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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Banking Sector Concerns Reemerge; Economy Expected to Slow

Return of banking sector concerns. Until recently, financial markets had become less concerned over the health of the US banking sector, particularly regional banks, with measures of financial stress falling and expectations of the federal funds rate (FFR) rising. But with regional banks reporting significant declines in deposits and reductions in loans, concerns of a pending credit crunch and its likely deleterious impact on the economy have re-emerged. As recession risks have re-surfaced, longer-term market interest rates and FFR expectations have fallen markedly while financial stress has increased.

While the revival of banking sector concerns has significantly affected the economic outlook of Blue Chip Financial Forecasts (BCFF) panelists, it has had substantially less effect on their interest rate outlook. In answering several special questions, 69% said that banking sector turmoil had led them to lower their outlook for the US and global economies. However, a much smaller 45% said that this turbulence had caused them to lower their estimate of the terminal FFR. Moreover, a mere 15% said that this increased uncertainty had led them to move forward their expected date for the first FFR cut.

FFR hikes nearly completed. The expected peak FFR by the BCFF consensus rose slightly this month to 5.15% from 5.13% in last month's survey. That is, the consensus looks for only one more 25-bp rate hike, as does the FOMC and the FFR futures market. Of the BCFF respondents, 70% think that 5.125% would be the peak rate with 97% expecting the peak to be reached in the current quarter. The FOMC next meets on May 2-3; the FFR futures market places an 85% probability of a 25-bp rate hike at that meeting. The quarterly forecast for the FFR may seem to indicate that the BCFF consensus expects the FFR to peak in Q3. However, that is just a quirk of quarterly averaging. The expected average for Q2 implies a 25-bp rate hike at the early May FOMC meeting and no change in June. Then, the consensus looks for the FFR to remain at 5.125% through the third quarter.

But cuts are a ways away. Concerning the long-awaited policy pivot to lower rates, the BCFF panelists continue to side more with the FOMC than with the FFR futures market. The FOMC does not anticipate the first cut until 2024. The BCFF consensus essentially agrees, with 63% of respondents not expecting the first cut until next year. By contrast, the FFR futures market looks for the first cut possibly late in the third quarter with rising probabilities of rate cuts during the fourth quarter. All in all, the FFR futures market is looking for 50 bps of rate cuts before year end.

Other rates at/near peaks. Additionally, the consensus thinks that yields on 2-year, 5-year and 10-year Treasury notes have already peaked on a quarterly average basis in this year's first quarter and that yields on the remainder of Treasury debt forecasted in this survey will peak in the current quarter. Going forward, all yields are expected to decline slightly over the six-quarter forecast horizon with shorter-term yields lingering around their highs longer than longer-term yields.

By contrast and likely reflecting the recession risks that the consensus continues to see, yields on corporate debt are expected to rise slightly in this quarter and the next. Consequently, the credit spread (the gap between the yield on corporate debt and the yield on 10-year Treasury debt) is expected to increase, indicating a rising concern by financial markets over the safety of corporate borrowing. However, the credit spread is expected to widen only to levels seen in Q4 2022 and to remain well below levels that have historically been associated with recessionary conditions. As for the recession watch, the expected shapes of the two yield curves continue to reflect significant recession risk though both curves are expected to flatten meaningfully going forward, pointing to falling recession risk ahead. The 10-year/3-month yield curve is still expected to remain inverted over the entire forecast horizon while the 10-year/2-year curve is expected to turn positive only in Q3 2024, the last quarter of the forecast period.

Near-recession economic outlook. The BCFF consensus continues to look for an economic environment in the near term that should please the Fed. The Fed has argued that the economy needs to experience a period of below-trend growth and softening of labor-market conditions in order to rein in inflation. The BCFF outlook is for just that. The consensus expects near-recession conditions over the remainder of 2023 accompanied by a nearly one-percentage point increase in the unemployment rate over the rest of this year. An increase of this size and speed in the unemployment rate has only occurred in the past when the economy has entered a recession. Indeed, a recession in 2023 is the most likely outcome expected by the BCFF consensus with 58% looking for one this year.

The economy slowed further in Q1 as real GDP rose a less-than-expected 1.1% q/q saar versus a 2.6% quarterly gain in Q4 with a resurgence in personal consumption expenditures in Q1 largely offset by a rare decline in inventories and further weakness in business investment. The BCFF consensus looks for GDP growth to continue to slow markedly over the remainder of this year with GDP rising just 0.2% in Q2 and falling 0.1% on average over the last half of 2023. Growth is expected to resume next year but not return to a trend-like rate until Q3 2024.

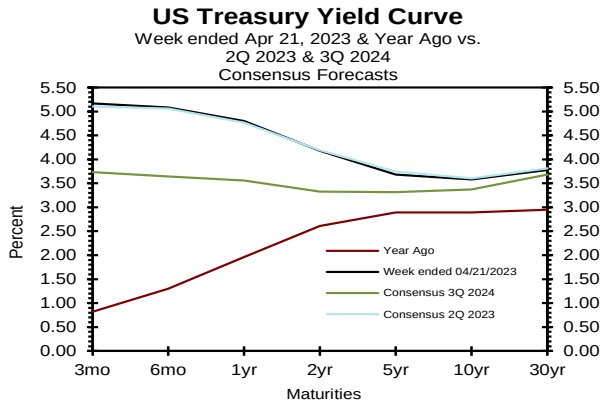
Stubborn inflation to slow. Inflation is proving to be stubbornly persistent. The rate of inflation as measured by the GDP price index unexpectedly increased to 4.0% q/q saar in Q1 from 3.9% in Q4, led by larger increases in PCE prices and prices of fixed investment. The PCE price index (the one the Fed targets) jumped up 4.2% in Q1, due mostly to a rebound in goods prices and raising the possibility that goods price disinflation may be near an end, after having slowed to 3.7% in Q4. However, the BCFF consensus looks for the near-recession economic environment it envisages to put downward pressure on inflation with PCE inflation expected to slow in every quarter of the forecast period, reaching 2.1% in Q3 2024, just above the Fed's 2% target.

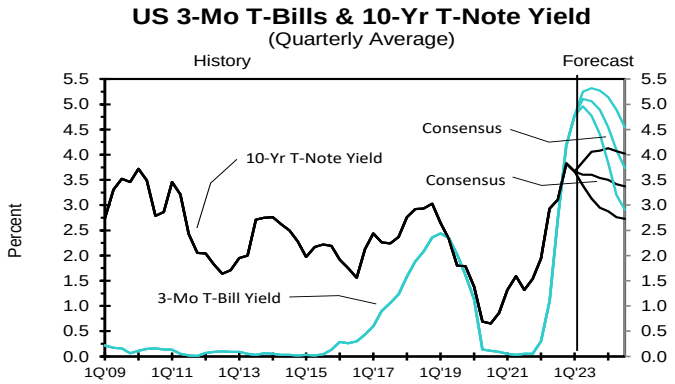
Sandy Batten (Haver Analytics, New York, NY)

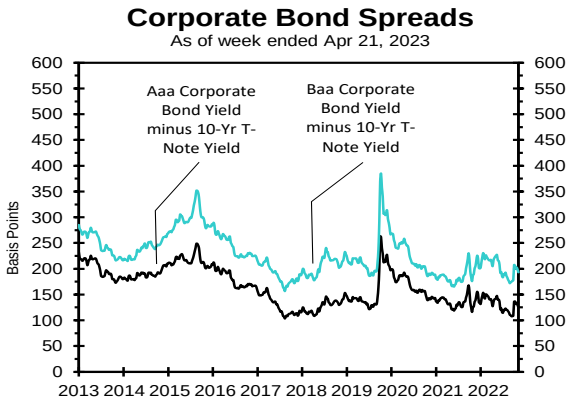
Consensus Forecasts of U.S. Interest Rates and Key Assumptions

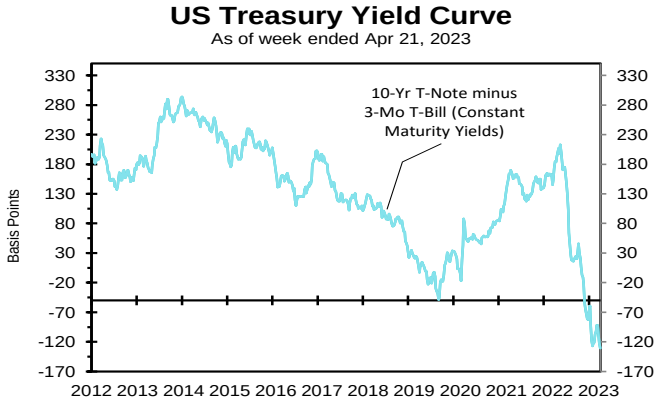
	History								Consensus Forecasts-Quarterly Avg.					
	Average For Week Ending				Average For Month			*Latest Qtr*	2Q	3Q	4Q	1Q	2Q	3Q
Interest Rates	Apr 21	Apr 14	Apr 7	Mar 31	Mar	Feb	Jan	1Q 2023	2023	2023	2023	2024	2024	2024
Federal Funds Rate	4.83	4.83	4.83	4.83	4.65	4.57	4.33	4.52	**5.0**	**5.1**	**5.0**	**4.7**	**4.2**	**3.8**
Prime Rate	8.00	8.00	8.00	8.00	7.82	7.74	7.50	7.69	**8.2**	**8.3**	**8.1**	**7.8**	**7.3**	**6.9**
SOFR	4.80	4.80	4.82	4.83	4.64	4.54	4.30	4.49	**5.0**	**5.1**	**4.9**	**4.6**	**4.1**	**3.8**
Commercial Paper, 1-mo.	4.82	4.83	4.82	4.81	4.74	4.55	4.33	4.54	**5.0**	**5.1**	**4.9**	**4.6**	**4.1**	**3.8**
Treasury bill, 3-mo.	5.17	5.08	4.90	4.87	4.86	4.79	4.69	4.78	**5.1**	**5.1**	**4.9**	**4.5**	**4.1**	**3.7**
Treasury bill, 6-mo.	5.08	4.99	4.88	4.91	4.99	4.97	4.80	4.92	**5.1**	**5.0**	**4.7**	**4.4**	**4.0**	**3.6**
Treasury bill, 1 yr.	4.80	4.68	4.53	4.58	4.68	4.93	4.69	4.77	**4.8**	**4.7**	**4.4**	**4.1**	**3.8**	**3.6**
Treasury note, 2 yr.	4.18	4.00	3.88	4.04	4.30	4.53	4.21	4.35	**4.2**	**4.1**	**3.9**	**3.7**	**3.5**	**3.3**
Treasury note, 5 yr.	3.68	3.53	3.43	3.63	3.82	3.94	3.64	3.80	**3.7**	**3.7**	**3.6**	**3.5**	**3.4**	**3.3**
Treasury note, 10 yr.	3.58	3.44	3.35	3.54	3.66	3.75	3.53	3.65	**3.6**	**3.6**	**3.5**	**3.5**	**3.4**	**3.4**
Treasury note, 30 yr.	3.78	3.66	3.59	3.75	3.77	3.80	3.66	3.74	**3.8**	**3.8**	**3.8**	**3.8**	**3.7**	**3.7**
Corporate Aaa bond	4.83	4.74	4.69	4.86	4.92	4.87	4.73	4.84	**4.7**	**4.8**	**4.9**	**4.7**	**4.6**	**4.6**
Corporate Baa bond	5.51	5.43	5.38	5.54	5.61	5.50	5.37	5.49	**5.8**	**6.0**	**5.9**	**5.8**	**5.6**	**5.5**
State & Local bonds	4.14	3.97	4.03	4.13	4.23	4.16	4.05	4.15	**4.0**	**4.1**	**4.0**	**4.0**	**3.9**	**3.8**
Home mortgage rate	6.39	6.27	6.28	6.32	6.54	6.26	6.27	6.36	**6.4**	**6.3**	**6.2**	**6.0**	**5.8**	**5.7**
	History								Consensus Forecasts-Quarterly					
	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q
Key Assumptions	2021	2021	2021	2022	2022	2022	2022	2023	2023	2023	2023	2024	2024	2024
Fed's AFE $ Index	102.8	104.9	106.9	108.3	113.5	118.8	119.8	115.5	**115.3**	**114.6**	**114.1**	**113.4**	**113.1**	**112.8**
Real GDP	7.0	2.7	7.0	-1.6	-0.6	3.2	2.6	1.1	**0.2**	**-0.3**	**0.0**	**0.7**	**1.3**	**1.8**
GDP Price Index	6.3	6.2	6.8	8.3	9.0	4.4	3.9	4.0	**3.2**	**2.9**	**2.7**	**2.5**	**2.3**	**2.2**
Consumer Price Index	7.5	6.6	8.8	9.2	9.7	5.5	4.2	3.8	**3.4**	**3.0**	**2.7**	**2.4**	**2.3**	**2.3**
PCE Price Index	6.4	5.6	6.2	7.5	7.3	4.3	3.7	4.2	**3.0**	**2.8**	**2.5**	**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).









