

# **Executive Summary**

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### Forecast overview

### GDP growth forecasts for 2023 and 2024 nudged down; a temporary pause in disinflation

- In November, S&P Global Market Intelligence revised down its forecast of US real GDP growth for 2023 from 2.5% to 2.4%, and for 2024 from 1.6% to 1.4%.<sup>1</sup>
- For 2023, the downward revision reflects third-quarter growth that, while stunning at 4.9%, was below our forecast of 5.2%. In addition, the mix of third-quarter growth, with final sales weaker and inventory investment stronger than we anticipated, encouraged us to mark down our forecast of fourth-quarter growth from 1.7% to 1.1%
- Despite an easing of financial conditions after the Fed's recent meeting, we revised up our near-term projections of term yields and the US dollar. This, in turn, encouraged the downward revision to our forecast of GDP growth for 2024.
- September's inflation reports reminded that achieving the Fed's 2% objective will be difficult. The 12-month change in "core" PCE<sup>2</sup> prices fell just 0.1 percentage point, to 3.7%, while the 3-month annualized change jumped from 2.0% to 2.5%. A recent re-acceleration of home prices suggests an anticipated deceleration of rents may be delayed. Nonfarm payroll employment rose 150 thousand in October, the second lowest monthly increase since the recent run of increases beginning December 2020, and while unemployment ticked up to 3.9% it remains unsustainably low. Reducing inflation to 2% will require growth slow enough to relieve wage pressures emanating from tight labor markets.
- We expect the Fed to raise its policy rate in December to a peak range of 5.50% 5.75%, with a reversal of policy in June. However, our call is dependent on incoming data — especially for inflation — and so remains under review.
- With growth slowing below trend after 2023, we project the unemployment rate to rise to 4.7% by mid-2025 before drifting down to the full-employment rate of 4.3% by late 2028. With the easing of labor market tightness, we expect core PCE inflation to ebb grudgingly to 2% by mid-2025.

### Labor market to remain tight into 2024

Third-quarter GDP growth of 4.9% was more than twice our estimate of the growth of potential output. Indeed, the economy has grown at or above trend for five consecutive quarters, during which span real GDP expanded at a 2.9% annual rate. Given lags from GDP to employment, a notable easing of labor market conditions is unlikely until mid-2024. Nevertheless, with GDP growth projected to drop below trend in 2024 — a growth recession — we do show the unemployment rate rising to 4.7% by mid-2025.

### A temporary pause in disinflation

In recent forecasts, favorable monthly inflation reports encouraged us to revise down our near-term inflation projections. That string of downward revisions ended this month. While core PCE inflation did fall 1.3 percentage points in the third quarter, to 2.4%, the recent monthly acceleration of prices suggests core inflation will rebound to 3.0% in the fourth quarter before resuming a gradual decline. Consequently, we've revised up our forecast for core inflation in 2024 from 2.6% to 2.8% — a reminder that covering the last distance to 2% inflation will be difficult.

### 2% inflation requires higher unemployment

Following declines in prices of energy and agricultural commodities, headline inflation has fallen convincingly below core inflation. Furthermore, the resolution of supply chain issues has allowed decelerations or, in some cases,

declines, in prices of certain core goods. However, while the economy's resilience has tempered concerns of an imminent recession, a period of below-trend growth and an accompanying increase in the unemployment rate will be necessary to reduce wage growth to a range consistent with core PCE inflation near the Fed's 2% objective within a time frame acceptable to the Fed.

#### Recent financial conditions and our Fed call

On November 1, as expected, the Fed announced it maintained its policy rate at 5.25% - 5.50% and kept a tightening bias. However, seeing mixed messages in the meeting's outcome, investors shifted strongly to the view that this tightening cycle is over. In the days following the meeting, term yields fell, stock prices rebounded, and the dollar depreciated. This reversed some of the tightening in financial conditions that had occurred since August and that we considered a potential substitute for further rate hikes. Given the recent uptick of inflation, still-tight labor markets, and the late reversal of financial conditions, we still expect the Fed to raise its policy rate in December to a peak of 5.50% - 5.75%, with a reversal of policy in June. However, our call is dependent on incoming data — especially for inflation — and so remains under review.

<sup>1.</sup> This forecast was issued on November 6, 2023. Unless otherwise noted, all quarterly growth rates are stated as compound annual rates, all expenditure components of GDP are in chained 2017 dollars, and all annual growth rates are full-year over full-year percent changes.

<sup>2.</sup> PCE is the acronym for personal consumption expenditures.

## Forecast at a glance

### Base forecast (November 2023) 2023:Q4 - 2027:Q4

Major economic indicators

		% ch fro	m prior au	uarter, anr	nual rate				ch. from por annual a				%		fourth qua		-	
	2023.2			2024.1	2024.2	2024.3	2022	2023	2024	2025	2026	2027	2022.4	2023.4		2025.4	2026.4	2027.4
Mary in diseases of used patients.																		
Key indicators of real activity	0.4	4.0	4.4	0.0	0.4	4.4	4.0	0.4	4.4	4.4	4.7	4.7	0.7	0.0	0.0	4.0	4.7	4.7
Real gross domestic product	2.1	4.9	1.1	0.9	0.1	1.1	1.9	2.4	1.4	1.4	1.7	1.7	0.7	2.6	8.0	1.6	1.7	1.7
Contributions to growth (% points):																		
Final sales to domestic purchasers	2.0	3.6	2.0	1.5	0.6	1.0	1.8	2.2	1.6	1.4	1.7	1.6	0.8	2.9	1.1	1.6	1.6	1.5
Net exports of goods & services	0.0	-0.1	-0.1	-0.6	-0.2	0.0	-0.5	0.5	-0.2	-0.1	0.0	0.1	0.2	0.1	-0.2	-0.1	0.0	0.1
Change in private inventories	0.0	1.3	-0.7	0.0	-0.3	0.1	0.6	-0.4	0.0	0.1	0.1	0.0	-0.3	-0.5	0.0	0.1	0.0	0.0
Major components of real GDP																		
Personal consumption expend.	8.0	4.0	2.4	1.8	1.0	1.3	2.5	2.3	1.9	1.5	1.8	1.8	1.2	2.7	1.3	1.7	1.8	1.8
Nonres. fixed investment	7.4	-0.1	2.1	1.6	0.0	0.7	5.2	4.2	1.4	1.3	1.7	1.8	5.6	3.8	0.9	1.6	1.7	1.8
Residential investment	-2.2	3.9	-1.3	-3.9	-4.8	-1.3	-9.0	-11.1	-1.8	3.5	3.8	1.8	-17.4	-1.3	-1.7	5.4	2.3	2.2
Change in private inventories *	14.9	80.6	41.5	41.5	23.3	25.9	128.1	41.0	31.2	52.5	67.7	66.9	151.9	41.5	34.1	61.7	69.3	65.9
Exports of goods & services	-9.3	6.2	6.5	1.9	3.6	4.2	7.0	2.8	3.2	3.7	4.0	3.8	4.3	2.3	3.3	3.7	4.1	3.7
Imports of goods & services	-7.6	5.7	6.3	5.7	4.1	3.2	8.6	-1.3	4.2	3.8	3.5	2.3	2.1	1.2	4.2	4.0	3.0	2.1
Gov't consump. & gross invest.	3.3	4.6	0.6	1.0	0.6	0.5	-0.9	3.7	1.3	0.4	0.4	0.2	0.8	3.3	0.6	0.4	0.3	0.1
Pvt. housing starts (thous. units)	1450	1359	1393	1342	1319	1324	1551	1397	1330	1370	1389	1383	1405	1393	1335	1385	1386	1378
Light vehicle sales (mil. units)	15.8	15.6	15.2	15.3	15.5	15.8	13.8	15.4	15.7	16.5	16.6	16.4	14.2	15.2	16.2	16.6	16.5	16.2
Industrial production, total	0.7	2.5	-3.0	2.0	-2.5	-1.0	3.4	0.2	-0.3	0.3	1.3	1.3	1.8	0.0	-0.4	1.1	1.3	1.3
Industrial production, mfg	0.3	0.0	-3.5	3.5	-1.6	-0.1	2.7	-0.7	0.0	0.9	1.4	1.4	0.6	-0.9	0.6	1.4	1.4	1.4
Capacity utilization (mfg, %)	78.0	77.8	76.8	77.3	76.7	76.4	79.2	77.7	76.7	76.3	76.3	76.2	78.5	76.8	76.3	76.3	76.3	76.2
Nonfarm payroll employ. (mil.)	155.9	156.5	157.1	157.2	157.2	157.2	152.6	156.2	157.2	157.3	157.9	158.6	154.3	157.1	157.2	157.4	158.2	158.9
Average monthly chg. (thous.)	201	233	152	6	-2	-18	399	224	-5	28	60	64	284	152	-8	48	60	66
Private nonfarm hours	-1.5	1.1	0.2	0.5	-0.6	-0.7	4.0	1.2	0.0	-0.3	0.2	0.4	2.5	0.6	-0.4	-0.1	0.4	0.4
Civilian unemployment rate (%)	3.5	3.7	3.9	4.0	4.2	4.4	3.6	3.6	4.3	4.7	4.6	4.5	3.6	3.9	4.5	4.7	4.6	4.5
Prices, Productivity, & Costs																		
CPI, all items, all urban	2.7	3.6	2.8	1.9	2.8	3.3	8.0	4.1	2.7	2.0	2.5	2.2	7.1	3.2	2.5	1.9	2.5	2.1
CPI excl food & energy, all urban	4.7	2.8	3.3	3.3	3.0	2.7	6.1	4.8	3.2	2.5	2.2	2.2	6.0	4.0	2.9	2.3	2.2	2.2
PCE price index	2.5	2.9	2.6	1.9	2.6	2.7	6.5	3.8	2.5	2.0	2.1	2.0	5.9	3.0	2.4	1.9	2.1	2.0
PCE price excl food & energy	3.7	2.4	3.0	2.9	2.8	2.5	5.2	4.2	2.8	2.2	2.0	2.0	5.1	3.5	2.6	2.0	2.0	2.0
PPI finished goods	-6.0	7.2	4.9	1.1	1.7	2.6	13.4	2.1	2.4	8.0	2.0	1.9	10.2	1.6	1.6	0.9	2.0	1.9
Compensation per hour	6.9	3.9	2.9	4.0	3.7	3.8	3.6	4.4	3.8	3.7	3.6	3.5	2.3	5.0	3.8	3.6	3.5	3.5
Output per hour	3.6	4.7	0.4	0.1	0.2	1.7	-1.9	1.2	1.2	1.7	1.6	1.5	-2.0	1.9	0.9	1.8	1.5	1.4
Unit labor cost	3.2	-0.8	2.5	3.9	3.5	2.1	5.6	3.2	2.6	1.9	1.9	2.0	4.4	3.0	2.8	1.7	2.0	2.1
Fed Financial Accounts house price index **	4.2	2.6	1.0	0.8	0.8	8.0	16.4	2.3	5.1	3.4	3.5	3.5	8.8	7.0	3.3	3.5	3.5	3.5
Price of WTI crude oil (\$/barrel)	73.76	82.31	84.03	77.98	79.69	85.17	94.78	79.04	80.62	70.11	76.83	80.39	82.79	84.03	79.63	72.66	78.93	81.35
Price of Brent crude oil (\$/barrel)	78.39	86.57	88.65	82.33	84.00	89.67	100.72	83.72	85.17	76.08	84.32	87.09	88.58	88.65	84.67	79.00	86.45	87.63
Selected Financial Variables																		
Federal funds rate (%)	4.99	5.26	5.39	5.60	5.56	5.32	1.68	5.04	5.38	4.05	2.87	2.63	3.65	5.39	5.05	3.57	2.63	2.63
Yield on 10-Yr Treasury Notes (%)	3.59	4.15	4.73	4.64	4.43	4.22	2.95	4.03	4.32	3.63	3.28	3.21	3.83	4.73	4.01	3.44	3.23	3.20
Baa corporate bond yield (%)	5.76	6.04	6.71	6.64	6.45	6.27	5.14	6.04	6.37	5.84	5.56	5.43	5.99	6.71	6.13	5.71	5.50	5.39
Broad trade-w td US\$ (Jan 2006=100)	119.7	120.4	124.0	124.5	123.9	122.9	120.7	121.1	123.4	120.7	117.0	114.2	124.8	124.0	122.1	119.2	115.8	113.5
S&P 500 stock index, period end	4450	4288	4247	4143	4234	4311	3839	4247	4372	4459	4467	4465	3839	4247	4372	4459	4467	4465
S&P 500 stock index, average	4204	4458	4294	4195	4188	4273	4101	4240	4249	4441	4477	4450	3852	4294	4342	4462	4474	4454
Incomes & Related Measures	•	66.4			2.5									• -				
Corporate profits w / NA & CCAdj	0.9	39.4	1.9	-5.8	-6.9	-4.0	9.8	3.2	0.9	-3.2	-0.1	1.4	8.6	6.6	-5.2	-1.9	0.7	1.8
Real disposable personal income	3.5	-1.0	0.8	4.5	2.6	2.8	-6.0	4.0	2.4	3.1	2.3	2.2	-1.5	3.5	3.2	2.9	2.2	2.3
Personal saving rate (%)	5.2	3.8	3.3	3.8	4.2	4.5	3.3	4.3	4.4	5.9	6.3	6.7	3.2	3.3	4.9	6.0	6.4	6.8
Fed. surplus (unified, FY, bil. \$)	-1168	-1210	-1765	-2297	-512	-1594	-1375	-1695	-1542	-1776	-1879	-1963	-1686	-1765	-2024	-2157	-2233	-2439

\* billions of chained 2017 \$

\*\* % change, not annualized
Source: S&P Global Market Intelligence © 2023 S&P Global

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### Forecast at a glance

#### Above-trend growth in 2023

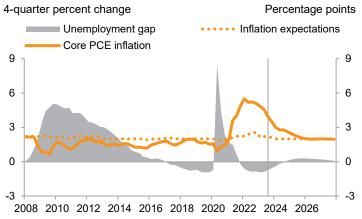
Percent change, annual rate Real GDP growth Unemployment rate (%) 15 34.8% 10 5 -5 -28.0% -10 2016 2018 2020 2022 2024 2026

As of Nov. 6, 2023.

Sources: S&P Global Market Intelligence; BEA; BLS.

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#### Core PCE inflation declines gradually to 2% after surge

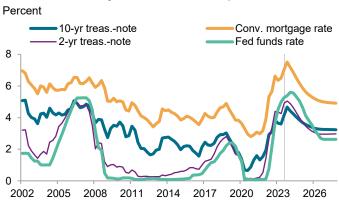


As of Nov. 6, 2023.

Sources: S&P Global Market Intelligence; Philly Fed; BEA; BLS.

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# Fed hikes for last time in December, then pauses until June 2024; term yields ease after rapid rise

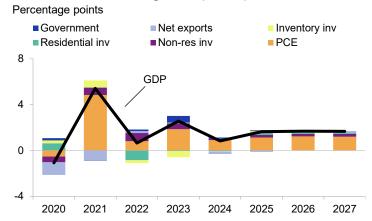


As of Nov. 6, 2023.

Sources: S&P Global Market Intelligence; FRB.

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

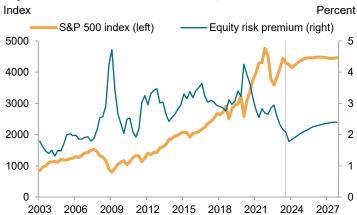


As of Nov. 6, 2023.

Sources: S&P Global Market Intelligence; BEA.

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#### Equities decline over Q4'23-Q1'24, then recover



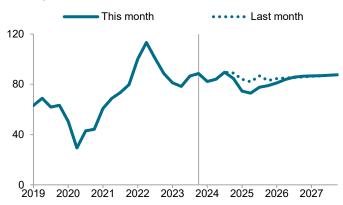
As of Nov. 6, 2023.

Sources: S&P Global Market Intelligence; S&P.

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#### Price of Brent crude oil

Dollars per barrel



As of Nov. 6, 2023.

Source: S&P Global Market Intelligence.

### Q3 now history; higher term yields, USD; revised capital stocks; student loan forbearance ends

BEA's advance estimate is that real GDP grew a stunning 4.9% in the third quarter, close to October's forecast of 5.2%. However, the mix of growth was notably different than we anticipated, with final sales weaker and inventory investment stronger than expected. The weakness in final sales was in net exports, which subtracted 0.1 percentage point from growth rather than contributing 1.1 percentage points. Largely offsetting this, inventory investment contributed 1.3 percentage points to growth rather than the 0.4 we anticipated. Domestic final sales grew 3.5%, as expected, but sales to private purchasers were a touch weaker (3.3% vs. 3.6%), and government purchases somewhat stronger (4.6% vs. 3.2%) than our forecast.

During the inter-forecast period and prior to the meeting of the Federal Open Market Committee that ended on November 1, term interest rates rose sharply as the yield on the 10-year Treasury note briefly exceeded 5% and the conventional mortgage rate flirted with 8%. Following the FOMC meeting, yields retreated but not enough to prevent an upward revision to our near term projection of term yields. A similar narrative pertained to our forecast of the Fed's broad, nominal, trade-weighted exchange rate.

In September, when BEA issued its 2023 comprehensive revision of the National Economic Accounts, corresponding revisions of capital stocks were not yet available. We attempted to anticipate those revisions by combining the revised data for gross investment with previous estimates of the effective depreciation rates on capital. Subsequently BEA published revised estimates of capital stocks, and this month we've replaced our estimates with these official numbers. Overall, BEA's revised estimates of business capital stocks were lower than we anticipated, with the largest difference being for the stock of intellectual property products. The result was to lower the recent value of capital services approximately 1.5%, and recent growth rates of capital services by about 0.2 percentage point.

Interest liabilities on student loans resumed accruing in September; cash payments resumed in October. Because BEA records interest on an accrual basis, personal interest "payments" on student loans rose approximately \$34 billion in September. While President Biden's grand plan to cancel one third of student debt was overruled by the Supreme Court, other changes in the loan program resulted in the cancellation of approximately \$115 billion of debt during the recent period of forbearance. BEA recorded this in the third guarter as a one-time \$460 billion (at an annual rate) capital transfer from government to households that will appear as a third-quarter increase in household net worth in the Financial Accounts of the United States.

#### 10-Year Treasury note yield

Percent October forecast November forecast 5 4 3 2 1 0 2019

2022

2023

2024

2025

As of Nov. 6, 2023.

2020

Sources: S&P Global Market Intelligence; Federal Reserve Board. © 2023 S&P Global.

2021

### Broad, nominal, trade-weighted dollar index

2019-Q1 = 100 November forecast October forecast 110 105 100

2022

2023

2024

2025

95 <del>-</del> 2019 As of Nov. 6, 2023.

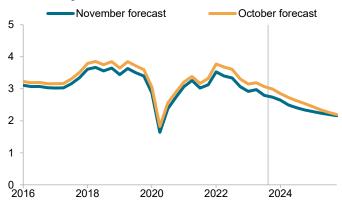
Sources: S&P Global Market Intelligence; Federal Reserve Board. © 2023 S&P Global.

2021

#### Growth of capital services

Percent change, annual rate

2020



As of Nov. 6, 2023.

Source: S&P Global Market Intelligence.

### The view just ahead

### GDP to decelerate sharply in the fourth quarter; labor markets may finally be about to ease

In this month's forecast, we look for GDP growth to slow sharply from 4.9% in the third quarter to roughly 1% in both the fourth and first quarters. Over one-half of the deceleration in the fourth quarter is in inventory investment, a development that would not be too surprising given the elevated pace of inventory-building in the third quarter. Also contributing to the slowdown in inventory investment in the fourth quarter was the idling of several auto assembly plants from mid-September through most of October even as sales remained in line with recent averages. This resulted from UAW's strike against the Big 3 automakers, which now appears to be resolved.

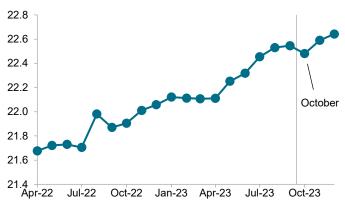
We also expect final sales to slow sharply in the fourth quarter, with nearly two-thirds of that slowing in PCE. Following 4.0% growth of PCE in the third quarter, we project 2.4% growth in the fourth quarter, a rate of increase in line with the recent trend. Elsewhere within final sales, recent indicators support our forecast of a modest acceleration in business fixed investment in the fourth guarter. Real orders for nondefense capital goods excluding aircraft ("core" capital goods) increased over August and September, reversing declines over prior months, while real shipments of core capital goods appear to have stabilized in recent months. Private nonresidential construction spending continued to firm through September, although the trend appears to be slowing. Residential investment is on track to post a modest decline in the fourth guarter, as continued but slowing gains in new housing construction are expected to be overwhelmed by indicators pointing to declining spending on residential brokers' commissions (mainly declining existing home sales) and residential improvements.

