 1.2     | 1.9     | -16.3   | 1.6     | 3.9     | 5.9     | 5.6     | 5.2     |
| Commercial & Health Care                               | 8.7     | 13.8    | 8.3     | 19.6    | -2.7    | -1.7    | 2.3     | -12.7   | 2.0     | 3.3     | 9.9     | 3.3     | 5.5     |
| Manufacturing  | 4.4     | 29.4    | 9.8     | -7.1    | -12.3   | 1.1     | 3.4     | -16.3   | -0.6    | 28.2    | 4.9     | 2.6     | -1.2    |
| Power & Communication                                  | 14.6    | -16.1   | 20.0    | 13.2    | -18.0   | -6.4    | 20.5    | 2.4     | -4.6    | -14.8   | -3.4    | 7.4     | 6.9     |
| Mining & Petroleum                                     | 2.0     | 16.3    | -44.2   | -27.3   | 47.2    | 17.2    | -11.0   | -52.3   | 36.8    | 12.0    | 6.5     | 7.4     | 6.4     |
| Other  | 4.5     | 12.5    | 4.7     | 8.8     | 1.5     | -1.0    | -3.7    | -13.2   | -5.9    | 9.1     | 9.4     | 8.7     | 6.7     |
| Residential Fixed Investment                           | 7.1     | 7.7     | 9.2     | 4.2     | 4.7     | -3.9    | 1.6     | 10.0    | -5.0    | -2.1    | -0.4    | 0.9     | 0.2     |
| Exports  | 6.0     | 2.9     | -1.5    | 1.5     | 5.8     | 0.5     | 0.4     | -12.7   | 9.6     | 8.3     | 6.1     | 5.1     | 4.2     |
| Imports  | 3.0     | 6.5     | 3.3     | 2.8     | 5.6     | 3.0     | -1.9    | -5.0    | 5.1     | 2.1     | 3.7     | 4.7     | 4.9     |
| Federal Government                                     | -6.1    | -1.1    | 1.3     | 0.1     | 1.2     | 3.0     | 4.8     | 1.8     | 0.6     | -1.0    | -2.1    | -0.5    | 0.0     |
| State & Local Government                               | 0.2     | 1.2     | 2.8     | 2.4     | 1.1     | 0.6     | 1.9     | -2.7    | 0.8     | 1.1     | 1.6     | 1.9     | 1.3     |
| <b>Billions of Dollars</b>                             |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Real GDP   | 16495.4 | 16912.0 | 17432.2 | 17730.5 | 18144.1 | 18687.8 | 19091.7 | 18413.2 | 18982.4 | 19464.1 | 19945.3 | 20527.9 | 21142.2 |
| Nominal GDP  | 16784.9 | 17527.3 | 18238.3 | 18745.1 | 19543.0 | 20611.9 | 21433.2 | 20924.3 | 21986.1 | 22998.7 | 24055.8 | 25274.9 | 26579.6 |
| <b>Prices &amp; Wages, Percent Change (Q4/Q4)</b>      |         |         |         |         |         |         |         |         |         |         |         |         |         |
| GDP Deflator   | 1.8     | 1.5     | 0.8     | 1.5     | 2.0     | 2.3     | 1.6     | 1.3     | 2.0     | 2.0     | 2.1     | 2.1     | 2.1     |
| Consumer Prices  | 1.2     | 1.2     | 0.4     | 1.8     | 2.1     | 2.2     | 2.0     | 1.2     | 2.5     | 2.5     | 2.1     | 2.1     | 2.2     |
| Producer Prices, Finished Goods                        | 0.9     | 0.6     | -3.4    | 1.0     | 3.5     | 2.3     | 0.9     | -1.6    | 3.3     | 2.6     | 1.9     | 1.8     | 1.9     |
| Employment Cost Index - Total Comp.                    | 2.0     | 2.3     | 1.8     | 2.2     | 2.7     | 3.0     | 2.7     | 2.4     | 2.4     | 3.5     | 3.4     | 3.3     | 3.2     |
| <b>Other Key Measures</b>                              |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Brent Crude, Spot Price (\$/bbl)                       | 108.74  | 99.83   | 52.68   | 44.24   | 54.83   | 70.96   | 64.34   | 41.00   | 46.73   | 55.87   | 57.82   | 59.38   | 62.65   |
| Productivity (%ch.)                                    | 1.5     | 0.5     | 1.0     | 1.1     | 1.2     | 1.2     | 1.9     | 2.3     | -2.1    | 1.0     | 2.0     | 2.5     | 2.6     |