----------Policy Rates[1]----------

	History			Consensus Forecasts Months From Now:		
	Latest:	Month Ago:	Year Ago:	3	6	12
U.S.	4.88	4.88	0.38	**5.12**	**5.11**	**4.40**
Japan	-0.10	-0.10	-0.10	**-0.06**	**-0.06**	**-0.06**
U.K.	4.25	4.25	0.75	**4.47**	**4.53**	**4.28**
Switzerland	1.50	1.50	-0.75	**1.88**	**1.94**	**1.90**
Canada	4.50	4.50	1.00	**4.50**	**4.50**	**3.79**
Australia	3.60	3.60	0.10	**3.82**	**3.85**	**3.67**
Euro area	3.50	3.50	0.00	**3.89**	**4.01**	**3.96**

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

	History			Consensus Forecasts Months From Now:		
	Latest:	Month Ago:	Year Ago:	3	6	12
U.S.	3.57	3.48	2.90	**3.58**	**3.51**	**3.37**
Germany	2.48	2.28	0.97	**2.42**	**2.40**	**2.29**
Japan	0.47	0.39	0.25	**0.46**	**0.49**	**0.62**
U.K.	3.78	3.54	1.98	**3.59**	**3.47**	**3.22**
France	3.05	2.80	1.43	**2.90**	**2.87**	**2.74**
Italy	4.35	4.08	2.69	**4.32**	**4.25**	**4.02**
Switzerland	1.10	1.23	0.91	**1.45**	**1.51**	**1.51**
Canada	2.94	2.90	2.87	**3.05**	**3.11**	**3.10**
Australia	3.46	3.30	3.13	**3.43**	**3.45**	**3.36**
Spain	3.49	3.36	1.83	**3.40**	**3.35**	**3.25**

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

	History			Consensus Forecasts Months From Now:		
	Latest:	Month Ago:	Year Ago:	3	6	12
U.S.	114.22	114.69	112.29	**114.2**	**112.6**	**110.9**
Japan	134.28	132.75	128.78	**131.1**	**129.0**	**125.8**
U.K.	1.24	1.24	1.28	**1.25**	**1.27**	**1.30**
Switzerland	0.89	0.91	0.96	**0.90**	**0.88**	**0.88**
Canada	1.35	1.35	1.27	**1.34**	**1.33**	**1.31**
Australia	0.67	0.67	0.73	**0.68**	**0.69**	**0.70**
Euro	1.10	1.09	1.08	**1.09**	**1.11**	**1.13**

	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	-4.98	**-4.46**	Germany	-1.09	**-1.09**
U.K.	-0.63	**-0.12**	Japan	-3.10	**-2.75**
Switzerland	-3.38	**-2.50**	U.K.	0.21	**-0.15**
Canada	-0.38	**-0.60**	France	-0.52	**-0.64**
Australia	-1.28	**-0.73**	Italy	0.78	**0.65**
Euro area	-1.38	**-0.44**	Switzerland	-2.47	**-1.87**
			Canada	-0.64	**-0.27**
			Australia	-0.11	**-0.02**
			Spain	-0.08	**-0.12**

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. Financial markets have been on a more upbeat footing in recent weeks as fears about the US and broader global banking sectors have ebbed. The additional liquidity support that's been offered by central banks, and the Fed in particular, coupled with heightened expectations of a pivot toward looser monetary policy are key reasons for this optimism. But improving economic data have additionally contributed to a more constructive mood.

Flash composite PMI surveys, for example, climbed to higher-than-expected levels in April in the US, Euro area and UK and suggested stronger growth in all three economies for a third consecutive month. A trend toward ebbing headline CPI inflation and much slower pipeline (e.g., PPI) inflation has also continued to establish itself in most major economies over the past few weeks.

Whether or not this newfound optimism will endure is still, however, open to much debate. Financial market jitters have resumed in recent days, in part because of renewed fears about funding pressures in the US banking sector. Many investors are also questioning how the conditions that ultimately warrant a pivot toward looser monetary policy over the latter half of this year can be positive for growth and profitability in the period ahead.

Digging a little further into the data certainly suggests that the foundations for a meaningful revival in the world economy remain fragile. The upturn in those PMI surveys, for example, has been highly concentrated in specific sectors, such as consumer and financial services. By contrast, manufacturing PMIs remain far more depressed and firmly rooted in contractionary territory. Many other leading indicators, moreover, most notably in the US, are also flirting with recession.

Although headline CPI and PPI inflation are now abating in most major economies, core (ex food and energy) price pressures, and especially services prices, are proving far more resilient. Alongside evidence that suggests labor markets remain tight, many central banks could be far more reluctant to pivot toward easier monetary policy in the months ahead than financial market participants presently assume.

That last point certainly finds an echo in the views about the ECB that emerge from the latest survey of Blue Chip Financial Forecasts. Most panelists expect the ECB to continue lifting its policy rates over the next 6 months, specifically by a further 50 basis points, and there are very few panelists that expect the ECB to embark on an easing cycle over the next 12 months. That chimes too with the hawkish views that have lately been expressed by a number of ECB policymakers.

There is, nevertheless, much more sympathy from Blue Chip panelists about the prospects for easier monetary policy in the UK. Many forecasters are of the view that the BoE is close to completing its tightening cycle. Equally, many panelists additionally envisage that policy rates will be lowered by the end of this year. The 12-month consensus forecast for the Bank rate, for example, stands at 4.28% versus 4.5% at present. This contrasts with a forecast of 4.53% in 6 months' time.

As for the Bank of Japan, Blue Chip panelists continue to forecast that an ultra-loose policy stance will remain in vogue in the immediate months ahead. There were no indications of any imminent changes from the BoJ's latest policy statement. And while some surveys suggest that inflationary pressures have been building a little, core CPI inflation at 3.1% in March is still quite low. An economic recovery in Japan, moreover, is still nascent compared to other major economies.

What about China? The re-opening of its economy has arguably been an additional factor that has contributed to the more upbeat mood in financial markets noted above. GDP growth of 4.5% y/y in Q1, moreover, surprised forecasters to the upside and other higher frequency indicators suggest the economy has been recovering quite strongly. Much of that data, however, relates to retail spending, the spillovers from which for the world economy are liable to be small. Industrial production and fixed asset investment growth, where spillovers are likely to be larger, have been more disappointing.

Second Quarter 2023

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 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
Action Economics	5.1 H	8.3 H	5.1	5.2 H	5.3	5.1	4.9	4.1	3.6	3.6	3.8	4.4	5.6	3.9	6.6	115.5	0.0	3.6	3.4	3.3
Bank of America	5.1 H	na	na	na	na	na	na	4.0	3.6	3.5	3.7	na	na	na	na	na	0.5	4.9	3.9	3.6
Barclays	5.1 H	na	na	na	na	na	na	4.0	3.5	3.6	3.8	na	na	na	na	na	0.5	3.0	2.9	2.9
Chan Economics	5.1 H	8.1	5.0	5.1	5.1	5.2	4.8	4.3	3.7	3.7	3.8	4.8	5.8	4.3	6.2	114.0	0.5	3.1	3.3	2.8
GLC Financial Economics	5.1 H	8.2	4.9	5.1	5.0	5.1	5.1	4.5	4.5 H	3.8	4.0	4.7	5.8	4.0	6.4	117.4	1.0	3.6	2.5	3.3
Goldman Sachs & Co.	5.1 H	na	na	na	5.0	na	na	4.8 H	4.2	4.1 H	4.2 H	na	na	na	na	na	0.6	2.9	3.3	2.6
ING	5.1 H	na	na	na	na	na	na	4.1	3.7	3.5	3.8	na	na	na	na	na	0.0	na	na	na
Nomura Securities, Inc.	5.1 H	8.3 H	na	na	na	na	na	4.3	3.8	3.6	na	na	na	na	na	na	0.6	3.5	2.8	2.5
Oxford Economics	5.1 H	8.2	5.2 H	na	5.2	5.3	5.0	4.6	3.9	3.6	3.9	4.4	na	na	6.6	115.1	0.4	2.3	4.4	3.5
RDQ Economics	5.1 H	8.2	5.0	5.1	5.4 H	5.5 H	4.8	4.0	3.8	3.7	3.8	4.8	5.8	4.3	6.4	112.4 L	2.1 H	4.0	4.1	3.9
Scotiabank Group	5.1 H	na	5.1	na	5.1	na	na	4.1	3.4 L	3.2 L	3.7	na	na	na	na	na	-1.0	5.3 H	6.3 H	4.3 H
Swiss Re	5.1 H	na	na	na	na	na	na	na	na	3.6	na	na	na	na	na	na	1.9	na	na	na
Via Nova Investment Mgt.	5.1 H	8.3 H	5.2 H	5.2 H	5.2	5.3	4.8	4.6	4.2	4.1 H	4.1	5.3	6.1	4.5 H	6.8	114.0	0.0	3.5	3.4	3.0
Wells Fargo	5.1 H	8.3 H	5.1	5.1	5.1	5.1	4.7	4.1	3.6	3.5	3.7	4.7	5.7	4.1	6.3	na	1.3	2.5	2.8	2.5
ACIMA Private Wealth	5.0	8.0 L	5.0	5.1	5.1	4.3 L	4.1 L	4.0	3.7	3.5	3.6 L	5.8 H	7.0 H	3.0 L	6.0	125.0 H	-2.0 L	-1.5 L	-1.0 L	-1.1 L
Bank of the West	5.0	8.2	4.9	5.0	5.2	5.1	4.8	4.2	3.7	3.6	3.7	4.6	5.7	4.2	6.5	114.4	-0.9	3.2	3.3	3.2
BMO Capital Markets	5.0	8.2	5.0	na	5.1	5.2	4.8	4.3	3.8	3.7	3.9	na	na	na	6.5	114.0	-1.0	3.6	3.5	3.2
Chmura Economics & Analytics	5.0	8.2	5.0	5.1	5.1	5.1	4.8	4.3	3.7	3.6	3.9	4.7	na	na	6.4	na	0.8	3.5	3.4	3.5
Daiwa Capital Markets America	5.0	8.1	na	na	5.1	na	na	4.2	3.7	3.6	3.8	na	na	na	6.5	115.0	-1.0	3.4	3.7	3.5
DePrince & Assoc.	5.0	8.1	4.9	5.0	5.2	5.0	4.7	4.0	3.6	3.5	3.7	4.5	5.5	3.8	6.2	115.8	0.0	3.3	3.3	3.1
Economist Intelligence Unit	5.0	8.2	na	5.2 H	5.2	5.2	5.0	4.3	4.1	4.0	4.0	na	na	na	6.5	na	-0.4	na	3.6	na
EY-Parthenon	5.0	na	na	na	4.9	na	na	na	na	3.2 L	na	na	na	na	na	na	-1.5	2.6	3.1	2.5
Fannie Mae	5.0	8.1	na	na	5.2	4.9	4.6	3.8 L	3.4 L	3.4	3.7	na	na	na	6.2	na	-0.7	3.3	3.9	3.2
Georgia State University	5.0	8.2	na	na	5.2	5.1	4.7	4.2	3.7	3.7	3.8	5.4	6.1	na	6.3	na	-1.3	3.7	2.4	2.3
KPMG	5.0	8.2	5.0	4.4 L	4.7 L	4.8	4.7	4.3	3.8	3.7	3.8	4.7	5.8	na	6.4	na	0.0	3.4	3.9	3.1
MacroFin Analytics & Rutgers Bus School	5.0	8.1	4.9	5.1	5.4 H	5.3	4.8	4.0	3.6	3.6	3.8	4.8	5.6	4.1	6.4	114.8	-0.5	3.6	3.3	3.4
MacroPolicy Perspectives	5.0	8.1	4.9	4.9	5.1	5.0	4.7	4.0	3.5	3.5	3.7	4.5	5.5	4.1	6.9 H	114.1	na	na	4.1	3.0
Moody's Analytics	5.0	8.2	5.0	5.0	5.1	5.1	4.8	4.6	4.2	3.8	4.0	4.7	5.7	3.9	6.3	na	1.0	2.2	2.6	2.3
PNC Financial Services Corp.	5.0	8.2	5.0	na	5.0	5.0	4.7	4.0	3.6	3.5	3.7	na	5.8	3.6	6.3	115.4	0.6	3.5	3.8	2.9
Regions Financial Corporation	5.0	8.2	4.8 L	4.9	5.1	5.0	4.7	4.0	3.6	3.5	3.7	5.0	5.9	4.2	6.2	114.1	0.2	3.3	4.5	3.9
S&P Global Market Intelligence	5.0	8.1	4.9	na	5.0	4.9	4.9	4.5	4.0	3.9	4.0	na	na	na	6.6	na	-0.4	3.2	3.9	3.2
Santander Capital Markets	5.0	8.2	5.0	5.1	5.0	4.9	4.8	4.2	3.7	3.6	3.9	4.7	5.9	3.6	6.6	115.0	1.9	3.5	4.3	3.8
Societe Generale	5.0	8.2	5.0	na	5.1	5.1	4.9	4.1	3.8	3.5	3.8	na	na	na	na	na	0.7	3.5	2.9	2.5
The Northern Trust Company	5.0	8.2	5.0	5.1	5.1	5.0	4.7	4.2	3.6	3.5	3.7	4.5	5.5	4.1	6.1	115.0	0.9	2.3	2.8	2.3
Thru the Cycle	5.0	8.2	5.0	5.2 H	5.1	5.0	4.5	4.0	3.5	3.4	3.7	4.8	5.6	4.1	6.3	114.5	0.0	3.2	3.1	3.9
Comerica Bank	4.9 L	8.0 L	4.9	na	4.8	4.8	4.4	3.8 L	3.4 L	3.4	3.6 L	4.3	5.6	na	6.5	na	-1.0	3.3	4.2	4.1
J.P. Morgan Chase	4.9 L	na	na	na	na	na	na	4.5	4.0	3.8	3.9	na	na	na	na	na	1.0	2.3	2.9	3.1
Loomis, Sayles & Company	4.9 L	8.1	4.9	4.8	5.1	5.1	4.7	4.0	3.6	3.3	3.6 L	4.2 L	5.2 L	3.9	6.1	114.5	0.7	3.5	3.7	3.4
NatWest Markets	4.9 L	8.0 L	na	5.0	5.1	5.2	5.3 H	4.1	3.7	3.7	3.9	4.9	5.9	4.0	5.7 L	na	0.9	4.3	3.4	3.0
May Consensus	**5.0**	**8.2**	**5.0**	**5.0**	**5.1**	**5.1**	**4.8**	**4.2**	**3.7**	**3.6**	**3.8**	**4.7**	**5.8**	**4.0**	**6.4**	**115.3**	**0.2**	**3.2**	**3.4**	**3.0**
Top 10 Avg.	5.1	8.2	5.1	5.1	5.3	5.2	5.0	4.5	4.1	3.9	4.0	5.0	6.0	4.2	6.6	116.4	1.3	4.0	4.4	3.8
Bottom 10 Avg.	5.0	8.1	4.9	4.9	5.0	4.9	4.6	4.0	3.5	3.4	3.7	4.5	5.6	3.8	6.1	114.1	-1.1	2.2	2.4	2.1
April Consensus	5.0	8.2	5.0	5.0	5.0	5.0	4.8	4.3	3.9	3.7	3.9	4.8	5.9	4.0	6.4	116.6	0.0	3.2	3.4	3.1
Number of Forecasts Changed From A Month Ago:																				
Down	6	5	6	6	4	10	15	21	23	21	18	10	12	10	14	16	12	13	15	19
Same	30	23	16	9	15	9	5	7	9	13	14	7	7	5	6	2	13	12	9	8
Up	3	3	4	6	14	10	9	8	4	4	3	5	2	4	9	1	13	10	13	9
Diffusion Index	46%	47%	46%	50%	65%	50%	40%	32%	24%	28%	29%	39%	26%	34%	41%	11%	51%	46%	47%	36%

