Blue Chip Financial Forecasts®

Top Analysts' Forecasts Of U.S. And Foreign Interest Rates, Currency Values And The Factors That Influence Them

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BLUE CHIP FINANCIAL FORECASTS®

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COVID Still Most Important Factor in Outlook, but Growth Seen Improving

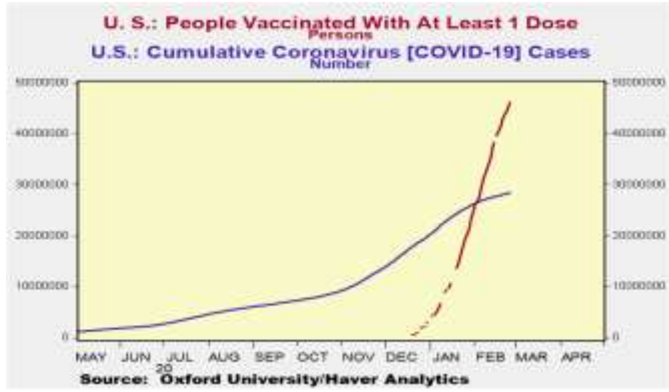
So far, 46 million Americans have received some vaccine. Oxford University's website "Our World in Data" shows that as of February 25, 46,074,392 Americans had received at least one dose of a COVID vaccine and 21,555,117 were fully vaccinated. These aggregate figures mean that 13.78 persons per hundred have received at least one dose and 6.45 persons per hundred are fully vaccinated.

We cite these vaccination population data because they coincide with upward revisions to the Blue Chip Financial Forecasts panel's expectations for U.S. GDP growth and for inflation (measured by the personal consumption expenditure price index, the price index targeted by the Federal Reserve in their monetary policy actions). In the January forecast, right after the vaccination process began, the panel was projecting 1.8% (SAAR) growth in GDP in the first quarter and 4.3% in Q2. In the February forecast, the estimates had risen to 2.1% growth in Q1 and 5.4% in Q2. Now, the panel consensus stands at 4.3% for this quarter and 6.8% in Q2, noticeably upward increments. While there is no real documentation that the vaccination process is the source of the boost to the economy, it is the condition that has changed most noticeably over this period. The survey results for this month were collected February 23 and 24.

Fiscal Policy Plays a Supportive Role, Too. In addition, stimulus payments and enhanced unemployment benefits from the CRRSA Act enacted in late December started to be paid out in January. Also, over the last several weeks, discussion about the Biden Administration's proposed $1.9 trillion America Rescue Plan is providing still more support to growth.

But Inflation and Interest Rates Prospects Have Been Raised, Too. The changes to these Blue Chip growth forecasts, particularly this month, accompany upshifts in inflation and interest rate outlooks. The new forecasts for inflation and interest rates are not significantly higher, but these as well as the growth numbers tell a consistent story. The Blue Chip participants estimate PCE inflation at 2.7% (SAAR) this quarter and then easing to 1.9% in Q2. The forecast for this quarter is noticeably higher than the February estimate of 2.1%. The panel also raised their estimate of 10-year Treasury yields and projected a persistent uptrend across 2021 somewhat steeper than last month's. As noted, these are not major changes, but they are in the same direction – an increase.

Yield Curve Steepening. At the same time, Federal Reserve officials asserted yet again in recent testimony and speeches that they would not raise the federal funds rate unless inflation accelerates beyond 2% and stays there "for some time." Despite the upward revisions we describe here, that "2%+" condition does not appear in the new forecasts. So the funds rate would not likely change, as indicated in the quarterly forecast pages that follow here and in the Special Questions on page 14. Thus, the result is a steepening yield curve, with basically flat short-term rates and rising long-term rates.



This indeed might be seen as an optimistic outlook for financial markets and the economy in the months ahead. However, the panel does reply to a Special Question that the balance of risks to the inflation outlook is to the upside. The responses are heavily weighted in that direction with 31 of 36 respondents giving that answer. One of the sources of upward pressure on inflation is the Biden Administration's proposed $1.9 trillion stimulus bill, which would be layered on top of the stimulus payments already in force. That bill seems likely to pass in the House, perhaps even as we are going to press with this report, but its fate in the Senate is notably less certain. Panelists estimate that this bill would add 0.4%-point to PCE inflation this year. They also indicate that the overall control of Congress by the Democrats would add 1.3%-points to GDP growth this year. And they also assert that the probability of a double-dip in economic growth has decreased to 16% from 21% a month ago.

Higher bond yields expected. As mentioned, the added inflation concern and expected stronger growth are generating increases in interest rates. Those rates are hardly "high," but they are rising. The 10-year Treasury rate moved as high as 1.54% this past week, up from 0.93% the first business day of January. The Blue Chip panel submitted their forecasts on February 23 and 24, as we noted above, and they believe the 10-year yield will average 1.2% for this quarter and then move upward gradually through the rest of this year. The yield level foreseen is about 30 basis points higher than the two previous months' forecasts. Similarly for this month, the 30-year bond, currently trading at 2.24%, may settle back from its current spike and then is expected to increase gradually over the course of this year to about 2.40% at year-end.

We have emphasized the role of low mortgage rates during the last several months in providing strong support to housing markets. From an all-time low (back to April 1971) of 2.65%, the Freddie Mac 30-year rate has moved to 2.97% in the most recent week, and the Blue Chip Financial Forecast panel projects a modest increase to about 3.25% by late 2021. The low level of mortgage rates is having a positive effect on the housing market and providing substantial support to the economy as a whole as people are wanting to move out of crowded urban areas in the wake of the COVID contagion.

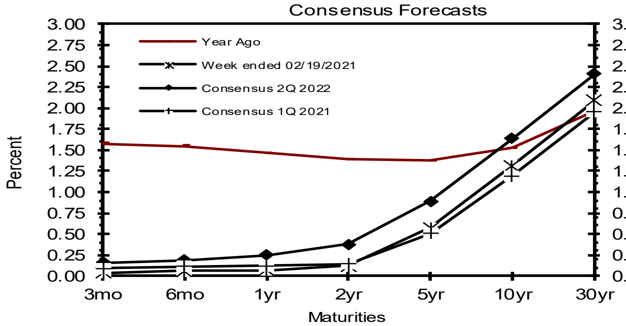
Carol Stone, CBE (Haver Analytics, New York, NY)

Consensus Forecasts of U.S. Interest Rates and Key Assumptions

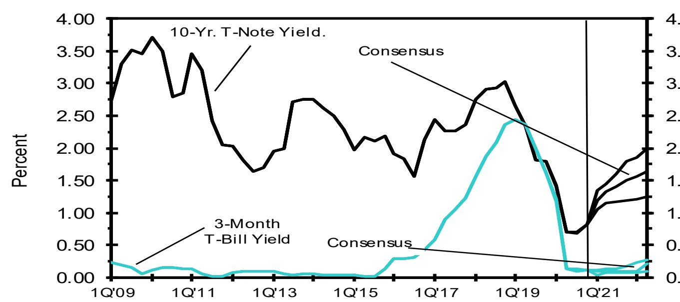
	History								Consensus Forecasts-Quarterly Avg.					
	Average For Week Ending				Average For Month			*Latest Qtr*	1Q	2Q	3Q	4Q	1Q	2Q
Interest Rates	Feb 19	Feb 12	Feb 5	Jan 29	Jan	Dec	Nov	4Q 2020	**2021**	**2021**	**2021**	**2021**	**2022**	**2022**
Federal Funds Rate	0.08	0.08	0.07	0.08	0.09	0.09	0.09	0.09	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**
Prime Rate	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	**3.3**	**3.3**	**3.3**	**3.3**	**3.3**	**3.3**
LIBOR, 3-mo.	0.18	0.20	0.19	0.21	0.22	0.23	0.22	0.22	**0.2**	**0.2**	**0.3**	**0.3**	**0.3**	**0.3**
Commercial Paper, 1-mo.	0.07	0.06	0.07	0.07	0.08	0.09	0.09	0.09	**0.1**	**0.1**	**0.2**	**0.2**	**0.2**	**0.2**
Treasury bill, 3-mo.	0.04	0.05	0.05	0.07	0.08	0.09	0.09	0.09	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.2**
Treasury bill, 6-mo.	0.06	0.06	0.07	0.08	0.09	0.09	0.10	0.10	**0.1**	**0.1**	**0.1**	**0.2**	**0.2**	**0.2**
Treasury bill, 1 yr.	0.07	0.07	0.07	0.09	0.10	0.10	0.12	0.12	**0.1**	**0.1**	**0.2**	**0.2**	**0.2**	**0.3**
Treasury note, 2 yr.	0.12	0.11	0.11	0.12	0.13	0.14	0.17	0.15	**0.1**	**0.2**	**0.2**	**0.3**	**0.3**	**0.4**
Treasury note, 5 yr.	0.57	0.48	0.45	0.42	0.45	0.39	0.39	0.37	**0.5**	**0.6**	**0.7**	**0.8**	**0.8**	**0.9**
Treasury note, 10 yr.	1.31	1.18	1.14	1.06	1.08	0.93	0.87	0.86	**1.2**	**1.3**	**1.4**	**1.5**	**1.6**	**1.6**
Treasury note, 30 yr.	2.09	1.96	1.91	1.81	1.82	1.67	1.62	1.62	**2.0**	**2.1**	**2.2**	**2.3**	**2.4**	**2.4**
Corporate Aaa bond	2.86	2.77	2.74	2.64	2.64	2.52	2.58	2.58	**2.6**	**2.8**	**2.9**	**3.0**	**3.0**	**3.1**
Corporate Baa bond	3.31	3.22	3.21	3.13	3.14	3.03	3.13	3.14	**3.5**	**3.7**	**3.8**	**3.9**	**4.0**	**4.0**
State & Local bonds	2.60	2.58	2.62	2.61	2.65	2.70	2.82	2.82	**2.6**	**2.7**	**2.8**	**2.9**	**3.0**	**3.0**
Home mortgage rate	2.81	2.73	2.73	2.73	2.74	2.68	2.77	2.76	**2.9**	**3.0**	**3.1**	**3.2**	**3.3**	**3.4**
	History								Consensus Forecasts-Quarterly					
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
Key Assumptions	2019	2019	2019	2019	2020	2020	2020	2020	**2021**	**2021**	**2021**	**2021**	**2022**	**2022**
Fed's AFE $ Index	109.5	110.4	110.6	110.5	111.4	112.4	107.3	105.2	**103.6**	**103.2**	**103.1**	**103.2**	**102.9**	**103.0**
Real GDP	2.9	1.5	2.6	2.4	-5.0	-31.4	33.4	4.1	**4.3**	**6.8**	**6.3**	**4.6**	**3.3**	**2.9**
GDP Price Index	1.2	2.5	1.5	1.4	1.4	-1.8	3.5	2.1	**2.2**	**1.8**	**1.9**	**1.9**	**1.9**	**2.0**
Consumer Price Index	0.7	3.5	1.3	2.6	1.0	-3.1	4.7	2.4	**2.8**	**2.0**	**2.0**	**2.1**	**2.1**	**2.1**
PCE Price Index	0.6	2.5	1.4	1.5	1.3	-1.6	3.7	1.6	**2.7**	**1.9**	**1.9**	**1.9**	**1.9**	**2.0**

Forecasts for interest rates and the Federal Reserve's Major Currency Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index and Consumer Price Index are seasonally-adjusted annual rates of change (saar). Individual panel members' forecasts are on pages 4 through 9. Historical data: Treasury rates from the Federal Reserve Board's H.15; AAA-AA and A-BBB corporate bond yields from Bank of America-Merrill Lynch and are 15+ years, yield to maturity; State and local bond yields from Bank of America-Merrill Lynch, A-rated, yield to maturity; Mortgage rates from Freddie Mac, 30-year, fixed; LIBOR quotes from Intercontinental Exchange. All interest rate data are sourced from Haver Analytics. Historical data for Fed's Major Currency Index are from FRSR H.10. Historical data for Real GDP and GDP Chained Price Index are from the Bureau of Economic Analysis (BEA). Consumer Price Index (CPI) history is from the Department of Labor's Bureau of Labor Statistics (BLS).

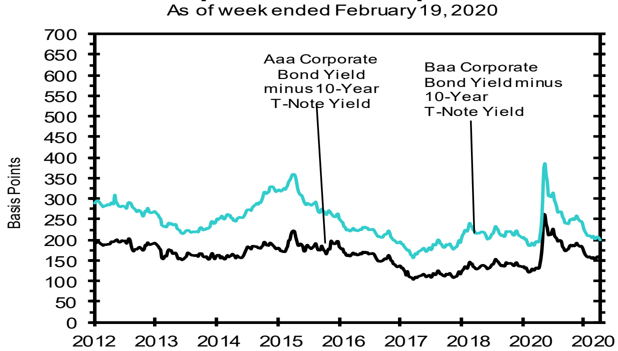
U.S. Treasury Yield Curve
Week ended February 19, 2021 & Year Ago vs. 1Q 2021 & 2Q 21922 Consensus Forecasts



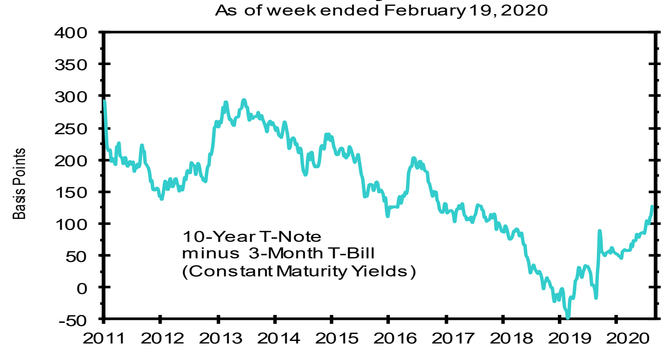
U.S. 3-Mo. T-Bills & 10-Yr. T-Note Yield
(Quarterly Average)



Corporate Bond Spreads
As of week ended February 19, 2020



U.S. Treasury Yield Curve
As of week ended February 19, 2020



Policy Rates[1]

	History: Latest	History: Month Ago	History: Year Ago	Consensus Forecasts Months From Now: 3	6	12
U.S.	0.13	0.13	1.63	**0.13**	**0.13**	**0.13**
Japan	-0.10	-0.10	-0.10	**-0.08**	**-0.08**	**-0.08**
U.K.	0.10	0.10	0.75	**0.10**	**0.10**	**0.10**
Switzerland	-0.75	-0.75	-0.75	**-0.75**	**-0.75**	**-0.75**
Canada	0.25	0.25	1.75	**0.25**	**0.25**	**0.25**
Australia	0.10	0.10	0.75	**0.13**	**0.13**	**0.14**
Euro area	0.00	0.00	0.00	**0.00**	**0.00**	**0.00**

10-Yr. Government Bond Yields[2]

	History: Latest	History: Month Ago	History: Year Ago	Consensus Forecasts Months From Now: 3	6	12
U.S.	1.34	1.10	1.46	**1.24**	**1.35**	**1.57**
Germany	-0.31	-0.52	-0.44	**-0.39**	**-0.32**	**-0.18**
Japan	0.11	0.04	-0.06	**0.05**	**0.06**	**0.10**
U.K.	0.74	0.38	0.65	**0.54**	**0.62**	**0.75**
France	-0.06	-0.28	-0.21	**-0.17**	**-0.09**	**0.05**
Italy	0.62	0.71	0.92	**0.74**	**0.83**	**1.00**
Switzerland	-0.28	-0.45	-0.74	**-0.35**	**-0.28**	**-0.19**
Canada	1.21	0.85	1.28	**1.14**	**1.26**	**1.45**
Australia	1.39	1.09	0.93	**1.32**	**1.39**	**1.50**
Spain	0.30	0.13	0.23	**0.23**	**0.33**	**0.49**

Foreign Exchange Rates[3]

	History: Latest	History: Month Ago	History: Year Ago	Consensus Forecasts Months From Now: 3	6	12
U.S.	102.64	102.78	111.75	**102.9**	**102.1**	**101.8**
Japan	105.58	103.76	111.74	**103.9**	**103.6**	**103.7**
U.K.	1.40	1.37	1.30	**1.37**	**1.38**	**1.41**
Switzerland	0.89	0.89	0.98	**0.90**	**0.90**	**0.89**
Canada	1.26	1.27	1.32	**1.29**	**1.28**	**1.28**
Australia	0.79	0.77	0.66	**0.76**	**0.76**	**0.77**
Euro	1.21	1.22	1.09	**1.22**	**1.23**	**1.25**

Consensus Policy Rates vs. US Rate

	Now	In 12 Mo.
Japan	-0.23	**-0.21**
U.K.	-0.03	**-0.03**
Switzerland	-0.88	**-0.88**
Canada	0.13	**0.12**
Australia	-0.03	**0.01**
Euro area	-0.13	**-0.13**

Consensus 10-Year Gov't Yields vs. U.S. Yield

	Now	In 12 Mo.
Germany	-1.65	**-1.75**
Japan	-1.23	**-1.47**
U.K.	-0.60	**-0.82**
France	-1.40	**-1.53**
Italy	-0.72	**-0.57**
Switzerland	-1.62	**-1.76**
Canada	-0.13	**-0.12**
Australia	0.05	**-0.07**
Spain	-1.04	**-1.08**

Forecasts of panel members are on pages 10 and 11. Definitions of variables are as follows: [1]Monetary policy rates. [2]Government bonds are yields to maturity. [3]Foreign exchange rate forecasts for U.K., Australia and the Euro are U.S. dollars per currency unit. For the U.S dollar, forecasts are of the U.S. Federal Reserve Board's AFE Dollar Index.