| Total Industrial Production (%ch.)                     | 2.0     | 3.1     | -1.0    | -2.0    | 2.3     | 3.9     | 0.9     | -7.4    | 1.8     | 2.6     | 2.8     | 3.0     | 3.0     |
| Factory Operating Rate                                 | 74.4    | 75.2    | 75.3    | 74.2    | 75.1    | 76.6    | 75.6    | 69.6    | 71.1    | 71.9    | 73.1    | 74.4    | 75.6    |
| Nonfarm Inven. Chg. (Bil. 2012 \$)                     | 98.2    | 90.1    | 136.5   | 30.2    | 21.0    | 59.3    | 62.2    | -80.1   | 64.4    | 72.3    | 76.7    | 91.6    | 103.8   |
| Consumer Sentiment Index                               | 79.2    | 84.1    | 92.9    | 91.8    | 96.8    | 98.4    | 96.0    | 81.8    | 83.9    | 89.0    | 91.5    | 91.7    | 91.8    |
| Light Vehicle Sales (Mil. units)                       | 15.53   | 16.45   | 17.40   | 17.46   | 17.14   | 17.21   | 16.95   | 14.40   | 15.77   | 15.86   | 15.98   | 16.10   | 16.27   |
| Housing Starts (Mil. units)                            | 0.928   | 1.000   | 1.107   | 1.177   | 1.207   | 1.248   | 1.295   | 1.362   | 1.357   | 1.298   | 1.274   | 1.270   | 1.290   |
| Exist. House Sales (Total, Mil. units)                 | 5.078   | 4.923   | 5.228   | 5.437   | 5.527   | 5.334   | 5.330   | 5.580   | 5.900   | 5.844   | 5.576   | 5.498   | 5.498   |
| Unemployment Rate (%)                                  | 7.4     | 6.2     | 5.3     | 4.9     | 4.4     | 3.9     | 3.7     | 8.1     | 5.7     | 4.7     | 4.4     | 4.0     | 3.8     |
| Payroll Employment (%ch.)                              | 1.8     | 2.1     | 2.0     | 1.7     | 1.5     | 1.6     | 1.4     | -5.6    | 4.0     | 2.2     | 1.1     | 1.1     | 0.8     |
| Federal Surplus (Unified, FY, bil. \$)                 | -559.5  | -487.4  | -475.4  | -581.6  | -680.9  | -873.0  | -1022.0 | -3315.3 | -1398.9 | -1195.8 | -1066.9 | -926.9  | -934.7  |
| Current Account Balance (Bil. \$)                      | -336.9  | -367.8  | -407.4  | -394.9  | -365.3  | -449.7  | -480.2  | -678.7  | -713.7  | -601.8  | -505.0  | -436.0  | -424.7  |
| <b>Financial Markets, NSA, Quarter Average</b>         |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Federal Funds Rate (%)                                 | 0.11    | 0.09    | 0.13    | 0.40    | 1.00    | 1.83    | 2.16    | 0.38    | 0.10    | 0.10    | 0.11    | 0.12    | 0.13    |
| 3-Month Treasury Bill Rate (%)                         | 0.06    | 0.03    | 0.05    | 0.32    | 0.93    | 1.94    | 2.06    | 0.37    | 0.10    | 0.09    | 0.10    | 0.11    | 0.11    |
| 10-Year Treasury Note Yield (%)                        | 2.35    | 2.54    | 2.14    | 1.84    | 2.33    | 2.91    | 2.14    | 0.88    | 0.97    | 1.24    | 1.45    | 1.63    | 1.87    |
| 30-Year Fixed Mortgage Rate (%)                        | 3.98    | 4.17    | 3.85    | 3.65    | 3.99    | 4.54    | 3.94    | 3.13    | 3.01    | 3.17    | 3.29    | 3.42    | 3.61    |
| S&P 500 Stock Index                                    | 1643    | 1931    | 2061    | 2092    | 2448    | 2745    | 2912    | 3171    | 3508    | 3534    | 3611    | 3777    | 3983    |
| (Percent change, Q4/Q4)                                | 24.8    | 13.6    | 2.0     | 6.4     | 19.2    | 3.3     | 14.7    | 9.1     | 4.9     | 0.4     | 3.5     | 4.9     | 5.6     |
| Exchange Rate, Broad Index of Partners                 | 1.012   | 1.044   | 1.180   | 1.235   | 1.231   | 1.222   | 1.263   | 1.291   | 1.212   | 1.166   | 1.161   | 1.169   | 1.179   |