Third Quarter 2023

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 SOFR Rate	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
Oxford Economics	5.4 H	8.5 H	5.3	na	5.3	5.2	5.0	4.5	3.7	3.6	3.8	4.5	na	na	6.2	115.4	-5.2 L	2.7	4.3	3.5
RDQ Economics	5.4 H	8.5 H	5.4	5.4 H	5.6 H	5.7 H	4.9	4.1	3.9	3.8	3.8	5.1	6.2	4.3	6.5	111.5 L	1.6	3.7	3.9	3.5
Action Economics	5.3	8.5 H	5.6 H	5.4 H	5.3	5.3	5.0	4.3	3.8	3.8	4.0	4.6	5.8	4.0	6.8	115.0	0.2	2.4	2.6	2.2
Santander Capital Markets	5.3	8.5 H	5.3	5.4 H	5.3	5.3	5.1	4.8	4.2	4.1	4.4 H	5.3	6.5	4.2	7.0	115.0	1.3	3.4	4.4 H	4.0 H
Via Nova Investment Mgt.	5.3	8.5 H	5.3	5.4 H	5.3	5.4	4.9	4.9 H	4.5 H	4.4 H	4.3	5.6 H	6.4	4.8 H	7.1 H	113.0	0.0	3.0	2.9	2.5
Daiwa Capital Markets America	5.2	8.4	na	na	5.4	na	na	4.6	4.0	3.9	4.0	na	na	na	6.6	115.0	-1.3	3.2	3.4	3.3
GLC Financial Economics	5.2	8.3	5.0	5.1	5.0	5.0	4.9	4.4	4.2	3.7	3.9	4.7	6.0	4.1	6.3	116.6	0.5	2.8	3.1	2.6
J.P. Morgan Chase	5.2	na	na	na	na	na	na	4.3	3.9	3.7	3.9	na	na	na	na	na	0.5	2.5	3.4	3.3
Bank of America	5.1	na	na	na	na	na	na	3.8	3.5	3.4	3.6	na	na	na	na	na	-1.0	3.7	2.6	2.5
Bank of the West	5.1	8.3	5.0	5.1	5.2	5.1	4.8	4.3	3.9	3.9	4.0	4.9	6.0	4.6	6.8	113.5	-1.8	2.9	3.0	2.9
Barclays	5.1	na	na	na	na	na	na	3.8	3.5	3.6	3.8	na	na	na	na	na	-0.5	2.9	2.7	2.8
BMO Capital Markets	5.1	8.3	5.1	na	5.1	5.2	4.8	4.3	3.8	3.7	3.8	na	na	na	6.5	112.7	-1.0	3.3	3.4	3.2
Chan Economics	5.1	8.1	5.0	5.1	5.1	5.2	4.8	4.3	3.7	3.7	3.8	4.8	5.8	4.3	6.2	113.6	-0.8	2.9	3.1	2.6
Chmura Economics & Analytics	5.1	8.2	5.1	5.3	5.1	5.2	5.0	4.6	4.2	4.1	4.2	5.1	na	na	6.6	na	-1.2	3.6	3.5	3.4
Economist Intelligence Unit	5.1	8.3	na	5.2	5.2	5.2	5.0	4.3	4.0	3.9	3.9	na	na	na	6.3	na	-1.4	na	2.0	na
EY-Parthenon	5.1	na	na	na	4.9	na	na	na	na	2.8	na	na	na	na	na	na	-1.1	2.3	2.2	2.2
Fannie Mae	5.1	8.3	na	na	4.5	4.3	4.1	3.5	3.3	3.3	3.6	na	na	na	5.9	na	-1.5	2.9	2.4	2.5
Georgia State University	5.1	8.3	na	na	4.9	4.7	4.5	3.8	3.6	4.0	4.1	5.5	6.3	na	6.5	na	0.2	3.6	2.9	2.5
Goldman Sachs & Co.	5.1	na	na	na	5.1	na	na	4.8	4.4	4.3	4.3	na	na	na	na	na	0.6	3.3	2.9	2.8
ING	5.1	na	na	na	na	na	na	3.6	3.4	3.3	3.7	na	na	na	na	na	-1.8	na	na	na
KPMG	5.1	8.3	5.1	4.1 L	4.4	4.6	4.5	4.3	3.9	3.8	3.8	4.8	5.8	na	6.4	na	0.1	3.2	4.3	3.5
MacroFin Analytics & Rutgers Bus School	5.1	8.3	5.0	5.2	5.5	5.6	5.3 H	4.4	4.0	4.0	4.3	4.9	5.7	4.4	6.5	115.3	0.8	3.2	2.8	3.0
MacroPolicy Perspectives	5.1	8.3	5.1	na	na	na	na	4.4	na	3.5	na	na	na	na	6.5	na	na	na	3.1	1.9
Moody's Analytics	5.1	8.3	5.0	5.3	5.1	5.1	4.7	4.5	4.2	4.0	4.3	5.2	6.2	4.3	6.2	na	0.5	2.4	2.7	2.4
Nomura Securities, Inc.	5.1	8.3	na	na	na	na	na	4.1	3.5	3.0	na	na	na	na	na	na	-1.2	2.9	2.7	2.5
PNC Financial Services Corp.	5.1	8.3	5.1	na	4.9	5.0	4.5	3.8	3.5	3.4	3.7	na	6.5	4.3	6.2	115.5	0.3	2.9	2.9	2.6
Regions Financial Corporation	5.1	8.3	4.9	4.9	5.1	4.9	4.6	3.9	3.5	3.5	3.7	5.0	5.9	4.2	6.2	113.9	0.5	3.1	3.5	3.3
S&P Global Market Intelligence	5.1	8.2	5.0	na	4.9	4.8	4.8	4.4	3.8	3.7	3.9	na	na	na	6.4	na	0.8	3.2	4.3	3.6
Scotiabank Group	5.1	na	5.1	na	5.1	na	na	3.8	3.3	3.4	3.6	na	na	na	na	na	-1.0	1.0 L	3.7	2.8
Societe Generale	5.1	8.3	5.1	na	5.1	5.0	4.7	3.9	3.6	3.5	3.8	na	na	na	na	na	1.1	3.5	3.3	3.0
Swiss Re	5.1	na	na	na	na	na	na	na	na	3.5	na	na	na	na	na	na	0.1	na	na	na
The Northern Trust Company	5.1	8.3	5.1	5.2	5.1	5.0	4.5	4.0	3.5	3.4	3.6	4.5	5.7	4.1	5.8	113.0	0.8	2.2	2.6	2.1
Thru the Cycle	5.1	8.3	5.1	5.3	5.0	4.9	4.4	3.9	3.6	3.4	3.6	4.8	6.0	4.1	6.2	115.3	0.1	2.8	3.1	3.6
Wells Fargo	5.1	8.3	5.1	5.1	5.0	4.8	4.1	3.5	3.2	3.2	3.5	4.4	5.4	3.8	5.8	na	-0.9	1.9	2.1	1.9
Comerica Bank	5.0	8.2	5.0	na	5.0	4.8	4.5	3.8	3.6	3.6	3.8	4.7	5.9	na	6.7	na	-1.0	2.9	2.3	3.1
DePrince & Assoc.	5.0	8.1	4.9	4.9	5.1	5.0	4.7	4.0	3.6	3.5	3.7	4.6	5.5	3.9	6.0	116.3	0.3	3.1	3.1	2.9
Loomis, Sayles & Company	4.9	8.1	4.9	4.8	5.0	5.0	4.6	3.6	3.4	3.0	3.3	3.9 L	4.9 L	3.6	5.8	114.1	-2.1	2.7	2.2	2.1
NatWest Markets	4.9	8.0	na	5.0	5.1	5.2	5.3 H	3.9	3.6	3.6	3.7	4.9	5.9	3.9	5.5	na	-2.2	4.5 H	2.7	2.7
ACIMA Private Wealth	4.1 L	7.1 L	4.1 L	4.2	4.2 L	3.3 L	3.0 L	2.7 L	2.5 L	2.5 L	2.8 L	4.8	6.8 H	2.2 L	5.0 L	118.0 H	5.5 H	1.9	1.5 L	0.8 L
May Consensus	**5.1**	**8.3**	**5.1**	**5.1**	**5.1**	**5.0**	**4.7**	**4.1**	**3.7**	**3.6**	**3.8**	**4.8**	**6.0**	**4.1**	**6.3**	**114.6**	**-0.3**	**2.9**	**3.0**	**2.8**
Top 10 Avg.	5.3	8.4	5.2	5.3	5.3	5.3	5.0	4.6	4.2	4.1	4.2	5.2	6.3	4.4	6.7	115.7	1.4	3.6	3.9	3.5
Bottom 10 Avg.	4.9	8.1	4.9	4.8	4.8	4.6	4.3	3.6	3.3	3.1	3.5	4.6	5.6	3.8	5.8	113.5	-2.0	2.2	2.3	2.1
April Consensus	5.1	8.2	5.0	5.1	5.0	5.0	4.7	4.1	3.8	3.7	3.8	4.7	5.9	4.0	6.2	115.9	-0.2	2.9	3.0	2.8
Number of Forecasts Changed From A Month Ago:																				
Down	7	4	4	5	10	8	12	17	18	13	9	6	7	5	12	14	15	9	17	11
Same	30	23	20	12	13	11	6	13	12	17	18	8	8	8	9	2	17	18	13	17
Up	2	4	2	3	9	9	10	6	5	8	7	7	5	5	8	2	6	8	7	8
Diffusion Index	44%	50%	46%	45%	48%	52%	46%	35%	31%	43%	47%	52%	45%	50%	43%	17%	38%	49%	36%	46%