Labor markets are starting to show signs of easing. Non-farm payroll employment rose 150 thousand in October. Even allowing for the impact from UAW's strike, which shaved roughly 30 thousand jobs from the headline figure, this is below average gains over the prior 3 months (233 thousand per month). Over the three months ending in October, the unemployment rate moved up and remained materially above the average over the first half of this year. In recent weekly data, insured unemployment has turned up following a downward trend from early April through mid-September.

Inflation is easing but remains elevated. The core PCE price index rose 0.3% in September following increases over the prior three months that averaged 0.2% per month. Still, the 12-month increase has been trending down for roughly one year.

### Slowing trend in monthly GDP punctuated by strike

Trillions of chained (2017) dollars



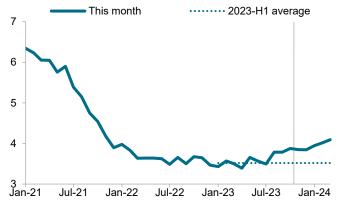
As of Nov. 6, 2023.

Source: S&P Global Market Intelligence.

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#### Labor-market tightness showing signs of easing

Unemployment rate (unemployed as percent of labor force)



As of Nov. 6, 2023.

Source: S&P Global Market Intelligence, BLS

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### Core PCE price inflation declining but still elevated

Percent change

1-mo (left)

12-mo (right)

8

0.6

0.4

0.2

0.0

Oct-21 Apr-22 Oct-22 Apr-23 Oct-23

As of Nov. 6, 2023.

Sources: S&P Global Market Intelligence; BEA.

### Growth

### Potential GDP growth to average 1.6% - 1.7% over the coming decade

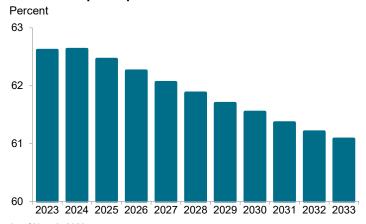
Now that the BEA has released benchmark revised estimates of capital stocks (see What's New), it is a good time to update our projection of potential GDP. It is based primarily on our projection of "full-employment" output of the private nonfarm business (PNFB) sector that, in turn, is determined by projections of capital inputs, labor inputs, and total factor productivity (TFP) in that sector. Our projection of capital inputs depends primarily on our forecast of business fixed investment. Our projection of labor inputs depends primarily on our forecasts of population and the labor force participation rate. We set TFP, a residual in growth accounting that Robert Solow famously described as the "measure of our ignorance," by assuming its growth reverts gradually to the historical average.

Since October's forecast there have been two revisions with a bearing on our calculation of potential GDP. First, as just mentioned, BEA issued new historical estimates of capital stocks consistent with the benchmark revisions of gross investment published in late September. Overall, business capitals stocks were revised lower, implying downward revisions to the recent and prospective level and growth of our index of capital services. Second, the Bureau of Labor Statistics issued revised estimates of productivity and costs that included a reclassification of hours worked from nonprofit institutions to the private nonfarm business sector. The result was an upward revision in the level of nonfarm business hours of approximately 0.5%. For the historical path of GDP, the net result of the downward revision to capital inputs and upward revision to labor inputs was a modest upward revision of 0.2% in the recent level of TFP, but with little impact on the recent growth of total factor productivity.

Prospectively, we expect slowing growth of the workingage population and a secular decline in the participation rate (chart, top), driven by the aging of the population, to limit growth in the labor force to just 0.4% annually over the coming decade (chart, middle). Given our forecast of capital spending, we project the growth of capital services to slow gradually from the recent 3% towards 2% by middecade. We estimate that TFP grew 0.6% in 2022, and assume its growth gradually rises to the historical average of 0.9% by 2027.

The bottom chart depicts our forecast of GDP growth against our updated estimate of potential growth. From 2023 through 2033, growth of potential GDP averages 1.65%. In our base forecast, growth of actual GDP drops below potential in 2024 and 2025, allowing the unemployment rate rise to 4.7% — a prerequisite for inflation to subside to the Fed's 2% objective.

#### Labor force participation rate

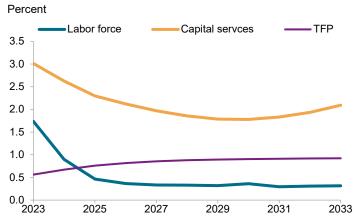


As of Nov. 6, 2023.

Source: S&P Global Market Intelligence.

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#### **Growth of inputs to potential GDP**

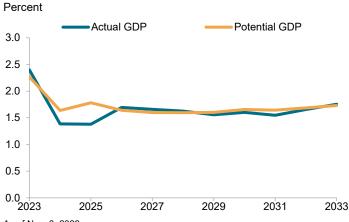


As of Nov. 6, 2023.

Source: S&P Global Market Intelligence.

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#### Growth of actual and potential GDP



As of Nov. 6, 2023.

Source: S&P Global Market Intelligence.

### Sector highlights

### Wage growth continued to fuel spending thru Sep; labor markets showed signs of easing in Oct

Consumer markets: Real PCE rose a robust 0.4% in September, and 4.0% at an annual rate in the third guarter, up from 0.8% in the second. Fueling this spending is a tight labor market and rising wages, up 5.3% from a year ago, which in our forecast continue to support consumer spending this year. The 0.4% rise in wages and salaries in September helped raise annualized growth of income to 3.5% in the third quarter. Nevertheless, growth of real disposable income slowed notably, falling 1.0% at an annual rate in the third quarter, due primarily to special factors including the rise in Medicaid disenrollments and end of COVID-era benefits. Combined with the sharp drop in transfer receipts, the resumption of interest accrual on student loans reduced the personal saving rate to 3.8% in the third quarter, down from 5.1% in the second. In the near term, wealth effects are expected to support consumer spending, at least in those households benefiting from past portfolio gains and rising home prices. While core PCE inflation fell to 2.4% in the third quarter, the threemonth annualized percent change rose to 2.5% in September, indicating that the Fed's fight against inflation is not yet finished. We expect the fourth quarter to be the start of a transition to a slower pace of growth in 2024. In our forecast, real PCE is expected to grow at a 2.4% rate in the fourth quarter, down from 4.0% in the third, as core PCE inflation rises to 3.0% to end the year.

**Labor markets:** Nonfarm payroll employment rose 150 thousand in October, while the unemployment rate rose 0.1 percentage point to 3.9%. Prior months' gains in payrolls were revised materially lower. While the labor market remains tight — an unemployment rate of 3.9% is still near historic lows — there are several emerging signs of easing. Over the last three months, the unemployment rate has been 0.3 to 0.4 percentage point above the 2023 average through July (3.5%). A sustained increase in the unemployment rate, such as this, is not noise, it's an actual easing. The increase in the unemployment rate in October was due to a sharp decline in civilian employment (348 thousand) that outpaced a smaller decline in the civilian labor force. Average hourly earnings rose only 0.2% in October, the lowest reading since February 2022. Corroborating evidence of easing in labor markets includes an ongoing downward trend in the job openings rate and a more recent, clear, and sharp upturn in weekly insured unemployment. This is all against the backdrop of what we expect to be a sharp slowing in GDP in the fourth quarter. All signs point to an emerging easing in the labor market.

**Business investment:** Following 5.2% growth last year, business fixed investment (BFI) is forecast to slow to growth of 4.2% this year and 1.4% next year. These are

each 0.2 percentage point below last month's forecast. The somewhat weaker outlook for investment spending mainly reflects higher borrowing costs than in last month's forecast; the yield on Baa-rated corporate debt is expected to average 6.71% in the fourth quarter, 14 basis points above last month's forecast. Nonfarm business sector output, moreover, is somewhat weaker in this month's forecast, suggesting somewhat less need for capital expansion to keep pace with sales. The deceleration in BFI from this year to next in part reflects slowing growth of spending on manufacturing structures, a sector that recently has benefited from federal incentives for semiconductor and electric-vehicle battery plants.

Housing and construction: Rising mortgage rates have led to bewildering housing statistics. Builder sentiment has plummeted, yet single-family permits have advanced for eight months. Existing home sales are crashing, yet house prices have risen to record highs as inventory has sunk to record lows. Meanwhile, new home sales are climbing because builders are slashing prices to reduce inventory. The recent rise in mortgage rates prompted us to downgrade the housing forecast: housing starts are expected to drop from 1.55 million in 2022 to 1.40 million in 2023 and to 1.33 million in 2024 and rebound to 1.37 million in 2025. Total home sales are projected to sink from 5.72 million in 2022 to 4.80 million in 2023 before reaching 4.86 million in 2024. Inflation-adjusted house prices are forecast to fall 1.8% in 2023 before rising 2.4% in 2024 and 1.4% in 2025. Residential investment will be a slight drag on growth over the first four quarters of the forecast, and will deduct 0.5 percentage point and 0.1 percentage point off GDP growth in 2023 and 2024, respectively.

International trade: Real imports rose at a 5.7% rate in the third guarter, while real exports grew 6.2%; real imports of autos expanded for the eighth straight quarter. The goods and services deficit shrank to 2.7% of GDP, down from 4.4% in the first quarter of 2022, and the lowest since the onset of the pandemic. On November 3, the broad dollar exchange rate index sat 3.9% above a July 14 trough. We expect further appreciation in the near term, reaching a peak in first guarter 2024. Widening longterm yields account for the dollar's appreciation. In the forecast, exports increase a solid 6.5% in the fourth guarter and 2.8% for the year. Imports are expected to grow by 6.3% in the fourth quarter but drop 1.3% for the year. Net exports subtracted 0.1 percentage point from third-quarter growth; we expect a 0.2 deduction in the fourth quarter. For 2023, net exports contribute 0.5 percentage point to growth; they subtract from growth in the next three years.

### **Key forecast assumptions**

### Fed raises policy rate to peak range of 5.5% - 5.75%; Medicaid rolls and benefits decline

Federal fiscal policy: Under the Fiscal Responsibility Act of 2023 (FRA23) the debt ceiling is suspended through 2024 but is assumed raised without incident before then. Discretionary budget authority is governed through fiscal year 2025 by statutory caps established by FRA23 and is assumed to grow at the rate of inflation after 2025. A FY24 budget is passed in time to avoid a government shutdown in mid-November. The pandemic-era expansion of the Child Tax Credit expired in January. The pandemic-era 15% increase in SNAP benefits expired in March. The 6.2 percentage point increase in the Medicaid FMAP is phased out over 2023. Personal taxes are governed by current policy, including extension beyond the scheduled expiration in 2026 of provisions in the 2017 Tax Act. Corporate taxes are governed by current law, including the Inflation Reduction Act and scheduled phase outs of provisions of the 2017 Tax Act. Forbearance on student loans ended August 31, and payments resume October 1. Scheduled Social Security and Medicare benefits are paid beyond the projected exhaustion of those trust funds.

State & local fiscal policy: After enjoying surpluses in 2021 and 2022 that were supported by COVID relief measures, state and local budgets have returned to deficit. However, unspent pandemic-era funds as well as monies authorized under the Infrastructure Investment & Jobs Act (IIJA) mitigate pressures to reduce state and local spending. IIJA spending is reflected in state and local gross investment. Pandemic-era expansion of Medicaid eligibility expired on May 11. The pandemic-era policy of continuous enrollment in Medicaid expired in April, and states are assumed to trim Medicaid roles through 2025.

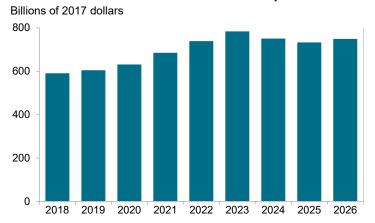
**Monetary policy:** The Fed raises its policy rate to 5.50% - 5.75% in December, temporarily overshooting the terminal range of 2.5% - 2.75%, and allows its balance sheet to decline by about one third through 2024.

**Tariffs and trade:** Tariffs enacted by the US and China since 2017 remain in effect.

**Global growth:** Growth of real, trade-weighted foreign GDP slows from 3.4% in 2022 to 2.0% in 2023, then rebounds to 2.5% by 2025. Foreign CPI inflation jumped from 2.8% in 2021 to 5.9% in 2022 but recedes to 2.4% by 2026. Foreign sovereign bond yields climb from 0.3% in 2020 to 3.0% in 2024 as central banks around much of the world tighten monetary policy, then ease to 2.6% by 2026.

**Oil prices:** The price of Brent crude drops from \$101 per barrel in 2022 to \$76 in 2025, rebounds to \$87 by 2027, then rises at roughly the rate of inflation.

### State and local medical social benefits to persons

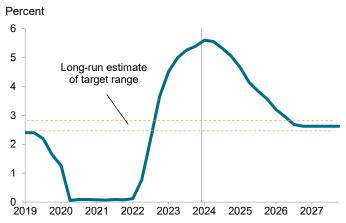


As of Nov. 6, 2023.

Sources: S&P Global Market Intelligence; Bureau of Economic Analysis.

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#### Federal funds rate

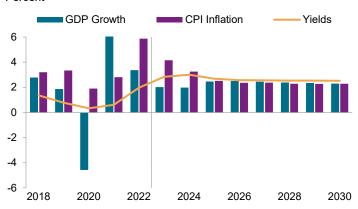


As of Nov. 6, 2023.

Sources: S&P Global Market Intelligence; Federal Reserve Board.

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### Foreign growth, inflation, term govt bond yields Percent



As of Nov. 6, 2023. Source: S&P Global Market Intelligence. © 2023 S&P Global.

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### Alternative scenarios

### Two alternative outcomes for the US economy

Our assessment of the economic risks around the baseline forecast as reflected in these alternative scenarios remains unchanged compared to last month. Relative to our updated base forecast, we continue to see risks as being tilted to the downside. Downside risks stem from the tightening of lending standards leading to a decline in consumer spending and business investment, and a worsening in the conflicts in Ukraine and in the Middle East. Posing upside risks are a muted response by financial institutions to the recent banking sector turmoil, more resilience on the part of consumers, and a quicker end to the conflicts in Ukraine and the Middle East, which would allow for a modest decline in energy prices. As a result, we assign a 55% probability to our baseline forecast, 30% to the Pessimistic, and 15% to the Optimistic scenario.

# Pessimistic Scenario: A shallow recession hits as tightening lending standards restrain spending and production (30% probability)

The pessimistic scenario is characterized by a small decline in consumer spending and a shallow recession, compared to a growth slowdown in the baseline. Underlying this narrative is the assumption that the recent turmoil in the banking sector leads financial institutions to severely tighten lending standards and curtail credit expansion. As a result, credit-dependent consumer spending and small business activity suffer greatly. Moreover, higher energy prices due to a worsening in the conflicts currently underway in Ukraine and in the Middle East weigh heavily on businesses and households.

As a result, PCE declines in the first half of 2024, versus a modest increase in the baseline. Annually, PCE rises 0.8% in 2024 and 1.2% in 2025, versus increases of 1.9% and 1.5% in the base case, respectively.

GDP remains flat in late 2023 and declines in the first half of 2024, versus an average pace of growth of 0.5% in the baseline, and remains subdued relative to the base through 2025. On an annual basis, GDP rises on average at an unimpressive 0.9% over 2024 and 2025, versus growth of 1.4% in the base case.

Slumping consumer demand and tighter credit lead businesses to scale back investment plans. Overall business fixed investment rises 4.0% over 2023, but declines 0.9% over 2024 and 1.3% over 2025.

The unemployment rate in this scenario rises from 3.7% in the third quarter of 2023 to 6.7% by mid-2025, before declining to 5.5% by the end of the forecast horizon.

The price of Brent oil rises to \$112 per barrel by the first quarter of 2024, \$30 higher than the baseline. PCE inflation is higher than the baseline early in the scenario, but subsequently falls below baseline in early 2025 and remains soft through 2027, as a result of the elevated slack in labor markets. In response, the Fed begins cutting rates in spring 2024, sooner than the baseline, reaching a range of 0.50-0.75% by late 2026.

# Optimistic Scenario: Banking sector remains resilient, funding robust growth (15% probability)

The optimistic scenario is characterized by stronger growth of consumer spending and stronger productivity relative to baseline. We assume that the recent turmoil in the banking sector is successfully managed and that fears of contagion remain contained, allowing financial institutions to continue to support the economy through solid growth of credit. Moreover, a cessation of active fighting in the Russia-Ukraine conflict and a quick resolution to the conflict in the Middle East allows for a lower path of energy prices, while firms are able to effect large productivity gains, improving corporate profitability. The impact of the IIJA is greater than in the base forecast constituting a source of modest upside risk over 2023–2027.

GDP grows above baseline in fourth quarter 2023, aided in part by the recent agreement to suspend the debt ceiling. The economy then grows below trend through 2027. GDP rises on average 2.0% over 2024 and 2025, compared to an increase of 1.4% in the baseline.

The strength of the scenario early is due to a robust reacceleration in consumer spending, thanks to a lower path of energy prices and to strong credit expansion. The price of Brent oil stays \$4 below baseline through mid-2024 before converging to baseline. Consumer spending rises 2.7% over 2024 and 2.1% over 2025, versus increases of 1.9% and 1.5% in the base forecast.

Business fixed investment remains elevated relative to the baseline thanks to strong demand faced by businesses and elevated cashflows. Business fixed investment rises on average 2.8% over 2024 and 2025, compared to 1.4% in the baseline.

The unemployment rate remains near 3.7% through mid-2024, but then rises as a result of the below-trend growth of GDP. PCE inflation exceeds the baseline through 2025, and then hovers barely above the FOMC's 2% target through the end of the forecast. The federal funds rate follows the baseline through early 2024, but then remains steadily above baseline as core inflation stays elevated.

### **US Macro Forecast Snapshot**

	Baseline (55%)	Pessimistic (30%)	Optimistic (15%)
GDP growth	Real GDP rises 2.4% in 2023. Growth continues at 1.4% in 2024 and 2025.	Real GDP rises 2.3% in 2023. Growth then slows to 0.6% in 2024 before rising to 1.1% in 2025.	Real GDP grows 2.5% in 2023 as the relative strength in consumer spending supports growth. Growth persists at 2.2% in 2024 and 1.9% in 2025.
Consumer spending	Consumption drops from 2.5% in 2022 to 2.3% in 2023. Growth continues at 1.9% in 2024 and 1.5% in 2025.	Spending rises 2.2% in 2023, 0.8% in 2024, and 1.2% in 2025.	Spending rises 2.3% in 2023, 2.7% in 2024, and 2.1% in 2025.
Business fixed investment	Increases 4.2% in 2023, 1.4% in 2024, and 1.3% in 2025.	Rises 4.0% in 2023 before falling by 0.9% in 2024 and 1.3% in 2025.	Rises 4.3% in 2023, 2.8% in 2024, and 2.7% in 2025.
Housing	Housing starts fall from 1.55 million in 2022 to 1.40 million in 2023, fall to 1.33 million in 2024, and tick up to 1.37 million in 2025.	Housing starts drop from 1.55 million in 2022 to 1.40 million in 2023 and 1.25 in 2024 before ticking up to 1.26 million in 2025.	Housing starts fall to 1.40 million in 2023, tick down further to 1.36 million in 2024, and rise back to 1.40 million in 2025.
Exports	Rise 2.8% in 2023, 3.2% in 2024, and 3.7% in 2025.	Jump 2.8% in 2023, 2.4% in 2024, and 3.7% in 2025.	Rise 2.7% in 2023, 4.2% in 2024, and 4.0% in 2025.
Fiscal policy	Student loan forbearance ended August 31; government shutdown is avoided in November; spending limited by caps through 2025.	Same fiscal assumptions as in baseline.	Same fiscal assumptions as in baseline.
Monetary policy	We expect that the upper end of the federal funds rate target to reach 5.60% by early 2024.	The federal funds rate reaches an upper limit of 5.60% in early 2024.	Similar path to baseline but with a higher long-run federal funds rate over 2023–2026.
Credit conditions	Tightened in 2022; tightening persists throughout the forecast amidst high interest rates.	Remain slightly tighter than in baseline.	Slightly looser than in baseline.
Productivity growth	Moves up from -1.9% in 2022 to 1.2% in 2023 and 2024 and to 1.7% in 2025.	Rises 1.2% in 2023, 2.5% in 2024, and 2.7% in 2025.	Rises 1.2% in 2023, before picking up to 1.6% in 2024 and 2.3% in 2025.
Consumer confidence	Gently escalates through 2023.	Remains below the baseline over the entire forecast interval.	Outperforms baseline over the entire forecast interval.
Oil prices (Dollars/ barrel)	Average price of Brent crude oil falls from \$100/barrel in 2022 to \$84 in 2023, rises to \$85 in 2024 and falls to \$76 in 2025.	Brent crude oil averages \$84 in 2023, \$105 in 2024, and \$92 in 2025.	Brent crude oil averages \$83 in 2023 and 2024, before falling to \$76 in 2025.
Stock markets	The year-end value of the S&P 500 fell 19.4% in 2022. The index grows 10.6% over 2023 and slows to 2.9% in 2024 and 2.0% in 2025.	The year-end value of the S&P 500 fell 19.4% in 2022 but rises 9.4% in 2023. Falls 1.5% in 2024 before rising 0.2% in 2025.	The year-end value of the S&P 500 fell -19.4% in 2022, but rises 12.0% in 2023, 7.0% in 2024, and 2.9% in 2025.
Inflation (PCE)	Core personal consumption (PCE) price inflation falls from 5.2% in 2022 to 4.2% in 2023, 2.8% in 2024, and 2.2% in 2025.	Core PCE price inflation slows to 4.2% in 2023, 3.1% in 2024, and 1.9% in 2025.	Core PCE price inflation falls from 5.2% in 2022 to 4.2% in 2023, 2.9% in 2024, and 2.5% in 2025.
Foreign growth	Eurozone GDP slips from 3.5% in 2022 to 0.5% in 2023, while China's growth rises from 3.0% in 2022 to 5.0% in 2023.	Global economy suffers from Russia- Ukraine conflict and tightening lending standards.	Global economy recovers more quickly than in baseline amid a faster resolution to the Russia-Ukraine conflict.
US dollar	The broad real dollar gently falls through the end of 2029 before resuming to rise.	Decreases slowly through the forecast through 2028 before resuming to rise.	The broad dollar strengthens slightly more than in the baseline.

