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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With Recession-like Conditions, the Fed Nears its Rate Peak

Solid headline Q4 GDP, weak details. Notwithstanding the solid, above-trend rise in GDP in Q4 last year, the recession watch for the US economy has intensified, as the Fed's aggressive tightening of monetary policy over the past year appears to be taking its toll. US GDP increased 2.9% saar in Q4, slightly above expectations. However, the composition of growth was weaker than suggested by the headline increase and monthly data show that the economy slowed significantly during the quarter. Moreover, demand is also feeling the strain from higher interest rates and still-elevated inflation. It weakened markedly in Q4 from an already anemic Q3 with real final sales to private domestic purchasers edging up just 0.2%, down from 1.1% in Q3.

Personal consumption expenditures growth slowed to 2.1% q/q saar in Q4 from 2.3% in Q3 but still accounted for nearly half of overall growth in Q4. However, the monthly consumption figures showed that the Q4 increase in PCE was concentrated at the end of Q3 and the beginning of Q4 with real spending falling in both November and December. And the most interest-sensitive sector, housing, continued to be a meaningful drag, with residential investment plunging 26.7% in Q4 and subtracting 1.3%-points from total growth. Inventory investment picked up in Q4 for the first time in three quarters and added 1.5%-points to growth. However, with demand slowing markedly, much of this increase could have been unintended and so could be reversed in Q1, thereby restraining overall growth. Furthermore, readings on the PMIs slumped into contraction territory over the months of Q4.

Recession-like conditions likely ahead. Going forward, the Blue Chip Financial Forecasts (BCFF) panel expects that the compositional weakness in Q4 and the slowdown observed within the quarter are pointing to a very weak 2023. The consensus looks for recession-like conditions in the first half of this year with real GDP expected to fall 0.4% q/q saar in Q1 and 0.7% in Q2 before exhibiting a tepid rebound in Q3 (+0.1%) and Q4 (+0.7%). For the four quarters of 2023, real GDP is expected to contract 0.1%.

In general, BCFF forecasters are looking for an economic environment that is expected to put downward pressure on credit demand and thereby on market interest rates. Besides the expected weakness in GDP during 2023, the consensus looks for inflation to slow over most of the six-quarter forecast window, with PCE inflation returning to near the Fed's 2% target by the middle of 2024, and for unemployment to rise markedly, especially this year. In answering a special question, the consensus looks for the unemployment rate to increase 1.4%-points during 2023. Historically, an increase of this magnitude has been associated with the economy being in recession.

Leading recession indicators are increasingly flashing yellow. The Index of Leading Indicators fell 1.0% m/m (not annualized) in December, its tenth consecutive monthly decline. Over the six months to December, the index fell 4.2%, a fall that historically has signaled the economy is falling into a recession. Moreover, the two most widely followed Treasury yield curves (the 10-year/3-month and the 10-year/2-year) are cur rently inverted, historically an accurate indication of a pending recession. BCFF forecasters look for recession risks to linger with both of these yield curves remaining inverted over the entire forecast period through Q2 2024.

Tight money, weak economy. The panel places much of the blame for the expected recession-like conditions on the aggressive monetary policy tightening by the Fed over the past year. Eighty-eight percent (88%) of survey respondents think the Fed's actions will precipitate a recession, up from 84% in last month's survey. More generally, the group places a 63% probability on a recession occurring during 2023 versus 61% last month.

Fed nearly done. The BCFF consensus thinks the Fed has mostly completed its monetary policy tightening. It looks for the quarterly average federal funds rate (FFR) to peak at 5.0% in this year's second quarter. The current FFR target is 4.25%-4.50%. The 10 most hawkish forecasters look for the FFR to rise to 5.1% in Q2 while the 10 most dovish forecasters expect an increase to only 4.8%, also in Q2. In answering a special question, the consensus estimates that the FFR will peak at 5.00% and that that peak will most likely be reached this quarter. The responses were very concentrated, with 41% expecting a peak of 4.875% and another 41% looking for a peak of 5.125%. The consensus peak implies only another 50-60bps of rate hikes to come. A 25bp hike is almost universally expected at the January 31-February 1 FOMC meeting. So, the BCFF consensus is basically looking for just one more hike after that.

The FOMC does not expect any declines in the FFR during 2023, but in contrast, the BCFF consensus does. In answering a special question, 50% of respondents expect the first decrease in the FFR to occur in either the third or fourth quarters of 2023. Another 35% look for the first cut in the first quarter of 2024. In the forecasts of quarterly averages, the consensus looks for the FFR to be essentially unchanged in Q3 and then fall to 4.7% in Q4 and to 4.0% by the middle of next year. Accordingly, the BCFF consensus thinks that most market rates, especially medium- and long-term Treasury yields, are also near their peak and should begin to decline modestly beginning in the second half of this year.

The relatively mild recession expected by the consensus is not anticipated to be particularly disruptive to corporate credit markets. The spread between the yield on corporate debt and the yield on US Treasury debt (called the credit spread) is often seen as an indicator of both recession risk and, during a recession, its severity. In contrast to the recession warnings issued by the two yield curves mentioned above, the credit spread is not currently pointing to a pending recession but rather remains in territory consistent with ongoing economic expansion. Moreover, while BCFF forecasters see this spread widening modestly over the course of 2023, this widening is not expected to be to levels that would indicate stress in the corporate bond market.

Sandy Batten (Haver Analytics, New York, NY)

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

------------------------------------History------------------------------------

	-------Average For Week Ending------				----Average For Month---			*Latest Qtr*	Consensus Forecasts-Quarterly Avg.					
									1Q	2Q	3Q	4Q	1Q	2Q
Interest Rates	Jan 27	Jan 20	Jan 13	Jan 6	Dec	Nov	Oct	4Q 2022	2023	2023	2023	2023	2024	2024
Federal Funds Rate	4.33	4.33	4.33	4.33	4.10	3.78	3.08	3.65	4.7	5.0	4.9	4.7	4.3	4.0
Prime Rate	7.50	7.50	7.50	7.50	7.27	6.95	6.25	6.82	7.8	8.1	8.0	7.8	7.4	7.0
SOFR	4.30	4.30	4.30	4.31	4.08	3.73	3.04	3.62	4.6	4.9	4.8	4.6	4.3	3.9
Commercial Paper, 1-mo.	4.39	4.36	4.32	4.26	4.20	3.88	3.28	3.79	4.7	5.0	4.9	4.7	4.3	3.9
Treasury bill, 3-mo.	4.72	4.71	4.70	4.60	4.36	4.32	3.87	4.18	4.8	4.9	4.8	4.6	4.3	3.9
Treasury bill, 6-mo.	4.81	4.80	4.81	4.79	4.71	4.61	4.31	4.54	4.9	5.0	4.9	4.6	4.2	3.9
Treasury bill, 1 yr.	4.69	4.66	4.70	4.73	4.68	4.73	4.43	4.61	4.8	4.9	4.7	4.4	4.1	3.8
Treasury note, 2 yr.	4.16	4.12	4.19	4.36	4.29	4.50	4.38	4.39	4.4	4.3	4.1	3.9	3.7	3.5
Treasury note, 5 yr.	3.59	3.52	3.63	3.85	3.76	4.06	4.18	4.00	3.8	3.9	3.8	3.6	3.5	3.4
Treasury note, 10 yr.	3.49	3.44	3.52	3.69	3.62	3.89	3.98	3.83	3.7	3.7	3.7	3.6	3.5	3.4
Treasury note, 30 yr.	3.64	3.60	3.65	3.79	3.66	4.00	4.04	3.90	3.8	3.9	3.9	3.8	3.8	3.7
Corporate Aaa bond	4.67	4.64	4.72	4.92	4.80	5.23	5.41	5.15	4.9	5.0	5.0	5.0	4.8	4.7
Corporate Baa bond	5.28	5.27	5.38	5.62	5.49	5.95	6.22	5.89	5.9	6.1	6.1	6.0	5.8	5.7
State & Local bonds	3.97	3.98	4.08	4.22	4.23	4.50	4.62	4.45	4.1	4.3	4.2	4.2	4.1	4.0
Home mortgage rate	6.13	6.15	6.33	6.48	6.36	6.81	6.90	6.69	6.3	6.3	6.2	6.0	5.9	5.7

------------------------------------History------------------------------------

	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	Consensus Forecasts-Quarterly					
									1Q	2Q	3Q	4Q	1Q	2Q
Key Assumptions	2021	2021	2021	2021	2022	2022	2022	2022	2023	2023	2023	2023	2024	2024
Fed's AFE $ Index	103.4	102.9	105.0	107.0	108.4	113.7	119.0	120.0	116.8	116.0	115.4	115.0	114.6	114.3
Real GDP	6.3	7.0	2.7	7.0	-1.6	-0.6	3.2	2.9	-0.4	-0.7	0.1	0.7	1.4	1.8
GDP Price Index	5.2	6.3	6.2	6.8	8.3	9.0	4.4	3.5	3.3	3.0	2.7	2.6	2.4	2.3
Consumer Price Index	4.1	8.2	6.7	7.9	9.2	10.5	5.7	3.1	3.1	3.1	2.7	2.6	2.3	2.2
PCE Price Index	4.5	6.4	5.6	6.2	7.5	7.3	4.3	3.2	3.0	2.8	2.6	2.4	2.2	2.1

Forecasts for interest rates and the Federal Reserve's Advanced Foreign Economies Index represent averages for the quarter. Forecasts for Real GDP, GDP Price Index, CPI and PCE 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; SOFR from the New York Fed. 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, GDP Price Index and PCE Price Index are from the Bureau of Economic Analysis (BEA). Consumer Price Index history is from the Department of Labor's Bureau of Labor Statistics (BLS).

U.S. Treasury Yield Curve
Week ended Jan 27, 2023 & Year Ago vs.
1Q 2023 & 2Q 2024
Consensus Forecasts
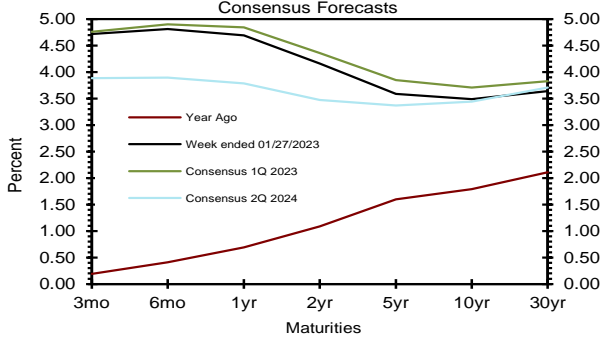
US 3-Mo T-Bills & 10-Yr T-Note Yield
(Quarterly Average)
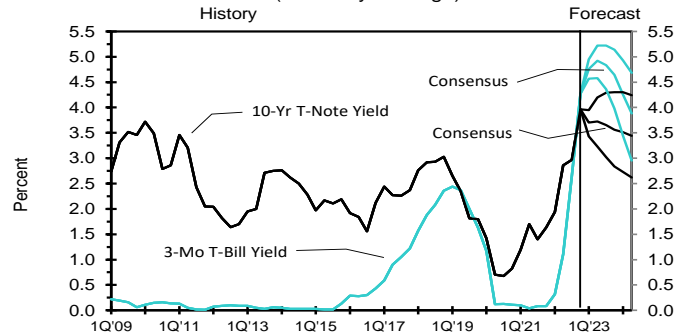
Corporate Bond Spreads
As of week ended Jan 27, 2023
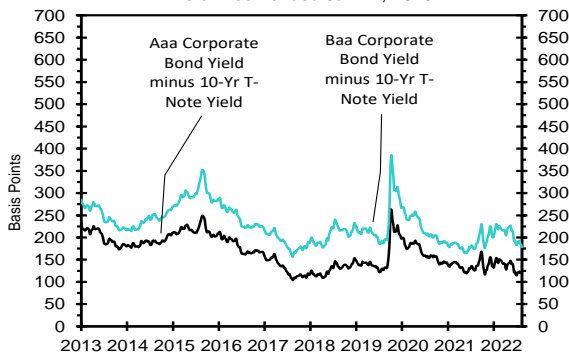
U.S. Treasury Yield Curve
As of week ended Jan 27, 2023
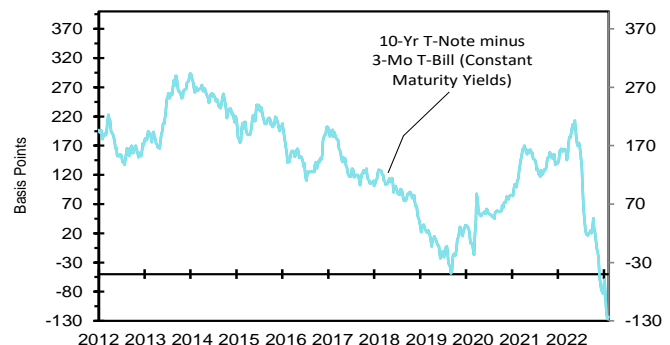
-------------Policy Rates[1]-----------------

	----------History----------			Consensus Forecasts Months From Now:		
	Latest:	Month Ago:	Year Ago:	3	6	12
U.S.	4.38	4.38	0.13	4.83	4.79	4.42
Japan	-0.10	-0.10	-0.10	-0.06	-0.06	-0.06
U.K.	3.50	3.50	0.25	3.97	3.94	3.77
Switzerland	1.00	1.00	-0.75	1.26	1.33	1.33
Canada	4.50	4.25	0.25	4.49	4.41	4.03
Australia	3.10	3.10	0.10	3.54	3.48	3.20
Euro area	2.50	2.50	0.00	3.11	3.43	3.14

-----------10-Yr. Government Bond Yields[2]------

	----------History----------			Consensus Forecasts Months From Now:		
	Latest:	Month Ago:	Year Ago:	3	6	12
U.S.	3.52	3.88	1.78	3.70	3.60	3.47
Germany	2.23	2.57	-0.05	2.30	2.17	2.11
Japan	0.50	0.45	0.17	0.47	0.47	0.42
U.K.	3.46	3.80	1.27	3.39	3.40	3.26
France	2.71	3.11	0.37	2.80	2.62	2.51
Italy	4.23	4.72	1.35	4.27	4.05	3.86
Switzerland	1.23	1.57	0.02	1.40	1.43	1.39
Canada	2.89	3.29	1.76	3.17	3.14	3.06
Australia	3.56	4.05	1.93	3.74	3.63	3.53
Spain	3.19	3.53	0.73	3.35	3.15	3.02

----------------Foreign Exchange Rates[3]-----------

	----------History----------			Consensus Forecasts Months From Now:		
	Latest:	Month Ago:	Year Ago:	3	6	12
U.S.	113.96	115.79	108.89	116.0	113.7	113.8
Japan	129.94	131.81	115.21	130.4	128.6	126.8
U.K.	1.24	1.21	1.34	1.24	1.25	1.25
Switzerland	0.92	0.92	0.93	0.93	0.91	0.91
Canada	1.33	1.35	1.28	1.35	1.34	1.32
Australia	0.71	0.68	0.70	0.68	0.69	0.71
Euro	1.09	1.07	1.12	1.08	1.09	1.10

	Consensus Policy Rates vs. US Rate			Consensus 10-Year Gov't Yields vs. U.S. Yield	
	Now	In 12 Mo.		Now	In 12 Mo.
Japan	-4.48	-4.48	Germany	-1.29	-1.36
U.K.	-0.88	-0.65	Japan	-3.02	-3.05
Switzerland	-3.38	-3.09	U.K.	-0.06	-0.21
Canada	0.13	-0.39	France	-0.81	-0.96
Australia	-1.28	-1.21	Italy	0.71	0.39
Euro area	-1.88	-1.28	Switzerland	-2.29	-2.08
			Canada	-0.63	-0.41
			Australia	0.04	0.06
			Spain	-0.33	-0.45

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. The mood in financial markets has improved over the past few weeks and investors – and BCFF panelists - appear to be a little more upbeat about the outlook for the world economy in the year ahead. This improvement can be traced to a number of factors. Firstly, European natural gas prices have continued to fall thanks to a spate of unusually warm weather and a healthier supply/demand balance in the energy market. Secondly, and related to this, incoming inflation data have surprised forecasters on the downside, and more generally suggest that headline inflation pressures are easing. Thirdly, China's incoming data have surprised forecasters on the upside, such as the firmer-than-expected retail sales print for December. Combined with recent re-opening initiatives, this has fueled expectations that its economy could normalize more quickly than had previously been expected.