Fourth Quarter 2023

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 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
Daiwa Capital Markets America	5.5 H	8.6 H	na	na	5.6 H	na	na	4.4	3.9	3.8	4.1	na	na	na	6.5	115.0	-0.3	3.0	3.2	3.1
Action Economics	5.4	8.5	5.7 H	5.4	5.3	5.2	5.0	4.2	3.8	3.8	4.0	4.6	5.8	4.0	6.8	115.1	0.9	2.2	2.5	2.1
Oxford Economics	5.4	8.5	5.2	na	5.2	5.1	4.8	4.4	3.5	3.4	3.7	4.3	na	na	5.9	115.2	-0.9	2.5	3.4	2.9
RDQ Economics	5.4	8.5	5.4	5.5 H	5.4	5.4 H	4.7	4.0	4.0	4.0	4.0	5.6 H	6.8 H	4.6	6.6	111.3 L	0.8	3.6 H	3.8 H	3.5 H
J.P. Morgan Chase	5.3	na	na	na	na	na	na	4.1	3.7	3.6	3.9	na	na	na	na	na	-0.5	2.3	2.7	2.3
Santander Capital Markets	5.3	8.5	5.3	5.4	5.3	5.3	5.1	5.0 H	4.5	4.2	4.5	5.5	6.7	4.3	7.2 H	114.0	1.3	3.3	3.7	3.3
Via Nova Investment Mgt.	5.3	8.5	5.3	5.4	5.3	5.4 H	4.9	4.9	4.5	4.4	4.3	5.6 H	6.4	4.8 H	7.1	112.0	1.5	2.5	2.4	2.3
GLC Financial Economics	5.2	8.3	4.9	5.0	4.8	4.7	4.7	4.2	4.1	3.6	3.9	4.7	6.0	4.1	6.3	116.5	1.2	2.6	2.8	2.6
Bank of America	5.1	na	na	na	na	na	na	3.5	3.4	3.3	3.4	na	na	na	na	na	-2.0	3.4	2.4	1.9
Bank of the West	5.1	8.3	5.0	5.1	5.2	5.1	4.7	4.3	3.9	3.9	4.0	4.9	6.1	4.8 H	6.8	111.8	0.7	2.6	2.7	2.6
Barclays	5.1	na	na	na	na	na	na	3.6	3.4	3.5	3.7	na	na	na	na	na	-1.5	2.5	2.0	2.3
BMO Capital Markets	5.1	8.3	5.1	na	5.1	5.2	4.7	4.0	3.7	3.6	3.7	na	na	na	6.4	111.5	0.8	2.3	2.4	2.2
Chmura Economics & Analytics	5.1	8.2	5.1	5.3	5.1	5.1	5.1	4.9	4.7 H	4.6 H	4.6 H	5.5	na	na	6.7	na	-0.8	3.4	3.2	3.3
Economist Intelligence Unit	5.1	8.3	na	5.1	5.1	5.1	4.9	4.0	3.6	3.7	3.8	na	na	na	6.0	na	0.4	na	1.8 L	na
EY-Parthenon	5.1	na	na	na	4.8	na	na	na	na	2.9	na	na	na	na	na	na	0.8	1.8	1.8 L	1.7 L
Goldman Sachs & Co.	5.1	na	na	na	5.1	na	na	4.5	4.3	4.2	4.3	na	na	na	na	na	0.9	3.6 H	3.5	3.0
KPMG	5.1	8.3	5.1	4.2	4.5	4.6	4.5	4.2	3.8	3.7	3.8	4.7	5.7	na	6.2	na	-0.3	3.0	2.5	2.7
MacroPolicy Perspectives	5.1	8.2	5.0	na	na	na	na	4.4	na	3.8	na	na	na	na	6.4	na	na	na	2.6	1.8
Moody's Analytics	5.1	8.3	5.0	5.3	5.0	4.9	4.5	4.3	4.1	4.0	4.4	5.4	6.3	4.4	6.1	na	1.2	2.7	3.0	2.7
Nomura Securities, Inc.	5.1	8.3	na	na	na	na	na	3.9	3.3	2.9	na	na	na	na	na	na	-1.4	2.7	2.4	2.3
PNC Financial Services Corp.	5.1	8.3	5.1	na	4.9	5.0	4.2	3.6	3.4	3.4	3.7	na	6.6	4.5	6.0	115.6	-0.5	1.5	2.0	1.9
Regions Financial Corporation	5.1	8.3	4.8	4.8	4.8	4.8	4.4	3.8	3.4	3.4	3.7	4.9	5.8	4.1	6.1	113.8	0.6	2.7	3.0	2.5
S&P Global Market Intelligence	5.1	8.2	5.0	na	4.9	4.6	4.6	4.2	3.7	3.7	3.9	na	na	na	6.3	na	1.5	3.0	2.6	2.8
Scotiabank Group	5.1	na	5.1	na	4.9	na	na	3.5	3.2	3.5	3.8	na	na	na	na	na	1.2	1.0 L	2.6	2.5
Societe Generale	5.1	8.3	5.1	na	5.0	4.8	4.3	3.6	3.5	3.4	3.7	na	na	na	na	na	0.7	3.6 H	3.5	3.1
Swiss Re	5.1	na	na	na	na	na	na	na	na	3.4	na	na	na	na	na	na	-2.6	na	na	na
The Northern Trust Company	5.1	8.3	5.1	5.2	5.0	4.8	4.3	3.8	3.4	3.3	3.5	4.5	5.7	4.0	5.5	112.0	0.9	2.3	2.5	2.1
Chan Economics	5.0	8.0	4.9	5.0	5.0	5.1	4.7	4.2	3.6	3.6	3.7	4.7	5.7	4.2	6.1	113.2	0.4	2.7	2.9	2.4
Fannie Mae	5.0	8.1	na	na	4.2	4.1	3.8	3.3	3.2	3.3	3.6	na	na	na	5.7	na	-1.1	2.7	3.0	2.6
Georgia State University	5.0	8.2	na	na	4.7	3.8	4.2	3.5	3.5	3.8	4.0	5.5	6.4	na	6.1	na	-0.6	3.0	3.0	2.5
MacroFin Analytics & Rutgers Bus School	5.0	8.1	5.0	5.2	5.2	5.3	5.1	4.3	4.0	3.9	4.1	5.0	5.7	4.4	6.4	115.1	1.2	3.0	3.0	2.8
NatWest Markets	4.9	8.0	na	5.0	5.1	5.2	5.3 H	3.6	3.4	3.4	3.7	4.9	5.8	3.9	5.5	na	-1.5	3.4	2.2	2.4
Thru the Cycle	4.9	8.0	4.9	5.1	4.9	4.8	4.3	3.8	3.6	3.3	3.6	4.8	6.1	4.1	6.2	116.3	-0.1	2.5	1.9	3.3
Comerica Bank	4.8	8.0	4.8	na	4.7	4.5	4.2	3.6	3.6	3.7	3.9	4.8	6.0	na	6.5	na	-0.5	2.6	2.2	2.5
DePrince & Assoc.	4.6	7.7	4.5	4.5	4.7	4.6	4.4	3.8	3.5	3.5	3.8	4.7	5.5	3.9	5.9	116.7 H	0.7	2.9	3.0	2.8
Wells Fargo	4.6	7.8	4.6	4.6	4.5	3.9	3.1	2.9	2.9	2.9	3.4	4.1	5.1	3.5	5.4	na	-2.7 L	1.7	2.1	1.7 L
Loomis, Sayles & Company	4.4	7.6	4.4	4.2	4.4	4.4	3.8	2.8	2.8	2.6	2.9	3.5 L	4.5 L	3.2	5.4	113.8	-1.5	2.6	2.0	2.0
ING	4.1	na	na	na	na	na	na	3.3	3.2	3.0	3.4	na	na	na	na	na	-2.1	na	na	na
ACIMA Private Wealth	2.8 L	5.8 L	2.8 L	2.9 L	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
May Consensus	**5.0**	**8.1**	**4.9**	**4.9**	**4.9**	**4.7**	**4.4**	**3.9**	**3.6**	**3.5**	**3.8**	**4.9**	**5.9**	**4.0**	**6.2**	**114.1**	**0.0**	**2.7**	**2.7**	**2.5**
Top 10 Avg.	5.3	8.4	5.2	5.3	5.3	5.2	5.0	4.5	4.2	4.1	4.2	5.3	6.3	4.4	6.7	115.5	1.5	3.3	3.3	3.1
Bottom 10 Avg.	4.5	7.7	4.6	4.5	4.4	4.1	3.7	3.1	3.0	3.0	3.4	4.4	5.5	3.7	5.6	112.8	-1.7	1.9	2.0	2.0
April Consensus	4.9	8.1	4.9	4.8	4.8	4.6	4.4	3.9	3.6	3.5	3.8	4.7	5.8	3.9	6.1	115.0	0.3	2.7	2.7	2.5
Number of Forecasts Changed From A Month Ago:																				
Down	7	4	5	3	9	9	11	16	17	12	6	7	8	6	11	14	18	12	12	14
Same	29	24	19	14	15	8	9	14	12	21	22	9	8	7	11	3	15	16	16	15
Up	3	3	2	3	8	11	8	6	6	5	6	5	4	5	7	1	5	7	9	7
Diffusion Index	45%	48%	44%	50%	48%	54%	45%	36%	34%	41%	50%	45%	40%	47%	43%	14%	33%	43%	46%	40%