| (% change, Q4/Q4)                                      | 2.3     | 6.6     | 12.2    | 3.9     | -4.2    | 4.3     | 0.6     | -0.8    | -6.1    | -2.1    | 0.2     | 0.8     | 1.0     |
| <b>Incomes</b>   |         |         |         |         |         |         |         |         |         |         |         |         |         |
| Personal Income (%ch., Q4/Q4)                          | -0.3    | 6.7     | 3.8     | 3.1     | 5.5     | 4.8     | 3.5     | 3.0     | 1.1     | 4.2     | 4.8     | 5.2     | 5.2     |
| Real Disposable Income (%ch., Q4/Q4)                   | -2.5    | 5.3     | 3.1     | 1.8     | 3.4     | 3.7     | 1.6     | 2.1     | -1.3    | 2.0     | 2.8     | 3.1     | 3.1     |
| Saving Rate (%)  | 6.4     | 7.4     | 7.6     | 6.9     | 7.2     | 7.9     | 7.6     | 15.7    | 9.4     | 8.6     | 8.6     | 8.7     | 8.7     |
| After-Tax Profits (Billions of \$)                     | 1789    | 1857    | 1732    | 1749    | 1872    | 1904    | 1939    | 1869    | 1672    | 1770    | 1926    | 2109    | 2296    |
| (Percent change, Q4/Q4)                                | 3.0     | 2.2     | -13.0   | 10.4    | -2.1    | 7.4     | 5.3     | -10.9   | -5.2    | 7.3     | 8.7     | 9.5     | 8.7     |

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## Alternative Scenarios of the US Economy

|   | 2020:2  | 2020:3 | 2020:4 | 2021:1 | 2021:2 | 2021:3 | 2019   | 2020    | 2021    | 2022    | 2023    | 2024   | 2025   |
|---|---------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|--------|
| <b>Pessimistic: Recovery stumbles as trend in new cases continues to rise (Prob. = 25%)</b> |         |        |        |        |        |        |        |         |         |         |         |        |        |
| <b>Composition of Real GDP, Percent Change, Annual Rate</b>                                 |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Gross Domestic Product  | -31.4   | 33.1   | 1.0    | -0.6   | 0.3    | 1.5    | 2.2    | -3.7    | 1.6     | 2.9     | 2.6     | 3.2    | 3.3    |
| Total Consumption   | -33.2   | 40.7   | -0.1   | -1.9   | 2.4    | 1.9    | 2.4    | -4.1    | 2.0     | 2.4     | 2.7     | 3.0    | 3.4    |
| Nonresidential Fixed Investment   | -27.2   | 20.3   | 1.0    | 1.9    | 1.5    | -0.1   | 2.9    | -5.0    | 1.3     | 4.0     | 5.1     | 5.2    | 4.9    |
| Residential Fixed Investment  | -35.6   | 59.3   | 19.1   | -1.8   | -9.8   | -11.8  | -1.7   | 4.8     | 1.7     | -5.8    | 0.0     | 1.7    | 1.4    |
| Exports   | -64.4   | 59.7   | 9.4    | 9.3    | -2.2   | 14.4   | -0.1   | -13.6   | 4.8     | 10.2    | 10.6    | 8.0    | 5.8    |
| Imports   | -54.1   | 91.1   | 7.5    | -10.8  | 0.1    | 4.1    | 1.1    | -10.5   | 2.2     | 3.1     | 10.2    | 6.6    | 6.0    |
| Federal Government  | 16.4    | -6.2   | -3.2   | 1.1    | 1.6    | 1.4    | 4.0    | 4.2     | 0.3     | 0.2     | -1.3    | -0.8   | 0.3    |
| State & Local Government  | -5.4    | -3.3   | -3.0   | -0.1   | -1.0   | 0.1    | 1.3    | -0.9    | -1.5    | 1.1     | 1.8     | 2.1    | 1.8    |
| <b>Prices &amp; Wages, Percent Change, Annual Rate</b>                                      |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Consumer Prices   | -3.5    | 5.2    | 2.3    | 0.4    | 2.2    | 1.9    | 1.8    | 1.3     | 1.7     | 1.6     | 1.4     | 1.4    | 1.6    |
| Producer Prices, Finished Goods   | -11.4   | 7.1    | 2.0    | -0.8   | 3.6    | 3.5    | 0.8    | -1.4    | 1.5     | 2.2     | 1.3     | 1.0    | 1.2    |