International. Even with continued, and in some countries increased, lockdowns, the global economic outlook appears to be getting brighter. On the COVID front, new cases and deaths are falling markedly all around the world with associated significant declines in hospitalizations. Moreover, the pace of vaccinations is picking up and reproduction rates (measures of how easily and quickly the virus is spreading) have fallen to below the critical 1.0 level. Indeed, the reproduction rate for the whole world is now below 1.0. Also encouraging has been evidence on vaccination efficacy.

Daily new COVID cases worldwide have fallen nearly 50% since their peak in mid-January, and deaths are down 33% from their late January peak. Moreover, the rollout of vaccinations has accelerated. The WHO reports that as of February 25, nearly 227 million vaccinations have been administered around the globe, a 128% increase since the end of January. Also, vaccinations are proving to be extremely effective. According to studies conducted in England, the first shot of the two-shot vaccines has reduced new cases by 57%-75% with the reduction rising to 88% after the second shot. In Israel, the world leader in administering vaccinations, among the 600,000 people who have received two doses of vaccine, there has been a 94% decline in symptomatic COVID cases compared with those who have not been vaccinated.

Looking at the economic data, manufacturing activity is firming with PMIs all around the developed world solidly above the 50 level that separates expansion from contraction. Flash reports for February showed the pace of manufacturing activity picking up in the Euro area, Japan and the UK while remaining at a historically high level in the US. By contrast, services production continues to decline with service-sector PMIs in February below 50 in the Euro area, Germany, France, the UK and Japan. Retail activity appears to be recovering from the hits delivered by the lockdowns put in place during Q4. Sales figures are beginning to show some rebound and with saving rates historically high, there is plenty of ammunition to fund increased spending if the move to more normal health conditions continues.

The cloud in the silver lining is the fixed income market. Last spring, the pandemic severely depressed longer-term interest rates all around the world. Now, as optimism is beginning to form over the economic outlook, holders of fixed income assets are becoming a little skittish. The result has been a steady increase in yields on longer-term government debt over the past couple of months, especially recently. In many developed economies (e.g., France, Germany, Japan., the UK, Canada), the yield on 10-year government debt is now higher than it was just before the pandemic. The US is the major exception, but even there, the 10-year yield is up nearly 60 bps since the beginning of this year.

Historically, it is usual for interest rates to rise as economic recovery emerges. So, the recent increase is not surprising. However, the rise could also reflect concerns over inflation. Inflation has generally been missing in action over the past decade but recent figures in some countries have surprised to the upside. Also, surveys show a marked increase in firms intending to raise prices and in a special question this month, the vast majority of Blue Chip forecasters (86%) think inflation risks for 2021 lie to the upside. Moreover, some commodity prices, which in the past have been associated with inflation flare-ups, have increased significantly. The price of WTI is up about 20% since the end of January and more than 30% since the beginning of 2021. The price of copper has risen about 20% since early February to its highest level in more than a decade. The price of lumber is fluctuating around all-time highs. To be sure, the COVID recession was extremely deep and so there remains a lot of excess capacity, which should restrain any rebound in inflation. Moreover, current inflation rates are very low by historical standards and well below central bank targets. Still, financial markets are on edge and inflation concerns could lead to increased volatility if the economic recovery picks up pace.

First Quarter 2021

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	1 Federal Funds Rate	2 Prime Bank Rate	3 LIBOR Rate 3-Mo.	4 Com. Paper 1-Mo.	5 Treas. Bills 3-Mo.	6 Treas. Bills 6-Mo.	7 Treas. Bills 1-Yr.	8 Treas. Notes 2-Yr.	9 Treas. Notes 5-Yr.	10 Treas. Notes 10-Yr.	11 Treas. Bond 30-Yr.	12 Aaa Corp. Bond	13 Baa Corp. Bond	14 State & Local Bonds	15 Home Mtg. Rate	A. Fed's Adv Fgn Econ $ Index	B. Real GDP	C. GDP Price Index	D. Cons. Price Index	E. PCE Price Index
	Percent Per Annum -- Average For Quarter: Short-Term							Intermediate-Term			Long-Term					Avg. For ---Qtr.---	(Q-Q % Change) (SAAR)			
Action Economics	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.5	1.1	1.9	2.5	3.3	2.9	2.9	105.2	4.8	4.7 H	3.2	3.6
AIG	0.1 H	3.3 H	na	na	0.1	0.1 L	0.1 L	0.1 L	0.5	1.2	1.9	na	3.3	na	2.9	na	3.5	1.2	1.8	1.4
Amherst Pierpont Securities	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.5	1.3	2.1	2.7	3.5	2.2	2.8 L	103.0	7.5	2.3	3.4	3.9
Bank of America	0.1 H	na	0.2 L	na	na	na	na	0.1 L	0.5	1.1	1.8	na	na	na	na	na	5.5	2.6	3.3	3.0
Barclays	0.1 H	3.3 H	na	na	na	na	na	0.2	0.5	1.2	1.9	na	na	na	na	na	3.5	3.1	3.1	3.0
BMO Capital Markets	0.1 H	3.3 H	0.2 L	na	0.1	0.1 L	0.1 L	0.1 L	0.5	1.2	2.0	na	na	na	2.8 L	102.8	5.0	2.5	3.2	3.3
BNP Paribas Americas	0.1 H	na	na	na	na	na	na	0.2	na	1.1	na	na	na	na	na	na	2.5	na	2.7	2.6
Chan Economics	0.1 H	3.3 H	0.3	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.5	1.4 H	2.1	2.8	3.7	2.8	3.1	102.4 L	7.0	1.9	2.2	1.9
Chmura Economics & Analytics	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.5	1.2	1.9	2.6	na	na	2.8 L	na	3.1	2.0	2.3	na
Comerica Bank	0.1 H	3.2	0.2 L	na	0.1	0.1 L	0.1 L	0.1 L	0.5	1.2	1.9	na	na	na	2.8 L	na	3.8	2.3	4.7 H	4.0
Daiwa Capital Markets America	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.6	1.2	2.0	2.6	3.4	na	2.8 L	103.0	3.1	2.4	3.0	3.2
DePrince & Assoc.	0.1 H	3.2	0.3	0.2	0.1	0.1 L	0.1 L	0.1 L	0.5	1.2	1.9	2.7	3.4	2.2	2.8 L	103.0	2.4	1.8	1.9	1.6
Economist Intelligence Unit	0.1 H	3.3 H	na	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.5	1.2	2.0	na	na	na	2.8 L	na	2.6	na	1.6	na
Fannie Mae	0.1 H	3.3 H	na	na	0.1	0.1 L	0.1 L	0.1 L	0.5	1.2	2.0	na	na	na	2.8 L	na	4.3	2.3	2.8	2.4
Georgia State University	0.1 H	3.3 H	na	na	0.1	0.1 L	0.1 L	0.1 L	0.5	1.2	2.0	2.6	3.5	na	2.9	na	3.2	2.1	2.6	2.3
GLC Financial Economics	0.1 H	3.3 H	0.2 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.5	1.1	1.9	2.7	3.3	3.2 H	3.1	104.1	4.7	1.6	1.9	2.1
Goldman Sachs & Co.	0.1 H	na	0.2 L	na	0.1	na	na	0.2	0.5	1.2	1.9	na	na	na	na	na	6.0	3.1	2.7	3.7
Grant Thornton/Diane Swonk	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.2	0.4	1.0	1.9	2.6	3.3	na	2.8 L	na	4.4	2.3	2.7	2.4
IHS Markit	0.1 H	3.3 H	na	na	0.1	0.1 L	0.1 L	0.1 L	0.4	1.0	1.8	na	na	na	2.8 L	na	4.7	2.1	2.7	2.3
ING	0.1 H	na	0.3	na	na	na	na	0.2	0.6	1.3	2.0	na	na	na	na	na	5.5	na	na	na
J.P. Morgan Chase	0.1 H	na	0.2 L	na	na	na	na	0.2	0.4	1.1	1.9	na	na	na	na	na	5.0	3.5	3.4	4.2
Loomis, Sayles & Company	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.5	1.1	1.9	2.5	3.2 L	2.6	2.8 L	103.5	2.5	2.8	3.1	2.7
MacroFin Analytics & Rutgers Bus School	0.1 H	3.3 H	0.2 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.6	1.4 H	2.2	2.9 H	3.3	2.7	3.1	102.8	4.1	2.1	2.2	2.0
MacroPolicy Perspectives	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.5	1.4 H	2.3 H	2.5	3.2 L	2.7	2.8 L	103.0	4.4	3.6	3.0	3.6
Mizuho Research Institute	0.1 H	na	na	na	na	na	na	na	na	1.2	na	na	na	na	na	na	na	na	na	na
Moody's Analytics	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.2	0.2	0.5	1.1	1.9	2.5	3.2 L	2.0	2.9	na	3.3	1.2	2.0	1.9
Moody's Capital Markets Group	0.1 H	3.3 H	0.2 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.4	1.2	2.0	2.8	3.5	2.9	2.9	103.0	4.1	2.2	3.4	3.7
Naroff Economic Advisors	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.2	0.5	1.2	1.8	2.5	4.2 H	2.6	3.2	103.5	4.4	2.4	3.9	3.7
NatWest Markets	0.1 H	3.2	0.4 H	0.2	0.1	0.2 H	0.3 H	0.1 L	0.6	1.3	2.1	2.7	3.7	3.0	2.9	107.0	9.0 H	2.4	3.2	3.9
Nomura Securities, Inc.	0.1 H	3.3 H	na	na	na	na	na	0.2	0.6	1.3	na	na	na	na	na	na	4.0	1.5	3.6	4.4 H
Oxford Economics	0.1 H	3.3 H	0.2 L	na	0.1	0.1 L	0.1 L	0.2	0.6	1.3	1.9	1.7 L	na	na	2.8 L	102.6	7.4	1.7	3.1	2.4
PNC Financial Services Corp.	0.1 H	3.3 H	0.2 L	na	0.0 L	0.1 L	0.1 L	0.1 L	0.5	1.1	1.9	na	3.3	1.5 L	2.8 L	na	3.0	1.5	1.6	1.6
RDQ Economics	0.1 H	3.3 H	0.2 L	0.1 L	0.0 L	0.1 L	0.1 L	0.1 L	0.7 H	1.2	2.0	2.6	3.4	3.0	2.9	103.9	7.4	2.4	2.2	2.2
Regions Financial Corporation	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.5	1.3	2.0	2.7	3.8	2.7	2.9	102.8	5.1	2.0	3.7	3.1
S&P Global	0.1 H	3.2	0.2 L	na	0.2 H	0.2 H	0.2	0.3 H	0.5	1.1	1.7 L	na	na	na	2.9	na	0.8 L	3.2	2.3	2.2
Scotiabank Group	0.1 H	3.3 H	na	na	0.1	na	na	0.2	0.5	1.2	2.0	na	na	na	na	na	1.7	na	na	na
Societe Generale	0.1 H	na	na	na	0.1	0.1 L	na	0.2	0.5	1.1	2.0	na	na	na	na	na	5.0	1.8	2.7	2.8
Swiss Re	0.1 H	3.3 H	0.3	0.2	0.1	0.2 H	0.2	0.3 H	0.6	1.1	1.8	2.8	3.8	na	2.8 L	na	4.4	2.5	3.7	1.6
The Northern Trust Company	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.5	1.2	1.9	2.6	3.3	2.8	2.8 L	102.5	3.7	2.3	2.3	2.4
TS Lombard	0.1 H	3.2	0.4 H	0.2	0.2 H	0.2 H	0.2	0.2	0.2 L	1.4 H	2.1	2.8	3.6	2.0	3.4 H	108.0 H	4.0	1.2	1.0 L	1.0
Via Nova Investment Mgt.	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.2	0.6	1.3	2.0	2.8	3.3	2.9	3.0	103.0	5.5	2.0	2.2	2.1
Wells Fargo	0.1 H	3.3 H	0.3	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.4	1.2	2.0	2.7	3.6	2.7	3.0	na	4.9	1.8	3.6	3.7
ACIMA Private Wealth	0.0 L	3.1 L	0.2 L	0.3 H	0.1	0.1 L	0.1 L	0.1 L	0.4	0.9 L	1.8	2.4	3.4	1.8	2.9	102.5	1.0	1.0 L	2.3	0.3 L
March Consensus	**0.1**	**3.3**	**0.2**	**0.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.5**	**1.2**	**2.0**	**2.6**	**3.5**	**2.6**	**2.9**	**103.6**	**4.3**	**2.2**	**2.8**	**2.7**
Top 10 Avg.	0.1	3.3	0.3	0.2	0.1	0.1	0.2	0.2	0.6	1.3	2.1	2.8	3.7	2.9	3.1	104.4	6.6	3.2	3.7	3.9
Bottom 10 Avg.	0.1	3.2	0.2	0.1	0.0	0.1	0.1	0.1	0.4	1.1	1.8	2.4	3.3	2.2	2.8	102.7	2.3	1.5	1.8	1.5
February Consensus	0.1	3.3	0.2	0.1	0.1	0.1	0.1	0.2	0.5	1.1	1.8	2.5	3.4	2.5	2.8	103.4	2.1	1.8	2.3	2.1
Number of Forecasts Changed From A Month Ago:																				
Down	0	0	3	1	7	0	3	11	2	0	1	3	7	8	5	2	3	5	7	3
Same	42	34	28	23	28	33	29	28	23	15	8	4	5	5	10	11	3	6	6	5
Up	1	2	1	0	1	1	1	3	16	28	31	18	13	7	18	7	36	26	27	29
Diffusion Index	51%	53%	47%	48%	42%	51%	47%	40%	67%	83%	88%	80%	62%	48%	70%	63%	89%	78%	75%	85%