January's flash PMI surveys chime with many of the observations above. The headline composite index, for example, for the Euro area inched above the expansion/contraction mark of 50 in January for the first time since last June. The same index for Japan also picked up further, specifically to 50.8 from 50.0.

There are, nevertheless, some counterpoints to this more optimistic narrative. Incoming economic data from the US, for example, have tended to surprise expectations on the downside with the notable - and important- exception of most labor-market statistics. The US composite PMI notably rose to just 46.6 from a prior 44.6. And in China, there are many factors that are still weighing on the economy including a beleaguered housing sector and high levels of debt. China's credit growth moreover, such as social financing, has been slowing in recent months and by more than expected. And along with very subdued levels of inflation, monetary and fiscal policy settings are expected to remain loose (or even loosened further) in the period ahead.

Many central bankers still seem inclined to lean against looser financial market conditions not least given their roots in lower interest rate expectations. That labor-market activity more generally, not just in the US, has remained firm and that underlying cost and price pressures (excluding energy) have been slow to fade, are certainly key elements of the dataflow that policymakers are finding hard to ignore.

The ECB has been extremely keen to push back against the idea that a tightening campaign is almost complete. Following a 50bp hike in its policy rates in December, Christine Lagarde along with other members of the ECB council have stressed that further "multiple 50bp hikes" could follow in the coming months. They have also underscored the ECB's focus on core inflation, which remains sticky with upside risks.

Unlike the ECB and following a 50bp hike in the Bank rate in mid-December, the BoE has exhibited a more dovish tone. While policymakers have been keen to stress they have not yet finished their tightening cycle, there has been little push-back to the idea that the peak in rates will be around 4.5%.

Relative to other major central banks, including the BoE, the BoJ arguably remains the biggest outlier. Following December's decision to change its yield curve control (YCC) policy and specifically to allow a higher target yield ceiling on 10-year JGBs and a lower floor, the central bank left its YCC policy unchanged. Even so, with headline and core (excluding food) inflation at 4.0% in December and the BoJ's bond purchase data suggesting that it may be struggling to keep yields locked in the wider range, markets remain on high alert for signals about a forthcoming policy change.

Against this backdrop, BCFF panelists expect most of the world's major central banks, including the RBA, to continue tightening monetary policy in the first half of this year. Thereafter there is more uncertainty, but most panelists nevertheless expect an easing cycle to have commenced in the latter half of 2023. The exception to this is Japan. While there has previously been a solid consensus for no change in BoJ policy, a small majority of BCFF panelists now expect slightly higher policy rates to be instigated in the immediate months ahead.

First Quarter 2023

Interest Rate Forecasts   Key Assumptions

Blue Chip Financial Forecasts Panel Members	1 Federal Funds Rate	2 Prime Bank Rate	3 SOFR Rate	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
Mizuho Research Institute	5.1 H	na	na	na	na	na	na	na	na	4.0 H	na	na	na	na	na	na	na	na	na	na
ACIMA Private Wealth	5.0	8.0 H	5.0	5.1 H	5.1 H	4.8	4.7	4.5	4.0	3.7	3.7	5.5	6.5	3.0 L	6.5	122.0 H	-2.0 L	1.0 L	0.8 L	1.0 L
Scotiabank Group	5.0	8.0 H	4.8		4.8		4.8	4.2	3.5	3.4	3.5 L	na	na	na	na	na	-0.4	5.1 H	4.3	3.9
Bank of America	4.9	na	5.3 H	na	na	na	na	4.5	4.3	4.0 H	4.1	na	na	na	na	na	1.5	4.6	2.0	2.5
Goldman Sachs & Co.	4.9	na	na	na	4.5	na	na	4.5	3.8	3.7	3.7	na	na	na	na	na	0.3	4.0	3.2	3.0
ING	4.9	na	na	na	na	na	na	4.3	3.8	3.8	3.8	na	na	na	na	na	-1.5	na	na	na
Nationwide	4.9	na	na	na	4.7	4.7	4.6 L	4.4	3.9	3.7	3.8	na	na	na	na	na	0.5	na	na	na
NatWest Markets	4.9	8.0 H	na	5.0	5.1 H	5.2 H	5.3 H	4.2	3.8	3.8	3.9	5.0	6.0	4.0	4.8 L	na	-1.0	3.1	3.8	3.7
Nomura Securities, Inc.	4.9	8.0 H	na	na	na	na	na	4.2	3.2 L	2.9 L	na	na	na	na	na	na	-1.2	3.9	1.9	2.3
Via Nova Investment Mgt.	4.9	8.0 H	4.8	4.9	5.0	5.2 H	5.2	4.7	4.1	4.0 H	4.1	5.4	6.0	4.9 H	6.4	116.0	0.0	4.0	3.9	3.5
Georgia State University	4.8	7.9	na		4.8	5.0	4.9	4.4	3.9	3.7	3.9	5.8 H	6.6	na	6.2	na	-1.2	4.2	4.2	3.5
GLC Financial Economics	4.8	8.0 H	4.7	4.8	4.8	4.9	5.0	4.9 H	4.5 H	4.0 H	4.2	4.9	6.1	4.4	6.6	120.8	0.0	4.4	2.9	3.3
MacroFin Analytics & Rutgers Bus School	4.8	7.9	4.8	5.0	5.1 H	5.2 H	5.0	4.4	3.7	3.7	3.8	5.0	5.7	4.2	6.1	115.0	-1.0	3.0	3.6	2.9
TS Lombard	4.8	7.9	4.7	4.7	4.4	4.6 L	4.6 L	4.5	3.9	3.5	3.6	4.4	5.2 L	3.5	5.3	118.0	-0.1	3.5	3.5	4.5 H
Wells Fargo	4.8	8.0 H	4.8	4.8	5.0	5.0	5.0	4.5	3.9	3.9	4.0	5.1	6.1	4.5	6.6	na	0.0	2.2	2.1	2.2
Chan Economics	4.7	7.7	4.6	4.7	4.8	4.9	5.0	4.7	4.1	3.9	4.0	5.2	6.2	4.5	6.6	117.8	1.0	3.6	3.8	3.3
EY-Parthenon	4.7	na	na	na	4.6	na	na	na	na	3.4	na	na	na	na	na	na	-1.8	3.1	3.1	2.8
Thru the Cycle	4.7	7.8	4.7	4.8	4.7	4.9	4.8	4.2	3.7	3.7	4.0	5.1	5.8	4.5	6.4	114.5	-1.7	3.3	2.0	2.1
Bank of the West	4.6	7.8	4.4 L	4.5	4.7	4.8	4.7	4.2	3.8	3.7	3.7	4.7	5.8	4.4	6.4	115.0	-0.8	3.4	3.7	3.2
BMO Capital Markets	4.6	7.8	4.5		4.7	4.8	4.8	4.3	3.8	3.7	3.8	na	na	na	6.4	114.8	-1.0	2.4	3.0	3.2
Comerica Bank	4.6	7.7	4.6	na	4.7	4.8	4.7	4.1	3.4	3.5	3.5 L	4.3 L	5.7	na	6.3	na	-1.8	3.2	3.9	4.2
Daiwa Capital Markets America	4.6	7.8	4.8	4.5	4.7	5.0	5.0	4.3	4.0	3.7	3.8	4.8	5.9	na	6.6	115.0	-0.5	4.0	4.3	4.0
Fannie Mae	4.6	7.8	na	na	4.7	4.7	4.6 L	4.1	3.6	3.5	3.6	na	na	na	6.0	na	-0.8	2.8	1.6	2.0
The Northern Trust Company	4.6	7.7	4.5	4.7	4.8	4.8	4.7	4.3	3.8	3.6	3.9	4.5	5.5	4.2	6.3	116.0	1.8 H	4.4	3.5	2.5
Action Economics	4.5	7.7	4.5	4.6	4.7	4.7	4.7	4.0 L	3.6	3.5	3.7	4.5	5.7	3.9	6.5	120.0	-1.0	2.6	2.6	2.7
Amherst Pierpont Securities	4.5	7.7	4.5	4.6	4.8	5.0	5.0	4.4	3.8	3.7	3.8	4.5	5.6	3.6	6.2	114.0 L	0.4	4.0	4.4	4.0
Chmura Economics & Analytics	4.5	7.7	4.5	4.7	4.8	4.9	4.8	4.5	4.0	3.9	4.1	4.7	na	na	6.7 H	na	0.7	4.5	4.5 H	4.4
DePrince & Assoc.	4.5	7.7	4.5	4.5	4.8	4.9	4.8	4.3	3.7	3.6	3.7	4.5	5.6	3.9	6.2	114.3	0.6	3.6	3.7	3.5
Economist Intelligence Unit	4.5	7.7	na	4.8	4.9	5.1	4.9	4.3	3.8	3.8	3.7	na	na	na	6.2	na	-1.4	na	3.1	na
KPMG	4.5	7.7	4.5	4.3 L	4.6	4.9	4.8	4.5	4.0	3.9	3.8	5.0	6.0	na	6.7 H	na	-2.0 L	3.2	3.2	2.8
Loomis, Sayles & Company	4.5	7.7	4.5	4.7	4.9	5.2 H	4.9	4.2	3.6	3.5	3.6	4.4	5.4	4.0	6.3	114.8	-0.6	2.7	2.0	2.1
Moody's Analytics	4.5	7.7	4.5	4.7	4.8	4.9	4.8	4.6	4.3	4.0 H	4.3 H	5.6	6.8 H	4.5	6.7 H	na	0.0	2.7	3.6	3.4
Oxford Economics	4.5	7.6	4.5	na	4.8	5.1	5.1	4.2	3.9	3.8	3.8	4.5	na	na	6.4	116.8	0.2	2.0	4.0	3.1
PNC Financial Services Corp.	4.5	7.7	4.5	na	4.3 L	4.6 L	4.6 L	4.4	4.1	3.8	3.8	na	6.0	4.0	6.5	121.6	0.0	3.5	3.8	3.5
Regions Financial Corporation	4.5	7.4 L	4.5	4.5	4.7	4.8	4.7	4.2	3.6	3.5	3.7	4.9	5.7	4.4	6.2	115.3	0.6	2.4	1.9	2.0
S&P Global Market Intelligence	4.5	7.7	4.5	na	4.5	4.7	4.8	4.4	3.9	3.8	3.8	na	na	na	6.6	na	-1.6	3.2	3.2	2.8
Societe Generale	4.5	7.7	4.5	na	4.8	4.9	4.9	4.3	3.7	3.6	3.8	na	na	na	na	na	0.9	2.8	2.2	2.3
J.P. Morgan Chase	4.3 L	na	na	na	na	na	na	4.3	4.0	3.9	3.9	na	na	na	na	na	1.0	2.4	2.3	1.9
February Consensus	**4.7**	**7.8**	**4.6**	**4.7**	**4.8**	**4.9**	**4.8**	**4.4**	**3.8**	**3.7**	**3.8**	**4.9**	**5.9**	**4.1**	**6.3**	**116.8**	**-0.4**	**3.3**	**3.1**	**3.0**
Top 10 Avg.	4.9	8.0	4.8	4.9	5.0	5.1	5.1	4.6	4.1	4.0	4.1	5.3	6.2	4.5	6.6	118.4	0.9	4.3	4.1	3.9
Bottom 10 Avg.	4.5	7.7	4.5	4.6	4.6	4.7	4.7	4.2	3.6	3.4	3.6	4.5	5.6	3.8	6.0	114.9	-1.6	2.3	1.9	2.0
January Consensus	4.7	7.8	4.6	4.8	4.8	4.9	4.9	4.5	4.0	3.8	4.0	5.1	6.1	4.3	6.5	118.7	-0.2	3.6	3.4	3.2

Number of Forecasts Changed From A Month Ago:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	A	B	C	D	E
Down	13	9	8	8	11	9	12	23	21	19	22	13	12	11	18	13	16	17	16	12
Same	22	19	13	7	13	13	13	13	13	13	10	7	9	5	7	4	10	11	11	12
Up	3	2	4	6	9	8	5	0	2	6	3	3	1	2	3	0	11	6	8	10
Diffusion Index	37%	38%	42%	45%	47%	48%	38%	18%	24%	33%	23%	28%	25%	25%	23%	12%	43%	34%	39%	47%