| Employment Cost Index - Total Comp.   | 1.7     | 2.0    | 2.4    | 1.0    | 1.3    | 1.4    | 2.7    | 2.5     | 1.6     | 2.0     | 2.1     | 2.0    | 1.9    |
| <b>Other Key Measures</b>   |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Brent Crude, Spot Price (\$/bbl)  | 29.38   | 42.97  | 41.20  | 43.25  | 44.15  | 47.03  | 64.34  | 41.00   | 45.42   | 49.50   | 55.48   | 57.82  | 58.70  |
| Productivity (%ch., saar)   | 10.6    | 4.9    | -5.2   | -3.7   | -3.9   | -2.0   | 1.7    | 2.6     | -1.8    | 0.3     | 1.1     | 2.0    | 2.6    |
| Total Industrial Production (%ch., saar)  | -42.9   | 39.8   | 0.7    | -1.2   | 0.2    | 1.3    | 0.9    | -7.5    | 0.7     | 2.8     | 2.5     | 3.2    | 3.0    |
| Nonfarm Inven. Chg. (Bil. 2012 \$)  | -280.8  | -4.9   | 37.0   | -67.5  | -112.0 | -121.9 | 62.2   | -79.9   | -100.8  | -55.1   | -6.8    | 37.0   | 84.0   |
| Consumer Sentiment Index  | 74.1    | 75.7   | 70.0   | 48.6   | 52.1   | 57.2   | 96.0   | 79.1    | 54.6    | 64.5    | 73.9    | 84.6   | 88.8   |
| Light Vehicle Sales (Mil. units, saar)  | 11.28   | 15.33  | 15.96  | 15.43  | 15.41  | 15.47  | 16.95  | 14.39   | 15.47   | 15.40   | 15.23   | 15.20  | 15.39  |
| Housing Starts (Mil. units, saar)   | 1.079   | 1.430  | 1.435  | 1.359  | 1.328  | 1.289  | 1.295  | 1.357   | 1.310   | 1.226   | 1.226   | 1.237  | 1.239  |
| Unemployment Rate (%)   | 13.0    | 8.8    | 7.0    | 6.7    | 6.5    | 6.3    | 3.7    | 8.2     | 6.4     | 5.6     | 5.0     | 4.4    | 4.1    |
| Payroll Employment (%ch., saar)   | -40.0   | 22.9   | 5.4    | 3.4    | 3.6    | 2.8    | 1.4    | -5.7    | 2.3     | 2.3     | 1.7     | 1.6    | 1.3    |
| Federal Surplus (Unified, FY, bil. \$)  | -2000.9 | -387.6 | -545.2 | -502.4 | -197.0 | -368.0 | -984.4 | -3131.9 | -1612.6 | -1371.6 | -1165.4 | -983.7 | -968.4 |
| <b>Financial Markets, NSA, Quarter Average</b>  |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Federal Funds Rate (%)  | 0.06    | 0.09   | 0.09   | 0.10   | 0.10   | 0.10   | 2.16   | 0.38    | 0.10    | 0.10    | 0.10    | 0.10   | 0.10   |
| 10-Year Treasury Note Yield (%)   | 0.69    | 0.65   | 0.78   | 0.82   | 0.86   | 0.88   | 2.14   | 0.87    | 0.87    | 0.95    | 0.98    | 1.11   | 1.35   |
| <b>Incomes</b>  |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Personal Income (% ch., saar)   | 34.2    | -10.2  | -11.7  | -7.1   | 1.8    | 2.4    | 3.9    | 5.7     | -2.9    | 2.9     | 3.6     | 4.3    | 4.5    |
| After-Tax Profits (Four-qr.% change)  | -19.7   | 24.9   | -13.1  | -5.3   | 5.1    | -32.7  | 1.8    | -4.1    | -13.0   | 4.8     | 8.2     | 11.4   | 13.6   |
| <b>Optimistic: Fiscal stimulus drives faster recovery (Prob. = 25%)</b>                     |         |        |        |        |        |        |        |         |         |         |         |        |        |
| <b>Composition of Real GDP, Percent Change, Annual Rate</b>                                 |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Gross Domestic Product  | -31.4   | 33.1   | 5.2    | 5.7    | 3.0    | 2.5    | 2.2    | -3.5    | 4.6     | 2.5     | 2.6     | 2.9    | 2.6    |
| Total Consumption   | -33.2   | 40.7   | 4.9    | 5.3    | 4.1    | 2.4    | 2.4    | -3.8    | 5.2     | 2.1     | 2.6     | 2.9    | 2.7    |
| Nonresidential Fixed Investment   | -27.2   | 20.3   | 6.3    | 7.8    | 4.1    | 3.3    | 2.9    | -4.7    | 4.8     | 3.9     | 4.5     | 5.0    | 4.7    |