### Alternative Scenarios of the US Economy

			Annual	rates					Annual a	verages					Q4/	Q4		
		2023.4			2024.3		2022	2023	2024	2025	2026	2027	2022	2023	2024	2025	2026	202
Pessimistic Scenario: A shallow re		hits as ti	ightening	lending	standar	ds restra	ain spend	ling and	producti	on (Prob	. = 30%)							
Composition of Real GDP, Percent																		
Gross Domestic Product	4.9	0.1	-0.5	-0.6	0.3	0.8	1.9	2.3	0.6	1.1	1.8	1.8	0.7	2.3	0.0	1.5	1.9	
Total Consumption	4.0	1.3	-0.1	-0.2	0.3	0.9	2.5	2.2	0.8	1.2	2.0	2.0	1.2	2.5	0.2	1.7	2.2	
Nonresidential Fixed Investment	-0.1	-0.5	-2.2	-1.3	-2.7	-2.3	5.2	4.0	-0.9	-1.3	0.6	1.7	5.6	3.1	-2.1	-0.7	1.5	
Residential Fixed Investment	3.9	-2.3	-5.8	-9.8	-6.2	2.0	-9.0	-11.2	-4.1	2.6	4.8	1.7	-17.4	-1.5	-5.0	6.3	2.8	
Exports	6.2	6.3	0.3	2.4	3.2	3.0	7.0	2.8	2.4	3.7	4.5	4.0	4.3	2.3	2.2	4.4	4.3	
Imports	5.7	4.9	2.2	0.8	0.6	1.2	8.6	-1.3	1.9	2.4	3.8	2.7	2.1	0.9	1.2	3.4	3.8	
Federal Government	6.2	-2.3	0.9	0.9	0.7	0.4	-2.8	3.8	0.9	0.5	0.5	-0.1	-0.1	2.5	0.7	0.6	0.3	-0.
State & Local Government	3.7	2.3	0.6	0.1	0.1	0.0	0.2	3.6	1.4	0.3	0.6	0.6	1.3	3.8	0.2	0.5	0.7	0.
Prices & Wages, Percent Change																		
Consumer Prices	3.6	3.5	3.9	4.4	3.7	2.5	8.0	4.2	3.7	2.0	2.1	1.6	7.1	3.4	3.6	1.6	2.0	
Producer Prices, Finished Goods	7.2	6.1	2.7	2.8	3.0	1.4	13.4	2.2	3.3	0.8	1.5	1.3	10.2	1.8	2.5	0.5	1.5	
Compensation per hour	3.9	3.1	4.5	4.0	3.6	3.0	3.6	4.5	4.0	2.9	2.6	2.6	2.3	5.1	3.8	2.6	2.6	2.
Other Key Measures, Percent Char																		
Productivity	4.7	0.1	2.5	2.5	2.8	3.2	-1.9	1.2	2.5	2.7	1.6	1.0	-2.0	1.9	2.8	2.3	1.4	0.
Total Industrial Production	2.5	-4.3	1.4	-5.0	-4.2	-2.8	3.4	0.1	-1.8	-1.6	0.9	1.7	1.8	-0.4	-2.7	-0.1	1.4	1.
Payroll Employment	1.6	1.2	-2.7	-2.2	-1.5	-1.4	4.3	2.3	-0.8	-0.9	0.4	0.8	3.4	1.8	-2.0	-0.3	0.6	0.
Incomes, Percent Change	0.5	0.0		4.0		0.4	0.0	F.0	4.0	4.0	4.7	4.0	4.7	4.5	4.0	4.7	4.5	
Personal Income	3.5	3.3	5.8	4.0	3.8	3.1	2.0	5.2	4.2	4.2	4.7	4.2	4.7	4.5	4.2	4.7	4.5	
After-Tax Profits (Four-qtr.% change)	39.4	-2.7	-4.2	-5.8	-8.8	-2.9	9.8	2.9	0.1	-3.5	-0.2	0.7	8.6	5.4	-5.5 Q4 va	-2.5	1.8	-0.
Other Key Measures			Lev	eis					Annual a	verages					Q4 Va	alues		
Other Key Measures Brent Crude, Spot Price (\$/bbl)	86.57	91.00	112.00	100.50	106.43	101.13	100.72	84.31	105.02	92.06	99.99	102.75	88.58	91.00	101.13	94.74	102.10	103.2
Nonfarm Inven. Chg. (Bil.2017 \$)	81.1	40.9	52.2	42.8	59.1	71.6	142.2	41.4	56.4	91.5	112.1	110.9	154.8	40.9	71.6	101.7	115.5	105.2
Light Vehicle Sales (Mil. units, saar)	15.6	15.0	14.8	15.0	15.0	15.2	13.8	15.3	15.0	15.4	15.5	15.4	14.2	15.0	15.2	15.4	15.5	15.
. ,	13.0	1.4	1.3	1.2	1.2	1.2	1.6	1.4	1.2	1.3	1.3	1.3	1.4	13.0	1.2	1.3	1.3	
Housing Starts (Mil. units, saar) Unemployment Rate (%)	3.7	3.9	5.0	5.7	6.0	6.3	3.6	3.7	5.7	6.6	6.2	5.7	3.6	3.9	6.3	6.5	6.0	1. 5.
Federal Surplus (Unified, FY, bil. \$)		-1765.2	-2305.9		-1644.5		-1419.2				-1972.8	-2020.8	-1685.6	-1765.2	-2094.0	-2255.4		
Financial Markets, NSA, Quarter Av		-1700.2	-2305.9	-340.2	-1044.5	-2094.0	-1419.2	-17 15.0	-1040.2	-1911.5	-1972.0	-2020.6	-1000.0	-1705.2	-2094.0	-2255.4	-2209.4	-2419.
Federal Funds Rate (%)	5.26	5.39	5.60	5.43	5.00	4.34	1.68	5.04	5.09	2.34	0.92	0.63	3.65	5.39	4.34	1.55	0.63	0.6
10-Year Treasury Note Yield (%)	4.15	4.68	4.43	4.12	3.87	3.55	2.95	4.02	3.99	2.99	2.46	2.28	3.83	4.68	3.55	2.71	2.35	2.2
10-1 car in casary note incla (70)	4.13	4.00	Annual		5.07	0.00	2.33	4.02	Annual a		2.40	2.20	3.00	4.00	Q4/		2.55	2.2
Optimistic Scenario: Banking sector	r remain	s resilie			t arowth	(Prob. =	15%)		,aa a	roragoo					<u> </u>	<u>~.</u>		
Composition of Real GDP, Percent			,			(	117,0											
Gross Domestic Product	4.9	2.0	1.8	1.5	1.8	1.7	1.9	2.5	2.2	1.9	1.7	1.5	0.7	2.8	1.7	1.9	1.6	1.
Total Consumption	4.0	3.4	2.6	2.6	2.0	1.7	2.5	2.3	2.7	2.1	1.8	1.5	1.2	3.0	2.2	2.1	1.5	
Nonresidential Fixed Investment	-0.1	4.6	2.7	2.2	2.6	2.0	5.2	4.3	2.8	2.7	2.3	1.8	5.6	4.4	2.4	2.9	2.0	1.
Residential Fixed Investment	3.9	-0.4	-2.5	-3.7	-0.3	3.7	-9.0	-11.1	-0.9	3.8	3.7	2.2	-17.4	-1.1	-0.7	5.4	2.2	
Exports	6.2	4.6	3.6	6.1	6.7	4.6	7.0	2.7	4.2	4.0	3.8	3.6	4.3	1.9	5.2	3.1	4.1	3.
Imports	5.7	7.7	7.1	5.3	5.1	4.8	8.6	-1.2	5.3	4.6	3.4	2.1	2.1	1.6	5.6	4.4	2.7	2.
Federal Government	6.2	-2.2	1.0	0.9	0.8	0.4	-2.8	3.8	1.0	0.5	0.4	-0.2	-0.1	2.5	0.8	0.5	0.2	
State & Local Government	3.7	3.8	0.8	-0.2	0.6	0.4	0.2	3.7	1.7	0.4	0.4	0.4	1.3	4.2	0.4	0.4	0.4	0.4
Prices & Wages, Percent Change	0	0.0	0.0	0.2	0.0	0	0.2	0	•••	0	0	0			0	0	0	0.
Consumer Prices	3.6	0.9	2.8	5.2	3.4	2.4	8.0	4.0	3.0	2.4	2.6	2.3	7.1	2.7	3.5	2.2	2.5	2.
Producer Prices, Finished Goods	7.2	0.6	1.8	4.7	3.0	1.1	13.4	1.8	2.3	1.3	2.0	2.0	10.2	0.5	2.6	1.1	2.0	
Compensation per hour	3.9	3.0	4.0	5.1	4.5	4.1	3.6	4.4	4.2	4.2	3.9	3.8	2.3	5.1	4.4	4.0	3.9	
Other Key Measures, Percent Cha																		
Productivity	4.7	0.3	0.2	0.5	2.8	3.0	-1.9	1.2	1.6	2.3	1.7	1.3	-2.0	1.9	1.7	2.1	1.5	1.
Total Industrial Production	2.5	-1.2	1.0	-0.6	0.8	1.1	3.4	0.3	0.4	1.6	1.9	1.1	1.8	0.4	0.6	2.2	1.5	
Payroll Employment	1.6	1.7	1.4	0.9	-0.4	-0.7	4.3	2.4	1.1	0.0	0.4	0.5	3.4	1.9	0.3	0.2	0.4	
Incomes, Percent Change																		
Personal Income	3.5	4.7	7.1	6.8	5.8	5.1	2.0	5.3	5.7	5.5	4.5	4.2	4.7	4.8	6.2	5.2	4.2	4.
Corporate profits w / NA & CCAdj	39.4	4.1	-2.5	-3.0	-1.5	0.6	9.8	3.4	3.6	-0.5	0.0	0.6	8.6	7.2	-1.6	-0.3	0.0	
corporate prome try try to contag			Lev			0.0	0.0	0.1	Annual a		0.0	0.0	0.0		Q4 va		0.0	
			Levi	CIO					Allilual a	verages					Q4 V	alues		
Other Key Measures									82.83	76.08	84.32	87.09	88.58	07.00			00.45	87.6
Other Key Measures  Brent Crude, Spot Price (\$/bbl)	86 57	87 00	77 00	80 00	89 67	84 67	100 72	83 31							84 67	79 nn	86 45	
Brent Crude, Spot Price (\$/bbl)	86.57	87.00 42.1	77.00 44.9	80.00	89.67	84.67 34.8	100.72	83.31 41.7						87.00 42.1	84.67 34.8	79.00 58.2	86.45 69.1	
Brent Crude, Spot Price (\$/bbl) Nonfarm Inven. Chg. (Bil.2017 \$)	81.1	42.1	44.9	26.7	23.0	34.8	142.2	41.7	32.4	48.6	67.8	65.4	154.8	42.1	34.8	58.2	69.1	64.
Brent Crude, Spot Price (\$/bbl) Nonfarm Inven. Chg. (Bil.2017 \$) Light Vehicle Sales (Mil. units, saar)	81.1 15.6	42.1 15.3	44.9 15.4	26.7 15.9	23.0 16.3	34.8 16.7	142.2 13.8	41.7 15.4	32.4 16.1	48.6 17.1	67.8 17.1	65.4 16.8	154.8 14.2	42.1 15.3	34.8 16.7	58.2 17.2	69.1 17.0	64. 16.
Brent Crude, Spot Price (\$/bbl) Nonfarm Inven. Chg. (Bil.2017 \$) Light Vehicle Sales (Mil. units, saar) Housing Starts (Mil. units, saar)	81.1 15.6 1.359	42.1 15.3 1.405	44.9 15.4 1.363	26.7 15.9 1.350	23.0 16.3 1.351	34.8 16.7 1.370	142.2 13.8 1.6	41.7 15.4 1.4	32.4 16.1 1.4	48.6 17.1 1.4	67.8 17.1 1.4	65.4 16.8 1.4	154.8 14.2 1.4	42.1 15.3 1.4	34.8 16.7 1.4	58.2 17.2 1.4	69.1 17.0 1.4	64. 16. 1.
Brent Crude, Spot Price (\$/bbl) Nonfarm Inven. Chg. (Bil.2017 \$) Light Vehicle Sales (Mil. units, saar) Housing Starts (Mil. units, saar) Unemployment Rate (%)	81.1 15.6 1.359 3.7	42.1 15.3 1.405 3.8	44.9 15.4 1.363 3.7	26.7 15.9 1.350 3.8	23.0 16.3 1.351 4.0	34.8 16.7 1.370 4.3	142.2 13.8 1.6 3.6	41.7 15.4 1.4 3.6	32.4 16.1 1.4 4.0	48.6 17.1 1.4 4.4	67.8 17.1 1.4 4.4	65.4 16.8 1.4 4.2	154.8 14.2 1.4 3.6	42.1 15.3 1.4 3.8	34.8 16.7 1.4 4.3	58.2 17.2 1.4 4.4	69.1 17.0 1.4 4.3	64. 16. 1. 4.
Brent Crude, Spot Price (\$/bbl) Nonfarm Inven. Chg. (Bil.2017 \$) Light Vehicle Sales (Mil. units, saar) Housing Starts (Mil. units, saar) Unemployment Rate (%) Federal Surplus (Unified, FY, bil. \$)	81.1 15.6 1.359 3.7 -1210.0	42.1 15.3 1.405	44.9 15.4 1.363 3.7	26.7 15.9 1.350 3.8	23.0 16.3 1.351	34.8 16.7 1.370 4.3	142.2 13.8 1.6 3.6	41.7 15.4 1.4 3.6	32.4 16.1 1.4	48.6 17.1 1.4 4.4	67.8 17.1 1.4 4.4	65.4 16.8 1.4 4.2	154.8 14.2 1.4 3.6	42.1 15.3 1.4 3.8	34.8 16.7 1.4 4.3	58.2 17.2 1.4 4.4	69.1 17.0 1.4 4.3	64. 16. 1. 4.
Brent Crude, Spot Price (\$/bbl) Nonfarm Inven. Chg. (Bil.2017 \$) Light Vehicle Sales (Mil. units, saar) Housing Starts (Mil. units, saar) Unemployment Rate (%) Federal Surplus (Unified, FY, bil. \$) Financial Markets, NSA, Quarter Av	81.1 15.6 1.359 3.7 -1210.0 erage	42.1 15.3 1.405 3.8 -1753.5	44.9 15.4 1.363 3.7 -2261.6	26.7 15.9 1.350 3.8 -460.4	23.0 16.3 1.351 4.0 -1540.7	34.8 16.7 1.370 4.3 -1974.5	142.2 13.8 1.6 3.6 -1419.2	41.7 15.4 1.4 3.6 -1712.1	32.4 16.1 1.4 4.0 -1559.3	48.6 17.1 1.4 4.4 -1770.8	67.8 17.1 1.4 4.4 -1874.0	65.4 16.8 1.4 4.2 -2012.8	154.8 14.2 1.4 3.6 -1685.6	42.1 15.3 1.4 3.8 -1753.5	34.8 16.7 1.4 4.3 -1974.5	58.2 17.2 1.4 4.4 -2119.3	69.1 17.0 1.4 4.3 -2216.3	64. 16. 1. 4. -2445.
Brent Crude, Spot Price (\$/bbl) Nonfarm Inven. Chg. (Bil.2017 \$) Light Vehicle Sales (Mil. units, saar) Housing Starts (Mil. units, saar) Unemployment Rate (%) Federal Surplus (Unified, FY, bil. \$)	81.1 15.6 1.359 3.7 -1210.0	42.1 15.3 1.405 3.8	44.9 15.4 1.363 3.7	26.7 15.9 1.350 3.8	23.0 16.3 1.351 4.0	34.8 16.7 1.370 4.3	142.2 13.8 1.6 3.6	41.7 15.4 1.4 3.6	32.4 16.1 1.4 4.0	48.6 17.1 1.4 4.4	67.8 17.1 1.4 4.4	65.4 16.8 1.4 4.2	154.8 14.2 1.4 3.6	42.1 15.3 1.4 3.8	34.8 16.7 1.4 4.3	58.2 17.2 1.4 4.4	69.1 17.0 1.4 4.3	64. 16. 1. 4. -2445.