Second Quarter 2023

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	1 Federal Funds Rate	2 Prime Bank Rate	3 SOFR Rate	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
Via Nova Investment Mgt.	5.3 H	8.5 H	5.3 H	5.4 H	5.3	5.4	5.4	5.1	4.6 H	4.4	4.5	5.9 H	6.4	5.4 H	6.7	115.0	0.0	3.5	3.4	3.0
Chan Economics	5.2	8.2	5.1	5.2	5.3	5.4	5.5	5.2 H	4.6 H	4.4	4.5	5.7	6.7	5.0	7.1 H	117.5	0.5	3.0	3.2	2.7
GLC Financial Economics	5.2	8.3	5.0	5.1	5.0	5.1	5.1	5.0	4.6 H	4.1	4.3	5.0	6.5	4.6	6.6	120.2	0.6	3.1	2.5	3.0
Bank of America	5.1	na	5.3 H	na	na	na	na	4.3	4.0	3.8	3.9	na	na	na	na	na	-0.5	4.8	3.9	3.2
Georgia State University	5.1	8.3	na	na	5.2	5.2	5.0	4.1	4.0	4.0	4.1	5.8	6.6	na	6.6	na	-0.8	3.4	2.4	2.1
Goldman Sachs & Co.	5.1	na	na	na	4.5	na	na	4.8	4.2	4.1	4.2	na	na	na	na	na	1.3	3.8	3.8	3.3
MacroFin Analytics & Rutgers Bus School	5.1	8.3	5.1	5.3	5.4 H	5.6 H	5.4	4.7	4.1	4.1	4.4	5.4	6.2	4.6	6.5	115.5	-0.2	2.6	3.0	2.5
Mizuho Research Institute	5.1	na	na	na	na	na	na	na	na	3.7	na	na	na	na	na	na	na	na	na	na
Nationwide	5.1	na	na	na	4.9	4.8	4.6	4.3	4.1	3.8	3.9	na	na	na	na	na	-1.4	na	na	na
NatWest Markets	5.1	8.2	na	5.2	5.4 H	5.5	5.6 H	4.1	3.7	3.7	3.9	4.9	5.9	4.0	4.8 L	na	-2.0	4.1	3.7	3.4
Wells Fargo	5.1	8.3	5.1	5.1	5.1	5.1	4.9	4.3	3.8	3.8	3.9	5.0	6.0	4.4	6.4	na	0.3	2.3	2.2	2.3
ACIMA Private Wealth	5.0	8.0	5.0	5.1	5.1	4.3 L	4.1	4.0	3.7	3.5	3.6	5.8	7.0 H	3.0 L	6.0	125.0 H	-2.0	-1.5 L	-1.0 L	-1.1 L
Amherst Pierpont Securities	5.0	8.2	4.9	5.1	5.1	5.2	5.2	4.6	4.1	3.9	4.1	4.9	6.1	3.9	6.2	114.0	1.4	3.6	5.2	4.6 H
Bank of the West	5.0	8.2	4.8	4.9	5.0	5.1	4.9	4.7	4.3	4.2	4.3	5.3	6.5	5.0	7.0	113.3	-2.5	3.0	3.1	3.0
Chmura Economics & Analytics	5.0	8.2	5.0	5.2	5.1	5.2	5.2	4.8	4.5	4.5 H	4.6 H	5.2	na	na	6.9	na	0.1	4.2	4.3	4.2
Daiwa Capital Markets America	5.0	8.1	5.1	5.0	5.1	5.4	5.4	4.4	4.1	3.7	3.8	4.9	6.0	na	6.5	115.0	-1.2	3.4	4.0	3.6
Economist Intelligence Unit	5.0	8.2	na	5.1	5.2	5.2	5.1	4.5	4.2	4.0	4.0	na	na	na	6.2	na	-2.1	na	2.7	na
KPMG	5.0	8.1	4.9	4.6 L	4.9	5.2	5.1	4.7	4.0	3.7	3.8	4.8	5.9	na	6.5	na	-1.6	2.9	3.2	3.0
Scotiabank Group	5.0	8.0	4.8	na	4.8	na	4.5	3.9	3.4	3.2	3.5	na	na	na	na	na	-0.3	4.9 H	5.7 H	3.7
Societe Generale	5.0	8.2	5.0	na	5.1	5.1	4.9	4.2	3.6	3.6	3.9	na	na	na	na	na	1.7 H	3.3	3.1	2.7
BMO Capital Markets	4.9	8.0	4.9	na	4.8	4.9	4.8	4.3	3.8	3.8	3.9	na	na	na	6.5	113.8	-1.0	3.2	4.0	3.8
Comerica Bank	4.9	8.0	4.9	na	4.9	4.8	4.6	3.9	3.5	3.6	3.7	4.4	5.5	na	6.1	na	-1.4	2.8	3.7	3.1
DePrince & Assoc.	4.9	8.0	4.8	4.8	5.1	5.1	5.1	4.5	3.8	3.7	3.8	4.8	5.7	4.0	6.2	116.4	0.2	3.1	3.2	3.0
EY-Parthenon	4.9	na	na	na	4.6	na	na	na	na	3.0	na	na	na	na	na	na	-1.5	2.5	2.2	2.2
ING	4.9	na	na	na	na	na	na	3.8	3.4	3.3	3.7	na	na	na	na	na	-2.7	na	na	na
J.P. Morgan Chase	4.9	na	na	na	na	na	na	4.5	4.1	4.0	4.0	na	na	na	na	na	0.8	2.3	3.5	3.1
Nomura Securities, Inc.	4.9	8.0	na	na	na	na	na	3.5	2.7 L	2.3 L	na	na	na	na	na	na	-1.6	2.9	1.0	1.3
PNC Financial Services Corp.	4.9	8.0	4.9	na	4.2	4.4	4.3	4.3	4.0	3.7	3.6	na	6.6	4.7	6.4	121.1	-0.6	2.9	3.1	2.7
S&P Global Market Intelligence	4.9	8.0	4.8	na	4.7	4.7	4.8	4.4	3.8	3.7	3.8	na	na	na	6.5	na	-0.8	3.0	3.3	3.1
The Northern Trust Company	4.9	8.0	4.8	5.0	5.0	4.9	4.6	4.2	3.8	3.8	4.1	4.8	5.8	4.4	6.3	113.0	0.5	2.9	2.8	2.3
Thru the Cycle	4.9	8.0	4.8	4.9	4.8	5.0	4.5	4.1	3.2	3.6	3.9	5.0	5.8	4.4	6.3	112.8 L	-0.5	2.7	2.6	2.6
Moody's Analytics	4.8	8.0	4.8	5.0	5.0	5.0	4.7	4.6	4.4	4.2	4.5	5.7	6.8	4.6	6.6	na	0.6	2.7	3.2	2.8
Regions Financial Corporation	4.8	7.8	4.7	4.7	4.8	4.9	4.9	4.1	3.6	3.5	3.7	5.0	5.9	4.4	6.1	114.7	0.2	3.0	3.4	3.0
TS Lombard	4.8	7.9	4.7	4.7	4.0 L	4.5	3.8 L	3.0 L	3.3	3.3	3.4	4.1 L	5.0 L	3.3	5.1	115.0	-1.5	3.0	3.0	4.0
Fannie Mae	4.7	7.9	na	na	4.7	4.7	4.4	3.9	3.5	3.4	3.6	na	na	na	5.9	na	-1.8	2.7	2.2	2.4
Action Economics	4.6 L	7.8	4.8	4.7	4.7	4.6	4.6	3.8	3.5	3.6	3.7	4.6	5.8	3.8	6.5	114.8	0.0	2.7	2.8	2.5
Loomis, Sayles & Company	4.6 L	7.8	4.6 L	4.7	4.9	5.0	4.7	4.0	3.6	3.3	3.3 L	4.2	5.2	3.8	6.1	113.6	-2.4	2.5	2.1	1.7
Oxford Economics	4.6 L	7.7 L	4.6 L	na	4.8	5.2	4.8	4.1	3.8	3.5	3.4	4.2	na	na	6.4	117.6	-4.0 L	2.6	3.8	3.1
February Consensus	**5.0**	**8.1**	**4.9**	**5.0**	**4.9**	**5.0**	**4.9**	**4.3**	**3.9**	**3.7**	**3.9**	**5.0**	**6.1**	**4.3**	**6.3**	**116.0**	**-0.7**	**3.0**	**3.1**	**2.8**
Top 10 Avg.	5.1	8.3	5.1	5.2	5.2	5.3	5.3	4.8	4.4	4.2	4.4	5.5	6.5	4.7	6.7	117.8	0.8	3.9	4.2	3.7
Bottom 10 Avg.	4.8	7.9	4.7	4.8	4.6	4.7	4.4	3.8	3.4	3.2	3.6	4.6	5.7	3.9	5.9	114.0	-2.3	2.1	1.9	1.8
January Consensus	5.0	8.1	4.9	5.1	4.9	5.0	4.9	4.4	4.0	3.8	4.0	5.2	6.3	4.4	6.5	118.1	-0.7	3.0	3.1	2.8
Number of Forecasts Changed From A Month Ago:																				
Down	9	8	7	6	9	6	11	19	21	19	16	14	12	10	18	13	14	13	9	9
Same	24	19	14	11	16	17	13	16	14	15	16	8	9	6	7	4	12	16	14	14
Up	5	3	4	4	8	7	6	1	1	4	3	1	1	2	3	0	11	5	12	11
Diffusion Index	45%	42%	44%	45%	48%	52%	42%	25%	22%	30%	31%	22%	25%	28%	23%	12%	46%	38%	54%	53%

Third Quarter 2023
Interest Rate Forecasts
Key Assumptions

Blue Chip Financial Forecasts Panel Members	1 Federal Funds Rate	2 Prime Bank Rate	3 SOFR Rate	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
Via Nova Investment Mgt.	5.3 H	8.5 H	5.3 H	5.4 H	5.3	5.4	5.4	5.1	4.6	4.4	4.5	5.9 H	6.4	5.4 H	6.6	114.0	0.0	3.0	2.9	2.5
Chan Economics	5.2	8.2	5.1	5.2	5.3	5.4	5.5	5.2 H	4.6	4.4	4.5	5.7	6.7	5.0	7.1	117.6	-0.8	2.8	3.0	2.5
GLC Financial Economics	5.2	8.3	5.0	5.1	5.0	5.0	5.1	4.9	4.6	4.0	4.2	5.0	6.6	4.5	6.5	119.2	1.5	2.9	3.5	2.9
Amherst Pierpont Securities	5.1	8.3	5.1	5.2	5.1	5.2	5.2	4.9	4.5	4.2	4.5	5.3	6.5	4.3	6.3	113.5	1.7	3.4	4.4 H	4.0 H
Bank of America	5.1	na	na	na	na	na	na	3.8	3.7	3.5	3.7	na	na	na	na	na	-2.0	4.2	3.0	2.4
Bank of the West	5.1	8.3	4.9	5.0	5.1	5.2	5.0	4.8	4.5	4.4	4.4	5.6	6.9 H	5.2	7.2 H	112.4	0.2	2.7	3.0	2.6
Chmura Economics & Analytics	5.1	8.3	5.1	5.3	4.9	5.2	5.2	5.0	4.7 H	4.8 H	4.8 H	5.5	na	na	6.8	na	-1.3	4.1	4.2	4.0 H
Daiwa Capital Markets America	5.1	8.3	5.1	5.2	5.2	5.4	5.4	4.4	4.2	3.8	3.9	5.2	6.3	na	6.5	114.5	-1.3	3.2	3.5	3.3
Economist Intelligence Unit	5.1	8.2	na	5.2	5.2	5.2	5.2	4.5	4.2	3.9	3.9	na	na	na	6.1	na	0.4	na	1.9	na
Georgia State University	5.1	8.3	na	na	5.1	5.1	5.1	4.0	3.7	3.8	3.8	5.8	6.7	na	6.4	na	0.2	3.0	2.8	2.6
Goldman Sachs & Co.	5.1	na	na	na	4.6	na	na	4.8	4.4	4.3	4.3	na	na	na	na	na	1.3	2.7	2.0	2.4
KPMG	5.1	8.3	5.1	4.7	5.0	5.1	4.9	4.5	3.8	3.7	3.8	4.8	5.9	na	6.4	na	1.1	2.6	2.6	2.6
MacroFin Analytics & Rutgers Bus School	5.1	8.3	5.1	5.3	5.4 H	5.6 H	5.4	4.8	4.0	4.1	4.4	5.5	6.2	4.5	6.5	116.0	0.8	2.3	2.7	2.3
Mizuho Research Institute	5.1	na	na	na	na	na	na	na	na	3.6	na	na	na	na	na	na	na	na	na	na
Nationwide	5.1	na	na	na	4.9	4.7	4.5	4.3	4.1	3.8	3.9	na	na	na	na	na	-3.4 L	na	na	na
NatWest Markets	5.1	8.2	na	5.2	5.4 H	5.5	5.6 H	3.9	3.6	3.6	3.7	4.9	5.9	3.9	4.7 L	na	0.0	4.4 H	2.5	3.0
Societe Generale	5.1	8.3	5.1	na	5.1	5.0	4.7	3.8	3.3	3.3	3.6	na	na	na	na	na	1.7	3.4	3.0	2.6
Wells Fargo	5.1	8.3	5.1	5.1	5.1	5.0	4.7	3.9	3.4	3.4	3.6	4.6	5.6	4.0	5.9	na	-2.6	2.1	2.0	2.1
J.P. Morgan Chase	5.0	na	na	na	na	na	na	4.3	4.0	3.9	4.0	na	na	na	na	na	0.5	2.3	3.2	2.7
Scotiabank Group	5.0	8.0	4.8	na	4.8	na	4.0	3.7	3.3	3.4	3.6	na	na	na	na	na	1.0	0.5 L	2.6	2.4
BMO Capital Markets	4.9	8.0	4.9	na	4.8	4.9	4.7	4.1	3.8	3.7	3.7	na	na	na	6.4	112.8	0.0	2.6	3.1	2.9
PNC Financial Services Corp.	4.9	8.0	4.9	na	4.2	4.3	4.1	4.0	3.8	3.6	3.5	na	6.6	4.8	6.2	120.6 H	-1.3	2.6	2.6	2.4
S&P Global Market Intelligence	4.9	8.0	4.9	na	4.6	4.6	4.6	4.2	3.7	3.6	3.8	na	na	na	6.3	na	1.4	2.6	2.7	2.6
The Northern Trust Company	4.9	8.0	4.8	5.0	5.0	4.9	4.5	4.2	4.1	4.0	4.3	5.1	6.3	4.7	6.3	112.0	0.2	2.4	2.6	2.2
Comerica Bank	4.8	8.0	4.8	na	4.8	4.6	4.3	3.7	3.4	3.6	3.8	4.5	5.0	na	6.0	na	0.5	2.4	1.6	2.2
DePrince & Assoc.	4.8	8.0	4.8	4.8	5.1	5.0	5.0	4.5	3.8	3.7	3.8	4.9	5.8	4.2	6.1	118.0	0.5	2.8	2.9	2.7
EY-Parthenon	4.8	na	na	na	4.5	na	na	na	na	2.9	na	na	na	na	na	na	0.5	2.2	2.2	2.2
Moody's Analytics	4.8	8.0	4.8	5.0	4.9	4.9	4.6	4.5	4.4	4.3	4.6	5.7	6.8	4.6	6.5	na	1.5	2.6	2.6	2.3
Regions Financial Corporation	4.8	7.8	4.6	4.6	4.7	4.8	4.7	3.9	3.5	3.4	3.6	4.9	5.9	4.3	6.0	114.1	0.7	2.8	2.9	2.8
Action Economics	4.6	7.8	4.8	4.7	4.7	4.6	4.5	3.7	3.5	3.6	3.7	4.6	5.8	3.8	6.5	114.7	0.6	2.4	2.6	2.2
Fannie Mae	4.6	7.7	na	na	4.5	4.4	4.1	3.7	3.4	3.4	3.6	na	na	na	5.8	na	-0.5	2.6	3.3	2.7
Nomura Securities, Inc.	4.6	7.8	na	na	na	na	na	2.7 L	2.5 L	2.2 L	na	na	na	na	na	na	-1.1	2.3	1.0 L	1.2
Oxford Economics	4.6	7.7	4.6	na	4.8	5.1	4.6	4.1	3.7	3.3	3.1	4.0	na	na	6.4	117.4	-1.6	2.9	3.2	2.8
Thru the Cycle	4.6	7.7	4.6	4.6	4.5	4.6	4.2	3.8	3.1	3.5	3.7	4.9	5.9	4.2	6.2	111.7 L	0.4	2.4	2.7	2.8
ING	4.4	na	na	na	na	na	na	3.0	3.1	3.3	3.6	na	na	na	na	na	-1.1	na	na	na
Loomis, Sayles & Company	4.4	7.6	4.4	4.3	4.5	4.6	4.2	3.5	3.4	2.9	3.0	3.8 L	4.8	3.4	5.7	113.3	-1.6	2.7	2.8	2.6
ACIMA Private Wealth	4.1	7.1	4.1	4.2	4.2	3.3 L	3.0 L	2.7 L	2.5 L	2.5	2.8 L	4.8	6.8	2.2 L	5.0	118.0	5.5 H	1.9	1.5	0.8 L
TS Lombard	3.8 L	6.9 L	3.7 L	3.7 L	3.3 L	3.3 L	3.2	3.0	3.2	3.0	3.1	3.9	4.7 L	3.0	4.8	118.0	1.0	2.5	2.5	3.5
February Consensus	**4.9**	**8.0**	**4.8**	**4.9**	**4.8**	**4.9**	**4.7**	**4.1**	**3.8**	**3.7**	**3.9**	**5.0**	**6.1**	**4.2**	**6.2**	**115.4**	**0.1**	**2.7**	**2.7**	**2.6**
Top 10 Avg.	5.1	8.3	5.1	5.2	5.2	5.3	5.3	4.9	4.5	4.3	4.5	5.5	6.6	4.7	6.7	117.4	1.8	3.5	3.4	3.2
Bottom 10 Avg.	4.5	7.6	4.5	4.6	4.4	4.3	4.0	3.4	3.1	3.0	3.4	4.5	5.5	3.7	5.6	113.3	-1.7	2.1	2.0	2.0
January Consensus	4.9	8.0	4.8	4.9	4.8	4.8	4.7	4.2	3.9	3.7	3.9	5.2	6.2	4.3	6.3	117.6	0.3	2.7	2.9	2.6
Number of Forecasts Changed From A Month Ago:																				
Down	7	7	6	6	7	7	12	17	19	16	14	14	14	10	18	13	16	10	12	10
Same	25	17	14	9	17	16	13	16	15	18	18	9	7	7	9	4	15	18	18	17
Up	6	6	5	6	9	7	5	3	2	4	3	0	1	1	1	0	6	6	5	7
Diffusion Index	49%	48%	48%	50%	53%	50%	38%	31%	26%	34%	34%	20%	20%	25%	20%	12%	36%	44%	40%	46%