| Residential Fixed Investment  | -35.6   | 59.3   | 20.2   | 1.9    | -1.4   | -3.8   | -1.7   | 4.8     | 6.1     | -3.3    | -1.9    | -0.4   | 0.6    |
| Exports   | -64.4   | 59.7   | 12.9   | 18.2   | 2.1    | 11.0   | -0.1   | -13.4   | 8.1     | 8.8     | 6.9     | 5.4    | 4.3    |
| Imports   | -54.1   | 91.1   | 10.4   | 12.8   | 9.4    | 6.2    | 1.1    | -10.4   | 11.1    | 1.8     | 2.6     | 4.1    | 3.8    |
| Federal Government  | 16.4    | -6.2   | -3.2   | 1.1    | 1.2    | 0.7    | 4.0    | 4.2     | 0.1     | -0.2    | -1.9    | -1.2   | 0.0    |
| State & Local Government  | -5.4    | -3.3   | -3.0   | 1.4    | 0.4    | 0.6    | 1.3    | -0.9    | -0.8    | 0.9     | 1.4     | 1.9    | 1.6    |
| <b>Prices &amp; Wages, Percent Change, Annual Rate</b>                                      |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Consumer Prices   | -3.5    | 5.2    | 2.5    | 2.1    | 3.2    | 3.2    | 1.8    | 1.3     | 2.6     | 2.9     | 2.4     | 2.2    | 2.3    |
| Producer Prices, Finished Goods   | -11.4   | 7.1    | 2.4    | 2.9    | 4.2    | 4.0    | 0.8    | -1.4    | 2.8     | 3.3     | 2.2     | 1.9    | 2.1    |
| Employment Cost Index - Total Comp.   | 1.7     | 2.0    | 2.5    | 2.1    | 2.7    | 2.8    | 2.7    | 2.6     | 2.4     | 3.4     | 3.7     | 3.5    | 3.4    |
| <b>Other Key Measures</b>   |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Brent Crude, Spot Price (\$/bbl)  | 29.38   | 42.97  | 42.70  | 44.70  | 47.00  | 50.80  | 64.34  | 41.37   | 49.20   | 58.73   | 60.77   | 61.96  | 64.08  |
| Productivity (%ch., saar)   | 10.6    | 4.9    | -3.7   | -4.6   | -2.3   | -1.1   | 1.7    | 2.7     | -1.2    | 0.5     | 2.0     | 2.6    | 2.4    |
| Total Industrial Production (%ch., saar)  | -42.9   | 39.8   | 4.7    | 4.3    | 2.5    | 2.1    | 0.9    | -7.3    | 3.4     | 2.8     | 2.4     | 2.5    | 2.7    |
| Nonfarm Inven. Chg. (Bil. 2012 \$)  | -280.8  | -4.9   | 42.9   | 76.6   | 109.6  | 121.4  | 62.2   | -78.4   | 104.2   | 89.7    | 75.3    | 86.3   | 92.0   |
| Consumer Sentiment Index  | 74.1    | 75.7   | 81.1   | 83.6   | 84.8   | 88.3   | 96.0   | 81.9    | 86.6    | 92.8    | 95.3    | 95.5   | 95.6   |
| Light Vehicle Sales (Mil. units, saar)  | 11.28   | 15.33  | 16.07  | 15.93  | 15.70  | 15.57  | 16.95  | 14.42   | 15.72   | 16.06   | 16.17   | 16.26  | 16.42  |
| Housing Starts (Mil. units, saar)   | 1.079   | 1.430  | 1.461  | 1.457  | 1.470  | 1.444  | 1.295  | 1.364   | 1.445   | 1.355   | 1.308   | 1.287  | 1.302  |
| Unemployment Rate (%)   | 13.0    | 8.8    | 6.8    | 5.5    | 5.0    | 4.7    | 3.7    | 8.1     | 4.9     | 4.2     | 4.0     | 3.8    | 3.7    |
| Payroll Employment (%ch., saar)   | -40.0   | 22.9   | 7.6    | 9.9    | 5.5    | 3.7    | 1.4    | -5.6    | 4.7     | 2.4     | 1.2     | 0.9    | 0.7    |
| Federal Surplus (Unified, FY, bil. \$)  | -2000.9 | -387.6 | -535.5 | -473.6 | -160.2 | -325.2 | -984.4 | -3131.9 | -1494.6 | -1205.8 | -1026.3 | -889.3 | -947.9 |
| <b>Financial Markets, NSA, Quarter Average</b>  |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Federal Funds Rate (%)  | 0.06    | 0.09   | 0.10   | 0.10   | 0.11   | 0.11   | 2.16   | 0.38    | 0.11    | 0.12    | 0.12    | 0.39   | 0.90   |
| 10-Year Treasury Note Yield (%)   | 0.69    | 0.65   | 0.81   | 0.94   | 1.00   | 1.06   | 2.14   | 0.88    | 1.04    | 1.37    | 1.69    | 1.88   | 2.12   |
| <b>Incomes</b>  |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Personal Income (% ch., saar)   | 34.2    | -10.2  | -9.8   | 0.2    | 4.0    | 3.5    | 3.9    | 5.9     | -0.1    | 3.8     | 4.4     | 4.9    | 5.2    |