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Monthly Economic Indicators													
	Sep. 2022	Oct. 2022	Mar. 2023	Apr. 2023	May. 2023	Jun. 2023	Jul. 2023	Aug. 2023	Sep. 2023	Oct. 2023	2020	2021	2022
Industrial Markets													
Industrial Prod. Total (2017=100.0)	103.5	103.4	102.7	103.2	102.8	102.3	103.3	103.3	103.6		95.1	99.2	102.6
Percent Change	0.3	-0.1	0.1	0.5	-0.3	-0.5	1.0	0.0	0.3		-7.2	4.4	3.4
Percent Change Year Earlier	4.5	3.1	0.2	0.3	0.1	-0.4	0.2	0.1	0.1				
Capacity Utilization, Manufacturing (%)	79.5	79.5	77.8	78.4	78.1	77.6	77.8	77.7	77.8		72.6	77.1	79.2
Unemployment Rate (%)	3.5	3.7	3.5	3.4	3.7	3.6	3.5	3.8	3.8	3.9	8.1	5.4	3.6
Payroll Employment (Mil.)	153.682	154.006	155.472	155.689	155.970	156.075	156.311	156.476	156.773	156.923	142.153	146.281	152.625
Change (Mil.)	0.350	0.324	0.217	0.217	0.281	0.105	0.236	0.165	0.297	0.150	-8.738	4.128	6.344
Leading Indicator (2016=1.000)	1.135	1.125	1.083	1.074	1.067	1.061	1.058	1.053	1.046		1.067	1.138	1.148
Percent Change	-0.5	-0.9	-1.2	-0.8	-0.7	-0.6	-0.3	-0.5	-0.7		-4.6	6.6	0.9
New Orders, Mfg. (Bil. \$)	583.7	589.1	574.9	576.4	578.6	592.1	579.4	585.4	601.5		428.9	513.9	578.2
Percent Change	0.1	0.9	0.6	0.3	0.4	2.3	-2.1	1.0	2.8		-7.5	19.8	12.5
Inv. Chg., Mfg. & Trade (Bil. \$)	2.4	5.1	-6.0	2.2	-1.1	-3.6	2.0	9.5			-51.3	268.6	284.3
Merchandise Trade Bal. (Bil. \$)	-90.6	-97.8	-82.5	-97.5	-91.6	-88.5	-90.9	-84.6			-901.5	-1071.1	-1177.4
Consumer Markets													
Disposable Income (Bil. 2017\$)	16185	16224	16730	16771	16830	16823	16784	16765	16751		15836	16130	15127
Percent Change	0.1	0.2	0.4	0.2	0.4	0.0	-0.2	-0.1	-0.1		6.2	1.9	-6.2
Personal Income (Bil. \$)	22122	22242	22758	22816	22893	22941	22994	23088	23166		19832	21295	21777
Percent Change	0.4	0.5	0.5	0.3	0.3	0.2	0.2	0.4	0.3		6.7	7.4	2.3
Personal Saving Rate (%)	3.0	3.0	5.2	5.2	5.3	4.9	4.1	4.0	3.4		16.8	11.8	3.6
Consumer Expenditures (Bil. \$)	17804	17915	18283	18364	18408	18485	18635	18715	18853		14116	15903	17357
Percent Change	0.6	0.6	-0.1	0.4	0.2	0.4	0.8	0.4	0.7		-1.9	12.7	9.1
Retail Sales (Bil. \$)	679.4	687.5	681.7	684.6	689.2	690.5	694.4	699.9	704.9		6223.7	7356.4	8071.8
Percent Change	-0.1	1.2	-0.9	0.4	0.7	0.2	0.6	0.8	0.7		0.9	18.2	9.7
Non-Auto. Retail Sales (Bil. \$)	552.1	558.1	552.0	553.9	556.2	556.8	561.1	566.0	569.7		5014.2	5874.4	6540.7
Percent Change	0.0	1.1	-0.8	0.3	0.4	0.1	0.8	0.9	0.6		1.7	17.2	11.3
New Light-Vehicle Sales (Mil.)	13.7	14.7	14.9	15.7	15.5	16.1	15.9	15.3	15.7	15.5	14.5	14.9	13.8
Housing Starts (Mil.)	1.463	1.432	1.38	1.348	1.583	1.418	1.451	1.269	1.358		1.397	1.606	1.551
New Home Sales (Mil.)	0.567	0.577	0.64	0.679	0.71	0.683	0.736	0.676	0.759		0.833	0.769	0.637
Existing Home Sales (Mil.)	4.680	4.440	4.430	4.290	4.300	4.160	4.070	4.040	3.960		5.636	6.128	5.081
Chg. Consumer Install. Credit (Bil. \$)	27.6	35.1	19.7	14.3	-0.2	13.8	11.0	-15.6	0.700		-7.3	364.1	346.1
Prices and Wages	27.10		.,,,								7.0		
CPI, All Urban Consumers	2.965	2.980	3.018	3.029	3.033	3.038	3.043	3.063	3.075		2.589	2.710	2.926
Percent Change Year Earlier	8.2	7.8	5.0	5.0	4.1	3.1	3.3	3.7	3.7		1.3	4.7	8.0
Core Cons. Price Defl. (2017=100.0)	115.7	116.1	118.3	118.6	119.0	119.2	119.4	119.6	119.9		113.5	117.4	123.3
Percent Change Year Earlier	5.5	5.3	4.8	4.8	4.7	4.3	4.3	3.8	3.7		1.3	3.5	5.0
PPI, Finished Goods	2.53708	2.55806	2.53374	2.54544	2.50389	2.51194	2.52067	2.57373	2.59978		2.030	2.211	2.508
Percent Change Year Earlier	11.6	11.2	3.1	2.6	-0.6	-2.8	-0.9	2.37373	2.5		-1.3	8.9	13.4
PPI, Industrial Commodities (NSA)	2.695	2.662	2.570	2.567	2.537	2.538	2.543	2.595	2.610		1.939	2.284	2.659
Percent Change Year Earlier	13.6	9.4	-1.7	-3.5	-7.8	-10.5	-7.3	-4.4	-3.2		-3.4	17.8	16.4
Avg. Private Hourly Earnings (\$)	27.85	27.96	28.52	28.61	28.72	28.82	28.94	29	29.09	29.19	24.69	25.91	27.56
Percent Change Year Earlier	5.9	5.7	5.2	4.9	4.9	4.7	4.7	4.5	4.5	4.4	5.0	4.9	6.4
Brent Crude, Spot Price (\$/bbl.)	89.75	93.33	78.43	84.74	75.59	74.84	80.11	86.07	93.52	90.34	41.77	70.70	100.72
Percent Change Year Earlier	20.5	20.5	-33.1	-19.2	-33.2	-38.7	-28.4	-14.5	4.2	-3.2	-35.1	69.3	42.5
Henry Hub Spot Natural Gas (\$/mmbtu)	7.88	5.69	2.31	2.16	2.15	2.18	2.55	2.58	2.66	0.2	2.03	3.91	6.42
Percent Change Year Earlier	52.7	3.2	-52.9	-67.2	-73.6	-71.7	-65.0	-70.7	-66.3		-20.8	92.3	64.2
Financial Markets, Period Average	02.7	0.2	02.7	07.2	70.0	71.7	00.0	70.7	00.0		20.0	72.0	- 01.2
Federal Funds Rate (%)	2.56	3.08	4.65	4.83	5.06	5.08	5.12	5.33	5.33	5.33	0.38	0.08	1.68
3-Month T-Bill Rate (%)	3.13	3.72	4.69	4.03	5.14	5.16	5.25	5.30	5.32	5.34	0.37	0.04	2.02
Commercial Bank Prime Rate (%)	5.73	6.25	7.82	8.00	8.23	8.25	8.29	8.50	8.50	8.50	3.54	3.25	4.85
10-Year Treasury Note Yield (%)	3.52	3.98	3.66	3.46	3.57	3.75	3.90	4.17	4.38	4.80	0.89	1.44	2.95
Conv. Mortgage Rate, FHLMC (%)	2.87	3.96	4.05	4.92	5.23	5.48	5.47	5.22	6.11	6.90	3.72	2.96	3.17
M1 Money Supply (Bil. \$)	2.87	20099	18939	18592	18560	5.48 18490	18428	18303	18171	0.90	12785	19381	20403
Percent Change	-1.0	-0.9	-1.9	-1.8				-0.7	-0.7		232.4	51.6	5.3
•	21525	21433	20876	20706	-0.2 20820	-0.4 20854	-0.3 20864	20825			17651	20526	5.3 21577
M2 Money Supply (Bil. \$) Percent Change									20755				
r ercent change	-0.6	-0.4	-1.1	-0.8	0.6	0.2	0.0	-0.2	-0.3		19.1	16.3	5.1

Source: S8P Global Market Intelligence © 2023 S8P Global

Monthly Economic Indicators													
	Sep. 2022	Oct. 2022	Mar. 2023	Apr. 2023	May. 2023	Jun. 2023	Jul. 2023	Aug. 2023	Sep. 2023	Oct. 2023	2020	2021	2022
Industrial Markets													
Industrial Prod. Total (2017=100.0)	103.5	103.4	102.7	103.2	102.8	102.3	103.3	103.3	103.6		95.1	99.2	102.6
Percent Change (Q4/Q4 for Annual Values)	0.3	-0.1	0.1	0.5	-0.3	-0.5	1.0	0.0	0.3		-4.7	3.8	1.8
Percent Change Year Earlier	4.5	3.1	0.2	0.3	0.1	-0.4	0.2	0.1	0.1				
Capacity Utilization, Manufacturing (%)	79.5	79.5	77.8	78.4	78.1	77.6	77.8	77.7	77.8		72.6	77.1	79.2
Unemployment Rate (%)	3.5	3.7	3.5	3.4	3.7	3.6	3.5	3.8	3.8	3.9	8.1	5.4	3.6
Payroll Employment (Mil.)	153.682	154.006	155.472	155.689	155.970	156.075	156.311	156.476	156.773	156.923	142.153	146.281	152.625
Change (Mil.)	0.350	0.324	0.217	0.217	0.281	0.105	0.236	0.165	0.297	0.150	-8.738	4.128	6.344
Leading Indicator (2016=1.000)	1.135	1.125	1.083	1.074	1.067	1.061	1.058	1.053	1.046		1.067	1.138	1.148
Percent Change (Q4/Q4 for Annual Values)	-0.5	-0.9	-1.2	-0.8	-0.7	-0.6	-0.3	-0.5	-0.7		-2.4	7.9	-4.6
New Orders, Mfg. (Bil. \$)	583.7	589.1	574.9	576.4	578.6	592.1	579.4	585.4	601.5		428.9	513.9	578.2
Percent Change (Q4/Q4 for Annual Values)	0.1	0.9	0.6	0.3	0.4	2.3	-2.1	1.0	2.8		0.9	19.1	7.1
Inv. Chg., Mfg. & Trade (Bil. \$)	2.4	5.1	-6.0	2.2	-1.1	-3.6	2.0	9.5			-51.3	268.6	284.3
Merchandise Trade Bal. (Bil. \$)	-90.6	-97.8	-82.5	-97.5	-91.6	-88.5	-90.9	-84.7	-86.8		-901.5	-1071.1	-1177.4
Consumer Markets													
Disposable Income (Bil. 2017\$)	16185	16224	16730	16771	16830	16823	16784	16765	16751		16607	17139	16117
Percent Change (Q4/Q4 for Annual Values)	0.1	0.2	0.4	0.2	0.4	0.0	-0.2	-0.1	-0.1		4.6	0.3	-1.5
Personal Income (Bil. \$)	22122	22242	22758	22816	22893	22941	22994	23088	23166		19629	21408	21841
Percent Change (Q4/Q4 for Annual Values)	0.4	0.5	0.5	0.3	0.3	0.2	0.2	0.4	0.3		6.1	8.0	4.7
Personal Saving Rate (%)	3.0	3.0	5.2	5.2	5.3	4.9	4.1	4.0	3.4		15.2	11.1	3.3
Consumer Expenditures (Bil. \$)	17804	17915	18283	18364	18408	18485	18635	18715	18853		14206	16043	17512
Percent Change (Q4/Q4 for Annual Values)	0.6	0.6	-0.1	0.4	0.2	0.4	0.8	0.4	0.7		0.4	13.5	7.2
Retail Sales (Bil. \$)	679.4	687.5	681.7	684.6	689.2	690.5	694.4	699.9	704.9		6223.7	7356.4	8071.7
Percent Change (Q4/Q4 for Annual Values)	-0.1	1.2	-0.9	0.4	0.7	0.2	0.6	0.8	0.7		4.9	15.9	7.0
Non-Auto. Retail Sales (Bil. \$)	552.1	558.1	552.0	553.9	556.2	556.8	561.1	566.0	569.7		5014.2	5874.4	6540.8
Percent Change (Q4/Q4 for Annual Values)	0.0	1.1	-0.8	0.3	0.4	0.1	0.8	0.9	0.6		4.6	17.0	8.1
New Light-Vehicle Sales (Mil.)	13.7	14.7	14.9	15.7	15.5	16.1	15.9	15.3	15.7	15.5	14.5	14.9	13.8
Housing Starts (Mil.)	1.463	1.432	1.38	1.348	1.583	1.418	1.451	1.269	1.358		1.397	1.606	1.551
New Home Sales (Mil.)	0.567	0.577	0.64	0.679	0.71	0.683	0.736	0.676	0.759		0.833	0.769	0.637
Existing Home Sales (Mil.)	4.680	4.440	4.430	4.290	4.300	4.160	4.070	4.040	3.960		5.636	6.128	5.081
Chg. Consumer Install. Credit (Bil. \$)	27.6	35.1	19.7	13.8	-0.7	12.9	11.2	-15.8	9.1		-7.3	363.7	345.4
Prices and Wages													
CPI, All Urban Consumers	2.965	2.980	3.018	3.029	3.033	3.038	3.043	3.063	3.075		2.589	2.710	2.926
Percent Change Year Earlier (Q4/Q4 for Annual Values)	8.2	7.8	5.0	5.0	4.1	3.1	3.3	3.7	3.7		1.2	6.8	7.1
Core Cons. Price Defl. (2012=100.0)	115.7	116.1	118.3	118.6	119.0	119.2	119.4	119.6	119.9		104.9	108.7	114.4
Percent Change Year Earlier (Q4/Q4 for Annual Values)	5.5	5.3	4.8	4.8	4.7	4.3	4.3	3.8	3.7		1.4	4.9	5.1
PPI, Finished Goods	2.53708	2.55806	2.53374	2.54544	2.50389	2.51194	2.52067	2.57373	2.59978		2.030	2.211	2.508
Percent Change Year Earlier (Q4/Q4 for Annual Values)	11.6	11.2	3.1	2.6	-0.6	-2.8	-0.9	2.1	2.5		-1.1	13.1	10.2
PPI, Industrial Commodities (NSA)	2.695	2.662	2.570	2.567	2.537	2.538	2.543	2.595	2.610		1.939	2.284	2.659
Percent Change Year Earlier (Q4/Q4 for Annual Values)	13.6	9.4	-1.7	-3.5	-7.8	-10.5	-7.3	-4.4	-3.2		-0.6	23.4	7.3
Avg. Private Hourly Earnings (\$)	27.85	27.96	28.52	28.61	28.72	28.82	28.94	29	29.09	29.19	24.69	25.91	27.56
Percent Change Year Earlier (Q4/Q4 for Annual Values)	5.9	5.7	5.2	4.9	4.9	4.7	4.7	4.5	4.5	4.4	4.9	6.4	5.6
Brent Crude, Spot Price (\$/bbl.)	89.75	93.33	78.43	84.74	75.59	74.84	80.11	86.07	93.52	90.34	41.77	70.70	100.72
Percent Change Year Earlier (Q4/Q4 for Annual Values)	20.5	20.5	-33.1	-19.2	-33.2	-38.7	-28.4	-14.5	4.2	-3.2	-30.1	79.9	11.2
Henry Hub Spot Natural Gas (\$/mmbtu)	7.88	5.69	2.31	2.16	2.15	2.18	2.55	2.58	2.66		2.03	3.91	6.42
Percent Change Year Earlier (Q4/Q4 for Annual Values)	52.7	3.2	-52.9	-67.2	-73.6	-71.7	-65.0	-70.7	-66.3		5.1	89.0	16.4
Financial Markets, Period Average													
Federal Funds Rate (%)	2.56	3.08	4.65	4.83	5.06	5.08	5.12	5.33	5.33	5.33	0.38	0.08	1.68
3-Month T-Bill Rate (%)	3.13	3.72	4.69	4.92	5.14	5.16	5.25	5.30	5.32	5.34	0.37	0.04	2.02
Commercial Bank Prime Rate (%)	5.73	6.25	7.82	8.00	8.23	8.25	8.29	8.50	8.50	8.50	3.54	3.25	4.85
10-Year Treasury Note Yield (%)	3.52	3.98	3.66	3.46	3.57	3.75	3.90	4.17	4.38	4.80	0.89	1.44	2.95
	2.87	3.06	4.05	4.92	5.23	5.48	5.47	5.22	6.11	6.90	3.94	3.12	2.95
Conv. Mortgage Rate. FHLMC (%)		0.00		2	0.20	00	٠ ,	0.22	· · · ·	0.75	01	J	0
Conv. Mortgage Rate, FHLMC (%) M1 Money Supply (Bil. \$)		20099	18939	18592	18560	18490	18428	18303	18171		12785	19381	20403
M1 Money Supply (Bil. \$)	20281	20099 -0.9	18939 -1.9	18592 -1.8	18560 -0.2	18490 -0.4	18428 -0.3	18303 -0.7	18171 -0.7		12785 343.5	19381 15.1	20403
		20099 -0.9 21433	18939 -1.9 20876	18592 -1.8 20706	18560 -0.2 20820	18490 -0.4 20854	18428 -0.3 20864	18303 -0.7 20825	18171 -0.7 20755		12785 343.5 17651	19381 15.1 20526	20403 -1.5 21577