Fourth Quarter 2023

Interest Rate Forecasts   Key Assumptions

Blue Chip Financial Forecasts Panel Members	1 Federal Funds Rate	2 Prime Bank Rate	3 SOFR Rate	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
Via Nova Investment Mgt.	5.3 H	8.5 H	5.3 H	5.4 H	5.3	5.4	5.4	5.1	4.6	4.4	4.5	5.9 H	6.4	5.4 H	6.5	112.0	1.5	2.5	2.4	2.3
Chan Economics	5.2	8.2	5.1	5.2	5.3	5.4	5.5	5.2 H	4.6	4.4	4.5	5.7	6.7	5.0	7.1	117.2	-1.0	2.7	2.9	2.4
Amherst Pierpont Securities	5.1	8.3	5.1	5.1	5.1	5.2	5.1	4.9	4.5	4.3	4.6	5.5	6.7	4.4	6.3	113.0	1.6	3.3	3.7	3.3
Bank of America	5.1	na	na	na	na	na	na	3.3	3.3	3.3	3.4	na	na	na	na	na	-1.5	3.9 H	1.8	1.6
Bank of the West	5.1	8.3	5.0	5.1	5.0	5.1	5.0	4.8	4.6	4.4	4.5	5.7	6.9 H	5.4 H	7.2 H	111.8	1.4	2.4	2.5	2.5
Chmura Economics & Analytics	5.1	8.3	5.1	5.3	5.0	5.0	5.2	5.1	5.0 H	5.1 H	5.2 H	5.6	na	na	6.7	na	-1.2	3.9 H	4.1 H	3.8 H
Daiwa Capital Markets America	5.1	8.3	5.1	5.2	5.2	5.4	5.4	4.3	4.1	3.7	3.8	5.3	6.3	na	6.4	114.5	-0.3	3.0	3.1	3.2
Economist Intelligence Unit	5.1	8.2	na	5.2	5.1	5.2	5.1	4.3	4.0	3.9	3.8	na	na	na	6.0	na	0.6	na	1.8	na
GLC Financial Economics	5.1	8.2	4.9	4.9	4.9	4.9	5.0	4.6	4.4	3.9	4.2	5.0	6.5	4.5	6.4	118.7	1.9	2.9	3.5	2.9
Goldman Sachs & Co.	5.1	na	na	na	4.6	na	na	4.5	4.3	4.2	4.3	na	na	na	na	na	1.3	3.2	2.8	2.7
Nationwide	5.1	na	na	na	4.9	4.7	4.4	4.2	4.0	3.7	3.8	na	na	na	na	na	-2.2 L	na	na	na
NatWest Markets	5.1	8.2	na	5.2	5.4 H	5.5 H	5.6 H	3.6	3.4	3.4	3.7	4.9	5.8	3.9	4.7	na	1.0	3.1	1.8	2.3
Societe Generale	5.1	8.3	5.1	na	5.0	4.8	4.3	3.5	3.1	2.9	3.2	na	na	na	na	na	0.9	3.5	3.3	2.9
Wells Fargo	5.1	8.3	5.1	5.1	5.0	4.7	4.1	3.3	3.1	3.2	3.4	4.4	5.4	3.8	5.6	na	-1.9	2.2	2.5	2.2
Georgia State University	5.0	8.2	na	na	4.9	4.9	4.9	3.6	3.6	3.7	3.8	5.7	6.7	na	6.2	na	-0.5	2.7	2.9	2.5
J.P. Morgan Chase	5.0	na	na	na	na	na	na	4.1	3.8	3.7	3.9	na	na	na	na	na	-0.5	2.3	2.3	2.1
BMO Capital Markets	4.9	8.0	4.9	na	4.8	4.9	4.5	3.8	3.7	3.5	3.6	na	na	na	6.3	111.9	0.5	2.3	2.6	2.4
S&P Global Market Intelligence	4.9	8.0	4.9	na	4.6	4.5	4.4	4.1	3.6	3.6	3.8	na	na	na	6.2	na	1.9	2.5	2.7	2.5
The Northern Trust Company	4.9	8.0	4.8	5.0	4.8	4.8	4.4	4.2	4.0	3.8	4.1	5.1	6.2	4.5	5.8	111.0 L	0.1	2.5	2.5	2.3
Moody's Analytics	4.8	8.0	4.8	4.9	4.8	4.7	4.4	4.3	4.3	4.3	4.6	5.7	6.7	4.6	6.3	na	1.9	2.7	2.6	2.5
PNC Financial Services Corp.	4.8	8.0	4.8	na	4.1	4.1	4.0	3.8	3.6	3.5	3.5	na	6.3	4.6	6.0	120.0 H	-1.5	2.0	2.1	2.0
Regions Financial Corporation	4.8	7.8	4.6	4.5	4.5	4.6	4.5	3.7	3.5	3.4	3.6	4.9	5.8	4.2	6.0	113.8	1.3	2.3	2.3	2.2
Scotiabank Group	4.8	7.8	4.6	na	4.5	na	3.6	3.3	3.2	3.5	3.6	na	na	na	na	na	1.2	2.1	2.7	2.8
KPMG	4.7	7.8	4.7	4.3	4.5	4.8	4.7	4.4	3.7	3.5	3.7	4.6	5.7	na	6.1	na	1.7	2.4	2.6	2.3
Action Economics	4.6	7.8	4.8	4.7	4.7	4.5	4.3	3.6	3.5	3.5	3.7	4.5	5.7	3.8	6.5	114.8	1.5	2.4	2.5	2.1
Comerica Bank	4.6	7.7	4.6	na	4.5	4.3	4.0	3.3	3.1	3.3	3.6	4.2	4.6	na	5.7	na	1.8	2.3	2.2	2.5
DePrince & Assoc.	4.6	7.7	4.5	4.6	4.8	4.7	4.7	4.3	3.8	3.8	3.9	5.0	5.9	4.2	6.0	117.9	1.2	2.7	2.8	2.6
EY-Parthenon	4.6	na	na	na	4.2	na	na	na	na	3.0	na	na	na	na	na	na	1.7	1.6 L	1.7	1.6
MacroFin Analytics & Rutgers Bus School	4.6	7.8	4.6	4.8	4.9	5.1	5.2	4.6	4.1	4.1	4.3	5.6	6.3	4.6	6.5	115.8	1.2	2.2	2.5	2.2
Mizuho Research Institute	4.6	na	na	na	na	na	na	na	na	3.7	na	na	na	na	na	na	na	na	na	na
Oxford Economics	4.6	7.7	4.6	na	4.8	4.9	4.3	4.0	3.5	3.1	2.9	3.8	na	na	6.4	117.1	0.6	2.9	2.7	2.4
Fannie Mae	4.3	7.5	na	na	4.2	4.1	3.8	3.6	3.3	3.4	3.5	na	na	na	5.6	na	0.8	2.3	3.4	2.6
Thru the Cycle	4.2	7.3	4.1	4.2	4.1	4.2	3.9	3.7	3.0	3.2	3.4	4.7	5.7	4.0	5.9	112.5	0.6	2.3	2.8	2.5
Nomura Securities, Inc.	4.1	7.3	na	na	na	na	na	2.2	2.2	2.1	na	na	na	na	na	na	-0.4	2.3	1.0 L	1.2 L
ING	3.9	na	na	na	na	na	na	2.5	2.8	3.0	3.4	na	na	na	na	na	1.1	na	na	na
Loomis, Sayles & Company	3.9	7.1	3.9	3.7	3.9	4.0	3.6	2.8	2.8	2.6	3.0	3.5 L	4.5 L	3.1	5.2	113.0	1.4	2.3	2.9	2.5
ACIMA Private Wealth	2.8 L	5.8 L	2.8	2.9	2.8 L	1.5 L	1.1 L	1.0 L	1.0 L	2.0 L	2.8 L	4.5	6.0	2.0 L	4.5 L	115.0	4.0 H	1.8	2.0	2.2
TS Lombard	2.8 L	5.9	2.7 L	2.8 L	3.0	3.0	3.0	3.0	3.2	3.3	3.4	4.1	5.0	3.3	5.1	120.0 H	1.5	2.5	2.5	2.8
February Consensus	**4.7**	**7.8**	**4.6**	**4.7**	**4.6**	**4.6**	**4.4**	**3.9**	**3.6**	**3.6**	**3.8**	**5.0**	**6.0**	**4.2**	**6.0**	**115.0**	**0.7**	**2.6**	**2.6**	**2.4**
Top 10 Avg.	5.1	8.3	5.1	5.2	5.1	5.2	5.3	4.8	4.5	4.3	4.5	5.6	6.6	4.7	6.6	117.1	2.0	3.2	3.3	3.0
Bottom 10 Avg.	4.0	7.2	4.1	4.1	4.0	3.9	3.5	2.8	2.8	2.8	3.2	4.3	5.4	3.7	5.4	112.8	-1.1	2.1	1.9	1.9
January Consensus	4.7	7.8	4.6	4.6	4.6	4.5	4.4	3.9	3.7	3.6	3.9	5.1	6.1	4.3	6.2	117.1	0.9	2.5	2.6	2.5

Number of Forecasts Changed From A Month Ago:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	A	B	C	D	E
Down	6	6	5	5	6	5	9	16	15	15	13	13	10	9	16	12	11	9	10	9
Same	26	19	13	10	15	17	14	16	17	18	17	8	10	8	9	5	17	20	21	21
Up	6	5	7	6	12	8	7	4	4	5	5	2	2	1	3	0	9	5	4	4
Diffusion Index	50%	48%	54%	52%	59%	55%	47%	33%	35%	37%	39%	26%	32%	28%	27%	15%	47%	44%	41%	43%