Second Quarter 2021

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	Percent Per Annum -- Average For Quarter: Short-Term: 1 Federal Funds Rate	2 Prime Bank Rate	3 LIBOR Rate 3-Mo.	4 Com. Paper 1-Mo.	5 Treas. Bills 3-Mo.	6 Treas. Bills 6-Mo.	7 Treas. Bills 1-Yr.	Intermediate-Term: 8 Treas. Notes 2-Yr.	9 Treas. Notes 5-Yr.	10 Treas. Notes 10-Yr.	Long-Term: 11 Treas. Bond 30-Yr.	12 Aaa Corp. Bond	13 Baa Corp. Bond	14 State & Local Bonds	15 Home Mtg. Rate	Avg. For ---Qtr.--- A. Fed's Adv Fgn Econ $ Index	(Q-Q % Change) (SAAR): B. Real GDP	C. GDP Price Index	D. Cons. Price Index	E. PCE Price Index
Action Economics	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.3	0.6	1.2	2.0	2.5	3.5	2.9	3.0	103.4	6.0	1.8	2.2	1.9
AIG	0.1 H	3.3 H	na	na	0.1	0.1	0.1 L	0.2	0.6	1.3	2.0	na	3.4	na	3.1	na	10.5	2.3	2.5	2.8
Amherst Pierpont Securities	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.2	0.8 H	1.5 H	2.4	3.1	3.9	2.4	3.1	103.5	9.4	2.2	2.9	2.6
Bank of America	0.1 H	na	0.2 L	na	na	na	na	0.1 L	0.6	1.3	2.0	na	na	na	na	na	8.0	2.1	2.9	2.3
Barclays	0.1 H	3.3 H	na	na	na	na	na	0.2	0.6	1.3	2.0	na	na	na	na	na	11.0	2.0	1.8	1.6
BMO Capital Markets	0.1 H	3.3 H	0.3	na	0.1	0.1	0.1 L	0.1 L	0.6	1.3	2.0	na	na	na	2.9	102.3	8.5	1.8	1.8	1.6
BNP Paribas Americas	0.1 H	na	na	na	na	na	na	0.2	na	1.2	na	na	na	na	na	na	4.8	na	1.4	1.1
Chan Economics	0.1 H	3.3 H	0.3	0.1 L	0.1	0.1	0.1 L	0.1 L	0.5	1.4	2.1	2.8	3.7	2.8	3.1	102.2	6.0	1.8	1.9	1.8
Chmura Economics & Analytics	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.1 L	0.5	1.3	2.0	2.6	na	na	2.8 L	na	5.1	2.0	2.2	na
Comerica Bank	0.1 H	3.2	0.3	na	0.1	0.2 H	0.2	0.3	0.7	1.4	2.1	na	na	na	2.9	na	5.4	2.1	3.3	2.8
Daiwa Capital Markets America	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.1 L	0.6	1.4	2.1	2.8	3.6	na	3.0	102.0	6.3	2.0	2.2	2.0
DePrince & Assoc.	0.1 H	3.2	0.3	0.2	0.1	0.1	0.1 L	0.2	0.6	1.3	2.1	3.0	3.8	2.5	2.9	102.7	3.8	1.9	1.9	1.7
Economist Intelligence Unit	0.1 H	3.3 H	na	0.1 L	0.1	0.1	0.1 L	0.2	0.5	1.2	2.0	na	na	na	2.9	na	3.3	na	1.6	na
Fannie Mae	0.1 H	3.3 H	na	na	0.1	0.1	0.1 L	0.1 L	0.7	1.4	2.2	na	na	na	3.0	na	9.4	1.3	1.4	1.3
Georgia State University	0.1 H	3.3 H	na	na	0.0 L	0.1	0.1 L	0.2	0.6	1.4	2.2	2.6	3.8	na	3.2	na	8.0	1.2	1.5	1.3
GLC Financial Economics	0.1 H	3.3 H	0.2 L	0.2	0.1	0.1	0.2	0.2	0.4	1.1	1.7	2.6	3.4	3.2	3.0	103.8	5.0	1.3	2.0	1.9
Goldman Sachs & Co.	0.1 H	na	0.2 L	na	0.1	na	na	0.2	0.6	1.3	2.1	na	na	na	na	na	11.0	1.6	3.4 H	2.7
Grant Thornton/Diane Swonk	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.2	0.4	1.2	2.0	2.8	3.4	na	2.9	na	4.9	1.2	1.1	1.3
IHS Markit	0.1 H	3.3 H	na	na	0.1	0.1	0.1 L	0.2	0.5	1.2	1.9	na	na	na	2.9	na	6.4	1.2	1.1	1.3
ING	0.1 H	na	0.3	na	na	na	na	0.2	0.8 H	1.5 H	2.1	na	na	na	na	na	7.0	na	na	na
J.P. Morgan Chase	0.1 H	na	0.2 L	na	na	na	na	0.2	0.6	1.4	2.2	na	na	na	na	na	9.5	2.0	2.6	2.3
Loomis, Sayles & Company	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.2	0.6	1.3	2.1	2.6	3.3 L	2.8	3.0	103.3	8.2	1.2	1.0	1.0
MacroFin Analytics & Rutgers Bus School	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.2	0.7	1.4	2.3	2.9	3.4	3.0	3.2	103.0	3.9	1.6	2.0	1.6
MacroPolicy Perspectives	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.1 L	0.5	1.5 H	2.5 H	2.9	3.6	2.9	3.2	104.0	5.0	1.2	1.2	1.2
Mizuho Research Institute	0.1 H	na	na	na	na	na	na	na	na	1.2	na	na	na	na	na	na	na	na	na	na
Moody's Analytics	0.1 H	3.3 H	0.3	0.1 L	0.1	0.1	0.3 H	0.4 H	0.7	1.1	2.2	2.5	3.3 L	2.3	3.1	na	5.2	2.2	1.8	2.0
Moody's Capital Markets Group	0.1 H	3.3 H	0.2 L	0.1 L	0.0 L	0.1	0.1 L	0.2	0.6	1.4	2.2	2.9	3.6	3.1	3.1	103.5	5.7	2.2	3.2	3.1 H
Naroff Economic Advisors	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.2 H	0.2	0.2	0.6	1.4	2.2	2.6	4.4	2.8	3.4	103.9	3.8	1.7	2.4	2.4
NatWest Markets	0.1 H	3.2	0.3	0.2	0.1	0.2 H	0.3 H	0.1 L	0.6	1.4	2.2	2.9	3.9	2.9	2.9	106.0 H	4.0	2.3	2.7	2.5
Nomura Securities, Inc.	0.1 H	3.3 H	na	na	na	na	na	0.2	0.6	1.4	na	na	na	na	na	na	8.0	1.6	2.5	2.1
Oxford Economics	0.1 H	3.3 H	0.3	na	0.1	0.1	0.2	0.3	0.8 H	1.5 H	2.1	2.0 L	na	na	2.8 L	102.5	12.9 H	2.5	2.2	2.1
PNC Financial Services Corp.	0.1 H	3.3 H	0.2 L	na	0.0 L	0.0 L	0.1 L	0.1 L	0.6	1.3	2.1	na	3.4	1.6 L	2.9	na	6.4	1.9	1.4	1.0
RDQ Economics	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.1 L	0.8 H	1.4	2.2	2.8	3.6	3.3 H	3.1	103.6	7.9	2.5	2.3	2.3
Regions Financial Corporation	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.1 L	0.6	1.4	2.3	2.9	4.0	2.8	3.0	102.4	3.9	1.7	2.3	1.9
S&P Global	0.1 H	3.2	0.2 L	na	0.2 H	0.2 H	0.2	0.3	0.6	1.3	2.0	na	na	na	3.0	na	12.4	2.2	1.4	1.4
Scotiabank Group	0.1 H	3.3 H	na	na	0.1	na	na	0.3	0.7	1.3	2.0	na	na	na	na	na	9.0	na	na	na
Societe Generale	0.1 H	na	na	na	0.1	0.1	na	0.3	0.6	1.3	2.1	na	na	na	na	na	3.0 L	0.8 L	0.6 L	0.5 L
Swiss Re	0.1 H	3.3 H	0.4 H	0.3 H	0.2 H	0.2 H	0.3 H	0.4 H	0.7	1.3	2.0	3.4 H	4.5 H	na	3.0	na	5.4	2.9 H	1.1	2.8
The Northern Trust Company	0.1 H	3.3 H	0.3	0.1 L	0.1	0.1	0.2	0.2	0.6	1.3	2.1	2.7	3.5	3.0	3.1	102.0	7.9	2.5	2.4	2.4
TS Lombard	0.1 H	3.2	0.4 H	0.2	0.2 H	0.2 H	0.2	0.2	0.3 L	1.5 H	2.2	2.9	3.7	2.1	3.5 H	105.0	6.0	1.0	1.0	1.0
Via Nova Investment Mgt.	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.2	0.6	1.3	2.1	3.0	3.5	3.3 H	3.2	103.0	4.5	2.0	2.4	2.2
Wells Fargo	0.1 H	3.3 H	0.3	0.1 L	0.1	0.1	0.1 L	0.2	0.6	1.4	2.2	2.9	3.8	2.8	3.2	na	8.3	2.8	2.8	2.6
ACIMA Private Wealth	0.0 L	3.1 L	0.2 L	0.3 H	0.1	0.1	0.1 L	0.1 L	0.4	0.8 L	1.6 L	2.6	3.8	1.7	2.9	101.0 L	5.0	0.9	0.8	0.8
March Consensus	**0.1**	**3.3**	**0.2**	**0.1**	**0.1**	**0.1**	**0.1**	**0.2**	**0.6**	**1.3**	**2.1**	**2.8**	**3.7**	**2.7**	**3.0**	**103.2**	**6.8**	**1.8**	**2.0**	**1.9**
Top 10 Avg.	0.1	3.3	0.3	0.2	0.1	0.2	0.2	0.3	0.7	1.5	2.3	3.0	4.0	3.0	3.2	104.0	10.4	2.4	2.9	2.7
Bottom 10 Avg.	0.1	3.2	0.2	0.1	0.1	0.1	0.1	0.1	0.5	1.2	1.9	2.5	3.4	2.4	2.9	102.3	4.0	1.1	1.1	1.1
February Consensus	0.1	3.3	0.3	0.1	0.1	0.1	0.2	0.2	0.5	1.2	1.9	2.6	3.6	2.6	3.0	102.8	5.4	1.7	1.8	1.7
Number of Forecasts Changed From A Month Ago:																				
Down	0	0	3	2	3	2	7	8	2	0	0	1	3	5	5	4	6	8	8	9
Same	42	34	27	22	32	31	24	31	16	10	11	6	7	5	11	8	9	9	8	9
Up	1	2	2	0	1	1	2	3	23	33	29	18	15	10	17	8	27	20	24	19
Diffusion Index	51%	53%	48%	46%	47%	49%	42%	44%	76%	88%	86%	84%	74%	63%	68%	60%	75%	66%	70%	64%