First Quarter 2024

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 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
Daiwa Capital Markets America	5.6 H	8.8 H	na	na	5.6 H	na	na	4.3	3.8	3.8	4.2	na	na	na	6.4	114.5	0.3	2.8	2.7	2.6
Action Economics	5.3	8.4	5.7 H	5.3	5.2	5.0	4.7	4.1	3.7	3.8	4.0	4.5	5.7	4.0	6.8	115.1	1.6	2.2	2.4	2.0
J.P. Morgan Chase	5.3	na	na	na	na	na	na	3.9	3.6	3.4	3.8	na	na	na	na	na	-0.5	2.3	2.4	2.2
Santander Capital Markets	5.3	8.5	5.3	5.4 H	5.2	5.2 H	5.0	5.0	4.5	4.1	4.5	5.4	6.7	4.2	7.0	113.5	1.0	3.1	3.2	2.9
RDQ Economics	5.2	8.3	5.3	5.3	5.1	5.0	4.4	3.9	4.0	4.0	4.0	5.8	7.1 H	4.8	6.5	110.4	-1.1	3.5	3.6 H	3.3 H
Chmura Economics & Analytics	5.1	8.2	5.1	5.3	5.1	5.1	5.2 H	5.2 H	5.2 H	5.2 H	5.2 H	5.9 H	na	na	6.8	na	1.8	3.5	3.2	3.1
Economist Intelligence Unit	5.1	8.3	na	5.1	5.1	5.0	4.7	3.9	3.6	3.7	3.6	na	na	na	5.9	na	0.9	na	2.2	na
Goldman Sachs & Co.	5.1	na	na	na	5.1	na	na	4.3	4.2	4.1	4.2	na	na	na	na	na	1.9	2.7	2.9	2.4
Oxford Economics	5.1	8.2	4.5	na	4.5	4.7	4.5	4.1	3.4	3.3	3.7	3.9	na	na	5.7	114.7	1.5	2.7	2.6	2.3
Regions Financial Corporation	5.1	8.3	4.7	4.8	4.6	4.7	4.3	3.6	3.4	3.4	3.6	4.9	5.8	4.1	5.9	113.4	1.1	2.6	2.4	2.4
S&P Global Market Intelligence	5.1	8.2	5.0	na	4.8	4.5	4.4	4.0	3.6	3.7	3.9	na	na	na	6.1	na	1.7	2.7	2.1	2.5
Bank of the West	5.0	8.2	4.9	5.0	5.0	4.9	4.7	4.2	3.9	3.9	4.0	5.0	6.1	4.7	6.8	111.2	1.3	2.4	2.4	2.3
BMO Capital Markets	5.0	8.2	5.1	na	5.0	5.2 H	4.5	3.8	3.6	3.5	3.5	na	na	na	6.3	110.7	1.7	2.0	2.2	2.0
Via Nova Investment Mgt.	5.0	8.3	5.1	5.1	5.0	5.1	4.7	4.8	4.5	4.5	4.5	5.7	6.5	5.0 H	7.2 H	110.0 L	2.0	2.2	2.1	2.0
Bank of America	4.9	na	na	na	na	na	na	3.3	3.3	3.3	3.4	na	na	na	na	na	-0.5	3.7 H	2.5	2.1
Moody's Analytics	4.9	8.0	4.8	5.0	4.7	4.5	4.3	4.2	4.1	4.0	4.4	5.5	6.4	4.4	5.9	na	1.8	2.4	2.2	2.1
Nomura Securities, Inc.	4.9	8.0	na	na	na	na	na	3.2	3.0	2.9	na	na	na	na	na	na	-0.5	2.3	2.3	2.2
PNC Financial Services Corp.	4.9	8.0	4.9	na	4.7	4.7	3.9	3.4	3.3	3.3	3.7	na	6.3	4.4	5.8	115.7	-1.0	0.2 L	1.1 L	1.0 L
Societe Generale	4.9	8.1	4.9	na	4.6	4.4	3.9	3.4	3.3	3.3	3.6	na	na	na	na	na	-0.8	1.8	2.2	2.9
Chan Economics	4.8	7.8	4.7	4.8	4.8	4.9	4.5	4.0	3.4	3.4	3.5	4.5	5.5	4.0	5.9	113.0	0.8	2.6	2.8	2.3
EY-Parthenon	4.8	na	na	na	4.4	na	na	na	na	2.9	na	na	na	na	na	na	1.7	1.8	1.9	1.9
GLC Financial Economics	4.8	7.9	4.5	4.6	4.6	4.5	4.4	4.1	4.0	3.6	3.8	4.6	5.9	4.1	6.1	115.8	1.7	2.3	2.3	2.3
KPMG	4.7	7.8	4.7	3.9	4.2	4.3	4.3	4.1	3.7	3.7	3.9	4.6	5.7	na	6.1	na	0.7	2.6	2.0	2.3
Barclays	4.6	na	na	na	na	na	na	3.4	3.3	3.4	3.6	na	na	na	na	na	-0.5	2.8	2.8	2.6
Comerica Bank	4.6	7.7	4.6	na	4.5	4.3	3.7	3.3	3.5	3.7	4.0	4.8	5.9	na	6.2	na	0.8	2.4	2.1	2.3
MacroFin Analytics & Rutgers Bus School	4.6	7.8	4.5	4.8	4.8	4.8	4.8	4.2	4.0	3.9	4.2	4.9	5.6	4.4	6.4	114.9	1.4	2.8	2.7	2.6
MacroPolicy Perspectives	4.6	7.8	4.6	na	na	na	na	3.9	na	3.8	na	na	na	na	6.3	na	na	na	na	na
Scotiabank Group	4.6	na	4.6	na	4.5	na	na	3.3	3.2	3.5	3.8	na	na	na	na	na	1.3	3.1	2.1	3.3 H
Swiss Re	4.6	na	na	na	na	na	na	na	na	3.2	na	na	na	na	na	na	-1.8 L	na	na	na
The Northern Trust Company	4.6	7.8	4.6	4.7	4.5	4.4	4.0	3.6	3.3	3.3	3.5	4.5	5.7	4.1	5.3	111.0	1.1	2.3	2.3	2.0
NatWest Markets	4.4	7.5	na	4.5	4.6	4.7	4.8	3.2	3.2	3.2	3.5	3.3 L	3.3 L	3.6	5.3	na	1.1	2.9	1.8	2.0
Thru the Cycle	4.4	7.5	4.4	4.6	4.4	4.3	4.0	3.7	3.3	3.2	3.4	4.6	6.0	3.9	6.0	117.4 H	0.7	2.3	1.5	2.6
Fannie Mae	4.3	7.4	na	na	4.0	3.8	3.4	3.2	3.2	3.3	3.6	na	na	na	5.5	na	-0.5	2.6	3.0	2.7
Georgia State University	4.3	7.4	na	na	4.0	3.4	3.9	3.3	3.5	3.6	4.0	5.5	6.4	na	6.0	na	1.1	1.5	2.7	2.4
DePrince & Assoc.	4.2	7.3	4.1	4.1	4.2	4.2	4.0	3.5	3.4	3.5	3.8	4.7	5.5	4.0	5.7	116.8	1.1	2.6	2.6	2.5
Loomis, Sayles & Company	4.1	7.3	4.1	4.0	4.1	4.1	3.4	2.0	2.3	2.5	2.8	3.4	4.4	3.1	5.3	113.6	1.1	2.4	3.0	2.5
Wells Fargo	3.6	6.8	3.6	3.6	3.5	3.0	2.7	2.7	2.8	2.9	3.3	4.1	5.1	3.5	5.4	na	-1.0	1.9	2.2	1.9
ING	3.1	na	na	na	na	na	na	3.1	3.1	3.0	3.4	na	na	na	na	na	-0.5	na	na	na
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 L	110.0 L	3.3 H	2.7	2.2	2.2
May Consensus	**4.7**	**7.8**	**4.6**	**4.6**	**4.5**	**4.4**	**4.1**	**3.7**	**3.5**	**3.5**	**3.8**	**4.7**	**5.8**	**4.0**	**6.0**	**113.4**	**0.7**	**2.5**	**2.4**	**2.4**
Top 10 Avg.	5.2	8.4	5.1	5.1	5.1	5.0	4.8	4.4	4.2	4.1	4.3	5.3	6.3	4.4	6.7	115.2	1.9	3.1	3.0	2.9
Bottom 10 Avg.	3.8	7.1	4.0	4.0	3.8	3.7	3.4	2.8	2.8	2.9	3.3	4.2	5.2	3.6	5.4	111.7	-0.8	1.8	1.9	1.9
April Consensus	4.6	7.7	4.5	4.5	4.5	4.3	4.1	3.7	3.5	3.5	3.8	4.6	5.8	3.9	5.9	114.1	0.9	2.5	2.4	2.3
Number of Forecasts Changed From A Month Ago:																				
Down	7	6	6	5	8	6	7	12	11	11	7	5	7	5	10	12	14	9	8	6
Same	26	19	14	10	15	9	11	13	16	20	21	10	9	7	12	3	19	17	19	19
Up	6	6	6	5	9	13	10	10	7	6	5	6	4	6	7	3	5	9	9	10
Diffusion Index	49%	50%	50%	50%	52%	63%	55%	47%	44%	43%	47%	52%	43%	53%	45%	25%	38%	50%	51%	56%