Source: IHS Markit © 2023 SRP Global

Summary of the US Economy	V												
Cummary of the Co Loonon,	2022:4	2023:1	2023:2	2023:3	2023:4	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Composition of Real GDP, Percent Change, Annu	ıal Rate												
Gross Domestic Product	2.6	2.2	2.1	4.9	1.1	0.9	0.1	1.1	1.3	1.5	1.6	1.7	1.7
Final Sales of Domestic Product	0.9	4.6	2.1	3.5	1.9	0.9	0.4	1.0	1.1	1.4	1.5	1.6	1.6
Gross Domestic Income	-3.0	0.5	0.7	4.9	1.4	1.1	0.5	1.5	1.7	1.9	1.9	1.9	1.9
Avg. of GDP and GDI	-0.3	1.4	1.3	4.9	1.3	1.0	0.3	1.3	1.5	1.7	1.7	1.8	1.8
Total Consumption	1.2	3.8	8.0	4.0	2.4	1.8	1.0	1.3	1.3	1.5	1.7	1.8	1.7
Durables	-1.0	14.0	-0.3	7.6	2.3	2.1	0.7	3.5	3.4	3.3	3.9	4.4	4.3
Nondurables	0.5	0.5	0.9	3.3	1.9	1.5	0.5	0.3	0.7	1.0	0.8	0.7	0.7
Services	1.8	3.1	1.0	3.6	2.6	1.9	1.2	1.2	1.2	1.4	1.6	1.7	1.7
Nonresidential Fixed Investment	1.7	5.7	7.4	-0.1	2.1	1.7	0.0	0.7	1.1	1.5	1.6	1.8	1.6
Equipment	-5.0	-4.1	7.7	-3.8	0.7	2.9	0.4	1.2	2.0	2.4	2.6	2.8	2.5
Information Processing Equipment	-19.1	-0.9	-6.1	-5.4	4.4	1.3	2.5	3.7	4.4	4.2	4.4	5.3	5.2
Industrial Equipment	3.4	3.9	-5.1	-3.4	0.7	-3.7	-3.0	-2.3	-1.8	0.0	0.3	2.8	2.6
Transportation equipment	17.5	-12.5	66.0	-1.4	-6.8	12.7	7.8	4.4	4.9	3.0	5.7	4.8	1.7
Aircraft	129.1	-44.9	100.8	23.8	9.2	-8.4	1.4	-0.6	-2.2	2.1	0.0	8.2	5.7
Other Equipment	-6.0	-8.5	0.6	-4.3	3.0	2.7	-5.9	-2.0	-0.8	1.4	-1.0	-2.5	-0.5
Intellectual Property Products	6.1	3.8	2.7	2.6	3.4	2.0	0.8	1.7	1.6	1.7	1.5	1.4	1.3
Structures	6.5	30.3	16.1	1.6	2.3	-1.0	-2.2	-2.2	-1.4	-0.4	0.3	0.6	0.7
Commercial & Health Care	2.0	-0.6	3.8	3.1	-9.3	3.5	-7.8	-7.3	-2.8	5.2	5.8	10.0	3.5
Manufacturing	17.3	190.4	86.5	18.8	8.6	-3.4	-9.5	-12.0	-14.6	-14.6	-13.3	-12.5	-11.6
Power & Communication	-3.4	25.5	-3.3	-4.0	2.2	-2.5	-3.4	-2.9	-2.7	-6.3	-3.5	-8.0	-6.9
Mining & Petroleum	6.1	13.2	-14.7	-27.4	-5.7	-0.8	37.0	45.5	46.0	17.5	15.5	16.0	26.5
Other	15.5	4.8	12.6	3.4	21.4	-3.9	-1.5	-4.7	-6.9	2.8	1.8	-0.6	-1.0
Residential Fixed Investment	-24.9	-5.3	-2.2	3.9	-1.3	-3.9	-4.8	-1.3	3.3	5.5	5.8	4.7	5.5
Exports	-3.5	6.8	-9.3	6.2	6.5	1.9	3.6	4.2	3.6	3.8	3.2	4.1	3.9
Imports	-4.3	1.3	-7.6	5.7	6.2	5.7	4.1	3.1	3.7	4.0	3.9	4.1	4.0
Federal Government	9.8	5.2	1.1	6.2	-2.3	1.0	1.0	8.0	0.4	0.4	0.4	0.6	0.6
State & Local Government	2.8	4.6	4.7	3.7	2.4	0.9	0.4	0.4	0.3	0.4	0.4	0.4	0.4
Billions of Dollars													
Real GDP	21990.0	22112.3	22225.4	22491.6	22553.2	22604.0	22608.5	22669.1	22740.6	22826.7	22918.1	23016.0	23112.7
Nominal GDP	26408.4	26813.6	27063.0	27623.5	27901.3	28127.8	28332.8	28587.9	28842.5	29099.9	29372.2	29654.6	29931.1
Prices & Wages, Percent Change, Annual Rate	0.0	0.0	17	0.5	0.0	0.4	0.0	0.5	0.0	0.1	0.0	0.1	0.1
GDP Deflator	3.9	3.9	1.7	3.5	2.9	2.4	2.9	2.5	2.3	2.1	2.2	2.1	2.1
Consumer Prices	4.2	3.8	2.7	3.6	2.8	1.9	2.8	3.3	2.0	0.8	1.7	3.0	2.4
Producer Prices, Finished Goods	3.6	0.6	-6.0	7.2	4.9	1.1	1.7	2.6	0.9	-0.9	0.4	2.2	2.1
Employment Cost Index - Total Comp.	4.5	4.7	4.1	4.1	4.1	4.0	3.8	3.5	3.2	2.9	3.1	3.3	3.4
Other Key Measures	00.50	01.07	70.00	06.57	00.65	00.00	04.00	00.67	04.67	74.67	70.00	77.67	70.00
Brent Crude, Spot Price (\$/bbl)	88.58	81.27	78.39	86.57	88.65	82.33	84.00	89.67	84.67	74.67	73.00	77.67	79.00
Productivity (%ch., saar)	1.6	-0.8	3.6	4.7	0.4	0.1	0.2	1.7	1.8	1.9	1.9	1.8	1.7
Total Industrial Production (%ch., saar)	-2.5	-0.3	0.7	2.5 77.8	-3.0	2.0	-2.5	-1.0	0.0	0.8	0.9	1.3	1.4
Factory Operating Rate	78.5	78.2	78.0		76.8	77.3	76.7	76.4	76.3	76.3	76.3	76.3	76.3
Nonfarm Inven. Chg. (Bil. 2017 \$)	154.8	28.8	14.8	81.1	41.4	40.1	18.2	20.5	29.3	38.7	46.6	54.1	60.3
Consumer Sentiment Index	58.8	64.6	62.3	69.6	73.1	75.6 15.20	78.6 15.40	81.3	83.2	85.6 16.20	87.3	89.1	90.7
Light Vehicle Sales (Mil. units, saar)	14.17	14.97	15.75	15.63	15.18	15.29	15.48	15.78	16.15	16.28	16.44	16.53	16.57
Housing Starts (Mil. units, saar) Exist. House Sales (Total, Mil. saar)	1.405 4.197	1.385 4.327	1.450 4.250	1.359 4.023	1.393 3.839	1.342	1.319	1.324 4.265	1.335 4.379	1.353 4.488	1.368 4.522	1.373	1.385
•	3.6	4.327 3.5	4.250 3.5	3.7		3.851	4.200	4.205	4.379	4.488	4.522	4.582	4.812
Unemployment Rate (%) Payroll Employment (%ch., saar)	3.6 2.5	3.5 2.5	3.5 1.7		3.9	4.0 0.4	4.2 0.0		4.5 -0.1	4.6 0.0	4.7 0.1	4.7 0.2	4.7 0.3
Federal Surplus (Unified, nsa, bil. \$)	-421.4	-679.3	-291.9	1.6 -302.5	1.4 -407.0	-484.7	-195.5	-0.1 -394.6	-0.1 -464.2	-548.3	-253.6	-436.3	-481.0
Current Account Balance (Bil. \$)		-679.3 -857.9	-291.9 -848.4	-302.5 -881.2	-407.0 -887.3	-484.7 -923.0	-195.5 -937.8	-394.6 -959.7	-464.2 -971.2	-548.3 -955.9	-253.6 -953.9	-436.3 -962.6	-481.0 -973.4
ouncill Account Dalance (DII. 3)				-001.2	-00/.3	-923.0	-93/.0	-509./	-9/1.2	-900.9	-500.9	-502.0	-5/3.4
Einanoial Markete NCA Quarter Average	-864.6	-037.9	7.040										
Financial Markets, NSA, Quarter Average					E 20	E 60	E E4	E 22	E OE	1 66	4.14	2.02	2 57
Federal Funds Rate (%)	3.65	4.52	4.99	5.26	5.39	5.60 5.62	5.56	5.32	5.05	4.66	4.14	3.83	3.57
Federal Funds Rate (%) 3-Month Treasury Bill Rate (%)	3.65 4.04	4.52 4.63	4.99 5.07	5.26 5.29	5.47	5.62	5.44	5.11	4.79	4.37	3.86	3.54	3.28
Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%)	3.65 4.04 3.83	4.52 4.63 3.65	4.99 5.07 3.59	5.26 5.29 4.15	5.47 4.73	5.62 4.64	5.44 4.43	5.11 4.22	4.79 4.01	4.37 3.84	3.86 3.69	3.54 3.56	3.28 3.44
Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%)	3.65 4.04 3.83 6.63	4.52 4.63 3.65 6.36	4.99 5.07 3.59 6.49	5.26 5.29 4.15 7.04	5.47 4.73 7.64	5.62 4.64 7.54	5.44 4.43 7.22	5.11 4.22 6.83	4.79 4.01 6.46	4.37 3.84 6.12	3.86 3.69 5.82	3.54 3.56 5.60	3.28 3.44 5.42
Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index	3.65 4.04 3.83 6.63 3852	4.52 4.63 3.65 6.36 4003	4.99 5.07 3.59 6.49 4204	5.26 5.29 4.15 7.04 4458	5.47 4.73 7.64 4294	5.62 4.64 7.54 4195	5.44 4.43 7.22 4188	5.11 4.22 6.83 4273	4.79 4.01 6.46 4342	4.37 3.84 6.12 4401	3.86 3.69 5.82 4443	3.54 3.56 5.60 4460	3.28 3.44 5.42 4462
Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Four-Quarter % change)	3.65 4.04 3.83 6.63 3852 -16.3	4.52 4.63 3.65 6.36 4003 -10.4	4.99 5.07 3.59 6.49 4204 2.3	5.26 5.29 4.15 7.04 4458 12.2	5.47 4.73 7.64 4294 11.5	5.62 4.64 7.54 4195 4.8	5.44 4.43 7.22 4188 -0.4	5.11 4.22 6.83 4273 -4.2	4.79 4.01 6.46 4342 1.1	4.37 3.84 6.12 4401 4.9	3.86 3.69 5.82 4443 6.1	3.54 3.56 5.60 4460 4.4	3.28 3.44 5.42 4462 2.8
Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Four-Quarter % change) Exchange Rate, Broad Index of Partners	3.65 4.04 3.83 6.63 3852 -16.3 1.106	4.52 4.63 3.65 6.36 4003 -10.4 1.066	4.99 5.07 3.59 6.49 4204 2.3 1.060	5.26 5.29 4.15 7.04 4458 12.2 1.067	5.47 4.73 7.64 4294 11.5 1.099	5.62 4.64 7.54 4195 4.8 1.103	5.44 4.43 7.22 4188 -0.4 1.098	5.11 4.22 6.83 4273 -4.2 1.089	4.79 4.01 6.46 4342 1.1 1.082	4.37 3.84 6.12 4401 4.9 1.080	3.86 3.69 5.82 4443 6.1 1.075	3.54 3.56 5.60 4460 4.4 1.066	3.28 3.44 5.42 4462 2.8 1.057
Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Four-Quarter % change) Exchange Rate, Broad Index of Partners (% change, annual rate)	3.65 4.04 3.83 6.63 3852 -16.3	4.52 4.63 3.65 6.36 4003 -10.4	4.99 5.07 3.59 6.49 4204 2.3	5.26 5.29 4.15 7.04 4458 12.2	5.47 4.73 7.64 4294 11.5	5.62 4.64 7.54 4195 4.8	5.44 4.43 7.22 4188 -0.4	5.11 4.22 6.83 4273 -4.2	4.79 4.01 6.46 4342 1.1	4.37 3.84 6.12 4401 4.9	3.86 3.69 5.82 4443 6.1	3.54 3.56 5.60 4460 4.4	3.28 3.44 5.42 4462 2.8
Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Four-Quarter % change) Exchange Rate, Broad Index of Partners (% change, annual rate) Incomes	3.65 4.04 3.83 6.63 3852 -16.3 1.106 4.4	4.52 4.63 3.65 6.36 4003 -10.4 1.066 -13.7	4.99 5.07 3.59 6.49 4204 2.3 1.060 -2.1	5.26 5.29 4.15 7.04 4458 12.2 1.067 2.4	5.47 4.73 7.64 4294 11.5 1.099	5.62 4.64 7.54 4195 4.8 1.103	5.44 4.43 7.22 4188 -0.4 1.098 -1.8	5.11 4.22 6.83 4273 -4.2 1.089 -3.2	4.79 4.01 6.46 4342 1.1 1.082 -2.8	4.37 3.84 6.12 4401 4.9 1.080 -0.5	3.86 3.69 5.82 4443 6.1 1.075 -1.8	3.54 3.56 5.60 4460 4.4 1.066 -3.5	3.28 3.44 5.42 4462 2.8 1.057 -3.5
Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Four-Quarter % change) Exchange Rate, Broad Index of Partners (% change, annual rate) Incomes Personal Income (% ch., saar)	3.65 4.04 3.83 6.63 3852 -16.3 1.106 4.4	4.52 4.63 3.65 6.36 4003 -10.4 1.066 -13.7	4.99 5.07 3.59 6.49 4204 2.3 1.060 -2.1	5.26 5.29 4.15 7.04 4458 12.2 1.067 2.4	5.47 4.73 7.64 4294 11.5 1.099 12.6	5.62 4.64 7.54 4195 4.8 1.103 1.7	5.44 4.43 7.22 4188 -0.4 1.098 -1.8	5.11 4.22 6.83 4273 -4.2 1.089 -3.2	4.79 4.01 6.46 4342 1.1 1.082 -2.8	4.37 3.84 6.12 4401 4.9 1.080 -0.5	3.86 3.69 5.82 4443 6.1 1.075 -1.8	3.54 3.56 5.60 4460 4.4 1.066 -3.5	3.28 3.44 5.42 4462 2.8 1.057 -3.5
Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Four-Quarter % change) Exchange Rate, Broad Index of Partners (% change, annual rate) Incomes Personal Income (% ch., saar) Real Disposable Income (%ch., saar)	3.65 4.04 3.83 6.63 3852 -16.3 1.106 4.4	4.52 4.63 3.65 6.36 4003 -10.4 1.066 -13.7	4.99 5.07 3.59 6.49 4204 2.3 1.060 -2.1	5.26 5.29 4.15 7.04 4458 12.2 1.067 2.4	5.47 4.73 7.64 4294 11.5 1.099 12.6	5.62 4.64 7.54 4195 4.8 1.103 1.7	5.44 4.43 7.22 4188 -0.4 1.098 -1.8	5.11 4.22 6.83 4273 -4.2 1.089 -3.2	4.79 4.01 6.46 4342 1.1 1.082 -2.8	4.37 3.84 6.12 4401 4.9 1.080 -0.5	3.86 3.69 5.82 4443 6.1 1.075 -1.8	3.54 3.56 5.60 4460 4.4 1.066 -3.5	3.28 3.44 5.42 4462 2.8 1.057 -3.5
Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Four-Quarter % change) Exchange Rate, Broad Index of Partners (% change, annual rate) Incomes Personal Income (% ch., saar) Real Disposable Income (%ch., saar) Saving Rate (%)	3.65 4.04 3.83 6.63 3852 -16.3 1.106 4.4	4.52 4.63 3.65 6.36 4003 -10.4 1.066 -13.7	4.99 5.07 3.59 6.49 4204 2.3 1.060 -2.1	5.26 5.29 4.15 7.04 4458 12.2 1.067 2.4 3.5 -1.0 3.8	5.47 4.73 7.64 4294 11.5 1.099 12.6	5.62 4.64 7.54 4195 4.8 1.103 1.7	5.44 4.43 7.22 4188 -0.4 1.098 -1.8	5.11 4.22 6.83 4273 -4.2 1.089 -3.2 5.2 2.8 4.5	4.79 4.01 6.46 4342 1.1 1.082 -2.8 4.9 3.0 4.9	4.37 3.84 6.12 4401 4.9 1.080 -0.5	3.86 3.69 5.82 4443 6.1 1.075 -1.8 4.8 3.1 5.9	3.54 3.56 5.60 4460 4.4 1.066 -3.5	3.28 3.44 5.42 4462 2.8 1.057 -3.5 4.5 2.1 6.0
Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Four-Quarter % change) Exchange Rate, Broad Index of Partners (% change, annual rate) Incomes Personal Income (% ch., saar) Real Disposable Income (%ch., saar)	3.65 4.04 3.83 6.63 3852 -16.3 1.106 4.4	4.52 4.63 3.65 6.36 4003 -10.4 1.066 -13.7	4.99 5.07 3.59 6.49 4204 2.3 1.060 -2.1	5.26 5.29 4.15 7.04 4458 12.2 1.067 2.4	5.47 4.73 7.64 4294 11.5 1.099 12.6	5.62 4.64 7.54 4195 4.8 1.103 1.7	5.44 4.43 7.22 4188 -0.4 1.098 -1.8	5.11 4.22 6.83 4273 -4.2 1.089 -3.2	4.79 4.01 6.46 4342 1.1 1.082 -2.8	4.37 3.84 6.12 4401 4.9 1.080 -0.5	3.86 3.69 5.82 4443 6.1 1.075 -1.8	3.54 3.56 5.60 4460 4.4 1.066 -3.5	3.28 3.44 5.42 4462 2.8 1.057 -3.5