Third Quarter 2021

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	1 Federal Funds Rate	2 Prime Bank Rate	3 LIBOR Rate 3-Mo.	4 Com. Paper 1-Mo.	5 Treas. Bills 3-Mo.	6 Treas. Bills 6-Mo.	7 Treas. Bills 1-Yr.	8 Treas. Notes 2-Yr.	9 Treas. Notes 5-Yr.	10 Treas. Notes 10-Yr.	11 Treas. Bond 30-Yr.	12 Aaa Corp. Bond	13 Baa Corp. Bond	14 State & Local Bonds	15 Home Mtg. Rate	A. Fed's Adv Fgn Econ $ Index	B. Real GDP	C. GDP Price Index	D. Cons. Price Index	E. PCE Price Index
	Percent Per Annum -- Average For Quarter: Short-Term							Intermediate-Term			Long-Term					Avg. For ---Qtr.---	(Q-Q % Change) (SAAR)			
Action Economics	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.2	0.4	0.7	1.2	2.0	2.5	3.5	2.9	3.0	103.6	4.8	2.0	1.8	1.6
AIG	0.1 H	3.3 H	na	na	0.1	0.1	0.2	0.2	0.7	1.4	2.2	na	3.6	na	3.2	na	9.5	2.0	2.7	2.4
Amherst Pierpont Securities	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.2 H	0.2	0.3	0.9	1.7 H	2.7 H	3.4 H	4.2	2.6	3.4	104.3	6.9	2.3	2.8	2.5
Bank of America	0.1 H	na	0.2 L	na	na	na	na	0.2	0.7	1.5	2.3	na	na	na	na	na	11.0 H	2.1	2.2	1.9
Barclays	0.1 H	3.3 H	na	na	na	na	na	0.2	0.7	1.4	2.1	na	na	na	na	na	9.5	2.3	1.9	2.0
BMO Capital Markets	0.1 H	3.3 H	0.3	na	0.1	0.1	0.1 L	0.2	0.6	1.3	2.1	na	na	na	2.9	101.9	7.5	2.4	2.7	2.5
BNP Paribas Americas	0.1 H	na	na	na	na	na	na	0.3	na	1.3	na	na	na	na	na	na	6.7	na	1.8	1.6
Chan Economics	0.1 H	3.3 H	0.3	0.1 L	0.1	0.1	0.2	0.2	0.6	1.5	2.2	2.9	3.8	2.9	3.2	102.0	4.5	1.8	1.9	1.8
Chmura Economics & Analytics	0.1 H	3.3 H	0.3	0.1 L	0.1	0.1	0.1 L	0.2	0.6	1.3	2.1	2.7	na	na	2.8 L	na	4.6	2.1	2.7	na
Comerica Bank	0.1 H	3.2	0.3	na	0.1	0.2 H	0.3 H	0.4	0.8	1.5	2.2	na	na	na	3.0	na	5.7	2.0	3.0 H	2.5
Daiwa Capital Markets America	0.1 H	3.3 H	0.3	0.1 L	0.1	0.1	0.1 L	0.2	0.7	1.4	2.2	2.9	3.7	na	3.1	101.0	5.2	2.1	2.3	2.1
DePrince & Assoc.	0.1 H	3.2	0.3	0.2	0.1	0.1	0.2	0.3	0.7	1.4	2.1	3.2	4.2	2.7	3.0	102.4	3.9	2.0	2.0	1.8
Economist Intelligence Unit	0.1 H	3.3 H	na	0.1 L	0.1	0.2 H	0.2	0.2	0.6	1.3	2.1	na	na	na	2.9	na	6.6	na	1.8	na
Fannie Mae	0.1 H	3.3 H	na	na	0.1	0.1	0.1 L	0.2	0.8	1.5	2.3	na	na	na	3.1	na	7.7	1.8	2.0	1.8
Georgia State University	0.1 H	3.3 H	na	na	0.0 L	0.0 L	0.1 L	0.2	0.8	1.7 H	2.4	2.8	4.1	na	3.5	na	3.3	1.7	2.2	1.6
GLC Financial Economics	0.1 H	3.3 H	0.4 H	0.2	0.1	0.2 H	0.2	0.3	0.5	1.1	1.7	2.6	3.6	3.2	3.0	103.6	4.8	1.5	2.5	2.0
Goldman Sachs & Co.	0.1 H	na	0.2 L	na	0.1	na	na	0.3	0.6	1.4	2.2	na	na	na	na	na	8.5	1.4	2.2	1.8
Grant Thornton/Diane Swonk	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.2	0.5	1.2	2.1	2.8	3.4 L	na	2.9	na	6.0	1.7	1.8	1.6
IHS Markit	0.1 H	3.3 H	na	na	0.1	0.1	0.1 L	0.2	0.6	1.3	2.1	na	na	na	3.0	na	7.8	1.7	1.8	1.6
ING	0.1 H	na	0.3	na	na	na	na	0.2	0.8	1.5	2.1	na	na	na	na	na	9.0	na	na	na
J.P. Morgan Chase	0.1 H	na	0.2 L	na	na	na	na	0.2	0.7	1.6	2.4	na	na	na	na	na	8.3	2.0	2.0	1.7
Loomis, Sayles & Company	0.1 H	3.3 H	0.3	0.1 L	0.1	0.1	0.2	0.2	0.6	1.5	2.3	2.7	3.4 L	2.9	3.1	103.0	7.7	1.7	1.0	1.2
MacroFin Analytics & Rutgers Bus School	0.1 H	3.3 H	0.2 L	0.2	0.1	0.1	0.1 L	0.2	0.7	1.5	2.3	2.9	3.4 L	3.1	3.2	103.2	3.4	1.9	2.1	1.8
MacroPolicy Perspectives	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.1 L	0.5	1.5	2.5	2.8	3.6	2.9	3.1	105.0	5.0	1.1	0.7 L	1.1 L
Mizuho Research Institute	0.1 H	na	na	na	na	na	na	na	na	1.1	na	na	na	na	na	na	na	na	na	na
Moody's Analytics	0.1 H	3.3 H	0.3	0.1 L	0.1	0.2 H	0.3 H	0.5 H	0.9	1.3	2.4	2.7	3.5	2.5	3.3	na	5.8	2.8	2.4	2.6
Moody's Capital Markets Group	0.1 H	3.3 H	0.2 L	0.1 L	0.0 L	0.1	0.1 L	0.2	0.7	1.5	2.4	3.1	3.8	3.2	3.2	106.7 H	5.3	2.1	2.5	2.7
Naroff Economic Advisors	0.1 H	3.3 H	0.3	0.2	0.1	0.2 H	0.2	0.3	0.7	1.5	2.3	2.7	4.4	2.8	3.6 H	104.8	3.0	1.9	1.7	1.9
NatWest Markets	0.1 H	3.2	0.3	0.2	0.1	0.2 H	0.3 H	0.2	0.6	1.4	2.3	2.9	3.9	2.8	3.0	105.0	7.0	1.9	1.2	1.6
Nomura Securities, Inc.	0.1 H	3.3 H	na	na	na	na	na	0.2	0.7	1.4	na	na	na	na	na	na	6.0	2.2	1.4	1.4
Oxford Economics	0.1 H	3.3 H	0.3	na	0.1	0.1	0.2	0.3	0.8	1.6	2.3	2.2 L	na	na	3.0	102.5	7.0	3.0 H	3.0 H	2.8 H
PNC Financial Services Corp.	0.1 H	3.3 H	0.2 L	na	0.0 L	0.1	0.1 L	0.2	0.8	1.4	2.2	na	3.5	1.6 L	3.0	na	6.7	2.4	2.0	2.2
RDQ Economics	0.1 H	3.3 H	0.2 L	0.2	0.1	0.1	0.2	0.2	1.0 H	1.7 H	2.5	3.1	3.9	3.8 H	3.4	102.8	6.0	2.5	2.3	2.3
Regions Financial Corporation	0.1 H	3.3 H	0.3	0.2	0.1	0.1	0.2	0.2	0.7	1.5	2.3	3.0	4.0	2.9	3.1	102.2	5.6	2.2	2.6	2.4
S&P Global	0.1 H	3.2	0.2 L	na	0.2 H	0.2 H	0.2	0.3	0.7	1.5	2.1	na	na	na	3.1	na	7.2	1.4	1.4	1.3
Scotiabank Group	0.1 H	3.3 H	na	na	0.1	na	na	0.3	0.9	1.7 H	2.3	na	na	na	na	na	10.5	na	na	na
Societe Generale	0.1 H	na	na	na	0.1	0.1	na	0.3	0.7	1.4	2.1	na	na	na	na	na	2.7 L	1.4	1.6	1.2
Swiss Re	0.1 H	3.3 H	0.4 H	0.3 H	0.2 H	0.2 H	0.3 H	0.4	0.7	1.2	2.0	3.3	4.5 H	na	2.9	na	5.0	1.3	2.9	2.2
The Northern Trust Company	0.1 H	3.3 H	0.3	0.1 L	0.1	0.2 H	0.2	0.3	0.8	1.4	2.3	2.9	3.7	3.1	3.2	100.0 L	9.0	2.2	2.1	2.3
TS Lombard	0.1 H	3.2	0.4 H	0.2	0.2 H	0.2 H	0.2	0.3	0.4	1.5	2.2	3.0	3.8	2.1	3.5	104.0	5.0	1.2	1.2	1.2
Via Nova Investment Mgt.	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1	0.1 L	0.2	0.7	1.4	2.1	3.1	3.6	3.3	3.3	104.0	4.5	1.9	2.0	2.0
Wells Fargo	0.1 H	3.3 H	0.3	0.1 L	0.1	0.1	0.1 L	0.2	0.7	1.4	2.2	2.9	3.8	2.8	3.2	na	8.3	2.4	2.1	1.9
ACIMA Private Wealth	-0.1 L	3.0 L	0.2 L	0.3 H	0.1	0.1	0.1 L	0.1 L	0.3 L	0.7 L	1.4 L	2.6	4.3	1.7	2.9	100.0 L	3.0	0.9 L	1.0	1.2
March Consensus	**0.1**	**3.3**	**0.3**	**0.2**	**0.1**	**0.1**	**0.2**	**0.2**	**0.7**	**1.4**	**2.2**	**2.9**	**3.8**	**2.8**	**3.1**	**103.1**	**6.3**	**1.9**	**2.0**	**1.9**
Top 10 Avg.	0.1	3.3	0.3	0.2	0.1	0.2	0.2	0.4	0.9	1.6	2.4	3.1	4.1	3.1	3.4	104.4	9.1	2.5	2.7	2.5
Bottom 10 Avg.	0.1	3.2	0.2	0.1	0.1	0.1	0.1	0.2	0.5	1.2	2.0	2.6	3.5	2.5	2.9	101.8	3.8	1.4	1.3	1.3
February Consensus	0.1	3.3	0.3	0.2	0.1	0.1	0.2	0.3	0.6	1.2	2.0	2.7	3.7	2.7	3.0	102.7	6.0	1.9	2.1	1.9
Number of Forecasts Changed From A Month Ago:																				
Down	0	0	1	2	6	3	4	5	0	0	0	1	2	4	3	3	11	10	14	12
Same	42	34	29	22	29	30	27	34	17	13	12	7	7	6	14	8	12	14	10	14
Up	1	2	2	0	1	1	2	3	24	30	28	17	16	10	16	9	19	13	16	11
Diffusion Index	51%	53%	52%	46%	43%	47%	47%	48%	79%	85%	85%	82%	78%	65%	70%	65%	60%	54%	53%	49%

Fourth Quarter 2021

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	Percent Per Annum -- Average For Quarter															Avg. For	(Q-Q % Change)			
	Short-Term							Intermediate-Term			Long-Term					---Qtr.---	(SAAR)			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	A.	B.	C.	D.	E.
	Federal Funds Rate	Prime Bank Rate	LIBOR Rate 3-Mo.	Com. Paper 1-Mo.	Treas. Bills 3-Mo.	Treas. Bills 6-Mo.	Treas. Bills 1-Yr.	Treas. Notes 2-Yr.	Treas. Notes 5-Yr.	Treas. Notes 10-Yr.	Treas. Bond 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Local Bonds	Home Mtg. Rate	Fed's Adv Fgn Econ $ Index	Real GDP	GDP Price Index	Cons. Price Index	PCE Price Index
Action Economics	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.2	0.2	0.4	0.8	1.2	2.0	2.5	3.5	3.0	3.0	103.5	4.5	1.8	2.2	1.9
AIG	0.1 H	3.3 H	na	na	0.1	0.1 L	0.2	0.3	0.8	1.5	2.3	na	3.7	na	3.3	na	5.0	0.9	1.4	0.9 L
Amherst Pierpont Securities	0.1 H	3.3 H	0.3	0.2	0.2 H	0.2	0.3	0.5	1.1 H	1.9 H	2.9 H	3.6 H	4.4	2.8	3.6	105.0	4.3	2.5	2.8	2.5
Bank of America	0.1 H	na	0.2 L	na	na	na	na	0.2	0.8	1.8	2.6	na	na	na	na	na	5.0	2.1	2.4	1.9
Barclays	0.1 H	3.3 H	na	na	na	na	na	0.2	0.7	1.4	2.1	na	na	na	na	na	5.0	2.0	2.0	1.7
BMO Capital Markets	0.1 H	3.3 H	0.3	na	0.1	0.1 L	0.1 L	0.2	0.6	1.4	2.1	na	na	na	2.9	101.4	4.0	2.0	2.3	2.1
BNP Paribas Americas	0.1 H	na	na	na	na	na	na	0.3	na	1.4	na	na	na	na	na	na	5.1	na	1.7	1.3
Chan Economics	0.1 H	3.3 H	0.3	0.1 L	0.1	0.1 L	0.2	0.3	0.7	1.6	2.3	3.0	3.9	3.0	3.3	101.8	4.0	1.9	2.0	1.9
Chmura Economics & Analytics	0.1 H	3.3 H	0.3	0.1 L	0.1	0.1 L	0.2	0.2	0.6	1.4	2.2	2.7	na	na	2.9	na	5.1	2.4	1.7	na
Comerica Bank	0.1 H	3.2	0.4 H	na	0.1	0.3 H	0.3	0.5	0.9	1.6	2.3	na	na	na	3.0	na	6.2	2.0	2.8	2.5
Daiwa Capital Markets America	0.1 H	3.3 H	0.3	0.1 L	0.1	0.2	0.2	0.2	0.7	1.5	2.2	3.0	3.8	na	3.2	101.0	4.4	2.2	2.4	2.2
DePrince & Assoc.	0.1 H	3.2	0.3	0.2	0.1	0.2	0.2	0.3	0.8	1.5	2.2	3.3	4.5 H	2.9	3.1	102.2	3.4	2.1	2.2	1.9
Economist Intelligence Unit	0.1 H	3.3 H	na	0.2	0.2 H	0.2	0.2	0.2	0.6	1.3	2.1	na	na	na	3.0	na	7.0 H	na	2.3	na
Fannie Mae	0.1 H	3.3 H	na	na	0.1	0.1 L	0.1 L	0.2	0.9	1.6	2.3	na	na	na	3.1	na	5.3	2.2	3.1 H	2.5
Georgia State University	0.1 H	3.3 H	na	na	0.0 L	0.1 L	0.1 L	0.2	0.9	1.9 H	2.6	2.9	4.4	na	3.8 H	na	3.0	1.9	3.1 H	2.2
GLC Financial Economics	0.1 H	3.3 H	0.4 H	0.2	0.1	0.2	0.2	0.3	0.5	1.0	1.6	2.5	3.6	3.1	3.0	103.4	4.3	1.3	2.3	2.1
Goldman Sachs & Co.	0.1 H	na	0.3	na	0.1	na	na	0.3	0.7	1.5	2.3	na	na	na	na	na	6.0	1.6	1.7	1.5
Grant Thornton/Diane Swonk	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.2	0.5	1.2	2.1	2.8	3.3 L	na	3.0	na	4.3	2.0	2.9	2.2
IHS Markit	0.1 H	3.3 H	na	na	0.1	0.1 L	0.1 L	0.2	0.7	1.4	2.2	na	na	na	3.2	na	5.4	1.9	2.9	2.2
ING	0.1 H	na	0.3	na	na	na	na	0.3	1.0	1.8	2.3	na	na	na	na	na	4.7	na	na	na
J.P. Morgan Chase	0.1 H	na	0.2 L	na	na	na	na	0.3	0.8	1.6	2.4	na	na	na	na	na	3.0	1.8	2.0	1.7
Loomis, Sayles & Company	0.1 H	3.3 H	0.3	0.1 L	0.1	0.2	0.2	0.3	0.7	1.6	2.3	2.8	3.5	2.9	3.2	103.0	5.0	1.9	1.8	1.7
MacroFin Analytics & Rutgers Bus School	0.1 H	3.3 H	0.3	0.2	0.1	0.2	0.2	0.2	0.7	1.5	2.3	3.0	3.4	3.1	3.2	103.3	3.5	2.0	2.2	2.0
MacroPolicy Perspectives	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.6	1.8	2.8	3.1	3.8	3.1	3.3	106.0	4.0	1.6	1.9	1.6
Mizuho Research Institute	0.1 H	na	na	na	na	na	na	na	na	1.1	na	na	na	na	na	na	na	na	na	na
Moody's Analytics	0.1 H	3.3 H	0.3	0.1 L	0.1	0.2	0.4 H	0.6 H	1.1 H	1.4	2.5	2.9	3.8	2.7	3.4	na	5.8	2.9 H	2.8	3.0 H
Moody's Capital Markets Group	0.1 H	3.3 H	0.2 L	0.1 L	0.0 L	0.1 L	0.2	0.3	0.9	1.6	2.4	3.2	3.8	3.3	3.3	107.7 H	4.3	2.0	2.4	2.3
Naroff Economic Advisors	0.1 H	3.3 H	0.3	0.2	0.2 H	0.2	0.3	0.4	0.9	1.6	2.5	2.8	4.5 H	2.9	3.7	105.6	2.5	2.0	2.0	2.2
NatWest Markets	0.1 H	3.2	0.3	0.2	0.1	0.2	0.3	0.2	0.7	1.6	2.5	2.9	3.8	2.7	3.0	105.0	5.0	0.5 L	1.6	1.7
Nomura Securities, Inc.	0.1 H	3.3 H	na	na	na	na	na	0.2	0.8	1.5	na	na	na	na	na	na	6.0	2.0	1.6	1.6
Oxford Economics	0.1 H	3.3 H	0.3	na	0.2 H	0.2	0.2	0.3	0.9	1.8	2.4	2.4 L	na	na	3.1	102.3	2.8	2.5	2.2	2.3
PNC Financial Services Corp.	0.1 H	3.3 H	0.2 L	na	0.1	0.1 L	0.1 L	0.2	0.8	1.5	2.3	na	3.6	1.7 L	3.1	na	4.4	2.1	1.7	2.0
RDQ Economics	0.1 H	3.3 H	0.2 L	0.2	0.1	0.1 L	0.2	0.2	1.1 H	1.9 H	2.8	3.3	4.1	4.2 H	3.6	102.5	4.6	2.6	2.3	2.3
Regions Financial Corporation	0.1 H	3.3 H	0.3	0.2	0.1	0.2	0.2	0.3	0.7	1.6	2.4	3.1	4.1	3.0	3.2	102.2	6.5	2.1	2.2	2.0
S&P Global	0.1 H	3.3 H	0.2 L	na	0.2 H	0.2	0.2	0.2	0.7	1.5	2.1	na	na	na	3.1	na	2.3	1.5	1.7	1.7
Scotiabank Group	0.1 H	3.3 H	na	na	0.1	na	na	0.5	1.1 H	1.9 H	2.4	na	na	na	na	na	6.6	na	na	na
Societe Generale	0.1 H	na	na	na	0.1	0.1 L	na	0.4	0.7	1.5	2.2	na	na	na	na	na	2.6	1.8	1.7	1.7
Swiss Re	0.1 H	3.3 H	0.4 H	0.3	0.2 H	0.2	0.3	0.4	0.7	1.2	2.0	3.3	4.4	na	2.9	na	5.0	1.6	1.8	2.1
The Northern Trust Company	0.1 H	3.3 H	0.3	0.1 L	0.1	0.2	0.3	0.3	0.9	1.5	2.5	3.0	3.9	3.2	3.3	99.5 L	5.0	1.8	1.8	1.8
TS Lombard	0.1 H	3.2	0.4 H	0.2	0.2 H	0.2	0.3	0.4	0.5	1.5	2.2	3.0	3.8	2.1	3.5	104.0	4.0	1.4	1.4	1.4
Via Nova Investment Mgt.	0.1 H	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.2	0.7	1.4	2.1	3.1	3.6	3.3	3.3	104.0	4.0	1.9	2.0	2.0
Wells Fargo	0.1 H	3.3 H	0.3	0.1 L	0.1	0.1 L	0.1 L	0.2	0.8	1.6	2.5	3.1	4.0	3.0	3.4	na	6.7	2.5	2.7	2.0
ACIMA Private Wealth	-0.1 L	3.0 L	0.3	0.4 H	0.1	0.1 L	0.1 L	0.1 L	0.3 L	0.6 L	1.4 L	2.8	4.5 H	1.7 L	2.8 L	100.0	2.0 L	0.8	1.0 L	1.3
March Consensus	**0.1**	**3.3**	**0.3**	**0.2**	**0.1**	**0.2**	**0.2**	**0.3**	**0.8**	**1.5**	**2.3**	**3.0**	**3.9**	**2.9**	**3.2**	**103.2**	**4.6**	**1.9**	**2.1**	**1.9**
Top 10 Avg.	0.1	3.3	0.3	0.2	0.2	0.2	0.3	0.4	1.0	1.8	2.6	3.2	4.3	3.2	3.5	104.8	6.2	2.4	2.8	2.4
Bottom 10 Avg.	0.1	3.2	0.2	0.1	0.1	0.1	0.1	0.2	0.6	1.2	2.0	2.7	3.6	2.5	3.0	101.6	2.9	1.3	1.6	1.5
February Consensus	0.1	3.3	0.3	0.2	0.1	0.2	0.2	0.3	0.7	1.3	2.1	2.8	3.8	2.8	3.1	102.7	4.5	1.9	2.0	1.9
Number of Forecasts Changed From A Month Ago:																				
Down	0	0	1	2	6	3	2	5	1	0	0	1	4	1	4	3	10	5	6	5
Same	42	34	28	22	29	29	28	34	13	14	12	7	6	8	10	7	14	16	16	17
Up	1	2	3	0	1	2	3	3	27	29	28	17	15	11	19	10	18	16	18	15
Diffusion Index	51%	53%	53%	46%	43%	49%	52%	48%	82%	84%	85%	82%	72%	75%	73%	68%	60%	65%	65%	64%