| After-Tax Profits (Four-qr.% change)  | -19.7   | 24.9   | -8.9   | -1.7   | 12.0   | -26.0  | 1.8    | -3.0    | -6.7    | 6.3     | 11.2    | 11.1   | 7.7    |

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## Alternative Scenarios of the US Economy

|   | 2020:2  | 2020:3 | 2020:4 | 2021:1 | 2021:2 | 2021:3 | 2019   | 2020    | 2021    | 2022    | 2023    | 2024   | 2025   |
|---|---------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|--------|
| <b>Pessimistic: Recovery stumbles as trend in new cases continues to rise (Prob. = 25%)</b> |         |        |        |        |        |        |        |         |         |         |         |        |        |
| <b>Composition of Real GDP, Percent Change, Annual Rate</b>                                 |         |        |        |        |        |        |        |         |         |         |         |        |        |
| <b>(Q4/Q4 for Annual Values)</b>  |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Gross Domestic Product  | -31.4   | 33.1   | 1.0    | -0.6   | 0.3    | 1.5    | 2.3    | -3.2    | 0.8     | 3.5     | 2.5     | 3.5    | 3.1    |
| Total Consumption   | -33.2   | 40.7   | -0.1   | -1.9   | 2.4    | 1.9    | 2.5    | -3.3    | 1.1     | 2.7     | 2.7     | 3.3    | 3.4    |
| Nonresidential Fixed Investment   | -27.2   | 20.3   | 1.0    | 1.9    | 1.5    | -0.1   | 1.4    | -4.7    | 1.0     | 6.0     | 4.9     | 5.0    | 4.8    |
| Residential Fixed Investment  | -35.6   | 59.3   | 19.1   | -1.8   | -9.8   | -11.8  | 1.6    | 9.8     | -8.0    | -2.7    | 1.3     | 1.9    | 0.4    |
| Exports   | -64.4   | 59.7   | 9.4    | 9.3    | -2.2   | 14.4   | 0.4    | -13.4   | 7.5     | 11.2    | 9.4     | 7.2    | 5.2    |
| Imports   | -54.1   | 91.1   | 7.5    | -10.8  | 0.1    | 4.1    | -1.9   | -5.4    | -1.0    | 5.8     | 9.4     | 5.7    | 6.1    |
| Federal Government  | 16.4    | -6.2   | -3.2   | 1.1    | 1.6    | 1.4    | 4.8    | 1.8     | 1.0     | -0.3    | -1.6    | -0.2   | 0.3    |
| State & Local Government  | -5.4    | -3.3   | -3.0   | -0.1   | -1.0   | 0.1    | 1.9    | -2.7    | 0.0     | 1.7     | 1.8     | 2.2    | 1.4    |
| <b>Prices &amp; Wages, Percent Change, Annual Rate</b>                                      |         |        |        |        |        |        |        |         |         |         |         |        |        |
| <b>(Q4/Q4 for Annual Values)</b>  |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Consumer Prices   | -3.5    | 5.2    | 2.3    | 0.4    | 2.2    | 1.9    | 2.0    | 1.2     | 1.5     | 1.5     | 1.3     | 1.4    | 1.6    |
| Producer Prices, Finished Goods   | -11.4   | 7.1    | 2.0    | -0.8   | 3.6    | 3.5    | 0.9    | -1.6    | 2.1     | 1.9     | 1.0     | 1.1    | 1.3    |
| Employment Cost Index - Total Comp.   | 1.7     | 2.0    | 2.4    | 1.0    | 1.3    | 1.4    | 2.7    | 2.3     | 1.5     | 2.1     | 2.2     | 1.9    | 2.0    |
| <b>Other Key Measures</b>   |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Brent Crude, Spot Price (\$/bbl)  | 29.38   | 42.97  | 41.20  | 43.25  | 44.15  | 47.03  | 64.34  | 41.00   | 45.42   | 49.50   | 55.48   | 57.82  | 58.70  |
| Productivity (%ch., saar)   | 10.6    | 4.9    | -5.2   | -3.7   | -3.9   | -2.0   | 1.9    | 2.3     | -2.7    | 1.6     | 1.0     | 2.5    | 2.6    |
| Total Industrial Production (%ch., saar)  | -42.9   | 39.8   | 0.7    | -1.2   | 0.2    | 1.3    | -0.7   | -6.9    | 0.6     | 3.3     | 2.5     | 3.5    | 2.7    |