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Composition   Personal Process   Personal Process   Personal Process   Personal Pe	Summary of the US Econom	V												
Personal Formation   1,6   2,5   2,0   2,5   2,6   2,5   2	Summary of the US Econom	_	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Pure Submeriche Product   Pure Submeriche Product   Pure Submeriche Product   Pure Submeriche Product   Pure Submeriche Purc Submeriche Purc Submeriche Purc Submeriche Pure Submeriche Purc Submeriche Purc Submeriche Pure Submeriche Pure Submeriche Purc Submeriche Pure Submeriche Pure Submeriche Pure	Composition of Real GDP, Percent Change													
Description   10	Gross Domestic Product	1.8	2.5	3.0	2.5	-2.2	5.8	1.9	2.4	1.4	1.4	1.7	1.7	1.6
1														
Performance   15														
Descentable   1.5	•													
Semiconses   18	·													
Personant														
Nonemarken   18														
Figure   1948   1948   1949														
Informatise programmer   19,8   1,4   1,0   1														
March   Mar	• •	5.8	8.4	8.0	3.0	0.7	9.6	7.6	-5.5			4.9	4.1	3.8
Member   M	Industrial Equipment	-0.3	5.5	4.8	1.8	-8.9	6.6	3.6	-0.9	-2.5	-0.3	2.5	2.4	2.5
Minimilate-hall properly products   58   58   38   48   78   43   54   54   54   54   54   54   54	Transportation equipment	-5.1	-0.9	6.1	-4.3	-27.8	2.6	1.1	16.9	7.0	4.5	2.3	2.6	3.4
Inference	Aircraft	-10.6	36.1	-2.7	-49.5	42.7	-11.6	7.6	37.0	6.2	1.5	2.9	4.1	4.7
Seminary   1	Other Equipment	-5.6	1.1	3.5	4.1	-7.3	4.3	6.2	-3.8	-0.7	-1.0	0.3	2.6	2.0
Manufach Health Cale	Intellectual Property Products	9.5	6.9	8.9	7.8	4.5	10.4	9.1	4.5	2.1	1.5	1.3	1.0	1.0
Membershering   4.1   1.7   1.7   1.7   1.8   1.5   1.9   1.8   1.5   1.9   1.8   1.5   1.9   1.8   1.5   1.8   1.5   1.8   1.5   1.8   1.5   1.8														
Power Communication														
Minor Petroleum   43,1   37,0   27,0   43,1   43,0   43	•													
Professional Pr														
Peside life derivement   7.1   4.3   4.7   7.0   4.0   7.2   4.0   7.2   4.0   7.0   4.0   4.1   4.3	•													
Emports   0.5														
Imports   1.5   4.7   4.0   1.2   4.9   1.4   5.8   6.1   3.8   3.4   2.4   2.4   2.5   1.5														
Performement   1														
Same Applies of Monte   1914   1915   1915   2019	· ·													
Performance														
Real Corp   1914   1912   1913   1912   2013   20														
Profess		19141.7	19612.1	20193.9	20692.1	20234.1	21407.7	21822.0	22345.6	22655.5	22968.4	23358.1	23745.9	24131.6
COP Defiator   1.0   1.8   2.3   2.7   2.3   2.7   2.2   2.1   2.1   2.2   2.2   2.2   2.2   2.3	Nominal GDP	18804.9		20656.5	21521.4		23594.0	25744.1			29514.5		31790.8	33009.7
Consumer Prices         1.3         2.1         2.4         1.8         1.3         4.7         8.0         4.1         2.7         2.0         3.0         3.1         3.0         3.1	Prices & Wages, Percent Change													
Producer Prices, Finished Goods   -1,0   -3,2   -3,1   -3,2	GDP Deflator	1.0	1.8	2.3	1.7	1.3	4.6	7.1	3.7	2.7	2.2	2.1	2.1	2.2
Employment Cost Index-Total Component         2.1         2.5         2.9         2.7         2.6         3.6         3.1         3.9         3.3         3.1	Consumer Prices	1.3	2.1	2.4	1.8	1.3	4.7	8.0	4.1	2.7	2.0	2.5	2.2	2.2
Productive (Sport Price (Sport)	Producer Prices, Finished Goods	-1.0	3.2	3.1	0.8	-1.3	8.9	13.4	2.1	2.4	0.8	2.0	1.9	1.9
Productivity (Such)	Employment Cost Index - Total Comp.	2.1	2.5	2.9	2.7	2.6	3.6	5.1	4.5	3.9	3.2	3.3	3.1	3.2
Productivity (\$ch)         0.5         1.5         1.4         2.2         1.5         1.6         1.9         1.2         1.2         1.5         1.3         1.2         1.5         1.6         1.9         1.2         1.2         1.5         1.3	Other Key Measures													
Total Industrial Production (%ch.)   C.2   C.3   C.2   C.3				70.96		41.77	70.70					84.32	87.09	88.73
Factory Operating Rate No. 1	* * *													
Non-farm inven. Chg. (Bil. 2017 \$)   38.6   38.4   61.6   86.3   48.5   74.5   54.5														
Consumer Sentiment Index         91.8         96.8         98.4         96.0         81.5         77.6         59.0         67.4         77.7         88.2         91.5         91.4         91.5         16.13         16.13         16.13         16.13         16.28         16.13         16.20														
Light Vehicle Sales (Mil. units)         17.48         17.55         17.22         16.96         14.47         14.95         13.56         15.68         15.67         16.58         16.58         16.38         13.38         13.80         13.38         13.80         13.83         13.80         13.83         13.80         13.83         13.80         13.80         13.80         13.80         13.80         13.80         13.80         13.80         13.80         13.80         13.80         13.80         13.80         13.80         13.80         14.80														
Housing Starts (Mil. units)         1.177         1.205         1.247         1.292         1.397         1.506         1.391         1.330         1.390         1.390         1.380         1.390         1.390         1.380         1.380         1.390         1.390         1.380         1.380         1.390         1.390         1.380         1.380         1.390         1.390         1.380         1.380         1.390         1.390         1.380         1.380         1.380         1.390         1.380         5.336         5.381         4.170         4.174         4.601         5.072         5.308         2.580         3.60         3.60         4.3         4.7         4.60         4.50         5.308         8.1         5.08         3.9         3.7         8.1         5.08         3.9         4.10         3.70         3.02         2.580         4.10         2.580         4.00         9.01         4.00         9.01         1.70         1.70         1.70         1.70         1.70         1.70         1.70         1.70         1.70         1.70         1.70         1.70         1.70         1.70         1.70         1.70         1.70         2.10         3.02         2.580         4.00         9.00         4.														
Exist Flouse Sales (Total, Mil. units)   5.437   5.527   5.334   5.325   5.365   6.128   5.081   4.110   4.174   4.601   5.072   5.308   5.345   1.000   1.0	, ,													
Unemployment Rate (%)         4.9         4.4         3.9         3.7         8.1         5.4         3.6         3.6         4.3         4.7         4.0         0.0         4.0         4.0         0.0         0.0         4.0         0.0	, ,													
Payroll Employment (%ch.)         1.8         1.6         1.6         1.3         -5.8         2.9         4.3         2.3         0.7         0.0         0.4         0.5         1.799.9         1.777.8           Eederal Surplus (Unified, FY, bil. §)         -381.6         -680.9         -873.0         -1022.0         -3348.2         -2580.4         -141.9         -1680.7         -947.9         -961.0         -980.4         -990.0         -917.8           Federal Surplus (Unified, FY, bil. §)         -396.2         -367.0         -439.8         -541.0         -581.6         -768.0         -349.0         -947.0         -961.0         -980.4         -990.0         -917.8           Financial Markets, NSA, Quarter														
Federal Surplus (Unified, FY, bil. \$)   -581.6   -680.9   -873.0   -1022.0   -3348.2   -2580.4   -1419.2   -1680.7   -1680.7   -1690.9   -1772.5   -1799.9   -1772.5   -1792.5														
Propertical Markets, NSA, Quarter Average   Propertical Markets,	, , , , ,													
Federal Funds Rate (%)         0.40         1.00         1.83         2.16         0.38         0.08         1.68         5.04         5.38         4.05         2.87         2.63         2.63           3-Month Treasury Bill Rate (%)         0.32         0.93         1.94         2.06         0.37         0.04         2.02         5.11         5.24         3.76         2.61         2.37         2.37           10-Year Treasury Note Yield (%)         1.84         2.33         2.91         2.14         0.89         1.44         2.95         4.03         4.32         3.28         3.21         3.23           30-Year Fixed Mortgage Rate (%)         3.76         4.09         4.64         4.08         3.18         3.03         5.38         6.88         7.01         5.74         4.96         4.90           S&P 500 Stock Index         2092         2448         2745         2912         3219         4267         4101         4240         4249         4441         4477         4450         453           Exchange Rate, Broad Index of Partners         1.03         1.00         1.93         1.02         1.03         1.02         1.03         1.07         1.03         1.07         1.03         1.07		-396.2	-367.6	-439.8	-441.8	-597.1	-831.4	-971.6	-868.7	-947.9	-961.4	-980.4	-959.0	-912.1
3-Month Treasury Bill Rate (%)         0.32         0.93         1.94         2.06         0.37         0.04         2.02         5.11         5.24         3.76         2.61         2.37         2.37           10-Year Treasury Note Yield (%)         1.84         2.33         2.91         2.14         0.89         1.44         2.95         4.03         4.32         3.63         3.28         3.21         3.20           30-Year Fixed Mortgage Rate (%)         3.76         4.09         4.64         4.08         3.18         3.03         5.38         6.88         7.01         5.74         5.14         4.96         4.90           S&P 500 Stock Index         2092         2448         2745         2912         3219         4267         4101         4240         4249         4441         4477         4450         450           (Percent change)         1.5         17.0         12.1         6.1         10.5         32.6         -3.9         3.4         0.2         4.5         0.8         -0.6         1.2           Exchange Rate, Broad Index of Partners         1.003         1.009         1.02         1.03         1.02         1.03         1.03         1.03         1.03         1.03         1.03	Financial Markets, NSA, Quarter Average													
10-Year Treasury Note Yield (%) 1.84 2.33 2.91 2.14 0.89 1.44 2.95 4.03 4.32 3.63 3.28 3.21 3.20 30-Year Fixed Mortgage Rate (%) 3.76 4.09 4.64 4.08 3.18 3.03 5.38 6.88 7.01 5.74 5.14 4.96 4.90 4.90 5.8P 500 Stock Index 2092 2.448 2.745 2.912 3.219 4.267 4.101 4.240 4.249 4.441 4.477 4.450 4.503 (Percent change) 1.5 17.0 12.1 6.1 10.5 32.6 -3.9 3.4 0.2 4.5 0.8 -0.6 1.2 Exchange Rate, Broad Index of Partners 1.003 1.000 0.993 1.026 1.033 1.00 1.005 1.00	Federal Funds Rate (%)	0.40	1.00	1.83	2.16	0.38	0.08	1.68	5.04	5.38	4.05	2.87	2.63	2.63
30-Year Fixed Mortgage Rate (%)         3.76         4.09         4.64         4.08         3.18         3.03         5.38         6.88         7.01         5.74         5.14         4.96         4.90           S&P 500 Stock Index         2092         2448         2745         2912         3219         4267         4101         4240         4249         4441         4477         4450         450           (Percent change)         1.5         17.0         12.1         6.1         10.5         32.6         -3.9         3.4         0.2         4.5         0.8         -0.6         1.2           Exchange Rate, Broad Index of Partners         1.003         1.000         0.993         1.026         1.043         1.009         1.073         1.093         1.070         1.012         0.998           (% change, annual rate)         4.6         -0.3         -0.7         3.3         1.7         -3.9         6.7         0.3         1.9         -2.2         -3.0         -2.4         -1.4           Intermediate Manage Annual rate)         2.7         4.9         5.2         4.7         6.9         9.1         2.0         5.2         4.9         5.1         4.5         4.3         4.2     <	3-Month Treasury Bill Rate (%)	0.32	0.93	1.94	2.06	0.37	0.04	2.02	5.11	5.24	3.76	2.61	2.37	2.37
S&P 500 Stock Index         2092         2448         2745         2912         3219         4267         4101         4240         4249         4441         4477         4450         450           (Percent change)         1.5         17.0         12.1         6.1         10.5         32.6         -3.9         3.4         0.2         4.5         0.8         -0.6         1.2           Exchange Rate, Broad Index of Partners         1.003         1.000         0.993         1.026         1.043         1.002         1.069         1.073         1.073         1.037         1.012         0.998           (% change, annual rate)         4.6         -0.3         -0.7         3.3         1.7         -3.9         6.7         0.3         1.99         -2.2         -3.0         -2.4         -1.4           Income           Personal Income (% ch.)         2.7         4.9         5.2         4.7         6.9         9.1         2.0         5.2         4.9         5.1         4.5         4.3         4.2           Real Disposable Income (% ch.)         1.9         3.1         3.6         3.1         6.4         3.2         -6.0         4.0         2.4         3.1         2.3	10-Year Treasury Note Yield (%)	1.84	2.33	2.91	2.14	0.89	1.44	2.95	4.03	4.32	3.63	3.28	3.21	3.20
(Percent change)         1.5         17.0         12.1         6.1         10.5         32.6         -3.9         3.4         0.2         4.5         0.8         -0.6         1.2           Exchange Rate, Broad Index of Partners         1.003         1.000         0.993         1.026         1.043         1.002         1.069         1.073         1.073         1.037         1.012         0.998           (% change, annual rate)         4.6         -0.3         -0.7         3.3         1.7         -3.9         6.7         0.3         1.9         -2.2         -3.0         -2.4         -1.4           Incomes           Personal Income (% ch.)         2.7         4.9         5.2         4.7         6.9         9.1         2.0         5.2         4.9         5.1         4.5         4.3         4.2           Real Disposable Income (% ch.)         1.9         3.1         3.6         3.1         6.4         3.2         -6.0         4.0         2.4         3.1         4.5         4.3         4.2           Real Disposable Income (% ch.)         5.4         5.8         6.4         7.4         15.3         11.3         3.3         4.3         4.4         5.9 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>3.03</td><td></td><td></td><td></td><td></td><td></td><td>4.96</td><td>4.90</td></t<>							3.03						4.96	4.90
Exchange Rate, Broad Index of Partners         1.003         1.000         0.993         1.026         1.043         1.002         1.069         1.073         1.070         1.037         1.012         0.993           (% change, annual rate)         4.6         -0.3         -0.7         3.3         1.7         -3.9         6.7         0.3         1.93         1.070         1.037         1.012         0.998           Incomes           Personal Income (% ch.)         2.7         4.9         5.2         4.7         6.9         9.1         2.0         5.2         4.9         5.1         4.5         4.3         4.2           Real Disposable Income (% ch.)         1.9         3.1         3.6         3.1         6.4         3.2         -6.0         4.0         2.4         3.1         2.3         4.2           Saving Rate (%)         5.4         5.8         6.4         7.4         15.3         11.3         3.3         4.3         4.4         5.9         6.3         6.7         7.0           After-Tax Profits (Billions of \$)         1864         1998         2020         2078         2187         2845         2981         3048         3171         3118         3177 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>														
(% change, annual rate)         4.6         -0.3         -0.7         3.3         1.7         -3.9         6.7         0.3         1.9         -2.2         -3.0         -2.4         -1.4 <td></td>														
Incomes           Personal Income (% ch.)         2.7         4.9         5.2         4.7         6.9         9.1         2.0         5.2         4.9         5.1         4.5         4.3         4.2           Real Disposable Income (%ch.)         1.9         3.1         3.6         3.1         6.4         3.2         -6.0         4.0         2.4         3.1         2.3         2.2         2.1           Saving Rate (%)         5.4         5.8         6.4         7.4         15.3         11.3         3.3         4.3         4.4         5.9         6.3         6.7         7.0           After-Tax Profits (Billions of \$)         1864         1998         2020         2078         2187         2845         2981         3048         3171         3118         3177         3254         3289           (Percent change)         1.2         7.2         1.1         2.8         5.3         30.0         4.8         2.3         4.0         -1.7         1.9         2.4         1.1														
Personal Income (% ch.)         2.7         4.9         5.2         4.7         6.9         9.1         2.0         5.2         4.9         5.1         4.5         4.3         4.2           Real Disposable Income (%ch.)         1.9         3.1         3.6         3.1         6.4         3.2         -6.0         4.0         2.4         3.1         2.3         2.2         2.1           Saving Rate (%)         5.4         5.8         6.4         7.4         15.3         11.3         3.3         4.3         4.4         5.9         6.3         6.7         7.0           After-Tax Profits (Billions of \$)         1864         1998         2020         2078         2187         2845         2981         3048         3171         3118         3177         3254         3289           (Percent change)         1.2         7.2         1.1         2.8         5.3         30.0         4.8         2.3         4.0         -1.7         1.9         2.4         1.1		4.6	-0.3	-0.7	3.3	1.7	-3.9	6.7	0.3	1.9	-2.2	-3.0	-2.4	-1.4
Real Disposable Income (%ch.)         1.9         3.1         3.6         3.1         6.4         3.2         -6.0         4.0         2.4         3.1         2.3         2.2         2.1           Saving Rate (%)         5.4         5.8         6.4         7.4         15.3         11.3         3.3         4.3         4.4         5.9         6.3         6.7         7.0           After-Tax Profits (Billions of \$)         1864         1998         2020         2078         2187         2845         2981         3048         3171         3118         3177         3254         3289           (Percent change)         1.2         7.2         1.1         2.8         5.3         30.0         4.8         2.3         4.0         -1.7         1.9         2.4         1.1														
Saving Rate (%)         5.4         5.8         6.4         7.4         15.3         11.3         3.3         4.3         4.4         5.9         6.3         6.7         7.0           After-Tax Profits (Billions of \$)         1864         1998         2020         2078         2187         2845         2981         3048         3171         3118         3177         3254         3289           (Percent change)         1.2         7.2         1.1         2.8         5.3         30.0         4.8         2.3         4.0         -1.7         1.9         2.4         1.1	, ,													
After-Tax Profits (Billions of \$) 1864 1998 2020 2078 2187 2845 2981 3048 3171 3118 3177 3254 3289 (Percent change) 1.2 7.2 1.1 2.8 5.3 30.0 4.8 2.3 4.0 -1.7 1.9 2.4 1.1														
(Percent change) 1.2 7.2 1.1 2.8 5.3 30.0 4.8 2.3 4.0 -1.7 1.9 2.4 1.1														
, , ,	, ,													
	Source: IHS Markit	1.2	1.2	1.1	2.0	J.3	30.0	4.0	2.3	4.0	-1.7	1.9		