First Quarter 2022

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	Percent Per Annum -- Average For Quarter: Short-Term							Intermediate-Term		Long-Term						Avg. For ---Qtr.---	(Q-Q % Change) (SAAR)			
	1 Federal Funds Rate	2 Prime Bank Rate	3 LIBOR Rate 3-Mo.	4 Com. Paper 1-Mo.	5 Treas. Bills 3-Mo.	6 Treas. Bills 6-Mo.	7 Treas. Bills 1-Yr.	8 Treas. Notes 2-Yr.	9 Treas. Notes 5-Yr.	10 Treas. Notes 10-Yr.	11 Treas. Bond 30-Yr.	12 Aaa Corp. Bond	13 Baa Corp. Bond	14 State & Local Bonds	15 Home Mtg. Rate	A. Fed's Adv Fgn Econ $ Index	B. Real GDP	C. GDP Price Index	D. Cons. Price Index	E. PCE Price Index
Amherst Pierpont Securities	0.2 H	3.3 H	0.5 H	0.3	0.4 H	0.5 H	0.6 H	0.7 H	1.4 H	2.1 H	3.1 H	3.8 H	4.6	3.0	3.9 H	106.0	3.3	2.5	2.9	2.6 H
Action Economics	0.1	3.3 H	0.2 L	0.1 L	0.1	0.2	0.2	0.4	0.8	1.2	2.0	2.6	3.6	3.0	3.1	103.3	4.1	1.7	2.6	2.3
AIG	0.1	3.3 H	na	na	0.1	0.1 L	0.2	0.3	0.8	1.6	2.4	na	4.0	na	3.5	na	2.5	1.1	1.0 L	1.1 L
Barclays	0.1	3.3 H	na	na	na	na	na	na	na	na	na	na	na	na	na	na	2.5	1.8	1.3	1.4
BMO Capital Markets	0.1	3.3 H	0.3	na	0.1	0.1 L	0.2	0.2	0.7	1.4	2.1	na	na	na	2.9	101.2	3.3	1.9	2.2	2.0
BNP Paribas Americas	0.1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	3.9	na	2.1	1.6
Chan Economics	0.1	3.3 H	0.3	0.1 L	0.1	0.1 L	0.2	0.3	0.7	1.6	2.3	3.0	3.9	3.0	3.3	101.2	1.5	2.0	2.1	2.0
Chmura Economics & Analytics	0.1	3.3 H	0.3	0.2	0.1	0.2	0.2	0.2	0.6	1.5	2.2	2.8	na	na	2.9	na	3.6	1.8	2.4	na
Comerica Bank	0.1	3.2	0.4	na	0.1	0.3	0.4	0.5	0.9	1.7	2.4	na	na	na	3.1	na	5.0	2.0	2.4	2.5
Daiwa Capital Markets America	0.1	3.3 H	0.3	0.1 L	0.1	0.2	0.2	0.2	0.8	1.6	2.3	3.1	3.9	na	3.3	100.0	3.9	2.2	2.4	2.2
DePrince & Assoc.	0.1	3.2	0.3	0.3	0.2	0.2	0.2	0.4	0.8	1.5	2.2	3.4	4.3	2.9	3.2	102.1	2.8	2.2	2.3	1.9
Economist Intelligence Unit	0.1	3.3 H	na	0.2	0.2	0.2	0.2	0.2	0.6	1.4	2.2	na	na	na	3.1	na	1.2	na	2.2	na
Fannie Mae	0.1	3.3 H	na	na	0.1	0.1 L	0.1 L	0.3	1.0	1.6	2.3	na	na	na	3.2	na	3.1	2.3	2.4	2.3
Georgia State University	0.1	3.3 H	na	na	0.0 L	0.1 L	0.1 L	0.3	1.0	2.0	2.7	2.8	4.5	na	3.9 H	na	4.3	1.8	2.6	1.9
GLC Financial Economics	0.1	3.3 H	0.4	0.2	0.1	0.2	0.2	0.3	0.5	1.0	1.5	2.4 L	3.5	3.0	2.9	103.3	4.7	1.1	2.4	1.9
Goldman Sachs & Co.	0.1	na	0.2 L	na	0.1	na	na	na	na	1.6	na	na	na	na	na	na	3.0	1.1	1.9	1.1 L
Grant Thornton/Diane Swonk	0.1	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.2	0.5	1.3	2.1	2.8	3.1 L	na	3.0	na	5.5	1.8	2.0	1.8
IHS Markit	0.1	3.3 H	na	na	0.1	0.1 L	0.1 L	0.3	0.8	1.5	2.3	na	na	na	3.3	na	3.6	1.8	2.0	1.9
ING	0.1	na	0.3	na	na	na	na	0.3	1.0	1.8	2.3	na	na	na	na	na	3.5	na	na	na
J.P. Morgan Chase	0.1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	3.5	1.9	2.1	1.8
Loomis, Sayles & Company	0.1	3.3 H	0.3	0.2	0.2	0.2	0.2	0.3	0.7	1.7	2.3	2.9	3.6	2.9	3.3	103.0	3.5	1.8	1.8	1.7
MacroFin Analytics & Rutgers Bus School	0.1	3.3 H	0.3	0.2	0.2	0.2	0.2	0.2	0.7	1.5	2.3	3.0	3.4	3.2	3.2	103.5	3.0	2.1	2.2	2.1
MacroPolicy Perspectives	0.1	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.1 L	0.6	1.8	2.8	3.0	3.7	3.0	3.3	107.0	3.6	1.9	2.1	1.9
Mizuho Research Institute	0.1	na	na	na	na	na	na	na	na	1.1	na	na	na	na	na	na	na	na	na	na
Moody's Analytics	0.1	3.3 H	0.4	0.1 L	0.2	0.2	0.5	0.7 H	1.3	1.7	2.8	3.2	4.1	2.8	3.6	na	5.7 H	2.6 H	2.6	2.6 H
Moody's Capital Markets Group	0.1	3.3 H	0.2 L	0.1 L	0.0 L	0.1 L	0.2	0.4	1.0	1.7	2.5	3.2	3.9	3.4	3.4	107.9 H	3.9	1.9	2.1	2.2
Naroff Economic Advisors	0.1	3.3 H	0.3	0.2	0.2	0.3	0.3	0.4	1.0	1.7	2.6	3.0	4.6	3.0	3.8	106.5	2.5	2.2	2.3	2.4
NatWest Markets	0.1	3.2	0.3	0.2	0.1	0.2	0.3	0.3	0.8	1.6	2.6	na	na	na	na	na	3.0	1.7	2.0	2.4
Nomura Securities, Inc.	0.1	3.3 H	na	na	na	na	na	0.3	0.9	1.5	na	na	na	na	na	na	5.0	2.0	1.6	1.5
Oxford Economics	0.1	3.3 H	0.3	na	0.2	0.2	0.2	0.3	0.9	1.8	2.5	2.5	na	na	3.2	102.1	0.4	2.1	2.0	2.0
PNC Financial Services Corp.	0.1	3.3 H	0.2 L	na	0.1	0.1 L	0.1 L	0.2	0.9	1.5	2.4	na	3.7	1.8	3.2	na	2.9	2.2	1.9	2.0
RDQ Economics	0.1	3.3 H	0.2 L	0.2	0.1	0.1 L	0.2	0.2	1.1	2.0	2.9	3.3	4.2	4.4 H	3.7	101.6	5.2	2.6 H	2.5	2.4
Regions Financial Corporation	0.1	3.3 H	0.4	0.2	0.1	0.2	0.2	0.3	0.8	1.6	2.5	3.1	4.2	3.1	3.3	102.5	4.5	1.7	1.8	1.7
S&P Global	0.1	3.3 H	0.2 L	na	0.2	0.2	0.2	0.2	0.7	1.6	2.2	na	na	na	3.1	na	1.1	1.9	1.9	1.9
Scotiabank Group	0.1	3.3 H	na	na	0.1	na	na	0.6	1.2	2.0	2.4	na	na	na	na	na	3.1	na	na	na
Societe Generale	0.1	na	na	na	0.1	0.1 L	na	0.4	0.8	1.7	2.4	na	na	na	na	na	2.6	1.9	2.1	1.8
Swiss Re	0.1	3.3 H	0.4	0.3	0.2	0.2	0.3	0.4	0.7	1.2	2.0	3.3	4.4	na	2.9	na	0.1 L	1.9	3.1 H	1.9
The Northern Trust Company	0.1	3.3 H	0.3	0.1 L	0.1	0.2	0.3	0.4	1.0	1.6	2.6	3.1	4.0	3.4	3.4	99.0 L	3.0	1.6	1.7	1.7
TS Lombard	0.1	3.2	0.4	0.2	0.2	0.2	0.4	0.7 H	0.7	1.6	2.3	3.1	3.9	2.2	3.6	100.0	3.0	1.6	1.6	1.6
Via Nova Investment Mgt.	0.1	3.3 H	0.2 L	0.1 L	0.1	0.1 L	0.1 L	0.3	0.8	1.4	2.2	3.2	3.7	3.4	3.3	105.0	3.5	2.0	2.1	2.0
Wells Fargo	0.1	3.3 H	0.3	0.1 L	0.1	0.1 L	0.2	0.2	0.8	1.7	2.6	3.2	4.1	3.1	3.5	na	4.8	2.1	2.4	2.0
ACIMA Private Wealth	-0.1 L	3.0 L	0.3	0.4 H	0.1	0.1 L	0.1 L	0.1 L	0.3 L	0.6 L	1.3 L	3.0	4.8 H	1.7 L	2.8 L	100.0	3.0	1.0 L	1.0 L	1.2
March Consensus	**0.1**	**3.3**	**0.3**	**0.2**	**0.1**	**0.2**	**0.2**	**0.3**	**0.8**	**1.6**	**2.4**	**3.0**	**4.0**	**3.0**	**3.3**	**102.9**	**3.3**	**1.9**	**2.1**	**1.9**
Top 10 Avg.	0.1	3.3	0.4	0.3	0.2	0.3	0.4	0.5	1.1	1.9	2.7	3.3	4.4	3.3	3.6	104.8	4.9	2.3	2.6	2.4
Bottom 10 Avg.	0.1	3.2	0.2	0.1	0.1	0.1	0.1	0.2	0.6	1.2	2.0	2.8	3.6	2.6	3.0	101.0	1.7	1.4	1.6	1.5
February Consensus	0.1	3.3	0.3	0.2	0.1	0.2	0.2	0.3	0.7	1.4	2.1	2.9	3.9	2.8	3.2	102.5	3.4	1.9	2.1	1.9
Number of Forecasts Changed From A Month Ago:																				
Down	0	0	2	2	4	3	7	8	1	1	2	1	4	2	3	3	13	11	10	12
Same	41	34	25	21	31	29	24	24	10	9	7	7	5	6	11	6	16	16	14	12
Up	1	2	3	1	1	2	2	5	26	29	27	16	15	11	18	10	13	10	16	13
Diffusion Index	51%	53%	52%	48%	46%	49%	42%	46%	84%	86%	85%	81%	73%	74%	73%	68%	50%	49%	58%	51%