First Quarter 2024
Interest Rate Forecasts
Key Assumptions

Blue Chip Financial Forecasts Panel Members	1 Federal Funds Rate	2 Prime Bank Rate	3 SOFR Rate	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	5.1 H	8.3 H	5.1 H	5.1	5.1 H	5.1	5.0	4.8	4.4	4.2	4.6	5.5	6.7	4.4	6.1	112.0	1.2	3.1	3.2	2.9
Chmura Economics & Analytics	5.1 H	8.3 H	5.1 H	5.3 H	5.1 H	4.9	5.1	5.1 H	5.2	5.2 H	5.2 H	5.7	na	na	6.8	na	2.1	3.9	4.0 H	3.6 H
Daiwa Capital Markets America	5.1 H	8.3 H	5.1 H	5.2	5.1 H	5.3 H	5.3 H	4.3	3.9	3.7	3.8	5.3	6.3	na	6.4	114.0	0.4	2.8	2.7	3.1
Economist Intelligence Unit	5.1 H	8.2	na	5.1	5.1 H	5.1	4.8	4.0	3.9	3.8	3.6	na	na	na	6.0	na	2.0	na	1.8	na
Goldman Sachs & Co.	5.1 H	na	na	na	4.6	na	na	4.3	4.2	4.1	4.2	na	na	na	na	na	1.9	2.6	2.6	2.3
Bank of the West	5.0	8.2	4.9	5.0	5.0	5.1	5.0	4.8	4.6	4.4	4.5	5.7	6.9 H	5.3	7.1 H	111.8	1.8	2.2	2.4	2.3
Chan Economics	5.0	8.0	4.9	5.0	5.1 H	5.2	5.3 H	5.0	4.4	4.2	4.3	5.5	6.5	4.8	6.9	116.8	1.0	2.6	2.8	2.3
J.P. Morgan Chase	5.0	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	-0.5	2.3	2.6	2.2
Via Nova Investment Mgt.	5.0	8.3 H	5.1 H	5.1	5.0	5.1	5.1	5.1 H	5.3 H	4.9	5.0	6.3 H	6.9 H	5.8 H	6.9	110.0 L	2.0	2.2	2.1	2.0
Bank of America	4.9	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.0	4.4 H	2.3	2.3
Nationwide	4.9	na	na	na	4.6	4.5	4.2	3.9	3.8	3.6	3.8	na	na	na	na	na	2.1	na	na	na
S&P Global Market Intelligence	4.9	8.0	4.9	na	4.5	4.3	4.2	3.9	3.5	3.5	3.8	na	na	na	6.0	na	1.9	2.1	1.7	1.9
Societe Generale	4.9	8.1	4.9	na	4.6	4.4	3.9	3.2	3.0	2.9	3.2	na	na	na	na	na	-1.1 L	1.8	2.2	2.8
GLC Financial Economics	4.8	7.9	4.6	4.7	4.6	4.6	4.7	4.4	4.2	3.9	4.1	4.8	6.3	4.5	6.3	118.6	1.7	2.2	2.2	2.1
Moody's Analytics	4.6	7.7	4.5	4.7	4.4	4.3	4.2	4.2	4.2	4.2	4.6	5.7	6.7	4.6	6.0	na	2.4	2.6	2.3	2.2
PNC Financial Services Corp.	4.6	7.7	4.6	na	4.0	4.0	3.8	3.6	3.5	3.5	3.5	na	6.1	4.4	5.8	119.6	0.1	1.3 L	1.5	1.2 L
Regions Financial Corporation	4.6	7.6	4.4	4.3	4.2	4.3	4.3	3.5	3.4	3.3	3.6	4.8	5.7	4.1	5.8	113.9	1.5	2.0	2.0	1.8
The Northern Trust Company	4.6	7.8	4.6	4.7	4.6	4.5	4.3	4.1	3.8	3.6	3.9	4.9	6.0	4.4	5.4	110.0 L	1.0	2.3	2.3	2.2
Action Economics	4.5	7.7	4.8	4.6	4.5	4.3	4.1	3.5	3.4	3.5	3.6	4.5	5.7	3.8	6.4	114.9	2.0	2.1	2.4	2.1
BMO Capital Markets	4.5	7.7	4.7	na	4.5	4.6	4.3	3.7	3.6	3.4	3.5	na	na	na	6.2	111.2	1.7	2.0	2.2	2.0
Mizuho Research Institute	4.4	na	na	na	na	na	na	na	na	3.7	na	na	na	na	na	na	na	na	na	na
Oxford Economics	4.4	7.5	4.4	na	4.3	4.3	3.8	3.8	3.2	3.0	2.8	3.6	na	na	6.1	116.6	1.5	3.0	2.5	2.6
Comerica Bank	4.3	7.5	4.4	na	4.2	4.1	3.7	2.9	3.1	3.1	3.4	4.0	4.5	na	5.6	na	1.6	2.2	2.4	2.3
EY-Parthenon	4.3	na	na	na	4.0	na	na	na	na	3.1	na	na	na	na	na	na	2.2	1.6	1.8	1.8
Georgia State University	4.3	7.5	na	na	4.2	4.0	3.9	3.3	3.4	3.5	3.7	5.4	6.4	na	6.1	na	-0.1	2.3	2.7	2.4
Scotiabank Group	4.3	7.3	4.1	na	4.0	na	3.3	3.1	3.2	3.5	3.7	na	na	na	na	na	1.6	2.1	1.8	1.9
DePrince & Assoc.	4.2	7.4	4.2	4.2	4.4	4.3	4.2	4.0	3.7	3.8	3.9	5.0	5.9	4.2	5.9	117.7	1.7	2.5	2.5	2.4
Wells Fargo	4.1	7.3	4.1	4.1	4.0	3.7	3.3	3.0	3.0	3.0	3.4	4.2	5.2	3.6	5.3	na	0.0	2.2	2.6	2.2
Fannie Mae	4.0	7.1	na	na	3.9	3.7	3.6	3.4	3.3	3.3	3.5	na	na	na	5.4	na	1.6	2.3	2.5	2.4
MacroFin Analytics & Rutgers Bus School	3.9	7.0	3.8	4.1	4.2	4.4	4.4	4.5	4.0	4.1	4.4	5.7	6.4	4.5	6.8	115.6	1.4	2.1	2.4	2.2
NatWest Markets	3.9	7.0	na	4.0	4.1	4.2	4.3	3.2	3.2	3.2	3.5	3.3 L	3.3 L	3.6	3.4 L	na	1.1	2.7	1.9	2.3
KPMG	3.7	6.8	3.7	3.3	3.5	3.8	3.8	3.7	3.4	3.5	3.8	4.6	5.6	na	5.9	na	2.1	2.0	1.5	1.8
Nomura Securities, Inc.	3.6	6.8	na	na	na	na	na	1.8	1.9	2.0	na	na	na	na	na	na	0.3	2.1	1.4 L	1.5
Thru the Cycle	3.5	6.6	3.5	3.6	3.5	3.5	3.5	3.6	2.8	3.0	3.3	4.5	5.7	3.8	5.6	113.1	0.9	1.3 L	1.6	2.0
ING	3.4	na	na	na	na	na	na	2.5	2.8	3.0	3.4	na	na	na	na	na	2.7	na	na	na
Loomis, Sayles & Company	3.4	6.6	3.4	3.3	3.4	3.5	3.1	2.3	2.3	2.5	3.0	3.4	4.4	3.0	4.9	112.7	1.8	2.1	3.1	2.4
TS Lombard	2.8	5.9	2.7	2.8	3.0	3.0	3.1	3.3	3.4	3.5	3.6	4.4	5.2	3.5	5.3	125.0 H	2.5	3.0	3.0	2.8
ACIMA Private Wealth	1.0 L	4.0 L	1.0 L	1.1 L	1.1 L	1.0 L	0.8 L	0.7 L	0.7 L	1.7 L	2.5 L	4.3	5.7	1.7 L	3.7	110.0 L	3.0 H	1.9	2.0	2.1
February Consensus	**4.3**	**7.4**	**4.3**	**4.3**	**4.3**	**4.2**	**4.1**	**3.7**	**3.5**	**3.5**	**3.8**	**4.8**	**5.8**	**4.1**	**5.9**	**114.6**	**1.4**	**2.4**	**2.3**	**2.2**
Top 10 Avg.	5.0	8.2	5.0	5.0	4.9	5.0	4.9	4.7	4.4	4.3	4.5	5.6	6.5	4.7	6.6	117.3	2.3	3.1	2.9	2.7
Bottom 10 Avg.	3.3	6.5	3.5	3.5	3.4	3.4	3.2	2.6	2.6	2.7	3.2	4.1	5.1	3.6	5.0	111.9	0.2	1.8	1.7	1.8
January Consensus	4.4	7.5	4.4	4.4	4.3	4.3	4.2	3.8	3.6	3.6	3.8	4.9	5.9	4.3	6.0	116.8	1.3	2.3	2.4	2.4
Number of Forecasts Changed From A Month Ago:																				
Down	4	3	3	4	3	4	7	12	13	13	11	12	8	7	14	12	10	12	10	10
Same	28	22	16	12	20	21	18	19	17	18	19	9	12	10	9	6	18	17	20	21
Up	6	5	6	5	10	5	5	3	4	5	3	2	2	1	5	0	9	5	5	3
Diffusion Index	53%	53%	56%	52%	61%	52%	47%	37%	37%	39%	38%	28%	36%	33%	34%	17%	49%	40%	43%	40%

Second Quarter 2024

Interest Rate Forecasts   **Key Assumptions**

Blue Chip Financial Forecasts Panel Members	1 Federal Funds Rate	2 Prime Bank Rate	3 SOFR Rate	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	5.1 H	8.3 H	5.1 H	5.1 H	5.0 H	5.0 H	4.9	4.7	4.3	4.1	4.5	5.4	6.6	4.3	6.0	111.0	1.1	2.9	2.9	2.6
Economist Intelligence Unit	5.1 H	8.2	na	5.1 H	5.0 H	5.0 H	4.7	3.9	3.8	3.7	3.5	na	na	na	5.9	na	2.4	na	1.7	na
Chmura Economics & Analytics	5.0	8.1	4.9	5.1 H	4.9	4.8	5.0 H	5.0 H	5.0	5.1 H	5.1 H	5.7	na	na	6.7	na	2.7	3.7	4.0 H	3.6 H
Daiwa Capital Markets America	4.9	8.0	4.6	4.9	4.8	4.9	5.0 H	4.0	3.7	3.6	3.7	5.0	6.2	na	6.3	114.0	1.7	2.7	2.7	2.8
Goldman Sachs & Co.	4.9	na	na	na	4.3	na	na	4.2	4.1	4.1	4.1	na	na	na	na	na	1.9	3.1	2.9	2.7
J.P. Morgan Chase	4.9	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	0.5	2.3	2.1	1.9
Bank of the West	4.8	7.9	4.7	4.7	4.7	4.8	4.8	4.7	4.6	4.4	4.4	5.7	6.8	5.3	7.0 H	111.9	1.4	2.2	2.3	2.2
Via Nova Investment Mgt.	4.8	8.0	4.8	4.9	4.8	4.9	4.9	4.9	5.1 H	4.9	4.9	6.3 H	6.9 H	5.8 H	6.8	110.0	2.5	2.0	2.0	2.0
S&P Global Market Intelligence	4.7	7.8	4.7	na	4.3	4.1	4.0	3.6	3.3	3.5	3.8	na	na	na	5.8	na	2.1	2.0	1.8	1.9
Chan Economics	4.6	7.6	4.5	4.6	4.7	4.8	4.9	4.6	4.0	3.8	3.9	5.1	6.1	4.4	6.5	116.0	1.5	2.3	2.5	2.0
Bank of America	4.4	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.5	4.6 H	2.7	2.4
GLC Financial Economics	4.4	7.6	4.3	4.4	4.3	4.4	4.3	4.2	4.0	3.8	4.1	4.7	6.0	4.4	6.1	118.3	2.0	2.2	2.3	2.2
Mizuho Research Institute	4.4	na	na	na	na	na	na	na	na	3.7	na	na	na	na	na	na	na	na	na	na
Nationwide	4.4	na	na	na	4.2	4.1	3.9	3.7	3.7	3.5	3.7	na	na	na	na	na	2.4	na	na	na
Societe Generale	4.4	7.5	4.4	na	4.1	3.9	3.4	2.9	2.4	2.8	3.1	na	na	na	na	na	-0.3 L	1.8	2.2	2.5
The Northern Trust Company	4.4	7.5	4.3	4.5	4.3	4.3	4.1	4.0	3.6	3.5	3.8	4.8	5.9	4.3	5.3	109.0	1.6	2.1	2.1	2.1
Action Economics	4.3	7.4	4.6	4.4	4.2	4.1	3.8	3.4	3.4	3.4	3.6	4.4	5.6	3.7	6.4	114.9	na	na	na	na
BMO Capital Markets	4.3	7.4	4.3	na	4.2	4.3	4.1	3.5	3.5	3.4	3.4	na	na	na	6.1	110.6	2.2	1.9	2.1	1.9
Moody's Analytics	4.3	7.5	4.3	4.4	4.2	4.1	4.0	4.0	4.0	4.1	4.5	5.5	6.6	4.5	5.8	na	2.4	2.3	2.3	2.3
PNC Financial Services Corp.	4.3	7.4	4.3	na	3.7	3.8	3.6	3.4	3.4	3.4	3.6	na	5.9	4.3	5.7	119.4	1.0	1.1 L	1.1	0.8 L
Regions Financial Corporation	4.3	7.3	4.1	4.1	4.0	4.1	4.2	3.4	3.4	3.3	3.5	4.7	5.6	4.1	5.7	114.3	1.8	1.9	2.0	1.7
Comerica Bank	4.1	7.2	4.1	na	3.9	3.7	3.4	2.8	2.6	2.9	3.2	3.9	4.4	na	5.4	na	1.6	2.1	2.1	2.1
EY-Parthenon	3.9	na	na	na	3.6	na	na	na	na	3.1	na	na	na	na	na	na	2.6	1.5	1.5	1.6
Georgia State University	3.8	7.2	na	na	3.8	3.6	3.5	3.2	3.2	3.5	3.7	5.0	6.1	na	5.8	na	0.8	1.9	2.0	1.8
Scotiabank Group	3.8	6.8	3.6	na	3.5	na	3.1	3.1	3.2	3.5	3.7	na	na	na	na	na	1.8	2.5	3.4	1.9
DePrince & Assoc.	3.7	6.8	3.7	3.7	3.9	3.8	3.7	3.6	3.5	3.7	4.0	5.1	5.8	4.2	5.8	117.6	2.2	2.5	2.5	2.4
Fannie Mae	3.7	6.8	na	na	3.6	3.5	3.4	3.3	3.3	3.3	3.5	na	na	na	5.2	na	1.9	2.2	2.5	2.2
Oxford Economics	3.6	6.7	3.6	na	3.5	3.5	3.3	3.4	3.0	2.8	2.7	3.5	na	na	5.6	115.8	2.0	2.5	2.1	2.3
MacroFin Analytics & Rutgers Bus School	3.5	6.7	3.5	3.8	3.8	4.1	4.2	4.4	4.1	4.1	4.4	5.8	6.4	4.5	6.8	115.4	1.5	2.1	2.3	2.1
TS Lombard	3.3	6.4	3.2	3.2	3.5	3.5	3.4	3.3	3.4	4.0	4.1	4.9	5.7	4.0	5.8	125.0 H	3.0 H	3.0	3.0	3.3
KPMG	3.1	6.3	3.1	2.7	3.0	3.2	3.2	3.2	3.0	3.2	3.6	4.4	5.3	na	5.4	na	2.3	2.0	1.8	1.9
Thru the Cycle	3.1	6.2	3.1	3.1	3.0	3.1	3.2	3.3	2.6	2.8	3.1	4.2	5.3	3.6	5.1	113.9	1.3	1.3	1.8	1.7
Wells Fargo	3.1	6.3	3.1	3.1	3.0	2.8	2.8	2.8	2.9	3.0	3.3	4.2	5.2	3.6	5.2	na	2.8	2.2	2.5	2.2
ING	2.9	na	na	na	na	na	na	2.5	2.8	3.0	3.4	na	na	na	na	na	2.6	na	na	na
NatWest Markets	2.9	6.0	na	3.0	3.1	3.2	3.3	2.6	2.8	3.0	3.2	2.9 L	3.1 L	3.3	3.0 L	na	1.7	2.4	1.1	1.5
Loomis, Sayles & Company	2.7	5.9	2.7	2.6	2.7	2.8	2.6	2.3	2.3	2.5	3.0	3.4	4.4	3.0	4.9	112.4	2.0	2.1	2.9	2.3
Nomura Securities, Inc.	2.6	5.8	na	na	na	na	na	1.5	1.8	1.9	na	na	na	na	na	na	0.8	1.5	0.8 L	0.9
ACIMA Private Wealth	0.5 L	3.5 L	0.5 L	0.6 L	0.6 L	0.6 L	0.6 L	0.7 L	0.7 L	1.5 L	2.3 L	4.0	5.0	1.5 L	3.3	108.0 L	2.0	1.8	2.0	2.0
February Consensus	**4.0**	**7.0**	**3.9**	**3.9**	**3.9**	**3.9**	**3.8**	**3.5**	**3.4**	**3.4**	**3.7**	**4.7**	**5.7**	**4.0**	**5.7**	**114.3**	**1.8**	**2.3**	**2.2**	**2.1**
Top 10 Avg.	4.9	7.9	4.7	4.8	4.7	4.7	4.7	4.5	4.3	4.2	4.4	5.5	6.4	4.6	6.5	117.1	2.6	3.0	3.0	2.7
Bottom 10 Avg.	2.8	6.0	3.0	3.0	3.0	3.0	2.9	2.4	2.4	2.6	3.1	4.0	5.0	3.5	4.8	111.5	1.0	1.7	1.6	1.6
January Consensus	4.0	7.2	4.1	4.0	3.9	4.0	3.9	3.5	3.4	3.5	3.8	4.8	5.8	4.2	5.8	116.9	1.7	2.2	2.3	2.2