Summary of the US Economy													
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Composition of Real GDP, Percent Change (Q4/Q4)													
Gross Domestic Product	2.2	3.0	2.1	3.2	-1.1	5.4	0.7	2.6	8.0	1.6	1.7	1.7	1.6
Final Sales of Domestic Product	2.4	3.1	1.9	3.5	-1.3	4.7	1.0	3.0	0.9	1.5	1.7	1.7	1.6
Gross Domestic Income	1.3	3.0	2.8	2.6	0.2	4.4	0.0	1.9	1.2	1.9	1.7	1.7	1.6
Avg. of GDP and GDI	1.7	3.0	2.5	2.9	-0.5	4.9	0.3	2.2	1.0	1.8	1.7	1.7	1.6
Total Consumption	2.5	3.1	2.0	2.6	-0.8	7.2	1.2	2.7	1.3	1.7	1.8	1.8	1.7
Durables	6.5	8.6	2.8	5.5	15.3	5.8	0.1	5.8	2.4	4.0	4.4	4.0	4.3
Nondurables	2.3	3.8	1.8	2.9	5.4	7.0	-1.0	1.6	0.7	0.8	0.7	0.8	0.8
Services	1.9	2.0	2.0	2.0	-5.1	7.6	2.1	2.6	1.4	1.6	1.7	1.7	1.6
Nonresidential Fixed Investment	3.3 -0.9	5.6	5.6	3.1	-3.7	4.9	5.6	3.8	0.9	1.6	1.7	1.8	1.8 2.9
Equipment	-0.9 5.1	7.5 10.1	3.3 4.5	-2.1	-3.7 7.7	1.4 7.9	5.3 -0.8	0.0 -2.1	1.6	2.6 4.8	2.8	3.1 3.9	3.9
Information Processing Equipment	-0.1	7.3	4.3	1.4 -2.6	-4.2	7.9	0.0	-2.1 -1.0	3.0 -2.7	4.6 1.4	4.6 2.3	2.8	2.2
Industrial Equipment	-0.1 -5.6	6.0	0.8	-2.0 -7.9	-20.5	-16.9	30.1	7.5	-2.7 7.4	3.8	2.3	2.8	3.8
Transportation equipment Aircraft	17.3	27.8	-17.0	-36.3	45.7	-47.5	110.1	10.6	-2.5	3.9	1.6	5.5	3.9
Other Equipment	-4.6	5.3	3.5	0.3	-1.5	0.6	4.1	-2.4	-2.5 -1.5	-0.6	1.6	2.7	1.4
Intellectual Property Products	9.0	7.2	9.9	7.3	3.4	11.6	8.3	3.1	1.5	1.5	1.0	1.0	1.4
Structures	3.7	-0.4	3.5			-0.9	0.8	12.0		0.3	0.9		
Commercial & Health Care	20.0	-0.4 -2.5	3.5 -1.5	6.4 8.5	-14.9 -3.0	-0.9 -5.6	-5.9	-0.9	-1.7 -3.7	6.1	2.2	1.1 1.0	1.1 5.4
	-6.8	-11.7		3.3	-9.4	9.0			-10.0		-8.5	-2.5	-1.2
Manufacturing Power & Communication	-6.8 10.1	-11.7	1.0 2.9	28.7	-9.4 -13.6	9.0 -8.7	16.1 -12.5	62.6 4.5	-10.0 -2.9	-13.0 -6.2	-8.5 -3.1	-2.5 6.0	6.6
Mining & Petroleum	-28.7	-18.6 46.8	2.9	-10.7	-13.6 -40.2	-8.7 42.1	-12.5 16.0	4.5 -9.8	30.4	-0.2 18.8	-3.1 14.7	0.1	-6.8
Other	-28.7 11.2	46.8 2.5	-1.2	1.7	-40.2 -18.4	-10.1	7.5	-9.8 10.3	-4.3	0.8	0.9	1.7	-6.8 0.1
Residential Fixed Investment	4.5	2.5 5.1	-1.2 -4.1	2.2	15.9	0.4	7.5 -17.4	-1.3	-4.3 -1.7	0.8 5.4	2.3	2.2	2.3
	1.4	6.1	0.3	0.8	-9.7	6.7	4.3	2.3	3.3	3.4	4.1	3.7	3.3
Exports	2.2	5.8	3.0	-1.9	0.1	11.1	4.3 2.1	1.2	3.3 4.2	4.0	2.9	2.1	3.3 2.2
Imports Federal Government	0.2	1.4	3.5	3.9	4.5	0.6	-0.1	2.5	0.8	0.5	0.2	-0.3	-0.4
State & Local Government	2.2	0.8	0.9	5.2	-0.9	-0.6	1.3	3.8	0.5	0.3	0.2	0.4	0.4
	2.2	0.0	0.9	J.Z	-0.9	-0.0	1.3	3.0	0.5	0.4	0.4	0.4	
Real GDP	10141.7	10(10.1	20193.9	200021	20224.1	21407.7	01000.0	22245.6	22455	22060.4	00050.1	22745.0	24131.6
	19141.7 18804.9	19612.1 19612.1	20193.9	20692.1 21521.4	20234.1 21322.9	23594.0	21822.0 25744.1	22345.6 27350.4	22655.5 28472.8	22968.4 29514.5	23358.1 30636.7	23745.9 31790.8	33009.7
Prices & Wages, Percent Change (Q4/Q4)	10004.9	19012.1	20030.3	21321.4	21322.9	23394.0	23/44.1	2/330.4	20472.0	29314.3	30030.7	31/90.0	33009.7
GDP Deflator	1.4	1.9	2.2	1.5	1.7	6.1	6.4	3.0	2.5	2.1	2.0	2.1	2.2
Consumer Prices	1.4	2.1	2.2	2.0	1.7	6.8	7.1	3.2	2.5	1.9	2.5	2.1	2.2
Producer Prices, Finished Goods	1.0	3.6	2.3	1.0	-1.1	13.1	10.2	1.6	1.6	0.9	2.0	1.9	1.9
Employment Cost Index - Total Comp.	2.2	2.6	3.0	2.7	2.6	4.4	5.1	4.2	3.6	3.2	3.2	3.1	3.2
Other Key Measures	2.2	2.0	3.0	2.7	2.0	4.4	J. I	4.2	3.0	3.2	3.2	3.1	J.Z
	44.24	54.83	70.96	64.34	41.77	70.70	100.72	83.72	85.17	76.08	84.32	87.09	88.73
Brent Crude, Spot Price (\$/bbl)  Productivity (%ch.)	1.4	1.6	0.6	3.5	5.0	0.7	-2.0	1.9	0.9	1.8	1.5	1.4	1.4
Total Industrial Production (%ch.)	-2.2	1.3	3.2	-0.7	-7.2	4.4	3.4	0.2	-0.3	0.3	1.3	1.4	1.4
* *	75.4	76.3	78.3	77.1	72.6	77.1	79.2	77.7	76.7	76.3	76.3	76.2	76.1
Factory Operating Rate	38.6	38.4	61.6	86.3	-18.5	14.5	142.2	41.5	27.0	76.3 49.9	67.5	67.7	65.1
Nonfarm Inven. Chg. (Bil. 2017 \$)													
Consumer Sentiment Index	91.8	96.8	98.4	96.0 16.06	81.5	77.6	59.0 12.75	67.4	79.7 15.67	88.2 16.45	91.5	91.4	90.1
Light Vehicle Sales (Mil. units) Housing Starts (Mil. units)	17.48 1.177	17.15 1.205	17.22 1.247	16.96 1.292	14.47 1.397	14.95 1.606	13.75 1.551	15.38 1.397	15.67 1.330	16.45 1.370	16.58 1.390	16.38 1.383	16.13 1.380
Exist. House Sales (Total, Mil. units)	5.437	5.527	5.334	5.325	5.636	6.128	5.081	4.110	4.174	4.601	5.072	5.308	5.337
Unemployment Rate (%)	0.40/				0.000	0.120	J.U01	4.110	4.1/4	4.001	J.U/ Z		0.00/
onemproyment nate (10)	/ O						2.6	2 6	13	17			11
Payroll Employment (%ch.)	4.9 1.7	4.4	3.9	3.7	8.1	5.4	3.6 3.4	3.6 1.8	4.3 0.1	4.7 0.2	4.6	4.5	4.4 0.5
Payroll Employment (%ch.)  Federal Surplus (Unified, EV hil. \$)	1.7	4.4 1.5	3.9 1.6	3.7 1.3	8.1 -6.0	5.4 4.6	3.4	1.8	0.1	0.2	4.6 0.5	4.5 0.5	0.5
Federal Surplus (Unified, FY, bil. \$)	1.7 -581.6	4.4 1.5 -680.9	3.9 1.6 -873.0	3.7 1.3 -1022.0	8.1 -6.0 -3348.2	5.4 4.6 -2580.4	3.4 -1419.2	1.8 -1680.7	0.1 -1539.0	0.2 -1719.2	4.6 0.5 -1752.5	4.5 0.5 -1799.9	0.5 -1777.8
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$)	1.7	4.4 1.5	3.9 1.6	3.7 1.3	8.1 -6.0	5.4 4.6	3.4	1.8	0.1	0.2	4.6 0.5	4.5 0.5	0.5
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$) Financial Markets, NSA, Quarter Average	1.7 -581.6 -396.2	4.4 1.5 -680.9 -367.6	3.9 1.6 -873.0 -439.8	3.7 1.3 -1022.0 -441.8	8.1 -6.0 -3348.2 -597.1	5.4 4.6 -2580.4 -831.4	3.4 -1419.2 -971.6	1.8 -1680.7 -868.7	0.1 -1539.0 -947.9	0.2 -1719.2 -961.4	4.6 0.5 -1752.5 -980.4	4.5 0.5 -1799.9 -959.0	0.5 -1777.8 -912.1
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$) Financial Markets, NSA, Quarter Average Federal Funds Rate (%)	1.7 -581.6 -396.2	4.4 1.5 -680.9 -367.6	3.9 1.6 -873.0 -439.8	3.7 1.3 -1022.0 -441.8	8.1 -6.0 -3348.2 -597.1	5.4 4.6 -2580.4 -831.4	3.4 -1419.2 -971.6	1.8 -1680.7 -868.7	0.1 -1539.0 -947.9	0.2 -1719.2 -961.4 4.05	4.6 0.5 -1752.5 -980.4	4.5 0.5 -1799.9 -959.0	0.5 -1777.8 -912.1 2.63
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$) Financial Markets, NSA, Quarter Average Federal Funds Rate (%) 3-Month Treasury Bill Rate (%)	1.7 -581.6 -396.2 0.40 0.32	4.4 1.5 -680.9 -367.6 1.00 0.93	3.9 1.6 -873.0 -439.8 1.83 1.94	3.7 1.3 -1022.0 -441.8 2.16 2.06	8.1 -6.0 -3348.2 -597.1 0.38 0.37	5.4 4.6 -2580.4 -831.4 0.08 0.04	3.4 -1419.2 -971.6 1.68 2.02	1.8 -1680.7 -868.7 5.04 5.11	0.1 -1539.0 -947.9 5.38 5.24	0.2 -1719.2 -961.4 4.05 3.76	4.6 0.5 -1752.5 -980.4 2.87 2.61	4.5 0.5 -1799.9 -959.0 2.63 2.37	0.5 -1777.8 -912.1 2.63 2.37
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$) Financial Markets, NSA, Quarter Average Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%)	1.7 -581.6 -396.2 0.40 0.32 1.84	4.4 1.5 -680.9 -367.6 1.00 0.93 2.33	3.9 1.6 -873.0 -439.8 1.83 1.94 2.91	3.7 1.3 -1022.0 -441.8 2.16 2.06 2.14	8.1 -6.0 -3348.2 -597.1 0.38 0.37 0.89	5.4 4.6 -2580.4 -831.4 0.08 0.04 1.44	3.4 -1419.2 -971.6 1.68 2.02 2.95	1.8 -1680.7 -868.7 5.04 5.11 4.03	0.1 -1539.0 -947.9 5.38 5.24 4.32	0.2 -1719.2 -961.4 4.05 3.76 3.63	4.6 0.5 -1752.5 -980.4 2.87 2.61 3.28	4.5 0.5 -1799.9 -959.0 2.63 2.37 3.21	0.5 -1777.8 -912.1 2.63 2.37 3.20
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$) Financial Markets, NSA, Quarter Average Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%)	1.7 -581.6 -396.2 0.40 0.32 1.84 3.76	4.4 1.5 -680.9 -367.6 1.00 0.93 2.33 4.09	3.9 1.6 -873.0 -439.8 1.83 1.94 2.91 4.64	3.7 1.3 -1022.0 -441.8 2.16 2.06 2.14 4.08	8.1 -6.0 -3348.2 -597.1 0.38 0.37 0.89 3.18	5.4 4.6 -2580.4 -831.4 0.08 0.04 1.44 3.03	3.4 -1419.2 -971.6 1.68 2.02 2.95 5.38	1.8 -1680.7 -868.7 5.04 5.11 4.03 6.88	0.1 -1539.0 -947.9 5.38 5.24 4.32 7.01	0.2 -1719.2 -961.4 4.05 3.76 3.63 5.74	4.6 0.5 -1752.5 -980.4 2.87 2.61 3.28 5.14	4.5 0.5 -1799.9 -959.0 2.63 2.37 3.21 4.96	0.5 -1777.8 -912.1 2.63 2.37 3.20 4.90
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$) Financial Markets, NSA, Quarter Average Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index	1.7 -581.6 -396.2 0.40 0.32 1.84 3.76 2092	4.4 1.5 -680.9 -367.6 1.00 0.93 2.33 4.09 2448	3.9 1.6 -873.0 -439.8 1.83 1.94 2.91 4.64 2745	3.7 1.3 -1022.0 -441.8 2.16 2.06 2.14 4.08 2912	8.1 -6.0 -3348.2 -597.1 0.38 0.37 0.89 3.18 3219	5.4 4.6 -2580.4 -831.4 0.08 0.04 1.44 3.03 4267	3.4 -1419.2 -971.6 1.68 2.02 2.95 5.38 4101	1.8 -1680.7 -868.7 5.04 5.11 4.03 6.88 4240	0.1 -1539.0 -947.9 5.38 5.24 4.32 7.01 4249	0.2 -1719.2 -961.4 4.05 3.76 3.63 5.74 4441	4.6 0.5 -1752.5 -980.4 2.87 2.61 3.28 5.14 4477	4.5 0.5 -1799.9 -959.0 2.63 2.37 3.21 4.96 4450	0.5 -1777.8 -912.1 2.63 2.37 3.20 4.90 4503
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$) Financial Markets, NSA, Quarter Average Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Percent change, Q4/Q4)	1.7 -581.6 -396.2 0.40 0.32 1.84 3.76 2092 6.4	4.4 1.5 -680.9 -367.6 1.00 0.93 2.33 4.09 2448 19.2	3.9 1.6 -873.0 -439.8 1.83 1.94 2.91 4.64 2745 3.3	3.7 1.3 -1022.0 -441.8 2.16 2.06 2.14 4.08 2912 14.7	8.1 -6.0 -3348.2 -597.1 0.38 0.37 0.89 3.18 3219 15.2	5.4 4.6 -2580.4 -831.4 0.08 0.04 1.44 3.03 4267 29.4	3.4 -1419.2 -971.6 1.68 2.02 2.95 5.38 4101 -16.3	1.8 -1680.7 -868.7 5.04 5.11 4.03 6.88 4240 11.5	0.1 -1539.0 -947.9 5.38 5.24 4.32 7.01 4249 1.1	0.2 -1719.2 -961.4 4.05 3.76 3.63 5.74 4441 2.8	4.6 0.5 -1752.5 -980.4 2.87 2.61 3.28 5.14 4477 0.3	4.5 0.5 -1799.9 -959.0 2.63 2.37 3.21 4.96 4450 -0.4	0.5 -1777.8 -912.1 2.63 2.37 3.20 4.90 4503 1.7
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$)  Financial Markets, NSA, Quarter Average  Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Percent change, Q4/Q4) Exchange Rate, Broad Index of Partners	1.7 -581.6 -396.2 0.40 0.32 1.84 3.76 2092 6.4 1.003	4.4 1.5 -680.9 -367.6 1.00 0.93 2.33 4.09 2448 19.2 1.000	3.9 1.6 -873.0 -439.8 1.83 1.94 2.91 4.64 2745 3.3 0.993	3.7 1.3 -1022.0 -441.8 2.16 2.06 2.14 4.08 2912 14.7 1.026	8.1 -6.0 -3348.2 -597.1 0.38 0.37 0.89 3.18 3219 15.2 1.043	5.4 4.6 -2580.4 -831.4 0.08 0.04 1.44 3.03 4267 29.4 1.002	3.4 -1419.2 -971.6 1.68 2.02 2.95 5.38 4101 -16.3 1.069	1.8 -1680.7 -868.7 5.04 5.11 4.03 6.88 4240 11.5 1.073	0.1 -1539.0 -947.9 5.38 5.24 4.32 7.01 4249 1.1 1.093	0.2 -1719.2 -961.4 4.05 3.76 3.63 5.74 4441 2.8 1.070	4.6 0.5 -1752.5 -980.4 2.87 2.61 3.28 5.14 4477 0.3 1.037	4.5 0.5 -1799.9 -959.0 2.63 2.37 3.21 4.96 4450 -0.4 1.012	0.5 -1777.8 -912.1 2.63 2.37 3.20 4.90 4503 1.7 0.998
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$) Financial Markets, NSA, Quarter Average Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Percent change, Q4/Q4) Exchange Rate, Broad Index of Partners (% change, Q4/Q4)	1.7 -581.6 -396.2 0.40 0.32 1.84 3.76 2092 6.4	4.4 1.5 -680.9 -367.6 1.00 0.93 2.33 4.09 2448 19.2	3.9 1.6 -873.0 -439.8 1.83 1.94 2.91 4.64 2745 3.3	3.7 1.3 -1022.0 -441.8 2.16 2.06 2.14 4.08 2912 14.7	8.1 -6.0 -3348.2 -597.1 0.38 0.37 0.89 3.18 3219 15.2	5.4 4.6 -2580.4 -831.4 0.08 0.04 1.44 3.03 4267 29.4	3.4 -1419.2 -971.6 1.68 2.02 2.95 5.38 4101 -16.3	1.8 -1680.7 -868.7 5.04 5.11 4.03 6.88 4240 11.5	0.1 -1539.0 -947.9 5.38 5.24 4.32 7.01 4249 1.1	0.2 -1719.2 -961.4 4.05 3.76 3.63 5.74 4441 2.8	4.6 0.5 -1752.5 -980.4 2.87 2.61 3.28 5.14 4477 0.3	4.5 0.5 -1799.9 -959.0 2.63 2.37 3.21 4.96 4450 -0.4	0.5 -1777.8 -912.1 2.63 2.37 3.20 4.90 4503 1.7
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$) Financial Markets, NSA, Quarter Average Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Percent change, Q4/Q4) Exchange Rate, Broad Index of Partners (% change, Q4/Q4) Incomes	1.7 -581.6 -396.2 0.40 0.32 1.84 3.76 2092 6.4 1.003 3.9	4.4 1.5 -680.9 -367.6 1.00 0.93 2.33 4.09 2448 19.2 1.000 -4.2	3.9 1.6 -873.0 -439.8 1.83 1.94 2.91 4.64 2745 3.3 0.993 4.3	3.7 1.3 -1022.0 -441.8 2.16 2.06 2.14 4.08 2912 14.7 1.026 0.6	8.1 -6.0 -3348.2 -597.1 0.38 0.37 0.89 3.18 3219 15.2 1.043 -2.1	5.4 4.6 -2580.4 -831.4 0.08 0.04 1.44 3.03 4267 29.4 1.002 0.9	3.4 -1419.2 -971.6 1.68 2.02 2.95 5.38 4101 -16.3 1.069 8.6	1.8 -1680.7 -868.7 -5.04 -5.11 -4.03 -6.88 -4240 -11.5 -0.77 -0.7	0.1 -1539.0 -947.9 5.38 5.24 4.32 7.01 4249 1.1 1.093 -1.5	0.2 -1719.2 -961.4 4.05 3.76 3.63 5.74 4441 2.8 1.070 -2.3	4.6 0.5 -1752.5 -980.4 2.87 2.61 3.28 5.14 4477 0.3 1.037 -2.9	4.5 0.5 -1799.9 -959.0 2.63 2.37 3.21 4.96 4450 -0.4 1.012 -2.0	0.5 -1777.8 -912.1 2.63 2.37 3.20 4.90 4503 1.7 0.998 -1.1
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$)  Financial Markets, NSA, Quarter Average  Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Percent change, Q4/Q4) Exchange Rate, Broad Index of Partners (% change, Q4/Q4)  Incomes  Personal Income (%ch., Q4/Q4)	1.7 -581.6 -396.2 0.40 0.32 1.84 3.76 2092 6.4 1.003 3.9	4.4 1.5 -680.9 -367.6 1.00 0.93 2.33 4.09 2448 19.2 1.000 -4.2	3.9 1.6 -873.0 -439.8 1.83 1.94 2.91 4.64 2745 3.3 0.993 4.3	3.7 1.3 -1022.0 -441.8 2.16 2.06 2.14 4.08 2912 14.7 1.026 0.6	8.1 -6.0 -3348.2 -597.1 0.38 0.37 0.89 3.18 3219 15.2 1.043 -2.1	5.4 4.6 -2580.4 -831.4 -831.4 -831.4 -831.4 -831.4 -931.4	3.4 -1419.2 -971.6 1.68 2.02 2.95 5.38 4101 -16.3 1.069 8.6	1.8 -1680.7 -868.7 -5.04 5.11 4.03 6.88 4240 11.5 1.073 -0.7	0.1 -1539.0 -947.9 5.38 5.24 4.32 7.01 4249 1.1 1.093 -1.5	0.2 -1719.2 -961.4 4.05 3.76 3.63 5.74 4441 2.8 1.070 -2.3	4.6 0.5 -1752.5 -980.4 2.87 2.61 3.28 5.14 4477 0.3 1.037 -2.9	4.5 0.5 -1799.9 -959.0 2.63 2.37 3.21 4.96 4450 -0.4 1.012 -2.0	0.5 -1777.8 -912.1 2.63 2.37 3.20 4.90 4503 1.7 0.998 -1.1
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$)  Financial Markets, NSA, Quarter Average  Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Percent change, Q4/Q4) Exchange Rate, Broad Index of Partners (% change, Q4/Q4)  Incomes  Personal Income (%ch., Q4/Q4) Real Disposable Income (%ch., Q4/Q4)	1.7 -581.6 -396.2 0.40 0.32 1.84 3.76 2092 6.4 1.003 3.9	4.4 1.5 -680.9 -367.6 1.00 0.93 2.33 4.09 2448 19.2 1.000 -4.2	3.9 1.6 -873.0 -439.8 1.83 1.94 2.91 4.64 2745 3.3 0.993 4.3	3.7 1.3 -1022.0 -441.8 2.16 2.06 2.14 4.08 2912 14.7 1.026 0.6	8.1 -6.0 -3348.2 -597.1 0.38 0.37 0.89 3.18 3219 15.2 1.043 -2.1	5.4 4.6 -2580.4 -831.4 0.08 0.04 1.44 3.03 4267 29.4 1.002 0.9	3.4 -1419.2 -971.6 1.68 2.02 2.95 5.38 4101 -16.3 1.069 8.6	1.8 -1680.7 -868.7 5.04 5.11 4.03 6.88 4240 11.5 1.073 -0.7	0.1 -1539.0 -947.9 5.38 5.24 4.32 7.01 4249 1.1 1.093 -1.5	0.2 -1719.2 -961.4 4.05 3.76 3.63 5.74 4441 2.8 1.070 -2.3	4.6 0.5 -1752.5 -980.4 2.87 2.61 3.28 5.14 4477 0.3 1.037 -2.9	4.5 0.5 -1799.9 -959.0 2.63 2.37 3.21 4.96 4450 -0.4 1.012 -2.0	0.5 -1777.8 -912.1 2.63 2.37 3.20 4.90 4503 1.7 0.998 -1.1
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$)  Financial Markets, NSA, Quarter Average  Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Percent change, Q4/Q4) Exchange Rate, Broad Index of Partners (% change, Q4/Q4)  Incomes  Personal Income (%ch., Q4/Q4) Real Disposable Income (%ch., Q4/Q4) Saving Rate (%)	1.7 -581.6 -396.2 0.40 0.32 1.84 3.76 2092 6.4 1.003 3.9 3.1 1.8 5.4	4.4 1.5 -680.9 -367.6 1.00 0.93 2.33 4.09 2448 19.2 1.000 -4.2 5.5 3.5 5.8	3.9 1.6 -873.0 -439.8 1.83 1.94 2.91 4.64 2745 3.3 0.993 4.3	3.7 1.3 -1022.0 -441.8 2.16 2.06 2.14 4.08 2912 14.7 1.026 0.6	8.1 -6.0 -3348.2 -597.1 0.38 0.37 0.89 3.18 3219 15.2 1.043 -2.1	5.4 4.6 -2580.4 -831.4 0.08 0.04 1.44 3.03 4267 29.4 1.002 0.9	3.4 -1419.2 -971.6 1.68 2.02 2.95 5.38 4101 -16.3 1.069 8.6 4.7 -1.5 3.3	1.8 -1680.7 -868.7 5.04 5.11 4.03 6.88 4240 11.5 1.073 -0.7	0.1 -1539.0 -947.9 5.38 5.24 4.32 7.01 4249 1.1 1.093 -1.5	0.2 -1719.2 -961.4 4.05 3.76 3.63 5.74 4441 2.8 1.070 -2.3 4.9 2.9 5.9	4.6 0.5 -1752.5 -980.4 2.87 2.61 3.28 5.14 4477 0.3 1.037 -2.9	4.5 0.5 -1799.9 -959.0 2.63 2.37 3.21 4.96 4450 -0.4 1.012 -2.0 4.3 2.3 6.7	0.5 -1777.8 -912.1  2.63 2.37 3.20 4.90 4503 1.7 0.998 -1.1  4.2 2.0 7.0
Federal Surplus (Unified, FY, bil. \$) Current Account Balance (Bil. \$)  Financial Markets, NSA, Quarter Average  Federal Funds Rate (%) 3-Month Treasury Bill Rate (%) 10-Year Treasury Note Yield (%) 30-Year Fixed Mortgage Rate (%) S&P 500 Stock Index (Percent change, Q4/Q4) Exchange Rate, Broad Index of Partners (% change, Q4/Q4)  Incomes  Personal Income (%ch., Q4/Q4) Real Disposable Income (%ch., Q4/Q4)	1.7 -581.6 -396.2 0.40 0.32 1.84 3.76 2092 6.4 1.003 3.9	4.4 1.5 -680.9 -367.6 1.00 0.93 2.33 4.09 2448 19.2 1.000 -4.2	3.9 1.6 -873.0 -439.8 1.83 1.94 2.91 4.64 2745 3.3 0.993 4.3	3.7 1.3 -1022.0 -441.8 2.16 2.06 2.14 4.08 2912 14.7 1.026 0.6	8.1 -6.0 -3348.2 -597.1 0.38 0.37 0.89 3.18 3219 15.2 1.043 -2.1	5.4 4.6 -2580.4 -831.4 0.08 0.04 1.44 3.03 4267 29.4 1.002 0.9	3.4 -1419.2 -971.6 1.68 2.02 2.95 5.38 4101 -16.3 1.069 8.6	1.8 -1680.7 -868.7 5.04 5.11 4.03 6.88 4240 11.5 1.073 -0.7	0.1 -1539.0 -947.9 5.38 5.24 4.32 7.01 4249 1.1 1.093 -1.5	0.2 -1719.2 -961.4 4.05 3.76 3.63 5.74 4441 2.8 1.070 -2.3	4.6 0.5 -1752.5 -980.4 2.87 2.61 3.28 5.14 4477 0.3 1.037 -2.9	4.5 0.5 -1799.9 -959.0 2.63 2.37 3.21 4.96 4450 -0.4 1.012 -2.0	0.5 -1777.8 -912.1  2.63 2.37 3.20 4.90 4503 1.7 0.998 -1.1