Second Quarter 2022

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	Percent Per Annum -- Average For Quarter: Short-Term							Intermediate-Term		Long-Term					Avg. For Qtr.	(Q-Q % Change) (SAAR)			
	1 Federal Funds Rate	2 Prime Bank Rate	3 LIBOR Rate 3-Mo.	4 Com. Paper 1-Mo.	5 Treas. Bills 3-Mo.	6 Treas. Bills 6-Mo.	7 Treas. Bills 1-Yr.	8 Treas. Notes 2-Yr.	9 Treas. Notes 5-Yr.	10 Treas. Notes 10-Yr.	11 Treas. Bond 30-Yr.	12 Aaa Corp. Bond	13 Baa Corp. Bond	14 State & Local Bonds	15 Home Mtg. Rate	A. Fed's Adv Fgn Econ $ Index	B. Real GDP	C. GDP Price Index	D. Cons. Price Index	E. PCE Price Index
Amherst Pierpont Securities	0.4 H	3.6 H	0.8 H	0.5 H	0.6 H	0.7 H	0.8 H	1.0 H	1.6 H	2.4 H	3.3 H	4.0 H	4.9 H	3.2	4.1 H	107.0	3.4	2.5	2.8 H	2.5
Regions Financial Corporation	0.2	3.3	0.4	0.3	0.2	0.2	0.3	0.4	0.9	1.7	2.6	3.2	4.3	3.2	3.4	103.0	3.4	1.6	1.9	1.8
Action Economics	0.1	3.3	0.2 L	0.1 L	0.1 L	0.2	0.2	0.4	0.8	1.2	2.0	2.6	3.6	3.0	3.1	103.1	na	na	na	na
AIG	0.1	3.3	na	na	0.1 L	0.1 L	0.3	0.3	0.9	1.7	2.5	na	4.1	na	3.5	na	2.0	2.2	2.5	2.5
Barclays	0.1	3.3	na	na	na	na	na	na	na	na	na	na	na	na	na	na	2.0	2.0	1.9	1.7
BMO Capital Markets	0.1	3.3	0.3	na	0.1 L	0.1 L	0.2	0.2	0.7	1.4	2.1	na	na	na	3.0	101.0	2.9	1.9	2.2	1.9
BNP Paribas Americas	0.1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	3.0	na	1.9	1.5
Chan Economics	0.1	3.3	0.3	0.2	0.2	0.2	0.3	0.3	0.7	1.6	2.3	3.0	3.9	3.0	3.3	101.0	2.5	2.1	2.2	2.0
Chmura Economics & Analytics	0.1	3.3	0.4	0.2	0.1 L	0.2	0.2	0.2	0.7	1.5	2.3	2.8	na	na	3.0	na	3.1	2.4	2.0	na
Comerica Bank	0.1	3.2	0.4	na	0.1 L	0.3	0.4	0.6	1.0	1.7	2.4	na	na	na	3.3	na	4.7	2.1	2.3	2.0
Daiwa Capital Markets America	0.1	3.3	0.3	0.2	0.1 L	0.2	0.2	0.2	0.8	1.6	2.4	3.2	4.0	na	3.4	100.0	3.0	2.3	2.5	2.3
DePrince & Assoc.	0.1	3.2	0.3	0.3	0.2	0.2	0.2	0.4	0.9	1.6	2.3	3.6	4.4	3.0	3.3	102.0	2.6	2.3	2.4	2.0
Economist Intelligence Unit	0.1	3.3	na	0.2	0.2	0.2	0.2	0.2	0.6	1.5	2.3	na	na	na	3.1	na	1.2 L	na	2.2	na
Fannie Mae	0.1	3.3	na	na	0.1 L	0.1 L	0.2	0.4	1.1	1.7	2.3	na	na	na	3.3	na	2.9	2.5	2.6	2.5
Georgia State University	0.1	3.3	na	na	0.1 L	0.1 L	0.1 L	0.4	1.1	2.2	2.9	2.8	4.5	na	4.0	na	4.1	1.9	2.8 H	1.9
GLC Financial Economics	0.1	3.3	0.4	0.2	0.1 L	0.2	0.2	0.3	0.5	0.9	1.3	2.1 L	3.2 L	2.8	2.6 L	103.5	3.6	2.0	2.5	2.1
Goldman Sachs & Co.	0.1	na	0.2 L	na	0.1 L	na	na	na	na	1.7	na	na	na	na	na	na	3.0	2.0	1.9	1.9
Grant Thornton/Diane Swonk	0.1	3.3	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.2	0.5	1.5	2.3	3.0	3.3	na	3.2	na	4.4	2.0	2.1	1.9
IHS Markit	0.1	3.3	na	na	0.1 L	0.1 L	0.1 L	0.3	0.8	1.6	2.4	na	na	na	3.4	na	2.6	1.9	2.1	1.9
ING	0.1	na	0.3	na	na	na	na	0.3	1.0	1.8	2.3	na	na	na	na	na	3.0	na	na	na
J.P. Morgan Chase	0.1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	3.0	1.9	2.2	1.9
Loomis, Sayles & Company	0.1	3.3	0.3	0.2	0.2	0.2	0.2	0.3	0.7	1.7	2.3	2.9	3.6	2.8	3.4	103.0	2.3	2.0	1.9	1.8
MacroFin Analytics & Rutgers Bus School	0.1	3.3	0.3	0.2	0.2	0.2	0.2	0.3	0.8	1.5	2.4	3.0	3.5	3.2	3.3	103.7	2.5	2.0	2.1	2.2
MacroPolicy Perspectives	0.1	3.3	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.1 L	0.6	1.8	2.8	3.0	3.7	2.9	3.3	108.0 H	3.6	1.3	1.9	1.3
Mizuho Research Institute	0.1	na	na	na	na	na	na	na	na	1.2	na	na	na	na	na	na	na	na	na	na
Moody's Analytics	0.1	3.3	0.4	0.1 L	0.2	0.3	0.5	0.8	1.5	2.0	3.0	3.5	4.4	3.0	3.8	na	5.3 H	2.5	2.7	2.6 H
Moody's Capital Markets Group	0.1	3.3	0.2 L	0.1 L	0.1 L	0.1 L	0.2	0.4	1.1	1.8	2.5	3.3	4.0	3.4	3.4	108.0 H	2.8	1.9	2.3	2.1
Naroff Economic Advisors	0.1	3.3	0.4	0.3	0.3	0.3	0.4	0.5	1.1	1.9	2.8	3.1	4.8	3.2	4.0	107.2	2.3	1.7	1.4	2.2
NatWest Markets	0.1	3.2	0.2 L	0.2	0.1 L	0.2	0.3	0.4	0.8	1.7	2.6	na	na	na	na	na	2.4	1.7	2.5	2.3
Nomura Securities, Inc.	0.1	3.3	na	na	na	na	na	0.3	1.0	1.5	na	na	na	na	na	na	4.0	2.1	1.4	1.4
Oxford Economics	0.1	3.3	0.3	na	0.2	0.2	0.2	0.3	1.0	1.9	2.5	2.6	na	na	3.2	101.9	1.8	2.1	2.2	2.1
PNC Financial Services Corp.	0.1	3.3	0.2 L	na	0.1 L	0.1 L	0.2	0.3	0.9	1.6	2.4	na	3.8	1.9	3.3	na	3.0	2.2	2.1	2.0
RDQ Economics	0.1	3.3	0.2 L	0.2	0.1 L	0.1 L	0.2	0.2	1.2	2.1	3.0	3.4	4.3	4.5 H	3.8	100.8	4.3	2.7	2.7	2.5
S&P Global	0.1	3.3	0.2 L	na	0.2	0.2	0.2	0.3	0.8	1.7	2.3	na	na	na	3.2	na	1.9	2.2	2.0	2.0
Scotiabank Group	0.1	3.3	na	na	0.2	na	na	0.7	1.3	2.1	2.5	na	na	na	na	na	1.4	na	na	na
Societe Generale	0.1	na	na	na	0.1 L	0.1 L	na	0.5	0.8	1.7	2.5	na	na	na	na	na	2.6	1.9	2.2	2.0
Swiss Re	0.1	3.3	0.4	0.3	0.2	0.2	0.3	0.4	0.7	1.3	2.1	3.4	4.4	na	3.0	na	2.6	2.8 H	1.0 L	1.9
The Northern Trust Company	0.1	3.3	0.3	0.1 L	0.1 L	0.2	0.3	0.4	1.0	1.6	2.6	3.1	4.0	3.5	3.4	99.0 L	2.6	1.6	1.9	1.9
TS Lombard	0.1	3.2	0.4	0.2	0.3	0.3	0.6	0.9	0.9	1.7	2.4	3.2	4.0	2.3	3.7	100.0	2.5	1.8	1.8	1.8
Via Nova Investment Mgt.	0.1	3.3	0.2 L	0.1 L	0.1 L	0.1 L	0.1 L	0.3	0.8	1.4	2.2	3.2	3.7	3.4	3.3	105.0	3.0	2.0	2.1	2.0
Wells Fargo	0.1	3.3	0.3	0.1 L	0.1 L	0.1 L	0.2	0.3	0.9	1.8	2.6	3.3	4.2	3.2	3.6	na	3.1	2.0	2.0	1.9
ACIMA Private Wealth	-0.1 L	3.0 L	0.3	0.4	0.1 L	0.1 L	0.1 L	0.1 L	0.3 L	0.6 L	1.2 L	3.0	4.5	1.8 L	2.9	100.0	2.0	1.1 L	1.2	1.0 L
March Consensus	**0.1**	**3.3**	**0.3**	**0.2**	**0.2**	**0.2**	**0.3**	**0.4**	**0.9**	**1.6**	**2.4**	**3.1**	**4.0**	**3.0**	**3.4**	**103.0**	**2.9**	**2.0**	**2.1**	**2.0**
Top 10 Avg.	0.1	3.3	0.4	0.3	0.3	0.3	0.4	0.6	1.2	2.0	2.8	3.4	4.5	3.4	3.7	105.2	4.1	2.4	2.6	2.4
Bottom 10 Avg.	0.1	3.2	0.2	0.1	0.1	0.1	0.1	0.2	0.6	1.3	2.0	2.8	3.6	2.7	3.0	100.9	1.9	1.7	1.6	1.6
February Consensus	0.1	3.3	0.3	0.2	0.2	0.2	0.3	0.4	0.8	1.5	2.2	2.9	3.9	2.9	3.2	102.6	3.0	2.0	2.1	1.9
Number of Forecasts Changed From A Month Ago:																				
Down	0	0	2	2	2	3	6	6	1	0	1	1	5	2	2	3	13	5	7	6
Same	41	34	25	21	32	29	25	27	12	13	9	7	4	6	10	7	15	15	15	18
Up	1	2	3	1	2	2	2	4	24	26	26	16	15	11	20	9	12	15	16	11
Diffusion Index	51%	53%	52%	48%	50%	49%	44%	47%	81%	83%	85%	81%	71%	74%	78%	66%	49%	64%	62%	57%

International Interest Rate And Foreign Exchange Rate Forecasts

United States

	Fed Fund Target Rate			10 Yr. Gov't Bond Yield %			Fed's AFE $ Index		
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	0.13	0.13	--	1.15	1.25	--	--	--	--
BMO Capital Markets	0.13	0.13	0.13	1.25	1.30	1.40	102.3	102.0	101.2
IHSMarkit	--	--	--	1.15	1.28	1.51	--	--	--
ING Financial Markets	0.13	0.13	0.13	1.50	1.50	1.75	99.5	97.6	96.7
Mizuho Research Institute	--	--	--	1.15	1.05	1.10	--	--	--
Moody's Analytics	0.13	0.13	0.13	1.05	1.10	1.42	--	--	--
Moody's Capital Markets	0.13	0.13	0.13	1.35	1.50	1.70	103.0	105.0	107.8
Northern Trust	0.13	0.13	0.13	1.15	1.30	1.50	102.0	100.0	99.0
Oxford Economics	0.13	0.13	0.13	1.53	1.70	1.85	102.5	102.5	102.1
S&P Global	0.12	0.12	0.12	0.80	0.93	1.32	--	--	--
Scotiabank	0.13	0.13	0.13	1.30	1.65	2.00	--	--	--
TS Lombard	0.13	0.13	0.13	1.40	1.50	1.60	108.0	105.0	104.0
Wells Fargo	0.13	0.13	0.13	1.35	1.50	1.70	103.3	102.5	101.5
March Consensus	**0.13**	**0.13**	**0.13**	**1.24**	**1.35**	**1.57**	**102.9**	**102.1**	**101.8**
High	0.13	0.13	0.13	1.53	1.70	2.00	108.0	105.0	107.8
Low	0.12	0.12	0.12	0.80	0.93	1.10	99.5	97.6	96.7
Last Months Avg.	0.13	0.12	0.12	1.08	1.19	1.38	103.2	102.5	101.5

Japan

	Policy-Rate Balance Rate			10 Yr. Gov't Bond Yield %			Yen per US$		
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	-0.10	-0.10	--	0.05	0.05	--	103.0	104.0	--
BMO Capital Markets	0.00	0.00	0.00	0.00	0.00	0.00	104.0	103.0	102.0
IHSMarkit	--	--	--	--	--	--	104.7	104.2	101.9
ING Financial Markets	-0.10	-0.10	-0.10	0.00	0.00	0.00	100.0	100.0	102.0
Mizuho Research Institute	-0.10	-0.10	-0.10	0.00	0.00	0.00	105.0	106.0	108.0
Moody's Analytics	-0.10	-0.10	-0.10	0.04	0.04	0.04	103.6	102.5	101.4
Moody's Capital Markets	-0.10	-0.10	-0.10	0.10	0.20	0.40	105.5	106.0	106.5
Nomura Securities	--	--	--	--	--	--	106.0	108.0	110.0
Northern Trust	-0.10	-0.10	-0.10	0.15	0.10	0.10	104.0	103.0	102.0
Oxford Economics	-0.04	-0.04	-0.05	0.01	0.00	0.00	102.3	101.5	101.5
S&P Global	-0.05	-0.05	-0.05	0.01	-0.01	0.01	105.0	104.8	104.0
Scotiabank	-0.10	-0.10	-0.10	--	--	--	102.0	100.0	102.0
TS Lombard	-0.06	-0.06	-0.06	0.10	0.20	0.30	106.0	103.0	100.0
Wells Fargo	-0.10	-0.10	-0.10	0.10	0.10	0.15	104.0	105.0	107.0
March Consensus	**-0.08**	**-0.08**	**-0.08**	**0.05**	**0.06**	**0.10**	**103.9**	**103.6**	**103.7**
High	0.00	0.00	0.00	0.15	0.20	0.40	106.0	108.0	110.0
Low	-0.10	-0.10	-0.10	0.00	-0.01	0.00	100.0	100.0	100.0
Last Months Avg.	-0.09	-0.09	-0.09	0.04	0.04	0.07	104.0	103.6	103.4

United Kingdom

	Official Bank Rate			10 Yr. Gilt Yields %			US$ per Pound Sterling		
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	0.10	0.10	--	0.40	0.40	--	1.30	1.30	--
BMO Capital Markets	0.10	0.10	0.10	0.65	0.75	0.90	1.38	1.39	1.40
IHSMarkit	--	--	--	--	--	--	1.37	1.37	1.38
ING Financial Markets	0.10	0.10	0.10	0.40	0.50	0.70	1.45	1.51	1.55
Moody's Analytics	0.10	0.10	0.10	0.40	0.52	0.63	1.41	1.43	1.51
Moody's Capital Markets	0.10	0.10	0.10	0.72	0.85	1.00	1.40	1.39	1.38
Nomura Securities	--	--	--	--	--	--	1.42	1.45	1.51
Northern Trust	0.10	0.10	0.10	0.85	0.95	1.05	1.37	1.32	1.33
Oxford Economics	0.10	0.10	0.10	0.39	0.39	0.42	1.37	1.37	1.38
S&P Global	0.10	0.10	0.10	0.37	0.40	0.46	1.27	1.25	1.31
Scotiabank	0.10	0.10	0.10	--	--	--	1.37	1.39	1.39
TS Lombard	0.10	0.10	0.10	0.70	0.80	0.90	1.36	1.42	1.45
Wells Fargo	0.10	0.10	0.10	0.55	0.60	0.70	1.35	1.35	1.37
March Consensus	**0.10**	**0.10**	**0.10**	**0.54**	**0.62**	**0.75**	**1.37**	**1.38**	**1.41**
High	0.10	0.10	0.10	0.85	0.95	1.05	1.45	1.51	1.55
Low	0.10	0.10	0.10	0.37	0.39	0.42	1.27	1.25	1.31
Last Months Avg.	0.10	0.10	0.10	0.36	0.45	0.60	1.36	1.37	1.42

Switzerland

	SNB Policy Rate			10 Yr. Gov't Bond Yield %			CHF per US$		
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	-0.75	-0.75	--	--	--	--	0.90	0.92	--
IHSMarkit	--	--	--	--	--	--	0.89	0.88	0.87
ING Financial Markets	-0.75	-0.75	-0.75	-0.40	-0.30	-0.30	0.88	0.88	0.88
Moody's Analytics	-0.75	-0.75	-0.75	-0.47	-0.47	-0.35	0.87	0.86	0.83
Moody's Capital Markets	-0.75	-0.75	-0.75	-0.30	-0.15	0.03	0.91	0.92	0.93
Nomura Securities	--	--	--	--	--	--	0.88	0.88	0.88
Northern Trust	-0.75	-0.75	-0.75	-0.25	-0.15	-0.05	0.89	0.87	0.86
Oxford Economics	-0.75	-0.75	-0.75	-0.41	-0.38	-0.29	0.89	0.89	0.90
S&P Global	-0.75	-0.75	-0.75	-0.44	-0.40	-0.39	0.91	0.91	0.93
TS Lombard	-0.75	-0.75	-0.75	-0.20	-0.10	0.00	0.97	0.97	0.97
Wells Fargo	--	--	--	--	--	--	0.90	0.90	0.89
March Consensus	**-0.75**	**-0.75**	**-0.75**	**-0.35**	**-0.28**	**-0.19**	**0.90**	**0.90**	**0.89**
High	-0.75	-0.75	-0.75	-0.20	-0.10	0.03	0.97	0.97	0.97
Low	-0.75	-0.75	-0.75	-0.47	-0.47	-0.39	0.87	0.86	0.83
Last Months Avg.	-0.75	-0.75	-0.75	-0.48	-0.45	-0.37	0.89	0.90	0.89