Number of Forecasts Changed From A Month Ago:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	A	B	C	D	E
Down	4	4	3	5	6	6	5	9	9	8	8	10	7	6	11	10	5	6	9	11
Same	27	21	16	12	20	18	19	20	21	23	20	9	11	9	11	7	24	19	20	16
Up	7	5	6	4	7	6	5	4	3	4	4	3	3	2	5	0	6	7	4	5
Diffusion Index	54%	52%	56%	48%	52%	50%	50%	42%	41%	44%	44%	34%	40%	38%	39%	21%	51%	52%	42%	41%

International Interest Rate And Foreign Exchange Rate Forecasts

United States

Blue Chip Forecasters	Fed Fund Target Rate In 3 Mo.	In 6 Mo.	In 12 Mo.	10 Yr. Gov't Bond Yield % In 3 Mo.	In 6 Mo.	In 12 Mo.	Fed's AFE $ Index In 3 Mo.	In 6 Mo.	In 12 Mo.
BMO Capital Markets	4.88	4.88	4.63	3.80	3.70	3.45	114.1	113.2	111.3
ING Financial Markets	4.88	4.88	3.88	3.75	3.25	3.00	115.1	109.8	109.8
Mizuho Research Institute	5.13	5.13	4.38	3.70	3.60	3.65	--	--	--
Moody's Analytics	4.59	4.89	4.88	4.02	4.19	4.26	--	--	--
Northern Trust	4.88	4.88	4.88	3.60	3.75	3.80	116.0	113.0	111.0
Oxford Economics	4.52	4.61	4.61	3.75	3.51	3.13	116.8	117.6	117.1
S&P Global Market Intelligence	--	--	--	3.72	3.65	3.55	--	--	--
Scotiabank	5.00	5.00	4.50	3.30	3.25	3.45	--	--	--
TS Lombard	4.75	3.75	2.88	3.50	3.30	3.25	118.0	115.0	120.0
Wells Fargo	4.83	5.13	5.13	3.85	3.75	3.15	--	--	--
February Consensus	**4.83**	**4.79**	**4.42**	**3.70**	**3.60**	**3.47**	**116.0**	**113.7**	**113.8**
High	5.13	5.13	5.13	4.02	4.19	4.26	118.0	117.6	120.0
Low	4.52	3.75	2.88	3.30	3.25	3.00	114.1	109.8	109.8
Last Months Avg.	4.81	4.98	4.55	3.76	3.80	3.45	119.2	117.1	116.1

Japan

Blue Chip Forecasters	Policy-Rate Balance Rate In 3 Mo.	In 6 Mo.	In 12 Mo.	10 Yr. Gov't Bond Yield % In 3 Mo.	In 6 Mo.	In 12 Mo.	Yen per US$ In 3 Mo.	In 6 Mo.	In 12 Mo.
BMO Capital Markets	0.00	0.00	0.00	0.40	0.45	0.50	129.0	129.0	128.0
ING Financial Markets	-0.10	-0.10	-0.10	0.25	0.25	0.20	128.0	127.0	125.0
Mizuho Research Institute	-0.10	-0.10	-0.10	0.80	0.70	0.60	124.0	120.0	119.0
Moody's Analytics	-0.10	-0.10	-0.10	0.43	0.43	0.40	135.0	131.4	125.9
Nomura Securities	--	--	--	--	--	--	130.0	130.0	125.0
Northern Trust	-0.10	-0.10	-0.10	0.50	0.50	0.50	131.0	126.0	124.0
Oxford Economics	-0.05	-0.04	-0.05	0.41	0.40	0.30	132.0	131.7	130.9
S&P Global Market Intelligence	--	--	--	--	--	--	129.6	129.0	127.5
Scotiabank	0.00	0.00	0.00	--	--	--	135.0	135.0	130.0
TS Lombard	0.00	0.00	0.00	0.49	0.49	0.49	130.0	126.7	132.2
Wells Fargo	-0.10	-0.10	-0.10	0.50	0.50	0.40	--	--	--
February Consensus	**-0.06**	**-0.06**	**-0.06**	**0.47**	**0.47**	**0.42**	**130.4**	**128.6**	**126.8**
High	0.00	0.00	0.00	0.80	0.70	0.60	135.0	135.0	132.2
Low	-0.10	-0.10	-0.10	0.25	0.25	0.20	124.0	120.0	119.0
Last Months Avg.	-0.08	-0.06	-0.07	0.32	0.32	0.22	136.1	134.3	131.4

United Kingdom

Blue Chip Forecasters	Official Bank Rate In 3 Mo.	In 6 Mo.	In 12 Mo.	10 Yr. Gilt Yields % In 3 Mo.	In 6 Mo.	In 12 Mo.	US$ per Pound Sterling In 3 Mo.	In 6 Mo.	In 12 Mo.
BMO Capital Markets	4.00	4.00	4.00	3.30	3.20	3.05	1.24	1.25	1.27
ING Financial Markets	4.00	4.00	4.00	3.60	3.40	3.10	1.21	1.31	1.27
Moody's Analytics	4.10	4.50	4.50	3.78	4.32	4.40	1.34	1.40	1.44
Nomura Securities	--	--	--	--	--	--	1.25	1.26	1.32
Northern Trust	4.25	4.25	4.25	3.25	3.30	3.20	1.22	1.24	1.26
Oxford Economics	3.69	4.00	4.00	3.54	3.59	3.50	1.21	1.20	1.20
S&P Global Market Intelligence	--	--	--	--	--	--	1.22	1.23	1.25
Scotiabank	4.25	4.25	4.25	--	--	--	1.20	1.20	1.25
TS Lombard	3.50	2.50	1.63	2.90	2.70	2.65	1.25	1.12	1.03
Wells Fargo	4.00	4.00	3.50	3.35	3.30	2.90	--	--	--
February Consensus	**3.97**	**3.94**	**3.77**	**3.39**	**3.40**	**3.26**	**1.24**	**1.25**	**1.25**
High	4.25	4.50	4.50	3.78	4.32	4.40	1.34	1.40	1.44
Low	3.50	2.50	1.63	2.90	2.70	2.65	1.20	1.12	1.03
Last Months Avg.	3.77	4.05	3.75	3.36	3.31	3.29	1.17	1.21	1.24

Switzerland

Blue Chip Forecasters	SNB Policy Rate In 3 Mo.	In 6 Mo.	In 12 Mo.	10 Yr. Gov't Bond Yield % In 3 Mo.	In 6 Mo.	In 12 Mo.	CHF per US$ In 3 Mo.	In 6 Mo.	In 12 Mo.
ING Financial Markets	1.50	1.50	1.50	1.30	1.20	1.20	0.87	0.78	0.85
Moody's Analytics	1.50	1.50	1.50	1.80	1.90	2.08	0.92	0.90	0.85
Nomura Securities	--	--	--	--	--	--	0.93	0.93	0.92
Northern Trust	1.25	1.50	1.50	1.20	1.30	1.25	0.93	0.91	0.89
Oxford Economics	1.08	1.50	1.50	1.48	1.50	1.40	0.93	0.93	0.94
S&P Global Market Intelligence	--	--	--	--	--	--	0.95	0.95	0.95
Scotiabank	--	--	--	--	--	--	0.93	0.93	0.91
TS Lombard	0.70	0.50	0.50	1.24	1.24	1.00	0.97	0.97	0.97
Wells Fargo	1.50	1.50	1.50	--	--	--	--	--	--
February Consensus	**1.26**	**1.33**	**1.33**	**1.40**	**1.43**	**1.39**	**0.93**	**0.91**	**0.91**
High	1.50	1.50	1.50	1.80	1.90	2.08	0.97	0.97	0.97
Low	0.70	0.50	0.50	1.20	1.20	1.00	0.87	0.78	0.85
Last Months Avg.	1.06	1.31	1.33	1.15	1.28	1.31	0.95	0.93	0.93

Canada

Blue Chip Forecasters	O/N MMkt Financing Rate In 3 Mo.	In 6 Mo.	In 12 Mo.	10 Yr. Gov't Bond Yield % In 3 Mo.	In 6 Mo.	In 12 Mo.	C$ per US$ In 3 Mo.	In 6 Mo.	In 12 Mo.
BMO Capital Markets	4.50	4.50	4.25	3.25	3.15	3.00	1.34	1.33	1.30
ING Financial Markets	4.50	4.50	3.75	3.25	3.00	2.50	1.36	1.33	1.26
Moody's Analytics	4.43	4.75	4.36	4.01	4.32	4.41	1.34	1.33	1.31
Nomura Securities	--	--	--	--	--	--	1.33	1.32	1.30
Northern Trust	4.50	4.50	4.50	2.95	3.00	2.90	1.35	1.33	1.30
Oxford Economics	4.25	4.25	4.25	3.22	3.10	2.97	1.37	1.39	1.38
S&P Global Market Intelligence	--	--	--	--	--	--	1.35	1.33	1.35
Scotiabank	4.25	4.25	4.00	2.85	3.00	3.45	1.35	1.35	1.30
TS Lombard	5.00	4.00	3.13	2.80	2.60	2.55	1.35	1.35	1.35
Wells Fargo	4.50	4.50	4.00	3.00	2.95	2.70	--	--	--
February Consensus	**4.49**	**4.41**	**4.03**	**3.17**	**3.14**	**3.06**	**1.35**	**1.34**	**1.32**
High	5.00	4.75	4.50	4.01	4.32	4.41	1.37	1.39	1.38
Low	4.25	4.00	3.13	2.80	2.60	2.50	1.33	1.32	1.26
Last Months Avg.	4.44	4.57	4.08	3.12	3.14	3.08	1.34	1.34	1.31

International Interest Rate And Foreign Exchange Rate Forecasts

Australia

Blue Chip Forecasters	Official Cash Rate			10 Yr. Gov't Bond Yield %			US$ per A$		
	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.
ING Financial Markets	3.60	3.60	2.60	3.30	3.00	2.70	0.69	0.70	0.72
Moody's Analytics	3.10	3.35	3.35	4.20	4.46	4.53	0.67	0.68	0.72
Nomura Securities	--	--	--	--	--	--	0.73	0.74	0.78
Northern Trust	3.60	3.60	3.60	3.60	3.65	3.55	0.69	0.70	0.72
Oxford Economics	3.35	3.60	3.60	4.00	3.91	3.78	0.68	0.67	0.68
S&P Global Market Intelligence	--	--	--	--	--	--	0.69	0.70	0.72
Scotiabank	3.45	3.55	3.50	--	--	--	0.67	0.67	0.69
TS Lombard	4.05	3.05	2.18	3.60	3.15	3.10	0.65	0.65	0.65
Wells Fargo	3.60	3.60	3.60	--	--	--	--	--	--
February Consensus	**3.54**	**3.48**	**3.20**	**3.74**	**3.63**	**3.53**	**0.68**	**0.69**	**0.71**
High	4.05	3.60	3.60	4.20	4.46	4.53	0.73	0.74	0.78
Low	3.10	3.05	2.18	3.30	3.00	2.70	0.65	0.65	0.65
Last Months Avg.	3.49	3.68	3.24	3.58	3.57	3.52	0.66	0.67	0.70

Euro area

Blue Chip Forecasters	Main Refinancing Rate			US$ per Euro		
	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.
BMO Capital Markets	3.50	3.50	3.50	1.09	1.10	1.11
ING Financial Markets	3.50	3.75	3.75	1.08	1.15	1.12
Mizuho Research Institute	3.50	3.50	3.00	1.08	1.11	1.16
Moody's Analytics	2.83	3.64	3.72	1.06	1.08	1.11
Nomura Securities	--	--	--	1.11	1.13	1.16
Northern Trust	3.50	3.75	3.75	1.06	1.09	1.12
Oxford Economics	2.90	3.50	3.50	1.06	1.05	1.06
S&P Global Market Intelligence	--	--	--	1.07	1.07	1.09
Scotiabank	3.25	3.25	3.25	1.05	1.05	1.10
TS Lombard	2.00	2.75	0.50	1.10	1.02	0.98
Wells Fargo	3.00	3.25	3.25	--	--	--
February Consensus	**3.11**	**3.43**	**3.14**	**1.08**	**1.09**	**1.10**
High	3.50	3.75	3.75	1.11	1.15	1.16
Low	2.00	2.75	0.50	1.05	1.02	0.98
Last Months Avg.	2.74	3.14	2.91	1.04	1.06	1.07

10 Yr. Gov't Bond Yields %

Blue Chip Forecasters	Germany			France			Italy			Spain		
	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.
BMO Capital Markets	2.05	2.00	1.85	--	--	--	--	--	--	--	--	--
ING Financial Markets	2.40	2.20	2.00	2.95	2.70	2.50	4.55	4.20	4.00	3.50	3.20	3.00
Mizuho Research Institute	2.45	2.40	2.55	--	--	--	--	--	--	--	--	--
Moody's Analytics	2.38	2.55	2.71	2.87	2.98	3.03	4.68	4.69	4.39	3.61	3.66	3.59
Northern Trust	2.20	2.25	2.15	2.70	2.75	2.65	4.10	4.15	4.05	3.20	3.25	3.15
Oxford Economics	2.32	2.18	1.98	2.93	2.83	2.55	4.50	4.40	4.10	3.47	3.39	3.15
TS Lombard	2.20	1.50	1.45	2.55	1.85	1.80	3.50	2.80	2.75	2.95	2.25	2.20
Wells Fargo	2.40	2.30	2.20	--	--	--	--	--	--	--	--	--
February Consensus	**2.30**	**2.17**	**2.11**	**2.80**	**2.62**	**2.51**	**4.27**	**4.05**	**3.86**	**3.35**	**3.15**	**3.02**
High	2.45	2.55	2.71	2.95	2.98	3.03	4.68	4.69	4.39	3.61	3.66	3.59
Low	2.05	1.50	1.45	2.55	1.85	1.80	3.50	2.80	2.75	2.95	2.25	2.20
Last Months Avg.	2.08	2.03	2.01	2.55	2.47	2.44	4.04	3.89	3.82	3.08	3.00	2.97

	Consensus Forecasts			
	10-year Bond Yields vs U.S. Yield			
	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-3.02	-3.23	-3.13	-3.05
United Kingdom	-0.06	-0.31	-0.19	-0.21
Switzerland	-2.29	-2.30	-2.17	-2.08
Canada	-0.63	-0.53	-0.46	-0.41
Australia	0.04	0.04	0.04	0.06
Germany	-1.29	-1.40	-1.42	-1.36
France	-0.81	-0.90	-0.97	-0.96
Italy	0.71	0.57	0.45	0.39
Spain	-0.33	-0.35	-0.45	-0.45

	Consensus Forecasts			
	Policy Rates vs U.S. Target Rate			
	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-4.48	-4.89	-4.73	-4.48
United Kingdom	-0.88	-0.86	-0.86	-0.65
Switzerland	-3.38	-3.57	-3.46	-3.09
Canada	0.13	-0.34	-0.39	-0.39
Australia	-1.28	-1.29	-1.32	-1.21
Euro area	-1.88	-1.72	-1.36	-1.28

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**

Fed Rate Rises: The Beginning of the End

The Fed is expected to raise policy rates by 25 bps on February 1, reining in the tightening tempo from 50 bps in December and a quartet of 75 bp actions before then. This will lift the target range for the fed funds rate to 4½%-to-4¾%, the highest in 15 years and the largest cumulative rate hike (450 bps) since the Fed began targeting fed funds in the 1980s.