| Nonfarm Inven. Chg. (Bil. 2012 \$)  | -280.8  | -4.9   | 37.0   | -67.5  | -112.0 | -121.9 | 62.2   | -79.9   | -100.8  | -55.1   | -6.8    | 37.0   | 84.0   |
| Consumer Sentiment Index  | 74.1    | 75.7   | 70.0   | 48.6   | 52.1   | 57.2   | 96.0   | 79.1    | 54.6    | 64.5    | 73.9    | 84.6   | 88.8   |
| Light Vehicle Sales (Mil. units, saar)  | 11.28   | 15.33  | 15.96  | 15.43  | 15.41  | 15.47  | 16.95  | 14.39   | 15.47   | 15.40   | 15.23   | 15.20  | 15.39  |
| Housing Starts (Mil. units, saar)   | 1.079   | 1.430  | 1.435  | 1.359  | 1.328  | 1.289  | 1.295  | 1.357   | 1.310   | 1.226   | 1.226   | 1.237  | 1.239  |
| Unemployment Rate (%)   | 13.0    | 8.8    | 7.0    | 6.7    | 6.5    | 6.3    | 3.7    | 8.2     | 6.4     | 5.6     | 5.0     | 4.4    | 4.1    |
| Payroll Employment (%ch., saar)   | -40.0   | 22.9   | 5.4    | 3.4    | 3.6    | 2.8    | 1.4    | -6.0    | 3.1     | 1.9     | 1.6     | 1.5    | 1.0    |
| Federal Surplus (Unified, FY, bil. \$)  | -2000.9 | -387.6 | -545.2 | -502.4 | -197.0 | -368.0 | -984.4 | -3131.9 | -1612.6 | -1371.6 | -1165.4 | -983.7 | -968.4 |
| <b>Financial Markets, NSA, Quarter Average</b>  |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Federal Funds Rate (%)  | 0.06    | 0.09   | 0.09   | 0.10   | 0.10   | 0.10   | 2.16   | 0.38    | 0.10    | 0.10    | 0.10    | 0.10   | 0.10   |
| 10-Year Treasury Note Yield (%)   | 0.69    | 0.65   | 0.78   | 0.82   | 0.86   | 0.88   | 2.14   | 0.87    | 0.87    | 0.95    | 0.98    | 1.11   | 1.35   |
| <b>Incomes</b>  |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Personal Income (% ch., saar)   | 34.2    | -10.2  | -11.7  | -7.1   | 1.8    | 2.4    | 3.5    | 2.6     | -0.3    | 3.2     | 4.0     | 4.3    | 4.6    |
| After-Tax Profits (Four-qr.% change)  | -19.7   | 24.9   | -13.1  | -5.3   | 5.1    | -32.7  | 5.3    | -13.1   | -9.7    | 11.6    | 6.0     | 14.9   | 11.7   |
| <b>Optimistic: Fiscal stimulus drives faster recovery (Prob. = 25%)</b>                     |         |        |        |        |        |        |        |         |         |         |         |        |        |
| <b>Composition of Real GDP, Percent Change, Annual Rate</b>                                 |         |        |        |        |        |        |        |         |         |         |         |        |        |
| <b>(Q4/Q4 for Annual Values)</b>  |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Gross Domestic Product  | -31.4   | 33.1   | 5.2    | 5.7    | 3.0    | 2.5    | 2.3    | -2.2    | 3.3     | 2.5     | 2.8     | 2.8    | 2.5    |
| Total Consumption   | -33.2   | 40.7   | 4.9    | 5.3    | 4.1    | 2.4    | 2.5    | -2.1    | 3.5     | 1.9     | 3.0     | 2.8    | 2.6    |
| Nonresidential Fixed Investment   | -27.2   | 20.3   | 6.3    | 7.8    | 4.1    | 3.3    | 1.4    | -3.5    | 4.7     | 4.1     | 4.9     | 4.9    | 4.5    |
| Residential Fixed Investment  | -35.6   | 59.3   | 20.2   | 1.9    | -1.4   | -3.8   | 1.6    | 10.1    | -1.5    | -3.2    | -1.3    | 0.2    | 0.0    |
| Exports   | -64.4   | 59.7   | 12.9   | 18.2   | 2.1    | 11.0   | 0.4    | -12.7   | 10.3    | 8.2     | 6.3     | 4.9    | 4.0    |
| Imports   | -54.1   | 91.1   | 10.4   | 12.8   | 9.4    | 6.2    | -1.9   | -4.8    | 8.2     | 0.2     | 3.5     | 4.0    | 3.7    |
| Federal Government  | 16.4    | -6.2   | -3.2   | 1.1    | 1.2    | 0.7    | 4.8    | 1.8     | 0.9     | -1.0    | -2.1    | -0.5   | 0.0    |