Canada

	O/N MMkt Financing Rate			10 Yr. Gov't Bond Yield %			C$ per US$		
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	0.25	0.25	--	--	--	--	1.31	1.30	--
BMO Capital Markets	0.25	0.25	0.25	1.05	1.10	1.20	1.27	1.26	1.25
IHSMarkit	--	--	--	--	--	--	1.30	1.28	1.25
ING Financial Markets	0.25	0.25	0.25	1.25	1.25	1.50	1.23	1.21	1.21
Moody's Analytics	0.25	0.25	0.25	0.81	0.91	1.20	1.29	1.32	1.32
Moody's Capital Markets	0.25	0.25	0.25	1.28	1.40	1.60	1.26	1.27	1.27
Nomura Securities	--	--	--	--	--	--	1.27	1.26	1.26
Northern Trust	0.25	0.25	0.25	1.40	1.50	1.60	1.28	1.28	1.27
Oxford Economics	0.25	0.25	0.25	1.23	1.39	1.51	1.29	1.29	1.28
S&P Global	0.25	0.25	0.25	0.84	1.11	1.38	1.35	1.38	1.39
Scotiabank	0.25	0.25	0.25	1.10	1.35	1.65	1.26	1.23	1.24
TS Lombard	0.25	0.25	0.25	1.35	1.45	1.55	1.38	1.38	1.38
Wells Fargo	0.25	0.25	0.25	1.10	1.15	1.30	1.26	1.24	1.22
March Consensus	**0.25**	**0.25**	**0.25**	**1.14**	**1.26**	**1.45**	**1.29**	**1.28**	**1.28**
High	0.25	0.25	0.25	1.40	1.50	1.65	1.38	1.38	1.39
Low	0.25	0.25	0.25	0.81	0.91	1.20	1.23	1.21	1.21
Last Months Avg.	0.25	0.25	0.25	0.84	1.01	1.22	1.29	1.29	1.27

International Interest Rate And Foreign Exchange Rate Forecasts

Australia

	Official Cash Rate			10 Yr. Gov't Bond Yield %			US$ per A$		
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	0.10	0.10	--	--	--	--	0.72	0.71	--
IHSMarkit	--	--	--	--	--	--	0.77	0.76	0.74
ING Financial Markets	0.10	0.10	0.10	1.30	1.50	1.80	0.80	0.82	0.83
Moody's Analytics	0.10	0.10	0.10	1.03	0.90	1.20	0.77	0.78	0.74
Moody's Capital Markets	0.10	0.10	0.10	1.55	1.73	1.88	0.80	0.80	0.81
Nomura Securities	--	--	--	--	--	--	0.77	0.78	0.78
Northern Trust	0.10	0.10	0.10	1.70	1.80	1.90	0.77	0.77	0.78
Oxford Economics	0.04	0.04	0.08	0.96	0.96	0.97	0.78	0.79	0.80
S&P Global	0.25	0.25	0.25	1.07	1.11	0.92	0.72	0.72	0.72
Scotiabank	0.10	0.10	0.10	--	--	--	0.77	0.78	0.79
TS Lombard	0.25	0.25	0.25	1.65	1.75	1.85	0.66	0.66	0.66
Wells Fargo	--	--	--	--	--	--	0.78	0.80	0.82
March Consensus	**0.13**	**0.13**	**0.14**	**1.32**	**1.39**	**1.50**	**0.76**	**0.76**	**0.77**
High	0.25	0.25	0.25	1.70	1.80	1.90	0.80	0.82	0.83
Low	0.04	0.04	0.08	0.96	0.90	0.92	0.66	0.66	0.66
Last Months Avg.	0.11	0.11	0.12	1.05	1.07	1.22	0.75	0.75	0.77

Euro area

	Main Refinancing Rate			US$ per Euro		
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	0.00	0.00	--	1.18	1.16	--
BMO Capital Markets	0.00	0.00	0.00	1.22	1.23	1.24
IHSMarkit	--	--	--	1.22	1.24	1.26
ING Financial Markets	0.00	0.00	0.00	1.25	1.28	1.30
Moody's Analytics	0.00	0.00	0.00	1.23	1.22	1.24
Moody's Capital Markets	0.00	0.00	0.00	1.20	1.19	1.18
Nomura Securities	--	--	--	1.26	1.28	1.30
Northern Trust	0.00	0.00	0.00	1.21	1.23	1.25
Oxford Economics	0.00	0.00	0.00	1.23	1.23	1.24
S&P Global	0.00	0.00	0.00	1.19	1.20	1.20
Scotiabank	0.00	0.00	0.00	1.25	1.26	1.25
TS Lombard	0.00	0.00	0.00	1.20	1.25	1.28
Wells Fargo	0.00	0.00	0.00	1.20	1.21	1.22
March Consensus	**0.00**	**0.00**	**0.00**	**1.22**	**1.23**	**1.25**
High	0.00	0.00	0.00	1.26	1.28	1.30
Low	0.00	0.00	0.00	1.18	1.16	1.18
Last Months Avg.	0.00	0.00	0.00	1.23	1.24	1.27

10 Yr. Gov't Bond Yields %

	Germany			France			Italy			Spain		
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	-0.50	-0.45	--	--	--	--	--	--	--	--	--	--
BMO Capital Markets	-0.30	-0.25	-0.10	--	--	--	--	--	--	--	--	--
ING Financial Markets	-0.40	-0.30	-0.20	-0.20	-0.10	0.10	0.60	0.60	0.80	0.10	0.25	0.50
Moody's Analytics	-0.55	-0.53	-0.39	-0.30	-0.29	-0.15	0.74	0.75	0.85	0.06	0.11	0.23
Moody's Capital Markets	-0.33	-0.20	0.00	-0.06	0.05	0.25	0.66	0.82	1.05	0.35	0.50	0.70
Northern Trust	-0.20	-0.10	0.00	0.05	0.15	0.25	0.75	0.85	0.95	0.50	0.60	0.70
Oxford Economics	-0.45	-0.40	-0.26	-0.18	-0.11	0.05	0.85	1.05	1.50	0.24	0.37	0.66
S&P Global	-0.53	-0.49	-0.44	-0.24	-0.20	-0.13	1.04	1.07	1.11	0.31	0.34	0.39
TS Lombard	-0.30	-0.20	-0.10	-0.25	-0.15	-0.05	0.57	0.67	0.77	0.07	0.17	0.27
Wells Fargo	-0.30	-0.25	-0.15	--	--	--	--	--	--	--	--	--
March Consensus	**-0.39**	**-0.32**	**-0.18**	**-0.17**	**-0.09**	**0.05**	**0.74**	**0.83**	**1.00**	**0.23**	**0.33**	**0.49**
High	-0.20	-0.10	0.00	0.05	0.15	0.25	1.04	1.07	1.50	0.50	0.60	0.70
Low	-0.55	-0.53	-0.44	-0.30	-0.29	-0.15	0.57	0.60	0.77	0.06	0.11	0.23
Last Months Avg.	-0.48	-0.41	-0.25	-0.27	-0.19	-0.03	0.63	0.72	0.91	0.09	0.18	0.37

Consensus Forecasts: 10-year Bond Yields vs U.S. Yield

	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-1.23	-1.19	-1.29	-1.47
United Kingdom	-0.60	-0.70	-0.73	-0.82
Switzerland	-1.62	-1.59	-1.63	-1.76
Canada	-0.13	-0.10	-0.09	-0.12
Australia	0.05	0.08	0.04	-0.07
Germany	-1.65	-1.63	-1.67	-1.75
France	-1.40	-1.41	-1.44	-1.53
Italy	-0.72	-0.50	-0.52	-0.57
Spain	-1.04	-1.01	-1.02	-1.08

Consensus Forecasts: Policy Rates vs U.S. Target Rate

	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-0.23	-0.21	-0.05	-0.21
United Kingdom	-0.03	-0.03	-0.03	-0.03
Switzerland	-0.88	-0.88	-0.88	-0.88
Canada	0.13	0.12	0.12	0.12
Australia	-0.03	0.00	0.00	0.01
Euro area	-0.13	-0.13	-0.13	-0.13

Viewpoints: A Sampling of Views on the Economy, Financial Markets and Government Policy Excerpted from Recent Reports Issued by our Blue Chip Panel Members and Others

The Fed's New Tool for Monitoring Inflation Expectations
(Ronnie Walker, Goldman Sachs Research)

A key reason for the Fed's adoption of average inflation targeting was to prevent persistently low inflation from causing inflation expectations to become unanchored to the downside.

To monitor inflation expectations, Fed staff economists recently introduced a new tool, the Index of Common Inflation Expectations (CIE). Vice Chair Clarida highlighted this tool as something the FOMC will monitor to make sure that inflation expectations remain well anchored and do not decline when the economy is in recession and monetary policy is constrained by the zero lower bound. If the CIE does decline, Clarida said, the FOMC would want to keep monetary policy accommodative to ensure that it returns to its pre-zero bound level.

In today's Daily, we replicate and update this new tool to better understand its makeup and to track how it has evolved over the pandemic.

The challenge in monitoring inflation expectations is that there are many survey- and market-based series available with varying long-term averages, volatility, and idiosyncrasies. The CIE addresses those problems by using a dynamic factor model to extract a common trend from the co-movement of the most prominent measures in order to produce a single aggregate quarterly series that summarizes the inflation expectation signal over time.

The CIE consists of 21 inflation expectation series. We see three dividing lines across the inputs. First, some series measure near-term inflation expectations, while others measure inflation over the medium- or long-term. Second, most series are denominated in terms of CPI inflation, but a few are in PCE terms or ask about prices more generally. Third, over half of the inputs measure the inflation expectations of professional forecasters, while there are 5 household- and 4 financial market-based measures.

Over half of the inputs measure the inflation expectations of professional forecasters, but the importance of the expectations of forecasters, households, and market participants in the CIE is more evenly split. We estimate that the CIE places roughly 40% weight in total on measures of forecaster inflation expectations and 30% weight each on household expectations and market-implied expectations.

The output of a dynamic factor model is in units that do not have a meaningful economic interpretation. To make the ouput more meaningful, the Fed staff economists choose to project the model's common factor onto the 10-year average PCE forecast from the Survey of Professional Forecasters. The authors stress that the CIE is designed to capture the evolution of inflation expectations and that one should therefore focus on changes in the CIE's trend, since the level is somewhat arbitrary. However, it might be tempting to think that the CIE at 2% means that inflation expectations are consistent with the Fed's 2% inflation target. Our calculations suggest that the bar for the CIE dipping below 2% is fairly high, in part because the SPF measure it is scaled to has a long-term average slightly above 2% and very low variance, meaning that large moves in the underlying components are translated into only modest changes in the CIE.

The Fed has not released an updated version of the CIE beyond the beginning of 2020. We provide a path through February 2021 based on our attempt to replicate the model at a monthly rather than a quarterly frequency.

The CIE declined to the lowest level on record in March 2020 (1.93%), though this largely reflected a sharp decline in breakeven inflation compensation that was likely due as much to poor liquidity conditions as to a decline in actual market inflation expectations. Over the next few months, the rebound in breakevens was offset by a broad decline in forecaster expectations, and the CIE remained low. But since then, the CIE has rebounded to 2.03%, the highest level since 2014. Forecaster expectations have risen since then, likely because of the surprisingly quick pace of recovery and the Fed's adoption of average inflation targeting, and both breakevens and household expectations are at multi-year highs. But even after the recent increase, the CIE remains well short of its pre-2014 level.

US Daily: Q&A: Policy Effects on Inflation
(Spencer Hill, Goldman Sachs Research)

We explore key questions about the inflation effects of the 2020 fiscal legislation and the upcoming Phase 5 stimulus—particularly on the healthcare, shelter, and education components. We find the largest effects in the healthcare sector, with coronacrisis support to providers boosting core PCE inflation by roughly 0.15pp currently. The reversal of these effects could reduce core inflation in 2022 by the same amount.

We also explore the potential disinflationary effects of tariff rollback. While we estimate a 0.25% boost to the current price level from tariffs imposed by the Trump administration, we expect many of these tariffs to remain in place.

Q&A: Policy Effects on Inflation

In today's Daily, we explore key questions about the inflation effects of the CARES Act, the expiration of key CARES Act provisions this year, and the Phase 4 fiscal deal in December. We also explore the likely inflation effects of the upcoming Phase 5 stimulus.

Q: What were the legislated effects of the CARES Act on healthcare inflation?

A: The CARES Act (March 2020) included two provisions that temporarily increased healthcare prices: a 20% add-on payment to Medicare coronavirus treatments, and the temporary cancellation of the 2013 Medicare sequestration reimbursement rate cuts. As discussed in more detail here, these changes are currently boosting year-on-year PCE health inflation by around 0.7pp, and could exert a drag of a similar magnitude when they expire.

Q: How did this change with the Phase 4 bill and a Democratic-controlled government?

A: These developments suggest incrementally higher healthcare services inflation in 2021, for two reasons. First, the Phase 4 bill included a 3.75% increase in Medicare payments to physician's offices that we expect to boost the level of PCE healthcare prices by roughly 0.15% as early as the January report. This increase is set to expire at the end of the year, implying a ~0.15pp drag on 2022 healthcare services inflation. Second, Democratic control of government means that the federal support to providers already in place will probably be extended through the end of this year. If these additional payments are allowed to expire in 2022—consistent with our forecast of a sharp decline in Covid-related hospitalizations at that horizon—the reversal of healthcare policy effects would exert 0.8pp of downward pressure on PCE healthcare inflation in 2022 relative to the pre-crisis trend. This would depress overall core inflation by around 0.15pp.

Q: Will health care legislation from the 2010s continue to affect medical care services inflation?

A: Yes. The steepest cuts to Medicare reimbursement rates legislated by the Affordable Care Act occurred during 2012-2017. However, the legislation also included a permanent downward adjustment to the annual price increases regulated by the Center for Medicare and Medicaid Services (CMS). We estimate this adjustment and its spillovers to private-sector pricing lower PCE healthcare inflation by as much as 0.5pp each year, which is worth -0.1pp for overall core PCE inflation (relative to its pre-Financial Crisis trend). So even though our baseline envisions a pickup in healthcare inflation in 2023 as coronacrisis effects disappear, we expect healthcare inflation to remain well below the 3¼% average pace in 2000-2007—barring a sharp pickup in wage growth or new policy changes. An expansion of the ACA could lower the medium-term pace of core inflation by an additional 0.05-0.1pp if implemented and if partially financed by Medicare reimbursement rate cuts.

Q: Are eviction moratoriums and rent forgiveness affecting the current pace of shelter inflation?

A: Yes, we think by around -0.35pp (yoy). Shelter inflation fell rapidly in the early months of the coronacrisis, as the BLS directly incorporated the impact of rent forgiveness into its estimates. While discounts and incentives are often offered during recessions, shelter inflation often does not slow significantly until a few quarters into the downturn. In contrast, monthly shelter prices decelerated sharply in Q2, and they have declined at least once in all 23 of the major MSAs in the CPI sample. Based on the approximation that these outright declines on average reflect the impact of rent forgiveness, we estimate the nationwide impact by cumulating these absolute declines across CPI geographies. This approach estimates the drag from rent forgiveness on year-on-year shelter inflation at about 0.35pp in January 2021.

Q: How does the Phase 4 bill and the upcoming stimulus round impact these considerations?

A: Biden's proposal to extend eviction and foreclosure moratoriums through September 2021 will probably increase the share of delinquent rent payments that are forgiven. At the margin, this could weigh on shelter inflation readings this year. However, we nonetheless expect a waning sequential drag from this channel, because these households are on a healthier financial footing than last year due to labor market improvement, stimulus checks, the reinstatement of unemployment benefit top-ups, and the additional rental assistance payments appropriated in the Phase 4 and upcoming relief packages. In fact, by late 2021 or early 2022, the normalization in rents for previously forgiven units could boost shelter inflation, potentially offsetting the downward cyclical pressure from the crisis.

Q: Will inflation in any other sectors be directly affected by coronacrisis legislation?