Second Quarter 2024

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 SOFR Rate	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
Daiwa Capital Markets America	5.5 H	8.5 H	na	na	5.3 H	na	na	4.1	3.8	3.7	4.4	na	na	na	6.3	114.0	1.7	2.7	2.6	2.5
Santander Capital Markets	5.3	8.5 H	5.3	5.3 H	5.2	5.1 H	4.9	4.8	4.4	4.0	4.4	5.3	6.6	4.1	6.8	113.0	0.9	2.9	2.9	2.6
Economist Intelligence Unit	5.1	8.3	na	5.1	5.0	4.9	4.5	3.7	3.4	3.5	3.5	na	na	na	5.7	na	1.6	na	2.4	na
J.P. Morgan Chase	5.1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	0.5	2.3	1.8	1.6
Action Economics	5.0	8.2	5.5 H	5.1	4.9	4.7	4.5	4.0	3.7	3.7	3.9	4.5	5.7	3.9	6.7	115.2	2.0	1.5	2.3	2.0
Chmura Economics & Analytics	5.0	8.1	4.9	5.1	4.9	4.9	5.1 H	5.2 H	5.3 H	5.3 H	5.4 H	6.1 H	na	na	6.7	na	2.3	3.3	3.0	2.8
Goldman Sachs & Co.	4.9	na	na	na	4.8	na	na	4.2	4.1	4.1	4.1	na	na	na	na	na	1.9	2.6	2.4	2.3
BMO Capital Markets	4.8	7.9	4.8	na	4.8	4.9	4.3	3.6	3.5	3.4	3.5	na	na	na	6.2	110.0	2.2	2.1	2.3	2.2
Regions Financial Corporation	4.8	8.0	4.6	4.6	4.3	4.3	4.2	3.5	3.4	3.3	3.6	4.8	5.7	4.0	5.8	113.1	1.5	2.1	2.1	2.1
Via Nova Investment Mgt.	4.8	8.0	4.8	4.9	4.8	4.9	4.9	4.9	5.1	4.6	4.7	5.8	6.6	5.1 H	7.3 H	110.0	2.5	2.1	2.1	2.1
RDQ Economics	4.7	7.8	4.8	4.8	4.6	4.5	4.1	3.7	3.8	3.9	3.9	5.8	6.9 H	4.7	6.3	109.6	-1.8 L	3.2	3.4	3.2 H
Bank of the West	4.6	7.8	4.5	4.6	4.6	4.5	4.3	4.0	3.8	3.7	3.8	4.9	6.0	4.6	6.6	111.2	1.3	2.3	2.3	2.2
Chan Economics	4.6	7.6	4.5	4.6	4.6	4.7	4.3	3.8	3.2	3.2	3.3	4.3	5.3	3.8	5.7	113.3	-0.2	2.5	2.7	2.2
S&P Global Market Intelligence	4.6	7.8	4.6	na	4.3	4.1	4.0	3.7	3.4	3.6	3.9	na	na	na	5.9	na	1.8	2.6	2.3	2.4
Oxford Economics	4.5	7.3	3.9	na	3.9	4.0	4.0	3.6	3.2	3.1	3.5	3.7	na	na	5.2	113.8	2.2	2.7	2.2	2.0
Bank of America	4.4	na	na	na	na	na	na	3.0	3.1	3.3	3.5	na	na	na	na	na	1.0	3.6 H	2.2	2.0
GLC Financial Economics	4.4	7.6	4.2	4.3	4.2	4.2	4.1	3.9	4.1	3.5	3.8	4.5	5.7	4.0	6.0	115.5	1.9	2.2	2.3	2.2
Moody's Analytics	4.4	7.6	4.3	4.5	4.2	4.2	4.2	4.1	4.0	3.9	4.4	5.4	6.4	4.4	5.7	na	2.4	2.1	2.3	2.2
Nomura Securities, Inc.	4.4	7.5	na	na	na	na	na	2.8	2.8	2.8	na	na	na	na	na	na	0.5	1.6	1.5	1.5
Societe Generale	4.4	7.5	4.4	na	4.1	3.9	3.4	3.1	2.8	3.3	3.6	na	na	na	na	na	-1.3	1.8	2.2	2.6
Swiss Re	4.4	na	na	na	na	na	na	na	na	3.0	na	na	na	na	na	na	1.2	na	na	na
EY-Parthenon	4.3	na	na	na	4.0	na	na	na	na	3.0	na	na	na	na	na	na	2.5	1.7	1.5	1.7
Comerica Bank	4.2	7.3	4.2	na	4.0	3.8	3.3	3.1	3.3	3.5	3.8	4.6	5.7	na	5.8	na	1.3	2.2	2.0	2.0
MacroPolicy Perspectives	4.2	7.4	4.1	na	na	na	na	3.5	na	3.5	na	na	na	na	6.0	na	na	na	na	na
Scotiabank Group	4.2	na	4.2	na	3.9	na	na	3.2	3.2	3.5	3.8	na	na	na	na	na	1.5	3.1	3.8 H	2.4
Barclays	4.1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	0.5	2.4	2.1	2.2
MacroFin Analytics & Rutgers Bus School	4.1	7.3	4.0	4.3	4.5	4.6	4.5	4.2	3.8	3.8	4.1	4.8	5.5	4.3	6.3	114.7	1.5	2.6	2.6	2.4
The Northern Trust Company	4.1	7.3	4.1	4.2	4.0	3.8	3.7	3.4	3.2	3.3	3.6	4.5	5.7	4.1	5.1	110.0	1.2	2.3	2.1	2.1
PNC Financial Services Corp.	4.0	7.1	4.0	na	3.8	3.8	3.4	3.2	3.2	3.3	3.7	na	6.0	4.3	5.6	116.2	-0.8	0.2 L	0.9	0.8 L
KPMG	3.9	7.1	3.9	3.3	3.6	4.0	4.0	3.9	3.6	3.6	3.9	4.6	5.7	na	5.8	na	1.0	2.5	2.2	2.3
Thru the Cycle	3.9	7.0	3.9	4.1	3.9	3.8	3.7	3.5	3.2	2.9	3.2	4.3	5.7	3.6	5.7	118.3 H	0.6	2.2	2.4	2.2
Georgia State University	3.8	7.2	na	na	3.6	3.2	3.6	3.2	3.5	3.5	4.0	5.3	6.2	na	5.9	na	2.0	1.3	2.1	1.9
DePrince & Assoc.	3.7	6.8	3.6	3.7	3.7	3.7	3.6	3.2	3.2	3.4	3.8	4.7	5.5	4.0	5.6	116.3	1.7	2.5	2.5	2.4
Fannie Mae	3.6	6.7	na	na	3.6	3.3	3.0	3.1	3.1	3.3	3.6	na	na	na	5.4	na	1.4	2.4	2.9	2.5
NatWest Markets	3.4	6.5	na	3.5	3.6	3.7	3.8	2.6	2.8	3.0	3.2	2.9 L	3.1 L	3.3	5.0	na	1.7	2.2	0.4 L	1.0
Loomis, Sayles & Company	3.1	6.3	3.1	3.0	3.1	3.1	2.8	2.0	2.3	2.5	2.8	3.4	4.4	3.1	5.2	113.5	2.0	2.3	3.4	2.6
ING	2.9	na	na	na	na	na	na	3.0	3.0	3.0	3.4	na	na	na	na	na	1.7	na	na	na
Wells Fargo	2.6	5.8	2.6	2.6	2.5	2.5	2.5	2.6	2.7	2.8	3.3	4.0	5.0	3.4	5.1	na	3.2 H	2.4	2.9	2.4
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 L	108.0 L	1.3	2.6	2.0	2.0
May Consensus	**4.2**	**7.3**	**4.1**	**4.1**	**4.1**	**4.0**	**3.8**	**3.5**	**3.4**	**3.4**	**3.7**	**4.6**	**5.6**	**3.9**	**5.8**	**113.1**	**1.3**	**2.3**	**2.3**	**2.2**
Top 10 Avg.	5.0	8.1	4.8	4.9	4.9	4.8	4.6	4.3	4.2	4.1	4.3	5.3	6.2	4.4	6.5	115.1	2.3	2.9	3.0	2.6
Bottom 10 Avg.	3.1	6.4	3.4	3.4	3.2	3.2	3.0	2.6	2.7	2.8	3.2	4.0	5.1	3.5	5.1	111.2	0.0	1.7	1.6	1.7
April Consensus	4.2	7.3	4.1	4.1	4.0	4.0	3.8	3.5	3.4	3.4	3.8	4.6	5.7	3.9	5.7	113.8	1.5	2.3	2.3	2.2
Number of Forecasts Changed From A Month Ago:																				
Down	7	4	4	4	7	7	8	9	11	11	6	6	7	7	11	13	10	6	12	11
Same	26	21	17	12	18	12	9	14	15	19	20	10	9	7	13	3	17	24	19	18
Up	6	6	5	4	7	9	11	10	6	5	5	5	4	4	5	2	11	5	5	6
Diffusion Index	49%	53%	52%	50%	50%	54%	55%	52%	42%	41%	48%	48%	43%	42%	40%	19%	51%	49%	40%	43%

Third Quarter 2024

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 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
Santander Capital Markets	5.1 H	8.3 H	5.1	5.0 H	4.9 H	4.8 H	4.6	4.4	4.2	3.9	4.3	5.2	6.4	4.0	6.6	112.5	0.8	2.7	2.7	2.3
Daiwa Capital Markets America	4.9	8.0	na	na	4.8	na	na	3.9	3.7	3.7	4.4	na	na	na	6.2	113.5	2.3	2.5	2.5	2.4
Action Economics	4.8	7.9	5.2 H	4.8	4.6	4.5	4.2	3.8	3.7	3.7	3.9	4.4	5.6	3.9	6.7	115.3	na	na	na	na
J.P. Morgan Chase	4.8	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	2.3	2.3	2.7	2.5
Economist Intelligence Unit	4.6	7.5	na	4.6	4.5	4.7	4.3	3.5	3.3	3.3	3.3	na	na	na	5.5	na	2.6	na	2.2	na
Goldman Sachs & Co.	4.6	na	na	na	4.6	na	na	4.1	4.0	4.0	4.1	na	na	na	na	na	1.9	2.3	2.0	2.0
BMO Capital Markets	4.5	7.7	4.6	na	4.5	4.6	4.1	3.5	3.4	3.3	3.4	na	na	na	6.2	109.3	2.5	1.8	2.0	1.8
Chmura Economics & Analytics	4.5	7.7	4.5	4.7	4.5	4.6	4.8 H	4.9 H	5.0 H	5.1 H	5.2 H	6.0 H	na	na	6.7	na	2.3	2.8	2.8	2.8
Via Nova Investment Mgt.	4.5	7.8	4.6	4.6	4.5	4.6	4.7	4.8	5.0 H	4.8	4.8	6.0 H	6.8 H	5.3 H	7.5 H	110.0	2.5	2.1	2.1	2.1
Chan Economics	4.4	7.4	4.3	4.4	4.3	4.4	4.0	3.5	2.9	2.9	3.0	4.0	5.0	3.5	5.4	113.4	-0.8 L	2.3	2.5	2.0
Regions Financial Corporation	4.4	7.7	4.2	4.3	4.1	4.2	4.1	3.4	3.3	3.3	3.5	4.8	5.6	4.0	5.7	112.7	1.5	1.9	1.9	1.9
Bank of the West	4.3	7.4	4.2	4.2	4.2	4.2	3.9	3.7	3.6	3.5	3.6	4.7	5.8	4.5	6.3	111.4	1.3	2.2	2.2	2.2
GLC Financial Economics	4.3	7.4	3.9	4.0	4.0	4.0	4.0	3.8	4.1	3.4	3.7	4.5	5.6	3.9	5.9	115.0	2.2	2.1	2.5	2.1
RDQ Economics	4.2	7.3	4.2	4.3	4.1	4.0	3.8	3.6	3.7	3.8	3.7	5.6	6.4	4.3	6.1	109.3	1.1	3.0	3.2 H	3.1 H
Moody's Analytics	4.1	7.2	4.0	4.1	3.9	3.9	4.0	3.9	3.9	3.8	4.3	5.3	6.3	4.3	5.5	na	2.6	1.8	2.0	1.9
S&P Global Market Intelligence	4.1	7.3	4.1	na	3.8	3.7	3.7	3.4	3.3	3.6	3.9	na	na	na	5.7	na	1.8	2.3	2.6	2.4
Swiss Re	4.1	na	na	na	na	na	na	na	na	3.0	na	na	na	na	na	na	2.8 H	na	na	na
Bank of America	3.9	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.5	3.7 H	2.4	2.2
Barclays	3.9	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.0	2.7	2.5	2.5
EY-Parthenon	3.9	na	na	na	3.6	na	na	na	na	3.1	na	na	na	na	na	na	2.4	1.9	2.1	1.9
Nomura Securities, Inc.	3.9	7.0	na	na	na	na	na	2.5	2.7	2.8	na	na	na	na	na	na	0.8	1.5	2.0	1.9
Oxford Economics	3.9	6.5	3.3	na	3.3	3.3	3.5	3.3	3.0	2.9	3.1	3.6	na	na	5.0	112.8	2.2	2.7	2.2	2.0
Societe Generale	3.9	7.0	3.9	na	3.6	3.4	3.1	3.0	2.7	3.2	3.5	na	na	na	na	na	2.7	1.8	2.2	2.5
MacroPolicy Perspectives	3.7	6.8	3.6	na	na	na	na	3.0	na	3.5	na	na	na	na	6.0	na	na	na	na	na
Comerica Bank	3.6	6.7	3.6	na	3.5	3.3	3.0	3.0	3.1	3.3	3.6	4.4	5.4	na	5.3	na	1.5	2.1	1.8	2.1
MacroFin Analytics & Rutgers Bus School	3.6	6.8	3.5	3.8	4.1	4.2	4.2	4.2	3.8	3.8	4.1	4.7	5.4	4.2	6.3	114.5	1.8	2.5	2.3	2.2
Scotiabank Group	3.6	na	3.6	na	3.4	na	na	3.1	3.2	3.5	3.8	na	na	na	na	na	1.7	-0.5 L	2.3	1.5
The Northern Trust Company	3.6	6.8	3.6	3.7	3.5	3.3	3.2	3.0	3.2	3.3	3.6	4.5	5.7	4.1	5.1	109.0	1.4	2.1	2.0	2.0
Georgia State University	3.5	6.7	na	na	3.3	3.2	3.5	3.1	3.3	3.4	3.9	5.1	6.0	na	5.8	na	2.2	1.7	2.4	2.3
KPMG	3.4	6.5	3.4	3.0	3.2	3.7	3.7	3.7	3.5	3.5	3.9	4.5	5.6	na	5.6	na	1.7	2.2	2.5	2.3
Thru the Cycle	3.4	6.5	3.4	3.5	3.4	3.3	3.3	3.2	2.8	2.8	3.0	4.1	5.4	3.4	5.5	118.8 H	1.5	2.0	2.2	1.9
Fannie Mae	3.3	6.5	na	na	3.1	2.8	2.8	3.0	3.1	3.3	3.6	na	na	na	5.4	na	2.4	2.2	2.5	2.2
PNC Financial Services Corp.	3.3	6.5	3.3	na	3.2	3.2	3.1	3.0	3.2	3.3	3.7	na	5.7	4.1	5.4	116.7	0.8	1.8	1.0	0.8 L
DePrince & Assoc.	3.2	6.4	3.2	3.2	3.3	3.3	3.3	3.0	3.1	3.4	3.8	4.7	5.5	4.0	5.5	115.4	2.2	2.5	2.5	2.4
ING	2.9	na	na	na	na	na	na	3.0	3.2	3.3	3.4	na	na	na	na	na	2.3	na	na	na
Loomis, Sayles & Company	2.8	5.9	2.7	2.7	2.8	2.8	2.5	2.0	2.3	2.6	2.9	3.5	4.5	3.1	5.2	113.4	2.2	2.0	2.8	2.2
NatWest Markets	2.6	5.7	na	2.7	2.9	3.0	3.1	2.6	2.7	2.9	3.2	2.8 L	3.0 L	3.3	5.0	na	1.9	2.9	0.5 L	1.1
Wells Fargo	2.4	5.5	2.4	2.4	2.4	2.4	2.5	2.6	2.7	2.8	3.3	4.0	5.0	3.4	4.9	na	2.1	2.5	3.1	2.5
ACIMA Private Wealth	1.5 L	4.5 L	1.5 L	1.6 L	1.6 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 L	108.0 L	1.5	2.3	1.7	1.8
May Consensus	**3.8**	**6.9**	**3.8**	**3.8**	**3.7**	**3.6**	**3.6**	**3.3**	**3.3**	**3.4**	**3.7**	**4.6**	**5.5**	**3.8**	**5.7**	**112.8**	**1.8**	**2.2**	**2.3**	**2.1**
Top 10 Avg.	4.7	7.7	4.5	4.5	4.5	4.5	4.3	4.2	4.1	4.0	4.3	5.2	6.0	4.3	6.5	114.9	2.5	2.8	2.7	2.5
Bottom 10 Avg.	2.9	6.1	3.0	3.1	2.9	2.8	2.7	2.5	2.6	2.7	3.1	3.9	5.0	3.4	5.0	110.8	0.9	1.6	1.7	1.7
April Consensus	3.8	6.9	3.7	3.8	3.7	3.7	3.6	3.3	3.4	3.4	3.7	4.6	5.6	3.8	5.6	113.0	1.9	2.2	2.3	2.1
Number of Forecasts Changed From A Month Ago:																				
Down	6	5	4	5	7	6	8	7	9	9	5	4	7	6	6	13	8	7	11	10
Same	24	18	14	9	17	13	8	16	15	18	20	9	7	8	16	3	20	22	19	18
Up	9	8	8	6	8	9	12	10	8	8	6	8	6	4	7	2	9	5	5	6
Diffusion Index	54%	55%	58%	53%	52%	55%	57%	55%	48%	49%	52%	60%	48%	44%	52%	19%	51%	47%	41%	44%