| State & Local Government  | -5.4    | -3.3   | -3.0   | 1.4    | 0.4    | 0.6    | 1.9    | -2.7    | 0.8     | 1.1     | 1.6     | 1.9    | 1.3    |
| <b>Prices &amp; Wages, Percent Change, Annual Rate</b>                                      |         |        |        |        |        |        |        |         |         |         |         |        |        |
| <b>(Q4/Q4 for Annual Values)</b>  |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Consumer Prices   | -3.5    | 5.2    | 2.5    | 2.1    | 3.2    | 3.2    | 2.0    | 1.3     | 2.9     | 2.7     | 2.2     | 2.3    | 2.4    |
| Producer Prices, Finished Goods   | -11.4   | 7.1    | 2.4    | 2.9    | 4.2    | 4.0    | 0.9    | -1.6    | 3.7     | 2.9     | 1.9     | 2.0    | 2.1    |
| Employment Cost Index - Total Comp.   | 1.7     | 2.0    | 2.5    | 2.1    | 2.7    | 2.8    | 2.7    | 2.4     | 2.7     | 3.6     | 3.7     | 3.5    | 3.4    |
| <b>Other Key Measures</b>   |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Brent Crude, Spot Price (\$/bbl)  | 29.38   | 42.97  | 42.70  | 44.70  | 47.00  | 50.80  | 64.34  | 41.37   | 49.20   | 58.73   | 60.77   | 61.96  | 64.08  |
| Productivity (%ch., saar)   | 10.6    | 4.9    | -3.7   | -4.6   | -2.3   | -1.1   | 1.9    | 2.7     | -1.9    | 1.3     | 2.4     | 2.5    | 2.3    |
| Total Industrial Production (%ch., saar)  | -42.9   | 39.8   | 4.7    | 4.3    | 2.5    | 2.1    | -0.7   | -6.0    | 2.7     | 3.1     | 2.2     | 2.7    | 2.6    |
| Nonfarm Inven. Chg. (Bil. 2012 \$)  | -280.8  | -4.9   | 42.9   | 76.6   | 109.6  | 121.4  | 62.2   | -78.4   | 104.2   | 89.7    | 75.3    | 86.3   | 92.0   |
| Consumer Sentiment Index  | 74.1    | 75.7   | 81.1   | 83.6   | 84.8   | 88.3   | 96.0   | 81.9    | 86.6    | 92.8    | 95.3    | 95.5   | 95.6   |
| Light Vehicle Sales (Mil. units, saar)  | 11.28   | 15.33  | 16.07  | 15.93  | 15.70  | 15.57  | 16.95  | 14.42   | 15.72   | 16.06   | 16.17   | 16.26  | 16.42  |
| Housing Starts (Mil. units, saar)   | 1.079   | 1.430  | 1.461  | 1.457  | 1.470  | 1.444  | 1.295  | 1.364   | 1.445   | 1.355   | 1.308   | 1.287  | 1.302  |
| Unemployment Rate (%)   | 13.0    | 8.8    | 6.8    | 5.5    | 5.0    | 4.7    | 3.7    | 8.1     | 4.9     | 4.2     | 4.0     | 3.8    | 3.7    |
| Payroll Employment (%ch., saar)   | -40.0   | 22.9   | 7.6    | 9.9    | 5.5    | 3.7    | 1.4    | -5.5    | 5.3     | 1.7     | 1.0     | 0.9    | 0.6    |
| Federal Surplus (Unified, FY, bil. \$)  | -2000.9 | -387.6 | -535.5 | -473.6 | -160.2 | -325.2 | -984.4 | -3131.9 | -1494.6 | -1205.8 | -1026.3 | -889.3 | -947.9 |
| <b>Financial Markets, NSA, Quarter Average</b>  |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Federal Funds Rate (%)  | 0.06    | 0.09   | 0.10   | 0.10   | 0.11   | 0.11   | 2.16   | 0.38    | 0.11    | 0.12    | 0.12    | 0.39   | 0.90   |
| 10-Year Treasury Note Yield (%)   | 0.69    | 0.65   | 0.81   | 0.94   | 1.00   | 1.06   | 2.14   | 0.88    | 1.04    | 1.37    | 1.69    | 1.88   | 2.12   |
| <b>Incomes</b>  |         |        |        |        |        |        |        |         |         |         |         |        |        |
| Personal Income (% ch., saar)   | 34.2    | -10.2  | -9.8   | 0.2    | 4.0    | 3.5    | 3.5    | 3.1     | 2.6     | 4.1     | 4.7     | 5.1    | 5.2    |
| After-Tax Profits (Four-qr.% change)  | -19.7   | 24.9   | -8.9   | -1.7   | 12.0   | -26.0  | 5.3    | -8.9    | -2.2    | 6.9     | 12.6    | 9.8    | 6.6    |

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