A: Increased financial aid appropriated in the spring 2020 stimulus rounds contributed to lower tuition costs in the fall semester (year-on-year tuition inflation fell 1.0pp to 1.3% between July and October 2020, CPI measure). With another $23bn allocated to higher education in the Phase 4 bill and a likely similar amount allocated to higher education fiscal assistance in the upcoming package, we expect softness in education inflation to persist in 2021. Given the weight of education (4% of core CPI basket), the impact on overall core inflation is likely modest, and our baseline estimate is a -0.05pp drag in 2020 and in 2021.

Q: What about the Aviation Excise Tax Holiday that expired at the end of 2020?

We do not include the excise tax holiday legislated by the CARES Act in our PCE estimates, because excise taxes are not reflected in the PPI source data used in the core PCE price index. In terms of the CPI, the tax holiday is difficult to identify in the data due to the simultaneous impact of the coronacrisis on the airline industry and the collapse in oil prices. Based on the 0.8% weight of airfares in the core CPI, the legislated holiday on a 7.5% excise tax may have lowered year-on-year core CPI inflation by as much as 0.06pp starting in April 2020 and lasting until December 2020. If so, the expiration of the holiday in 2021 could boost year-on-year core CPI inflation by the same amount during April-December 2021.

Q: What about trade policy? How much could tariff rollback reduce core inflation, and how likely is this in the next couple years?

A: We estimate the cumulative impact of the Trump administration's tariffs on the core price level at +0.25% (for both the PCE and CPI measures). This reflects the nearly 5% price outperformance of the categories directly affected by the China tariffs in Phases 1 through 3 coupled with their 5% combined weight in the core inflation basket. This +0.25% point estimate is also consistent with our tariff pass-through models (excluding tranche 4) and with academic research.

That being said, we have low expectations for the magnitude of tariff rollbacks in the near-term, and we expect many of these tariffs to remain in place. While we expect the Biden administration to begin the process of scaling back tariffs this year—for example the metals tariffs on US allies—reductions on the China tariffs are likely to require extensive negotiations, and their timing and outcome is very difficult to predict. Biden administration statements and recent press reports also cast doubt on significant progress in the near-term. Illustratively, if a third of these tariffs are reversed, it could lower year-on-year core inflation by nearly 0.05pp in 2022 and in 2023.

Special Questions:

1. When do you think the Fed will raise the Federal Funds rate?

2021	2022	2023	2024	2025	2026	Later
0%	16%	37%	37%	5%	3%	3%

2. How large do you estimate the Fed's balance sheet at year-end (tril.$)?

2021	2022	2023
8.5	9.3	9.5

3. Do you believe the balance of risks to US inflation in 2021 and 2022 are to the upside or to the downside?

	to the upside	to the downside
2021	86%	14%
2022	83%	17%

4. a. Do your current inflation forecasts (PCE price index) for 2021 and 2022 incorporate the $1.9 trillion proposal advanced by President Biden?

Yes 88% No 12%

b. If so, by how much did you adjust your inflation forecast (PCE price index)?

Q4 2021/Q4 2020	Q4 2022/Q4 2021
0.4 % point	0.2 % point

5. Does Democratic control of Congress and the Presidency impact your GDP forecasts in 2021 and 2022? If so, by how much (Q4/Q4)?

	Yes	No	Q4/Q4
2021	82%	18%	1.3%
2022	78%	22%	0.3%

6. Has the speed of distribution of vaccinations over the past month - and the policy response toward lockdowns - shifted the balance of risks to your 2021 GDP forecasts to the upside or to the downside?

	to the upside	to the downside
US	84%	16%
euro area	39%	61%
UK	83%	17%
Japan	68%	32%

7. a. What probability do you attach to a double dip in economic activity in the following economies?

US	UK	euro area
16%	44%	43%

b. Have these probabilities changed your view on the USD?

Yes	No
7%	93%

c. If so, what would be your new 2021 (EOP) USD/Sterling? Not enough responses

d. If so, what would be your new 2021 (EOP) USD/Euro? Not enough responses

Databank:

2021 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	5.3	····	····	····	····	····	····	····	····	····	····	····
Auto & Light Truck Sales (b)	16.63	····	····	····	····	····	····	····	····	····	····	····
Personal Income (a, current $)	10.0	····	····	····	····	····	····	····	····	····	····	····
Personal Consumption (a, current $)	2.4	····	····	····	····	····	····	····	····	····	····	····
Consumer Credit (e)	····	····	····	····	····	····	····	····	····	····	····	····
Consumer Sentiment (U. of Mich.)	79.0	76.8	····	····	····	····	····	····	····	····	····	····
Household Employment (c)	201	····	····	····	····	····	····	····	····	····	····	····
Nonfarm Payroll Employment (c)	49	····	····	····	····	····	····	····	····	····	····	····
Unemployment Rate (%)	6.3	····	····	····	····	····	····	····	····	····	····	····
Average Hourly Earnings (All, cur. $)	29.96	····	····	····	····	····	····	····	····	····	····	····
Average Workweek (All, hrs.)	35.0	····	····	····	····	····	····	····	····	····	····	····
Industrial Production (d)	-1.8	····	····	····	····	····	····	····	····	····	····	····
Capacity Utilization (%)	75.6	····	····	····	····	····	····	····	····	····	····	····
ISM Manufacturing Index (g)	58.7	····	····	····	····	····	····	····	····	····	····	····
ISM Nonmanufacturing Index (g)	58.7	····	····	····	····	····	····	····	····	····	····	····
Housing Starts (b)	1.580	····	····	····	····	····	····	····	····	····	····	····
Housing Permits (b)	1.886	····	····	····	····	····	····	····	····	····	····	····
New Home Sales (1-family, c)	923	····	····	····	····	····	····	····	····	····	····	····
Construction Expenditures (a)	····	····	····	····	····	····	····	····	····	····	····	····
Consumer Price Index (nsa, d)	1.4	····	····	····	····	····	····	····	····	····	····	····
CPI ex. Food and Energy (nsa, d)	1.4	····	····	····	····	····	····	····	····	····	····	····
PCE Chain Price Index (d)	1.5	····	····	····	····	····	····	····	····	····	····	····
Core PCE Chain Price Index (d)	1.5	····	····	····	····	····	····	····	····	····	····	····
Producer Price Index (nsa, d)	1.7	····	····	····	····	····	····	····	····	····	····	····
Durable Goods Orders (a)	3.4	····	····	····	····	····	····	····	····	····	····	····
Leading Economic Indicators (a)	0.5	····	····	····	····	····	····	····	····	····	····	····
Balance of Trade & Services (f)	····	····	····	····	····	····	····	····	····	····	····	····
Federal Funds Rate (%)	0.09	····	····	····	····	····	····	····	····	····	····	····
3-Mo. Treasury Bill Rate (%)	0.08	····	····	····	····	····	····	····	····	····	····	····
10-Year Treasury Note Yield (%)	1.08	····	····	····	····	····	····	····	····	····	····	····

2020 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	0.5	-0.3	-8.2	-14.7	18.3	8.6	1.1	1.4	1.7	-0.1	-1.3	-1.0
Auto & Light Truck Sales (b)	16.87	16.78	11.36	8.72	12.11	13.02	14.63	15.11	16.30	16.37	15.71	16.23
Personal Income (a, current $)	0.9	0.8	-1.8	12.4	-4.0	-1.1	0.7	-2.7	0.7	-0.7	-1.2	0.6
Personal Consumption (a, current $)	0.6	0.0	-6.7	-12.7	8.7	6.5	1.5	1.2	1.3	0.2	-0.6	-0.4
Consumer Credit (e)	2.8	5.5	-5.3	-18.3	-3.8	5.4	3.8	-2.5	4.3	1.3	4.0	2.8
Consumer Sentiment (U. of Mich.)	99.8	101.0	89.1	71.8	72.3	78.1	72.5	74.1	80.4	81.8	76.9	80.7
Household Employment (c)	-76	73	-3196	-22166	3854	4876	1677	3499	267	2126	140	21
Nonfarm Payroll Employment (c)	315	289	-1683	-20679	2833	4846	1726	1583	716	680	264	-227
Unemployment Rate (%)	3.5	3.5	4.4	14.8	13.3	11.1	10.2	8.4	7.8	6.9	6.7	6.7
Average Hourly Earnings (All, cur. $)	28.43	28.51	28.74	30.07	29.74	29.35	29.37	29.47	29.50	29.52	29.61	29.90
Average Workweek (All, hrs.)	34.3	34.4	34.1	34.2	34.7	34.6	34.6	34.7	34.8	34.8	34.8	34.7
Industrial Production (d)	-0.8	-0.2	-4.7	-16.3	-15.7	-10.5	-6.6	-6.3	-6.1	-4.7	-4.7	-3.2
Capacity Utilization (%)	76.9	76.9	73.6	64.2	64.8	68.9	71.8	72.5	72.4	73.3	73.9	74.9
ISM Manufacturing Index (g)	51.1	50.3	49.7	41.7	43.1	52.2	53.7	55.6	55.7	58.8	57.7	60.5
ISM Nonmanufacturing Index (g)	55.9	56.7	53.6	41.6	45.4	56.5	56.6	57.2	57.2	56.2	56.8	57.7
Housing Starts (b)	1.617	1.567	1.269	0.934	1.038	1.265	1.487	1.373	1.437	1.530	1.553	1.680
Housing Permits (b)	1.536	1.438	1.356	1.066	1.216	1.258	1.483	1.476	1.545	1.544	1.635	1.704
New Home Sales (1-family, c)	774	716	612	570	698	840	979	977	965	965	839	885
Construction Expenditures (a)	1.9	0.2	-0.3	-3.4	-1.3	1.0	1.1	2.0	-0.2	2.5	1.1	1.0
Consumer Price Index (nsa, d)	2.5	2.3	1.5	0.3	0.1	0.6	1.0	1.3	1.4	1.2	1.2	1.4
CPI ex. Food and Energy (nsa, d)	2.3	2.4	2.1	1.4	1.2	1.2	1.6	1.7	1.7	1.6	1.6	1.6
PCE Chain Price Index (d)	1.9	1.8	1.3	0.5	0.5	0.9	1.0	1.2	1.4	1.2	1.2	1.3
Core PCE Chain Price Index (d)	1.8	1.9	1.7	0.9	1.0	1.1	1.3	1.4	1.5	1.4	1.4	1.4
Producer Price Index (nsa, d)	2.0	1.1	0.3	-1.5	-1.1	-0.7	-0.3	-0.3	0.3	0.5	0.8	0.8
Durable Goods Orders (a)	-0.2	2.0	-16.7	-18.3	15.0	7.7	11.8	0.4	2.1	1.8	1.3	1.2
Leading Economic Indicators (a)	0.5	-0.1	-7.6	-6.4	3.1	3.0	2.0	1.5	0.9	0.7	0.9	0.4
Balance of Trade & Services (f)	-44.0	-37.7	-46.7	-52.5	-56.2	-51.9	-62.1	-65.6	-62.7	-63.8	-69.0	-66.6
Federal Funds Rate (%)	1.55	1.58	0.65	0.05	0.05	0.08	0.09	0.10	0.09	0.09	0.09	0.09
3-Mo. Treasury Bill Rate (%)	1.55	1.54	0.30	0.14	0.13	0.16	0.13	0.10	0.11	0.10	0.09	0.09
10-Year Treasury Note Yield (%)	1.76	1.50	0.87	0.66	0.67	0.73	0.62	0.65	0.68	0.79	0.87	0.93

(a) month-over-month % change; (b) millions, saar; (c) month-over-month change, thousands; (d) year-over-year % change; (e) annualized % change; (f) $ billions; (g) level. Most series are subject to frequent government revisions. Use with care.

Calendar of Upcoming Economic Data Releases

Monday	Tuesday	Wednesday	Thursday	Friday
March 1 Construction (Jan) ISM Manufacturing (Feb) IHS Markit Mfg PMI (Feb) NABE Outlook (Q1)	**2** ISM New York (Feb)	**3** BEA Truck Sales (Feb) BEA Auto Sales (Feb) ADP Employment Report (Feb) ISM Services PMI (Feb) IHS Markit Service PMI (Feb) EIA Crude Oil Stocks Mortgage Applications	**4** Productivity & Costs (Q4) Manufacturers' Shipments, Inventories & Orders (Jan) Public Debt (Feb) Challenger Employment Report (Feb) Weekly Jobless Claims Weekly Money Supply	**5** Employment Situation (Feb) International Trade (Jan) Consumer Credit (Jan)
8 Wholesale Trade (Jan) Treasury Auction Allotments (Feb)	**9** Manpower Survey (Q2) NFIB (Feb) Kansas City Financial Stress Index (Feb)	**10** CPI (Feb) Real Earnings (Feb) Cleveland Fed Median CPI(Feb) Transportation Services (Jan) Monthly Treasury Statement (Feb) EIA Crude Oil Stocks Mortgage Applications	**11** JOLTS (Jan) Financial Accounts (Q4) Weekly Jobless Claims Weekly Money Supply	**12** Producer Prices (Feb) QSS (Q4) Consumer Sentiment (Mar, Preliminary) Kansas City Fed Labor Market Conditions Indicators (Feb)
15 Empire State Mfg Survey (Mar) TIC Data (Jan)	**16** Import/Export Prices (Feb) Advance Retail Sales (Feb) Industrial Production (Feb) MTIS (Jan) Business Leaders Survey (Mar) Home Builders (Mar) FOMC Meeting	**17** New Residential Construction (Feb) FOMC Meeting EIA Crude Oil Stocks Mortgage Applications	**18** ECEC (Q4) Philadelphia Fed Mfg Business Outlook Survey (Mar) Composite Indexes (Feb) Weekly Jobless Claims Weekly Money Supply	**19**
22 QFR (Q4) Existing Home Sales (Feb) Treasury Auction Allotments (Mar) Chicago Fed National Activity Index (Feb)	**23** Final Building Permits (Feb) International Transactions (Q4) New Residential Sales (Feb) Philadelphia Fed Nonmfg Bus Outlook Survey (Mar) Richmond Fed Mfg & Service Sector Surveys (Mar)	**24** Advance Durable Goods (Feb) EIA Crude Oil Stocks Mortgage Applications	**25** GDP (Q4, 3rd Estimate) Selected NIPA Tables and Summary Key Source Data (Q4, 3rd Estimate) GDP by Industry (Q4) Kansas City Fed Manufacturing Survey (Mar) Steel Imports (Feb, Prelim) Weekly Jobless Claims Weekly Money Supply	**26** Personal Income (Feb) Advance Trade & Inventories (Feb) Consumer Sentiment (Mar, Final) Underlying NIPA Tables (Q4, 3rd Estimate) Dallas Fed Trimmed-Mean PCE (Feb) Strike Report (Mar)
29 Texas Manufacturing Outlook Survey (Mar)	**30** FHFA HPI (Jan) Case-Shiller HPI (Jan) Consumer Confidence (Mar) Texas Service Sector Outlook Survey (Feb)	**31** ADP Employment Report (Mar) Intl Investment Position (Q4) Agricultural Prices (Feb) Chicago PMI (Mar) Pending Home Sales (Feb) EIA Crude Oil Stocks Mortgage Applications	**April 1** Construction (Feb) ISM Mfg (Mar) IHS Markit Mfg PMI (Mar) Challenger Employment Report (Mar) Weekly Jobless Claims Weekly Money Supply	**2** BEA Truck Sales (Mar) BEA Auto Sales (Mar) Employment Situation (Mar)
5 MSIO (Feb) ISM Services PMI (Mar) IHS Markit Service PMI (Mar) ISM New York (Mar)	**6** JOLTS (Feb) Public Debt (Mar)	**7** Intl Trade (Feb) Consumer Credit (Feb) Kansas City Fed Labor Market Conditions Indicators (Mar) EIA Crude Oil Stocks Mortgage Applications	**8** Weekly Jobless Claims Weekly Money Supply	**9** Producer Prices (Mar) Wholesale Trade (Feb) Kansas City Financial Stress Index (Mar) FRB Philadelphia Coincident Economic Activity Index (Feb)

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