International Interest Rate And Foreign Exchange Rate Forecasts

United States

Blue Chip Forecasters	Fed Fund Target Rate			10 Yr. Gov't Bond Yield %			Fed's AFE $ Index		
	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	5.13	5.13	4.63	--	--	--	--	--	--
BMO Capital Markets	5.13	5.13	4.88	3.70	3.60	3.45	113.2	111.9	110.2
ING Financial Markets	5.10	4.60	2.90	3.50	3.20	3.00	113.4	110.1	107.6
Moody's Analytics	5.04	5.12	4.92	3.84	3.97	3.98	--	--	--
Northern Trust	5.13	5.13	4.38	3.50	3.40	3.25	115.0	113.0	111.0
Oxford Economics	5.07	5.38	5.08	3.62	3.62	3.30	115.1	115.4	114.7
S&P Global Market Intelligence	--	--	--	3.77	3.73	3.64	--	--	--
Scotiabank	5.25	5.25	4.75	3.20	3.40	3.50	--	--	--
Wells Fargo	5.13	5.13	3.63	3.50	3.15	2.85	--	--	--
May Consensus	**5.12**	**5.11**	**4.40**	**3.58**	**3.51**	**3.37**	**114.2**	**112.6**	**110.9**
High	5.25	5.38	5.08	3.84	3.97	3.98	115.1	115.4	114.7
Low	5.04	4.60	2.90	3.20	3.15	2.85	113.2	110.1	107.6
Last Months Avg.	5.02	5.02	4.32	3.68	3.55	3.41	114.9	113.6	110.7

Japan

Blue Chip Forecasters	Policy-Rate Balance Rate			10 Yr. Gov't Bond Yield %			Yen per US$		
	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	0.00	0.00	0.00	--	--	--	--	--	--
BMO Capital Markets	0.00	0.00	0.00	0.40	0.45	0.50	132.0	131.0	128.0
ING Financial Markets	-0.10	-0.10	-0.10	0.40	0.40	1.00	128.0	125.0	118.0
Moody's Analytics	-0.10	-0.10	-0.10	0.50	0.53	0.50	130.1	128.2	124.7
Nomura Securities	--	--	--	--	--	--	125.0	122.5	120.0
Northern Trust	-0.10	-0.10	-0.10	0.50	0.50	0.50	130.0	128.0	125.0
Oxford Economics	-0.01	0.00	0.00	0.52	0.57	0.52	135.1	135.8	133.5
S&P Global Market Intelligence	--	--	--	--	--	--	133.4	131.9	127.4
Scotiabank	-0.10	-0.10	-0.10	--	--	--	135.0	130.0	130.0
Wells Fargo	-0.10	-0.10	-0.10	0.45	0.50	0.70	--	--	--
May Consensus	**-0.06**	**-0.06**	**-0.06**	**0.46**	**0.49**	**0.62**	**131.1**	**129.0**	**125.8**
High	0.00	0.00	0.00	0.52	0.57	1.00	135.1	135.8	133.5
Low	-0.10	-0.10	-0.10	0.40	0.40	0.50	125.0	122.5	118.0
Last Months Avg.	-0.08	-0.06	-0.06	0.48	0.48	0.53	134.1	132.1	128.6

United Kingdom

Blue Chip Forecasters	Official Bank Rate			10 Yr. Gilt Yields %			US$ per Pound Sterling		
	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	4.75	4.75	4.75	--	--	--	--	--	--
BMO Capital Markets	4.75	5.00	4.75	3.60	3.60	3.40	1.25	1.26	1.28
ING Financial Markets	4.25	4.25	4.25	3.40	3.00	2.80	1.24	1.26	1.28
Moody's Analytics	4.39	4.50	4.38	3.48	3.44	3.33	1.37	1.40	1.47
Nomura Securities	--	--	--	--	--	--	1.27	1.29	1.34
Northern Trust	4.50	4.50	4.50	3.60	3.50	3.40	1.22	1.24	1.25
Oxford Economics	4.39	4.50	4.34	3.73	3.72	3.52	1.24	1.24	1.25
S&P Global Market Intelligence	--	--	--	--	--	--	1.24	1.24	1.26
Scotiabank	4.25	4.25	4.00	--	--	--	1.20	1.25	1.25
Wells Fargo	4.50	4.50	3.25	3.70	3.55	2.85	--	--	--
May Consensus	**4.47**	**4.53**	**4.28**	**3.59**	**3.47**	**3.22**	**1.25**	**1.27**	**1.30**
High	4.75	5.00	4.75	3.73	3.72	3.52	1.37	1.40	1.47
Low	4.25	4.25	3.25	3.40	3.00	2.80	1.20	1.24	1.25
Last Months Avg.	4.24	4.24	3.81	3.48	3.30	3.07	1.22	1.25	1.27

Switzerland

Blue Chip Forecasters	SNB Policy Rate			10 Yr. Gov't Bond Yield %			CHF per US$		
	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	2.25	2.25	2.25	--	--	--	--	--	--
ING Financial Markets	1.75	1.75	1.75	1.35	1.30	1.30	0.87	0.78	0.85
Moody's Analytics	2.00	2.00	2.00	1.80	2.00	2.09	0.90	0.87	0.83
Nomura Securities	--	--	--	--	--	--	0.92	0.92	0.93
Northern Trust	1.75	1.75	1.75	1.30	1.25	1.20	0.90	0.88	0.86
Oxford Economics	1.75	2.13	2.13	1.36	1.50	1.43	0.91	0.91	0.90
S&P Global Market Intelligence	--	--	--	--	--	--	0.91	0.91	0.90
Wells Fargo	1.75	1.75	1.50	--	--	--	--	--	--
May Consensus	**1.88**	**1.94**	**1.90**	**1.45**	**1.51**	**1.51**	**0.90**	**0.88**	**0.88**
High	2.25	2.25	2.25	1.80	2.00	2.09	0.92	0.92	0.93
Low	1.75	1.75	1.50	1.30	1.25	1.20	0.87	0.78	0.83
Last Months Avg.	1.42	1.54	1.58	1.30	1.42	1.40	0.92	0.90	0.90

Canada

Blue Chip Forecasters	O/N MMkt Financing Rate			10 Yr. Gov't Bond Yield %			C$ per US$		
	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	4.50	4.50	4.00	--	--	--	--	--	--
BMO Capital Markets	4.50	4.50	4.00	3.20	3.10	3.00	1.33	1.32	1.29
ING Financial Markets	4.50	4.50	3.25	2.80	2.80	3.00	1.32	1.28	1.26
Moody's Analytics	4.50	4.50	4.10	3.72	3.94	4.08	1.32	1.30	1.28
Nomura Securities	--	--	--	--	--	--	1.37	1.36	1.34
Northern Trust	4.50	4.50	3.75	2.85	2.75	2.50	1.37	1.34	1.32
Oxford Economics	4.50	4.50	4.25	3.03	3.11	2.97	1.36	1.38	1.38
S&P Global Market Intelligence	--	--	--	--	--	--	1.30	1.33	1.34
Scotiabank	4.50	4.50	4.00	2.80	3.15	3.45	1.35	1.30	1.27
Wells Fargo	4.50	4.50	3.00	2.95	2.90	2.70	--	--	--
May Consensus	**4.50**	**4.50**	**3.79**	**3.05**	**3.11**	**3.10**	**1.34**	**1.33**	**1.31**
High	4.50	4.50	4.25	3.72	3.94	4.08	1.37	1.38	1.38
Low	4.50	4.50	3.00	2.80	2.75	2.50	1.30	1.28	1.26
Last Months Avg.	4.48	4.44	3.77	3.07	3.09	3.00	1.35	1.33	1.31

International Interest Rate And Foreign Exchange Rate Forecasts

Australia

Blue Chip Forecasters	Official Cash Rate In 3 Mo.	Official Cash Rate In 6 Mo.	Official Cash Rate In 12 Mo.	10 Yr. Gov't Bond Yield % In 3 Mo.	10 Yr. Gov't Bond Yield % In 6 Mo.	10 Yr. Gov't Bond Yield % In 12 Mo.	US$ per A$ In 3 Mo.	US$ per A$ In 6 Mo.	US$ per A$ In 12 Mo.
ING Financial Markets	3.85	3.60	3.10	3.10	2.90	2.70	0.69	0.71	0.73
Moody's Analytics	3.68	3.85	3.35	3.85	4.04	4.01	0.70	0.71	0.72
Nomura Securities	--	--	--	--	--	--	0.68	0.68	0.69
Northern Trust	4.10	4.10	4.10	3.40	3.30	3.20	0.65	0.67	0.69
Oxford Economics	3.85	4.10	4.10	3.35	3.56	3.51	0.68	0.67	0.68
S&P Global Market Intelligence	--	--	--	--	--	--	0.67	0.69	0.72
Scotiabank	3.85	3.85	3.75	--	--	--	0.67	0.69	0.70
Wells Fargo	3.60	3.60	3.60	--	--	--	--	--	--
May Consensus	**3.82**	**3.85**	**3.67**	**3.43**	**3.45**	**3.36**	**0.68**	**0.69**	**0.70**
High	4.10	4.10	4.10	3.85	4.04	4.01	0.70	0.71	0.73
Low	3.60	3.60	3.10	3.10	2.90	2.70	0.65	0.67	0.68
Last Months Avg.	3.56	3.37	3.38	3.53	3.48	3.38	0.68	0.69	0.71

Euro area

Blue Chip Forecasters	Main Refinancing Rate In 3 Mo.	Main Refinancing Rate In 6 Mo.	Main Refinancing Rate In 12 Mo.	US$ per Euro In 3 Mo.	US$ per Euro In 6 Mo.	US$ per Euro In 12 Mo.
Barclays	4.25	4.25	4.25	--	--	--
BMO Capital Markets	4.00	4.00	3.75	1.10	1.11	1.13
ING Financial Markets	4.00	4.00	4.00	1.10	1.12	1.15
Moody's Analytics	3.66	4.16	4.23	1.08	1.10	1.14
Nomura Securities	--	--	--	1.14	1.15	1.17
Northern Trust	4.00	4.00	4.00	1.08	1.11	1.14
Oxford Economics	3.70	4.18	4.16	1.09	1.09	1.10
S&P Global Market Intelligence	--	--	--	1.09	1.10	1.12
Scotiabank	4.00	4.00	4.00	1.05	1.10	1.10
Wells Fargo	3.50	3.50	3.25	--	--	--
May Consensus	**3.89**	**4.01**	**3.96**	**1.09**	**1.11**	**1.13**
High	4.25	4.25	4.25	1.14	1.15	1.17
Low	3.50	3.50	3.25	1.05	1.09	1.10
Last Months Avg.	3.53	3.67	3.66	1.08	1.09	1.12