During December's press conference, when asked about the prospects for a further paring of the tightening pace, Chair Powell said that "having moved so quickly and having now so much restraint that's still in the pipeline, we think that the appropriate thing to do now is to move to a slower pace". It takes over a year for the full influence of rate hikes on growth and inflation to unfold. So, from the Fed's risk management perspective, moving more nimbly now helps mitigate the risk of tightening too much and causing a deeper economic downturn than is required to return inflation to the 2% target. At the same time, continuing with at least small rate hikes helps mitigate the risk of not tightening enough and causing inflation expectations to become unanchored.

Recent economic data support the policy tack of trimming the size of rate hikes. For the Fed-targeted PCE price index, total inflation was 5.0% in December, down from June's 7.0% peak, with both the six- and three-month trends at 2.1%. Core PCE inflation was 4.4%, down from the 5.4% peak in February-March, with the six-month change at 3.7% annualized and three months at 2.9%. Seeing '2 handles' on some of these trends and with indications of further disinflation underscores the meaningful progress already made to restore price stability. Smaller rate hikes are justified.

Although food inflation remains uncomfortably high (with its disproportionate influence on inflation expectations), the annual price gains for energy and core goods have slowed significantly. The same will be the case for housing once falling market prices are reflected in the inflation metrics. The remaining slice of the PCE price index (with its 55% share) is core services excluding housing, which is now being emphasized by Chair Powell given its correlation with underlying wage gains. This 'core-core' increased 4.0% y/y in December, down from the 5.1% peak last November-December and has been stuck around a '4-handle' range for the past 21 months. The six-month move was 3.7% annualized with the three-month at 3.9%. The rash of 3¾-to-4% readings points to underlying stickiness and more work to be done to restore price stability. Although smaller rate hikes are justified, continued rate hikes are required.

Recent economic data also support this conclusion. Although real GDP advanced at a 2.9% annualized rate in Q4, final domestic demand excluding government (so, consumption and investment) was up only 0.2% annualized, the weakest result since the pandemic plunge. Other key indicators are signalling outright contraction. Industrial production dropped 0.8% in December after falling 0.6% in November. Historically, such a two-month decline (-1.3%) has tended to occur amid recessions. ISM's PMIs for manufacturing and services were both below 50 in De-

cember. Housing demand has collapsed under the weight of higher mortgage rates. And, since peaking in February, the venerable Leading Economic Index has dropped 6.0% through December, a descent which has always been associated with recession. Thus, smaller rate hikes are justified.

Meanwhile, the labour market remains stubbornly strong. Although growth in payroll employment hit a two-year low of 223k in December, this is still historically high and marks the sixth month among the past seven registering gains in the 200k-to-300k range (and the one holdout was 537k). In November (the latest data), labour demand (payrolls plus job openings) hit a cycle high. And, we ended 2022 with an unemployment rate that matched the lowest (3.5%) in more than 53 years. Labour demand continues to exceed supply, applying upward pressure on wages. Thus, continued rate hikes are required.

We look for the policy statement to repeat that "ongoing increases in the target range will be appropriate in order to attain a stance of monetary policy that is sufficiently restrictive to return inflation to 2 percent over time". And there will be some new names at the bottom. Chicago President Goolsbee along with Philadelphia's Harker, Dallas' Logan and Minneapolis' Kashkari will replace Cleveland President Mester, along with Boston's Collins, St. Louis' Bullard and Kansas City's George. In normal times, we would be assessing whether the incoming class is any more hawkish or dovish than the outgoing group (for the record, we judge there's a less-hawkish tilt), and whether we could get a dissent. However, in the Fed's current fight against inflation there is much more agreement among policymakers about what must be done. In the press conference, we look for Chair Powell to explain why a slower rate hike cadence was warranted along with why rates will still likely rise further. So, where is the terminal rate? In December's Summary of Economic Projections, 17 of 19 FOMC participants were projecting a 2023-end fed funds rate above 5.00% with a 5.125% median. This implies two more quarter-point hikes after February. Our call is that we'll get half that, as underlying inflation performance improves a bit further amid broadening signs of a recession.

Michael Gregory (BMO)

U.S. Economy: Still Afloat

For the second straight time, the U.S. economy topped expectations, expanding 2.9% annualized in the fourth quarter. The minimal slowing from the prior 3.2% pace suggests some continued durability, as evident by the still-healthy jobs market. As a result, we now expect to see some positive growth for all of 2023 (0.5%) instead of a lost year of no growth.

To be sure, we still suspect the economy will contract mildly in the first half of the year. More than two-thirds of growth last quarter stemmed from just two factors that are unlikely to repeat: a big jump in government worker compensation and a large build in business inventories. Apparently, fierce discounting by retailers to pare excess stocks wasn't enough to counter rising inventories among manufacturers and other groups. Perhaps more importantly, the economy ended the year with declines in real personal spending, core capital goods orders, aggregate work

hours, housing starts and existing home sales. Even if the economy advanced in December, it looks to have lost its stamina. This could explain the weak slate of regional manufacturing and services surveys in January.

At the same time, however, we trimmed our estimate of how much the economy will contract to just 1 ppt annualized in the first half of the year. This recognizes that the current tight labour market, substantial excess savings, and even the recent improvement in financial conditions will provide some cushion. Businesses will be reluctant to shed workers given staffing challenges, thereby supporting incomes. Even though households have already plowed through a third of their cash hoard, they still have a substantial buffer, even if it's now largely held by higher income groups with less propensity to spend. Importantly, the bond rally has chopped a full percentage point from 30-year mortgage rates since November, which will help put a floor under the housing market even if some further price adjustment is required to restore affordability. At the very least, residential construction won't continue to carve 1.3-ppt chunks out of GDP growth as per the fourth quarter.

Fundamentally, our forecast hasn't changed much: we still foresee a downturn that raises the unemployment rate to 5%—the bitter medicine required to treat inflation. However, lingering pockets of resilience increase our confidence that the slump will be mild and short-lived. There may even be a one-in-three chance of an elusive soft landing, by no means a long shot. The apparent recession now underway in the housing, manufacturing, and information technology sectors, accounting for a quarter of gross industry output, won't carry enough sway with the overall economy if personal consumption and business spending (ex-computer gear), accounting for three quarters of GDP, can stay afloat. What has changed significantly in recent weeks is that the economy now stands a better chance of swimming, rather than sinking, this year despite the choppy waters.

Sal Guatieri (BMO)

Fed "Stays the Course"

One of the most frequently quoted phrases of Federal Reserve officials in recent weeks has been to "stay the course." It was almost as if they all got the same memo. The goal is to slow the pace of rate hikes as they close in on what the Fed sees as the terminal or peak rate. The current consensus is to raise rates to a 5%-5.25% range. They would hit that rate in May if the Fed slowed rate hikes in quarter point moves starting February 1.

Why wouldn't the Fed just stop after the next rate hike given the deceleration in inflation? Governor Christopher Waller summed it up best. He said, "Back in 2021, we saw three consecutive months of relatively low readings of core inflation before it jumped back up. We do not want to be head-faked."

The largest risk the Fed wants to avoid currently is stopping too soon and having to raise rates again. However, we are seeing some cracks in the consensus as inflation cools. The statement following this meeting is expected to include the phrase "ongoing increases" when it refers to rate hikes. The fear the Fed has is that financial markets will front-run a pause in rates and stem or undo the progress the Fed has made on inflation to date. As we

get into March and May, debate within the Fed over the persistence of rate hikes is likely to flare.\

Doves are more willing to space out rate hikes. Watch for the debate over the end point and the pace of rate hikes within the Fed to intensify in 2023 with more doves rotating into voting roles on the Federal Open Market Committee (FOMC) – the policy setting arm of the Fed.

The four regional Fed presidents who rotate onto the FOMC in 2023 are: Austan Goolsbee of Chicago, who just started in January; Lorie Logan of Dallas; Neel Kashkari of Minneapolis and Patrick Harker of Philadelphia. Logan and Harker have been more openly questioning the level and pace of rate hikes than their peers. Goolsbee is assumed to be more dovish but one never knows until they enter the doors of an actual Federal Reserve meeting. Kashkari was previously one of the most dovish members of the FOMC and is now among the most hawkish.

Doves are in the minority but they may lose an ally on the Board of Governors. Vice Chair Lael Brainard is the frontrunner to be the next head of the National Economic Council for the White House and is seen as an eventual replacement for Treasury Secretary Janet Yellen. This is a position she was previously considered for and has experience as Deputy Treasury Secretary for International Affairs from 2010-2013. That leaves Susan Collins of the Boston Fed as another dove. It is unclear who would replace Brainard on the Board of Governors.

The Fed's leadership ranks were fully staffed for the first time since 2013 in 2022. Diversity among the Fed's leadership has increased as well, which is showing up in a broader spectrum of research within the Fed system. The result will trigger more debate as the Fed attempts to narrow in on a terminal rate and decide when it has seen enough of a deceleration in inflation to cut rates. That may ruffle markets, which hate uncertainty and dissonance within the Fed ranks, but it could boost the quality of Fed decisions.

What does the Fed need to see before cutting rates? A decisive move in core PCE inflation toward 2%. Fed officials have rejected calls to stop with 3% inflation as that would seem as though they are moving the goal posts to declare victory. They are not likely to cut rates until core inflation appears to be moving through the 3% threshold. History has taught us that getting inflation off its peak is easier than getting inflation down to a pace that no longer distorts behaviors.

The last line is said with pure humility as history has been a poor predictor of an economy that moves as rapidly as the post-pandemic economy is shifting. It is more difficult to measure, let alone predict, than it once was. The latter is another reason that the Fed doesn't want to get ahead of the economic data, even though officials know there is some lag in how rate hikes play out.

The silver lining is that Fed-induced slowdowns are easier to rebound from than balance sheet recessions. That, coupled with a healing of household and corporate balance sheets, suggests that the economy will respond more rapidly to rate cuts once the Fed reverses course.

Diane Swonk (KPMG)

Special Questions:

1. How much do you expect the fed funds rate to be changed in total in: <u>2023</u>?　20.2 bps　　<u>2024</u>?　-125.0 bps

2. a. What do you think will be the terminal fed funds rate (average of target range) in the current tightening cycle?　<u>5.00%</u>

b. When will the terminal rate be reached?

<u>Q1 2023</u>	<u>Q2 2023</u>	<u>Q3 2023</u>	<u>Q4 2023</u>	<u>Later</u>
59%	41%	0%	0%	0%

3. a. When will the first fed funds rate cut occur?

<u>Q2 2023</u>	<u>Q3 2023</u>	<u>Q4 2023</u>	<u>Q1 2024</u>	<u>Q2 2024</u>	<u>Later</u>
0%	26%	24%	35%	9%	6%

b. What will motivate the first FFR cut?

A sharp slowdown in the economy	<u>33%</u>
A meaningful and persistent slowing in inflation	<u>67%</u>
More intense global financial instability	<u>0%</u>

4. a. Do you think that by removing monetary accommodation, major central banks will be successful in reining in inflation without precipitating a recession?

	<u>Yes</u>	<u>No</u>
US	12%	88%
euro area	4%	96%
UK	0%	100%

b. If no, what type of recession do you project?