Source: IHS Markit © 2023 S&P Global

Pessimistic: A shallow recession hits as tightenic Composition of Real GDP, Percent Change, Annual Gross Domestic Product Total Consumption Nonresidential Fixed Investment Residential Fixed Investment Exports Imports Federal Government State & Local Government Prices & Wages, Percent Change, Annual Rate Consumer Prices Producer Prices, Finished Goods Employment Cost Index - Total Comp. Other Key Measures		2.2 3.8 5.7 -5.3 6.8 1.3 5.2 4.6	2023:2 rain spendin 2.1 0.8 7.4 -2.2 -9.3 -7.6 1.1 4.7	2023:3 g and produ 4.9 4.0 -0.1 3.9 6.2 5.7 6.2 3.7	0.1 1.3 -0.5 -3.2 6.3 4.8 -2.3	2024:1 probability) -0.5 -0.1 -2.2 -5.8 0.3 2.1	1.9 2.5 5.2 -9.0 7.0	2.3 2.2 4.0 -11.3	0.6 0.8 -0.9 -4.3	1.1 1.2 -1.3 2.7	1.8 2.0 0.5	1.8 2.0	2028 1.6 1.6
Composition of Real GDP, Percent Change, Annual Gross Domestic Product Total Consumption Nonresidential Fixed Investment Residential Fixed Investment Exports Imports Federal Government State & Local Government Prices & Wages, Percent Change, Annual Rate Consumer Prices Producer Prices, Finished Goods Employment Cost Index - Total Comp.	2.6 1.2 1.7 -24.9 -3.5 -4.3 9.8 2.8	2.2 3.8 5.7 -5.3 6.8 1.3 5.2 4.6	2.1 0.8 7.4 -2.2 -9.3 -7.6 1.1 4.7	4.9 4.0 -0.1 3.9 6.2 5.7 6.2	0.1 1.3 -0.5 -3.2 6.3 4.8 -2.3	-0.5 -0.1 -2.2 -5.8 0.3	2.5 5.2 -9.0	2.2 4.0	0.8 -0.9	1.2 -1.3	2.0	2.0	
Gross Domestic Product Total Consumption Nonresidential Fixed Investment Residential Fixed Investment Exports Imports Federal Government State & Local Government Prices & Wages, Percent Change, Annual Rate Consumer Prices Producer Prices, Finished Goods Employment Cost Index - Total Comp.	2.6 1.2 1.7 -24.9 -3.5 -4.3 9.8 2.8	3.8 5.7 -5.3 6.8 1.3 5.2 4.6	0.8 7.4 -2.2 -9.3 -7.6 1.1 4.7	4.0 -0.1 3.9 6.2 5.7 6.2	1.3 -0.5 -3.2 6.3 4.8 -2.3	-0.1 -2.2 -5.8 0.3	2.5 5.2 -9.0	2.2 4.0	0.8 -0.9	1.2 -1.3	2.0	2.0	
Total Consumption Nonresidential Fixed Investment Residential Fixed Investment Exports Imports Federal Government State & Local Government Prices & Wages, Percent Change, Annual Rate Consumer Prices Producer Prices, Finished Goods Employment Cost Index - Total Comp.	1.2 1.7 -24.9 -3.5 -4.3 9.8 2.8	3.8 5.7 -5.3 6.8 1.3 5.2 4.6	0.8 7.4 -2.2 -9.3 -7.6 1.1 4.7	4.0 -0.1 3.9 6.2 5.7 6.2	1.3 -0.5 -3.2 6.3 4.8 -2.3	-0.1 -2.2 -5.8 0.3	2.5 5.2 -9.0	2.2 4.0	0.8 -0.9	1.2 -1.3	2.0	2.0	
Nonresidential Fixed Investment Residential Fixed Investment Exports Imports Federal Government State & Local Government Prices & Wages, Percent Change, Annual Rate Consumer Prices Producer Prices, Finished Goods Employment Cost Index - Total Comp.	1.7 -24.9 -3.5 -4.3 9.8 2.8	5.7 -5.3 6.8 1.3 5.2 4.6	7.4 -2.2 -9.3 -7.6 1.1 4.7	-0.1 3.9 6.2 5.7 6.2	-0.5 -3.2 6.3 4.8 -2.3	-2.2 -5.8 0.3	5.2 -9.0	4.0	-0.9	-1.3			1.6
Residential Fixed Investment Exports Imports Federal Government State & Local Government  Prices & Wages, Percent Change, Annual Rate Consumer Prices Producer Prices, Finished Goods Employment Cost Index - Total Comp.	-24.9 -3.5 -4.3 9.8 2.8 4.2 3.6	-5.3 6.8 1.3 5.2 4.6	-2.2 -9.3 -7.6 1.1 4.7	3.9 6.2 5.7 6.2	-3.2 6.3 4.8 -2.3	-5.8 0.3	-9.0				u a		1.0
Exports Imports Federal Government State & Local Government  Prices & Wages, Percent Change, Annual Rate Consumer Prices Producer Prices, Finished Goods Employment Cost Index - Total Comp.	-3.5 -4.3 9.8 2.8 4.2 3.6	6.8 1.3 5.2 4.6	-9.3 -7.6 1.1 4.7	6.2 5.7 6.2	6.3 4.8 -2.3	0.3		-11.3			4.8	1.7 1.7	1.9 2.4
Imports Federal Government State & Local Government  Prices & Wages, Percent Change, Annual Rate Consumer Prices Producer Prices, Finished Goods Employment Cost Index - Total Comp.	-4.3 9.8 2.8 4.2 3.6	1.3 5.2 4.6 3.8 0.6	-7.6 1.1 4.7	5.7 6.2	4.8 -2.3			2.8	2.4	3.7	4.6	4.0	3.5
Federal Government State & Local Government  Prices & Wages, Percent Change, Annual Rate Consumer Prices Producer Prices, Finished Goods Employment Cost Index - Total Comp.	9.8 2.8 4.2 3.6	5.2 4.6 3.8 0.6	1.1 4.7	6.2	-2.3		8.6	-1.3	1.9	2.4	3.8	2.7	1.7
State & Local Government  Prices & Wages, Percent Change, Annual Rate  Consumer Prices  Producer Prices, Finished Goods  Employment Cost Index - Total Comp.	2.8 4.2 3.6	3.8 0.6	4.7			0.9	-2.8	3.8	0.9	0.5	0.5	-0.1	-0.3
Prices & Wages, Percent Change, Annual Rate Consumer Prices Producer Prices, Finished Goods Employment Cost Index - Total Comp.	4.2 3.6	3.8 0.6			2.3	0.6	0.2	3.6	1.4	0.3	0.6	0.6	0.7
Consumer Prices Producer Prices, Finished Goods Employment Cost Index - Total Comp.	3.6	0.6	2.7										
Employment Cost Index - Total Comp.				3.6	3.6	3.9	8.0	4.2	3.7	2.1	2.1	1.6	1.6
	4.5		-6.0	7.2	6.1	2.7	13.4	2.2	3.3	0.8	1.5	1.3	1.3
Other Key Measures		4.7	4.1	4.1	3.8	3.2	5.1	4.5	3.3	2.4	2.2	2.0	2.0
Brent Crude, Spot Price (\$/bbl)	88.58	81.27	78.39	86.57	91.00	112.00	100.72	84.31	105.01	92.05	99.99	102.75	104.20
Productivity (%ch., saar)	1.6	-0.8	3.6	4.7	0.0	2.5	-1.9	1.2	2.5	2.7	1.6	1.0	0.5
Total Industrial Production (%ch., saar)	-2.5	-0.3	0.7	2.5	-4.4	1.3	3.4	0.1	-1.8	-1.6	0.9	1.7	1.8
Nonfarm Inven. Chg. (Bil.2017 \$)	154.8	28.8	14.8	81.1	41.6	53.1	142.2	41.6	57.4	93.9	115.1	113.9	95.2
Consumer Sentiment Index	58.8	64.6	62.3	69.6	65.1	66.5	59.0	65.4	70.8	81.6	85.4	86.1	86.0
Light Vehicle Sales (Mil. units, saar)	14.17	14.97	15.75	15.63	14.59	14.35	13.75	15.23	14.85	15.17	14.60	14.32	14.68
Housing Starts (Mil. units, saar)	1.405	1.385	1.450	1.359	1.386	1.314	1.551	1.395	1.245	1.255	1.283	1.275	1.289
Unemployment Rate (%)	3.6	3.5	3.5	3.7	3.9	5.0	3.6	3.7	5.7	6.6	6.2	5.7	5.2
Payroll Employment (%ch., saar)	2.5	2.5	1.7	1.6	1.2	-2.7	4.3	2.3	-0.9	-0.9	0.4	0.8	1.0
Federal Surplus (Unified, FY, bil. \$)	-421.4	-679.3	-291.9	-302.5	-411.6	-493.4	-343.9	-423.8	-382.6	-458.9	-465.1	-458.4	-439.5
Financial Markets, NSA, Quarter Average													
Federal Funds Rate (%)	3.65	4.52	4.99	5.26	5.39	5.60	1.68	5.04	5.09	2.34	0.92	0.63	0.63
10-Year Treasury Note Yield (%)	3.83	3.65	3.59	4.15	4.68	4.43	2.95	4.02	4.00	3.00	2.46	2.28	2.26
Incomes													
Personal Income (% ch., saar)	4.7	6.8	4.3 -7.8	3.5	3.4	5.9	2.0	5.2	4.3	4.2	4.7	4.2	3.7
After-Tax Profits (Four-qtr.% change)	0.1	-1.0		5.3	13.0	12.8	4.8	2.1	4.3	-3.0	1.2	1.9	-0.2
Optimistic: Banking sector remains resilient, fun Composition of Real GDP, Percent Change, Annua		10Will (15%	ловавініцу)										
Gross Domestic Product	2.6	2.2	2.1	4.9	1.9	1.8	1.9	2.4	2.1	1.9	1.7	1.5	1.5
Total Consumption	1.2	3.8	0.8	4.9	3.4	2.6	2.5	2.4	2.7	2.1	1.7	1.5	1.7
Nonresidential Fixed Investment	1.7	5.7	7.4	-0.1	4.6	2.6	5.2	4.3	2.8	2.7	2.3	1.8	1.7
Residential Fixed Investment	-24.9	-5.3	-2.2	3.9	-1.3	-2.6	-9.0	-11.1	-1.1	3.8	3.7	2.2	2.2
Exports	-3.5	6.8	-9.3	6.2	4.6	3.6	7.0	2.7	4.2	4.0	3.8	3.6	3.2
Imports	-4.3	1.3	-7.6	5.7	7.6	7.1	8.6	-1.2	5.3	4.6	3.4	2.1	2.3
Federal Government	9.8	5.2	1.1	6.2	-2.2	0.9	-2.8	3.8	0.9	0.5	0.4	-0.2	-0.4
State & Local Government	2.8	4.6	4.7	3.7	3.8	0.8	0.2	3.7	1.7	0.4	0.4	0.4	0.4
Prices & Wages, Percent Change, Annual Rate													
Consumer Prices	4.2	3.8	2.7	3.6	0.9	2.8	8.0	4.0	3.1	2.4	2.6	2.3	2.3
Producer Prices, Finished Goods	3.6	0.6	-6.0	7.2	0.6	1.8	13.4	1.8	2.3	1.3	2.0	2.0	1.9
Employment Cost Index - Total Comp.	4.5	4.7	4.1	4.1	3.9	3.8	5.1	4.5	3.9	3.5	3.5	3.3	3.4
Other Key Measures													
Brent Crude, Spot Price (\$/bbl)	88.58	81.27	78.39	86.57	87.00	77.00	100.72	83.31	82.83	76.08	84.32	87.10	88.73
Productivity (%ch., saar)	1.6	-0.8	3.6	4.7	0.2	0.2	-1.9	1.2	1.5	2.3	1.7	1.3	1.5
Total Industrial Production (%ch., saar)	-2.5	-0.3	0.7	2.5	-1.2	1.0	3.4	0.3	0.4	1.6	1.9	1.1	0.8
Nonfarm Inven. Chg. (Bil. 2017 \$)	154.8	28.8	14.8	81.1	42.8	45.6	142.2	41.9	32.7	49.9	69.7	67.1	71.1
Consumer Sentiment Index	58.8	64.6	62.3	69.6	73.5	78.1	59.0	67.5	81.9	89.9	93.3	93.4	91.7
Light Vehicle Sales (Mil. units, saar)	14.17	14.97	15.75	15.63	15.21	15.28	13.75	15.39	16.16	17.43	17.40	17.12	16.95
Housing Starts (Mil. units, saar)	1.405	1.385	1.450	1.359	1.405	1.362	1.551	1.400	1.357	1.402	1.421	1.425	1.430
Unemployment Rate (%)	3.6	3.5	3.5	3.7	3.8	3.7	3.6	3.6	4.0	4.4	4.4	4.3	4.2
Payroll Employment (%ch., saar)	2.5	2.5	1.7	1.6	1.7	1.4	4.3	2.4	1.0	0.0	0.4	0.5	0.4
Federal Surplus (Unified, FY, bil. \$)	-421.4	-679.3	-291.9	-302.5	-402.1	-475.6	-343.9	-423.8	-358.7	-406.3	-411.2	-424.4	-423.8
Financial Markets, NSA, Quarter Average	0.45	4.50	4.00	F 04	F 41	F (0	1.00	F 0.4		4.04	0.10	0.74	0.00
Federal Funds Rate (%)	3.65	4.52	4.99	5.26	5.41	5.60	1.68	5.04	5.55	4.34	3.12	2.74	2.63
10-Year Treasury Note Yield (%)	3.83	3.65	3.59	4.15	4.78	4.78	2.95	4.04	4.54	3.81	3.39	3.27	3.22
Incomes	4 7		4.0	2.5	4 7	7.0	2.0	F 0	F 7		4.0	4.0	4.1
Personal Income (% ch., saar)	4.7	6.8	4.3	3.5	4.7	7.2	2.0	5.3	5.7	5.5	4.6	4.2	4.1
After-Tax Profits (Four-qtr.% change)  Source: IHS Markit	0.1	-1.0	-7.8	5.3	14.0	13.6	4.8	2.4	6.8	0.7	1.4	1.1	1.1 S S&P Global

Source: IHS Markit © 2023 SRP Global

Alternative Scenarios of the L	JS Econ	omv											
	2022:4	2023:1	2023:2	2023:3	2023:4	2024:1	2022	2023	2024	2025	2026	2027	2028
Pessimistic: A shallow recession hits as tighteni	ng lending st	andards rest	train spendir	g and produ	iction (30%	probability)							
Composition of Real GDP, Percent Change, Annua	al Rate												
(Q4/Q4 for Annual Values)				4.0		0.5				4.5	- 10		
Gross Domestic Product Total Consumption	2.6 1.2	2.2 3.8	2.1 0.8	4.9 4.0	0.1 1.3	-0.5 -0.1	0.7 1.2	2.3 2.5	0.0 0.2	1.5 1.7	1.9 2.2	1.7 1.8	1.5 1.6
Nonresidential Fixed Investment	1.7	5.7	7.4	-0.1	-0.5	-2.2	5.6	3.1	-2.1	-0.7	1.3	1.9	1.7
Residential Fixed Investment	-24.9	-5.3	-2.2	3.9	-3.2	-5.8	-17.4	-1.8	-5.1	6.4	2.8	1.8	2.7
Exports	-3.5	6.8	-9.3	6.2	6.3	0.3	4.3	2.3	2.2	4.4	4.3	4.0	3.3
Imports	-4.3	1.3	-7.6	5.7	4.8	2.1	2.1	0.9	1.2	3.4	3.8	2.0	1.7
Federal Government	9.8	5.2	1.1	6.2	-2.3	0.9	-0.1	2.5	0.7	0.6	0.3	-0.2	-0.3
State & Local Government  Prices & Wages, Percent Change, Annual Rate	2.8	4.6	4.7	3.7	2.3	0.6	1.3	3.8	0.2	0.5	0.7	0.6	0.7
(Q4/Q4 for Annual Values)													
Consumer Prices	4.2	3.8	2.7	3.6	3.6	3.9	7.1	3.4	3.7	1.6	2.0	1.5	1.6
Producer Prices, Finished Goods	3.6	0.6	-6.0	7.2	6.1	2.7	10.2	1.8	2.5	0.5	1.5	1.3	1.3
Employment Cost Index - Total Comp.	4.5	4.7	4.1	4.1	3.8	3.2	5.1	4.2	2.8	2.2	2.1	2.0	2.0
Other Key Measures													
Brent Crude, Spot Price (\$/bbl)	88.58	81.27	78.39	86.57	91.00	112.00	100.72	84.31	105.01	92.05	99.99	102.75	104.20
Productivity (%ch., saar)	1.6 -2.5	-0.8	3.6	4.7	0.0	2.5	-2.0 1.8	1.9 -0.4	2.8 -2.7	2.3	1.4	0.7 1.8	0.3
Total Industrial Production (%ch., saar) Nonfarm Inven. Chg. (Bil.2017 \$)	-2.5 154.8	-0.3 28.8	0.7 14.8	2.5 81.1	-4.4 41.6	1.3 53.1	1.8 142.2	-0.4 41.6	-2.7 57.4	-0.1 93.9	1.4 115.1	1.8 113.9	1.7 95.2
Consumer Sentiment Index	58.8	64.6	62.3	69.6	65.1	66.5	59.0	65.4	70.8	81.6	85.4	86.1	86.0
Light Vehicle Sales (Mil. units, saar)	14.17	14.97	15.75	15.63	14.59	14.35	13.75	15.23	14.85	15.17	14.60	14.32	14.68
Housing Starts (Mil. units, saar)	1.405	1.385	1.450	1.359	1.386	1.314	1.551	1.395	1.245	1.255	1.283	1.275	1.289
Unemployment Rate (%)	3.6	3.5	3.5	3.7	3.9	5.0	3.6	3.7	5.7	6.6	6.2	5.7	5.2
Payroll Employment (%ch., saar)	2.5	2.5	1.7	1.6	1.2	-2.7	3.4	1.8	-2.0	-0.3	0.6	0.9	1.1
Federal Surplus (Unified, FY, bil. \$)  Financial Markets, NSA, Quarter Average	-421.4	-679.3	-291.9	-302.5	-411.6	-493.4	-343.9	-423.8	-382.6	-458.9	-465.1	-458.4	-439.5
Federal Funds Rate (%)	3.65	4.52	4.99	5.26	5.39	5.60	1.68	5.04	5.09	2.34	0.92	0.63	0.63
10-Year Treasury Note Yield (%)	3.83	3.65	3.59	4.15	4.68	4.43	2.95	4.02	4.00	3.00	2.46	2.28	2.26
Incomes													
Personal Income (% ch., saar)	4.7	6.8	4.3	3.5	3.4	5.9	4.7	4.5	4.2	4.7	4.4	4.0	3.6
After-Tax Profits (Four-qtr.% change)	0.1	-1.0	-7.8	5.3	13.0	12.8	0.1	13.0	-3.8	-1.9	2.8	1.3	0.0
Optimistic: Banking sector remains resilient, fun		rowth (15%	probability)										
Composition of Real GDP, Percent Change, Annua (Q4/Q4 for Annual Values)	н кате												
Gross Domestic Product	2.6	2.2	2.1	4.9	1.9	1.8	0.7	2.8	1.7	1.9	1.6	1.5	1.6
Total Consumption	1.2	3.8	0.8	4.0	3.4	2.6	1.2	3.0	2.2	2.1	1.5	1.6	1.8
Nonresidential Fixed Investment	1.7	5.7	7.4	-0.1	4.6	2.6	5.6	4.4	2.3	2.9	2.0	1.7	1.8
Residential Fixed Investment	-24.9	-5.3	-2.2	3.9	-1.3	-2.6	-17.4	-1.3	-0.8	5.5	2.2	2.7	2.1
Exports	-3.5	6.8	-9.3	6.2	4.6	3.6	4.3	1.9	5.2	3.1	4.1	3.5	3.1
Imports	-4.3	1.3	-7.6	5.7	7.6	7.1	2.1	1.6	5.6	4.4	2.7	2.1	2.5
Federal Government State & Local Government	9.8 2.8	5.2 4.6	1.1 4.7	6.2 3.7	-2.2 3.8	0.9 0.8	-0.1 1.3	2.5 4.2	0.8 0.4	0.5 0.4	0.2 0.4	-0.4 0.4	-0.5 0.4
Prices & Wages, Percent Change, Annual Rate	2.0		***			0.0				• • • • • • • • • • • • • • • • • • • •			
(Q4/Q4 for Annual Values)													
Consumer Prices	4.2	3.8	2.7	3.6	0.9	2.8	7.1	2.7	3.5	2.2	2.5	2.2	2.3
Producer Prices, Finished Goods	3.6	0.6	-6.0	7.2	0.6	1.8	10.2	0.5	2.6	1.1	2.0	1.9	1.9
Employment Cost Index - Total Comp.	4.5	4.7	4.1	4.1	3.9	3.8	5.1	4.2	3.7	3.5	3.4	3.4	3.4
Other Key Measures  Brent Crude, Spot Price (\$/bbl)	88.58	81.27	78.39	86.57	87.00	77.00	100.72	83.31	82.83	76.08	84.32	87.10	88.73
Productivity (%ch., saar)	1.6	-0.8	3.6	4.7	0.2	0.2	-2.0	1.9	1.7	2.1	1.5	1.4	1.6
Total Industrial Production (%ch., saar)	-2.5	-0.3	0.7	2.5	-1.2	1.0	1.8	0.4	0.6	2.2	1.5	1.0	0.7
Nonfarm Inven. Chg. (Bil. 2017 \$)	154.8	28.8	14.8	81.1	42.8	45.6	142.2	41.9	32.7	49.9	69.7	67.1	71.1
Consumer Sentiment Index	58.8	64.6	62.3	69.6	73.5	78.1	59.0	67.5	81.9	89.9	93.3	93.4	91.7
Light Vehicle Sales (Mil. units, saar)	14.17	14.97	15.75	15.63	15.21	15.28	13.75	15.39	16.16	17.43	17.40	17.12	16.95
Housing Starts (Mil. units, saar) Unemployment Rate (%)	1.405 3.6	1.385 3.5	1.450 3.5	1.359 3.7	1.405 3.8	1.362 3.7	1.551 3.6	1.400 3.6	1.357 4.0	1.402 4.4	1.421 4.4	1.425 4.3	1.430 4.2
Payroll Employment (%ch., saar)	2.5	3.5 2.5	3.5 1.7	1.6	3.8 1.7	3.7 1.4	3.4	3.0 1.9	0.3	0.2	0.4	0.4	0.3
Federal Surplus (Unified, FY, bil. \$)	-421.4	-679.3	-291.9	-302.5	-402.1	-475.6	-343.9	-423.8	-358.7	-406.3	-411.2	-424.4	-423.8
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Incomes													
Personal Income (% ch., saar)	4.7	6.8	4.3	3.5	4.7	7.2	4.7	4.8	6.2	5.3	4.2	4.2	4.1
After-Tax Profits (Four-qtr.% change)  Source: IHS Markit	0.1	-1.0	-7.8	5.3	14.0	13.6	0.1	14.0	0.0	0.9	0.9	1.9 © 202	2.1 23 S&P Global
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