	<u>Mild</u>	<u>Average</u>	<u>Severe</u>
US	83%	17%	0%
euro area	48%	41%	11%
UK	39%	32%	29%

5. What probability do you attach to a recession beginning in 2023?

the US	63%
the euro area	66%
globally	59%

6. a. Do you think the unemployment rate will rise during 2023?　<u>Yes</u>　97%　　<u>No</u>　3%

b. If so, by how much?　<u>1.4%</u>

c. What is your estimate of the long-term noninflationary rate of unemployment (fka NAIRU) for the US?　<u>4.1%</u>

7. a. Will the uncertainty surrounding the extension of the US debt limit impact US interest rates?　<u>Yes</u>　54%　　<u>No</u>　46%

b. Will it impact the foreign exchange value of the US dollar?　<u>Yes</u>　61%　　<u>No</u>　39%

8. What do you consider to be the biggest source of upside risk to your economic outlook for 2023?

A swift resolution to the conflict in Ukraine	3%
A bigger retreat in inflation and an earlier-than-expected end of central bank tightening cycles	77%
A bigger-than-expected boost from China following its recent re-opening initiatives	19%
Firmer-than-expected corporate capex and an associated productivity revival	0%
Something else	0%

Databank:

2023 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	....	....	....	....	....	....	....	....	....	....	....	....
Auto & Light Truck Sales (b)	....	....	....	....	....	....	....	....	....	....	....	....
Personal Income (a, current $)	....	....	....	....	....	....	....	....	....	....	....	....
Personal Consumption (a, current $)	....	....	....	....	....	....	....	....	....	....	....	....
Consumer Credit (e)	....	....	....	....	....	....	....	....	....	....	....	....
Consumer Sentiment (U. of Mich.)	64.9	....	....	....	....	....	....	....	....	....	....	....
Household Employment (c)	....	....	....	....	....	....	....	....	....	....	....	....
Nonfarm Payroll Employment (c)	....	....	....	....	....	....	....	....	....	....	....	....
Unemployment Rate (%)	....	....	....	....	....	....	....	....	....	....	....	....
Average Hourly Earnings (All, cur. $)	....	....	....	....	....	....	....	....	....	....	....	....
Average Workweek (All, hrs.)	....	....	....	....	....	....	....	....	....	....	....	....
Industrial Production (d)	....	....	....	....	....	....	....	....	....	....	....	....
Capacity Utilization (%)	....	....	....	....	....	....	....	....	....	....	....	....
ISM Manufacturing Index (g)	....	....	....	....	....	....	....	....	....	....	....	....
ISM Nonmanufacturing Index (g)	....	....	....	....	....	....	....	....	....	....	....	....
Housing Starts (b)	....	....	....	....	....	....	....	....	....	....	....	....
Housing Permits (b)	....	....	....	....	....	....	....	....	....	....	....	....
New Home Sales (1-family, c)	....	....	....	....	....	....	....	....	....	....	....	....
Construction Expenditures (a)	....	....	....	....	....	....	....	....	....	....	....	....
Consumer Price Index (nsa, d)	....	....	....	....	....	....	....	....	....	....	....	....
CPI ex. Food and Energy (nsa, d)	....	....	....	....	....	....	....	....	....	....	....	....
PCE Chain Price Index (d)	....	....	....	....	....	....	....	....	....	....	....	....
Core PCE Chain Price Index (d)	....	....	....	....	....	....	....	....	....	....	....	....
Producer Price Index (nsa, d)	....	....	....	....	....	....	....	....	....	....	....	....
Durable Goods Orders (a)	....	....	....	....	....	....	....	....	....	....	....	....
Leading Economic Indicators (a)	....	....	....	....	....	....	....	....	....	....	....	....
Balance of Trade & Services (f)	....	....	....	....	....	....	....	....	....	....	....	....
Federal Funds Rate (%)	....	....	....	....	....	....	....	....	....	....	....	....
3-Mo. Treasury Bill Rate (%)	....	....	....	....	....	....	....	....	....	....	....	....
10-Year Treasury Note Yield (%)	....	....	....	....	....	....	....	....	....	....	....	....

2022 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	2.0	1.7	1.2	0.7	0.4	1.0	-0.4	0.7	-0.2	1.1	-1.0	-1.1
Auto & Light Truck Sales (b)	15.11	13.71	13.55	14.28	12.58	13.05	13.32	13.24	13.63	15.28	14.28	13.38
Personal Income (a, current $)	-0.1	0.5	0.5	0.2	0.5	0.5	0.4	0.4	0.4	0.8	0.3	0.2
Personal Consumption (a, current $)	1.2	0.7	1.2	0.4	0.7	1.2	-0.1	0.7	0.6	0.8	-0.1	-0.2
Consumer Credit (e)	4.0	8.9	12.2	8.3	7.1	10.4	6.1	7.6	6.5	7.4	7.1	....
Consumer Sentiment (U. of Mich.)	67.2	62.8	59.4	65.2	58.4	50.0	51.5	58.2	58.6	59.9	56.8	59.7
Household Employment (c)	1041	468	738	-346	317	-242	215	422	156	-257	-66	717
Nonfarm Payroll Employment (c)	504	714	398	368	386	293	537	292	269	263	256	223
Unemployment Rate (%)	4.0	3.8	3.6	3.6	3.6	3.6	3.5	3.7	3.5	3.7	3.6	3.5
Average Hourly Earnings (All, cur. $)	31.56	31.60	31.75	31.86	31.98	32.11	32.27	32.36	32.49	32.60	32.73	32.82
Average Workweek (All, hrs.)	34.6	34.7	34.6	34.6	34.6	34.5	34.5	34.5	34.5	34.5	34.4	34.3
Industrial Production (d)	2.9	6.9	4.8	5.3	4.4	3.7	3.6	3.6	5.0	3.4	2.2	1.6
Capacity Utilization (%)	78.9	79.4	79.8	80.2	80.0	79.7	80.0	79.9	80.1	80.0	79.4	78.8
ISM Manufacturing Index (g)	57.6	58.4	57.0	55.9	56.1	53.1	52.7	52.9	51.0	50.0	49.0	48.4
ISM Nonmanufacturing Index (g)	60.4	57.2	58.4	57.5	56.4	56.0	56.4	56.1	55.9	54.5	55.5	49.2
Housing Starts (b)	1.666	1.777	1.716	1.805	1.562	1.575	1.377	1.508	1.465	1.426	1.401	1.382
Housing Permits (b)	1.841	1.857	1.879	1.823	1.695	1.696	1.685	1.542	1.564	1.512	1.351	1.337
New Home Sales (1-family, c)	831	790	707	619	636	571	543	646	550	598	602	616
Construction Expenditures (a)	2.7	1.5	0.9	0.7	0.7	0.6	0.8	-1.1	0.5	-0.2	0.2	....
Consumer Price Index (nsa, d)	7.5	7.9	8.5	8.3	8.6	9.1	8.5	8.3	8.2	7.7	7.1	6.5
CPI ex. Food and Energy (nsa, d)	6.0	6.4	6.5	6.2	6.0	5.9	5.9	6.3	6.6	6.3	6.0	5.7
PCE Chain Price Index (d)	6.1	6.4	6.8	6.4	6.5	7.0	6.4	6.3	6.3	6.1	5.5	5.0
Core PCE Chain Price Index (d)	5.2	5.4	5.4	5.0	4.9	5.0	4.7	4.9	5.2	5.1	4.7	4.4
Producer Price Index (nsa, d)	10.1	10.4	11.7	11.2	11.1	11.2	9.7	8.7	8.5	8.2	7.3	6.2
Durable Goods Orders (a)	3.1	-0.7	0.7	0.4	0.8	2.3	-0.1	0.2	0.2	0.7	-1.7	5.6
Leading Economic Indicators (a)	-0.6	0.6	-0.1	-0.4	-0.7	-0.7	-0.6	-0.1	-0.5	-1.0	-1.1	-1.0
Balance of Trade & Services (f)	-88.0	-87.8	-106.9	-87.2	-85.7	-80.7	-70.7	-65.8	-74.1	-77.8	-61.5	....
Federal Funds Rate (%)	0.08	0.08	0.20	0.33	0.77	1.21	1.68	2.33	2.56	3.08	3.78	4.10
3-Mo. Treasury Bill Rate (%)	0.15	0.31	0.45	0.76	0.99	1.54	2.30	2.72	3.22	3.87	4.32	4.36
10-Year Treasury Note Yield (%)	1.76	1.93	2.13	2.75	2.90	3.14	2.90	2.90	3.52	3.98	3.89	3.62

(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
30 Texas Manufacturing Outlook Survey (Jan)	**31** Consumer Confidence (Jan) Employment Cost Index (Q4) FHFA Monthly HPI (Nov) Case-Shiller HPI (Nov) Housing Vacancies (Q4) Agricultural Prices (Dec) Chicago PMI (Dec) Texas Service Sector Outlook Survey (Jan) FOMC Meeting	**February 1** ADP Employment Report (Jan) JOLTS (Dec) ISM Manufacturing (Jan) S&P Global Mfg PMI (Jan) Construction (Dec) FOMC Meeting EIA Crude Oil Stocks Mortgage Application	**2** Productivity & Costs (Q4) Manufacturers' Shipments, Inventories & Orders (Dec) Challenger Employment (Jan) Weekly Jobless Claims	**3** Employment Situation (Jan/Rev) BEA Auto and Truck Sales (Jan) ISM Services PMI (Jan) S&P Global Services PMI (Jan)
6 Public Debt (Jan) Interest on Public Debt (Jan) Senior Loan Officer Survey (Q1)	**7** International Trade (Dec) Consumer Credit (Dec) Treasury Auction Allotments (Jan) Kansas City Fed Labor Market Conditions Indicators (Jan)	**8** Wholesale Trade (Dec) Transportation Services Index (Dec) EIA Crude Oil Stocks Mortgage Application	**9** First Time Housing Affordability (Q4) Kansas City Financial Stress Index (Jan) CEO Confidence Survey (Q1) Weekly Jobless Claims	**10** Consumer Sentiment (Feb, Preliminary) Survey of Professional Forecasters (Q1) Housing Affordability (Dec) Monthly Treasury (Jan)
13	**14** CPI & Real Earnings (Jan) Cleveland Fed Median CPI (Jan) NFIB (Jan)	**15** Adv Retail Sales (Jan) Industrial Production (Jan) MTIS (Dec) Empire State Mfg Survey (Feb) NAHB (Feb) TIC Data (Dec) EIA Crude Oil Stocks Mortgage Application	**16** Producer Prices (Jan) New Residential Construction (Jan) Business Leaders Survey (Feb) Philadelphia Fed Mfg Business Outlook Survey (Feb) Weekly Jobless Claims	**17** Import and Export Prices (Jan) Retail E-Commerce Sales (Q4) Adv Quarterly Services (Q4) Composite Indexes (Jan)
20 **PRESIDENTS' DAY ALL MARKETS CLOSED**	**21** Existing Home Sales (Jan) Philadelphia Fed Nonmanufacturing Business Outlook Survey (Feb) S&P Global Flash PMI (Feb)	**22** CEW (Q3) Mortgage Application	**23** GDP (Q4, 2nd Estimate) Treas Auction Allotments (Feb) Chicago Fed National Activity Index (Jan) Kansas City Fed Manufacturing Survey (Feb)| EIA Crude Oil Stocks Weekly Jobless Claims	**24** Personal Income (Jan) New Residential Sales (Jan) Dallas Fed Trimmed-Mean PCE (Jan) Final Building Permits (Jan) Underlying NIPA Tables (Q4, 2nd Estimate) Consumer Sentiment (Feb, Final) Steel Imports (Jan, Preliminary)
27 Adv Durable Goods (Jan) Texas Manufacturing Outlook Survey (Feb) NABE Outlook (Q1) Pending Home Sales (Jan)	**28** Adv Trade & Inventories (Jan) FHFA HPI (Dec & Q4) Case Shiller HPI (Dec) H.6 Money Stock (Jan) Agricultural Prices (Jan) Chicago PMI (Feb) Richmond Fed Mfg & Service Sector Surveys (Feb) Texas Service Sector Feb) Consumer Confidence (Feb)	**March 1** Construction (Jan) ISM Manufacturing (Feb) S&P Global Mfg PMI (Feb) EIA Crude Oil Stocks Mortgage Application	**2** Productivity & Costs (Q4) Weekly Jobless Claims	**3** ISM Services PMI (Feb) S&P Global Services PMI (Feb) BEA Auto Sales (Feb) BEA Truck Sales (Feb) Strike Report (Feb)
6 Manufacturers' Shipments, Inventories & Orders (Jan) Public Debt (Feb) Interest on Public Debt (Feb)	**7** Wholesale Trade (Jan) Treasury Auction Allotments (Feb) Consumer Credit (Jan)	**8** ADP Employment Report (Feb) International Trade (Jan) Transportation Services Index (Jan) JOLTS (Jan) EIA Crude Oil Stocks Mortgage Application	**9** Financial Accounts (Q4) Challenger Employment Report (Feb) Kansas City Financial Stress Index (Feb) Weekly Jobless Claims	**10** Employment Situation (Feb) Monthly Treasury Statement (Feb)

BLUE CHIP FORECASTERS

CONTRIBUTORS TO DOMESTIC SURVEY

ACIMA Private Wealth, Richmond, VA
Ardavan Mobasheri
Action Economics, LLC, Boulder, CO
Michael Englund
Amherst Pierpont Securities, Stamford, CT
Stephen Stanley
Bank of America, New York, NY
Ethan Harris
Bank of the West, SF, CA
Scott Anderson
Barclays, New York, NY
Michael Gapen
BMO Capital Markets Economics, Toronto, Canada
Douglas Porter
BNP Paribas North America, New York, NY
Andrew Schneider
Chan Economics, New York, NY
Anthony Chan
Chmura Economics & Analytics, Richmond, VA
Christine Chmura and Xiaobing Shuai
Comerica, Dallas, TX
Bill Adams
Daiwa Capital Markets America, New York, NY
Michael Moran
DePrince & Associates, Murfreesburo, TN
Albert E. DePrince Jr.
Economist Intelligence Unit, New York, NY
Leo Abruzzese and Jan Friederich
EY- Parthenon, New York, NY
Gregory Daco
Fannie Mae, Washington, DC
Douglas Duncan
Georgia State University, Atlanta, GA
Rajeev Dhawan
GLC Financial Economics, Providence, RI
Gary L. Ciminero
Goldman, Sachs & Co., New York, NY
Jan Hatzius
KPMG, New York, NY
Diane Swonk
ING Financial Markets, London, England
James Knightley
J.P. Morgan Chase, New York, NY
Bruce Kasman
Loomis, Sayles & Company, L.P., Boston, MA
Brian Horrigan
MacroFin Analytics & Rutgers Business School, Wayne, NJ
Parul Jain
MacroPolicy Perspectives, New York, NY
Julia Coronado and Laura Rosner
Mizuho Research Institute, Tokyo, Japan
Mio Uemura

Moody's Analytics, West Chester, PA
Mark M. Zandi
Naroff Economic Advisors, Philadelphia, PA
Joel L. Naroff
Nationwide, New York, NY
Kathy Bostjancic
NatWest Markets, Greenwich, CT
Michelle Girard and Kevin Cummins
Nomura Securities International, Inc., New York, NY
U.S. Economics
Northern Trust Company, Chicago, IL
Carl Tannenbaum
Oxford Economics, New York, NY
Oren Klachkin
PNC Financial Services Group, Pittsburgh, PA
Gus Faucher
RDQ Economics, New York, NY
John Ryding and Conrad de Quadros
Regions Financial Corporation, Birmingham, AL
Richard F. Moody
Scotiabank Group, Toronto, Canada
Jean-Francois Perrault
Societe Generale, New York, NY
Stephen W. Gallagher
S&P Global Market Intelligence, St. Louis, MO
Joel Prakken & Chris Varvares
Swiss Re, New York, NY
Jerome Haegeli
ThruTheCycle.com, White Plains, NY
John Lonski
TS Lombard, London, UK
Steven Blitz
Via Nova Investment Management, Crozet, VA
Alan Gayle
Wells Fargo, Charlotte, NC
Jay Bryson and Mark Vitner

CONTRIBUTORS TO INTERNATIONAL SURVEY

Barclays Capital, New York, NY
BMO Capital Markets Economics, Toronto, Canada
ING Financial Markets, London, England
Mizuho Research Institute, Tokyo, Japan
Moody's Analytics, West Chester, PA
Nomura Securities International, Inc., New York, NY
Northern Trust Company, Chicago, IL
Oxford Economics, Wayne, PA
Scotiabank Group, Toronto, Canada
S&P Global Market Intelligence, St. Louis, MO
TS Lombard, London, UK
Wells Fargo, Charlotte, NC