Blue Chip Forecasters	10 Yr. Gov't Bond Yields % Germany In 3 Mo.	Germany In 6 Mo.	Germany In 12 Mo.	France In 3 Mo.	France In 6 Mo.	France In 12 Mo.	Italy In 3 Mo.	Italy In 6 Mo.	Italy In 12 Mo.	Spain In 3 Mo.	Spain In 6 Mo.	Spain In 12 Mo.
BMO Capital Markets	2.30	2.30	2.10	--	--	--	--	--	--	--	--	--
ING Financial Markets	2.40	2.20	2.10	2.90	2.70	2.55	4.35	4.15	3.90	3.45	3.20	3.10
Moody's Analytics	2.49	2.62	2.71	2.92	3.00	2.99	4.54	4.47	4.13	3.40	3.48	3.48
Northern Trust	2.50	2.45	2.35	2.95	2.90	2.80	4.25	4.20	4.10	3.40	3.35	3.25
Oxford Economics	2.33	2.38	2.10	2.81	2.88	2.60	4.15	4.19	3.95	3.33	3.38	3.16
Wells Fargo	2.50	2.45	2.35	--	--	--	--	--	--	--	--	--
May Consensus	**2.42**	**2.40**	**2.29**	**2.90**	**2.87**	**2.74**	**4.32**	**4.25**	**4.02**	**3.40**	**3.35**	**3.25**
High	2.50	2.62	2.71	2.95	3.00	2.99	4.54	4.47	4.13	3.45	3.48	3.48
Low	2.30	2.20	2.10	2.81	2.70	2.55	4.15	4.15	3.90	3.33	3.20	3.10
Last Months Avg.	2.40	2.27	2.18	2.87	2.78	2.65	4.26	4.06	3.89	3.37	3.21	3.11

	Consensus Forecasts 10-year Bond Yields vs U.S. Yield Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-3.10	-3.12	-3.02	-2.75
United Kingdom	0.21	0.01	-0.04	-0.15
Switzerland	-2.47	-2.13	-2.00	-1.87
Canada	-0.64	-0.53	-0.40	-0.27
Australia	-0.11	-0.15	-0.06	-0.02
Germany	-1.09	-1.16	-1.11	-1.09
France	-0.52	-0.68	-0.64	-0.64
Italy	0.78	0.74	0.74	0.65
Spain	-0.08	-0.18	-0.16	-0.12

	Consensus Forecasts Policy Rates vs U.S. Target Rate Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-4.98	-5.19	-5.05	-4.46
United Kingdom	-0.63	-0.65	-0.58	-0.12
Switzerland	-3.38	-3.25	-3.17	-2.50
Canada	-0.38	-0.62	-0.61	-0.60
Australia	-1.28	-1.30	-1.26	-0.73
Euro area	-1.38	-1.23	-1.10	-0.44

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

US economic outlook: spring showers, credit clouds and recession headwinds

An auspicious start to 2023 has been substituted by bank failures, deteriorating sentiment and a more broad-based cooling in the labor market. The strong first quarter prompts an upward revision to our forecast for 2023 real GDP growth to 0.9%. However, we still expect recession in the second half and into next year, dragging growth down to 0.8% in 2024. We see headline CPI averaging 4.0% in 2023 before easing to 2.8% in 2024. We expect the Fed to raise its policy rate once more in May to a range of 5.00-5.25%, as additional credit tightening represents between 25-100 bps of rate hikes and a roughly 0.25 ppt drag on real GDP growth in 2023. We see the 10-year Treasury yield at 3.4% by year-end 2023 and at 3.0% in 2024.

Key takeaways

- An auspicious start to 2023 has been substituted by bank failures, weakening sentiment, and cooling in the labor market.

- We expect a recession in the second half of 2023. We forecast real GDP growth of 0.9% in 2023 and 0.8% in 2024, and headline CPI inflation of 4.0% and 2.8%, respectively.

- With ongoing credit tightening and a broad-based slowdown, we look for the Fed to lift its policy rate once more in May to a range of 5.00-5.25% before a pause into 2024.

- We see the 10-year Treasury yield at 3.4% by year-end, with moderation in inflation and growth driving yields lower to 3.0% by the end of 2024

Credit

As credit tightening slows growth, a second-half recession remains probable, in our view. March's turmoil in the US and European banking sectors was contained, but downside risks to financial stability have escalated. US bank deposits declined USD 474 billion in March, and the Dallas Fed's banking conditions survey showed a sharp contraction in loan demand spanning five consecutive months. We do not foresee a global financial crisis-style credit crunch, but the gradual tightening in credit conditions supports our view that a US recession in the second half is likely. We expect real GDP to grow 0.9% in 2023 overall, but the economy will contract at an average annual rate of 2.2% across the third and fourth quarters as reduced bank lending shaves roughly 0.25 ppt off real GDP growth this year. The weak handoff into next year prompts us to lower our 2024 growth forecast to 0.8%.

Inflation and interest rates

Interest rates will need to remain higher-for-longer rates to return inflation to target. Headline CPI inflation moderated 1.0 ppt in March to 5.0%, the slowest pace since May 2021 on the back of lower energy prices and slowing food inflation. Core CPI, however, rose an annualized 4.8% last month and to 5.6% year-on-year. Shelter prices rose 0.6%, the slowest monthly increase since April 2022, signaling that a peak may be near. Notably, core services ex shelter – a key series related to labor market tightness –eased to 6.1%, the slowest pace since May 2022. The broader cooling in price pressures support our view that the hiking cycle is nearly over, but core inflation remains excessive and will require restrictive policy rates for a prolonged period. Headline CPI inflation is now expected to average 4.0% this year, 0.3 ppt higher than our prior forecast, before easing to 2.8% in 2024. We expect the Fed to lift its policy rate once more to a terminal range of 5.00-5.25% before pausing into 2024, contrary to current bond market pricing amid sticky inflation. We see the 10-year Treasury yielding 3.4% at year-end, and then falling to 3.0% by year-end 2024.

Labor market

The labor market is cooling but it remains too tight for comfort. Non-farm payroll growth slowed to 236 000 in March after a 326,000 increase in February, though the three-month moving average of job gains remains well above the pre-pandemic trend at 345,000. The unemployment rate ticked lower to 3.5%, driven by a strong 480,000 increase in the labor force. This lifted the overall participation rate to 62.6%, the highest of the post-pandemic period, while prime-age employment, which includes workers aged 25-54, rose to 80.7%, the highest share since May 2001. Labor market rebalancing has been encouraging since late 2022, as growth in labor supply has outpaced demand for four consecutive months. The rise in average hourly earnings also eased in March, up 0.3% after a 0.4% increase in February, cooling wage growth by 0.4 ppt to 4.2%. Meanwhile, seasonal revisions to initial jobless claims data reveal an uptrend developing in late March, with the four-week moving average of claims rising to 240,000. The latest vacancies data add further evidence of easing labor demand, with job openings falling a sharp 630,000 to 9.9 million in February. That's the lowest level since mid-2021 but still above the pre-pandemic level of 7.2 million. Fewer openings lowered the vacancies-to-unemployed ratio to 1.7, but this continues to signal a substantial imbalance.

Recession probable

Broad-based data weakening supports our call for a recession in the second half of 2023. The housing sector remained depressed in the first quarter, with growth in housing starts down 17.2% year-on-year. While existing home sales rebounded to a four-month high of 4.6 million in February, house prices have declined for 11 months running. The latest round of PMI surveys confirm that business sentiment remains downbeat, with the March ISM manufacturing survey down 1.4 points to 46.3 – the sixth consecutive month of contraction. The ISM services measure also fell sharply, down 3.9 points to 51.2 as the new orders index plunged 10.4 points. Consumers are echoing poor business confidence, with the personal savings rate rising 4.6% in February, the highest level in a year. Headline retail sales declined 1.0% in March in nominal and real terms, and core retail sales ex-autos and gas station spending also declined 0.3%. The data confirm that the strong start to the year reflected a combination of favorable weather, fiscal transfers and seasonal adjustment boosts more than a re-acceleration of underlying economic momentum. We do not read the weakening data flow as an imminent sign of recession, but the broad-based deterioration reaffirms our expectation of contraction in the second half of 2023.

Mahir Rasheed (Swiss Re)

Sticky Inflation Puts Pressure on BoE

This week's round of data releases have boosted the chances of another rate hike from the BoE next month to more than 50%. Inflation failed to drop into single digits, core inflation failed to decline at all, and wage growth came in higher than anticipated. The BoE may have already delivered an impressive run of hikes, but these numbers are hard to ignore, especially as the 10.1% y/y inflation rate compares very unfavorably to the 6.9% in the Eurozone and the 5% in the U.S. Another quarter point hike in May is likely, though it could well be the last in the current cycle.

The BoE's tightening cycle, which started in December of 2021 has brought the Bank Rate from 0.1% to 4.25%, which is close to the peak. Indeed, central bankers, while keeping the door open to additional hikes, seem increasingly reluctant to push rates higher, and there have been dissenters preferring to keep rates on hold for a while now. Tenreyro is one of those, and her warning that the BoE still has "to see most of the tightening pass through" clearly has value, though at the same time, the economy turned out to be more resilient than previously anticipated. On top of this, wage growth is higher than expected and inflation so far has failed to drop substantially.

The CPI rate did decline in March, but much less than anticipated. Lower energy prices and base effects were expected to trigger a sharp drop in the headline rate, but at 10.1% y/y, the annual rate remained in double digits and was just 0.3 percentage points lower than in February. Petrol prices declined a further 1.2 pence per litre versus February, and prices were down -5.9% y/y in March after still rising 4.6% y/y in February. This meant that transport cost inflation eased from 3.1% y/y in February to 1.0% y/y in March. Lower prices for liquid fuels helped to keep a lid on prices for housing and household services. Prices of heating oil fell -6.7% m/m in March, compared to a 44% m/m rise in March of last year, when Russia's invasion of Ukraine shook up markets.

The impact of lower energy prices was partly offset by higher contributions from food prices, as well as the recreation and culture category. Prices for food and non-alcoholic beverages jumped 19.2% y/y in March, which marked a further acceleration versus the 18.2% y/y in February. The ONS highlighted that this was a more than a 45-year high. Core inflation, which excludes energy, food, alcohol, and tobacco, held steady at 5.7% y/y. CPIH, which is a wider measure that includes owner-occupied housing costs, corrected to 8.9% from 9.2% - also less than hoped. The CPIH core measure held steady at 5.7% y/y.

The Retail Price Index, which remains an important figure for wage negotiations, stood at 13.5% y/y in March, down from 13.8% y/y in February, but still at a level that is likely to keep wage growth underpinned, even if there are some signs that the labour market is less tight than it was at one point. ILO unemployment unexpectedly rose to 3.8% in the three months to February, from 3.7% in the previous three-month period. Employment continued to rise, but the economic inactivity rate decreased by 0.4 percentage points on the quarter and the number of vacancies fell by -47K in the three months to March -- which is the ninth consecutive period of decline. This also suggests that labour market conditions have eased slightly. Indeed, the ONS reported that the drop in vacancies also reflects "uncertainty across industries, as survey respondents continue to cite economic pressures as a factor in holding back on recruitment".

However, vacancy levels are still higher than before the pandemic, and accordingly, wage growth has remained strong. Growth in average total pay held steady at 5.9% in the three months to February, regular pay (excluding bonuses) sat at 6.6%. Pay growth in the private sector remains higher than for the public sector, but the difference has narrowed in recent month against the background of widespread strike action with over three-fifth of the strikes in February concentrated in the education sector.

However, inflation not just reflects accelerating wage growth, but also efforts from companies to not just pass on cost pressures, but also increase profit margins as demand picks up. A study by union Unite pointed to rising profit margins as a key source of inflation pressures and price increases. BoE chief economist Pill also highlighted recently that the bank will not only look at the developments in the labour market, "which remains tight", but also the capacity of companies to raise prices and improve their margins. With growth and demand looking better than feared, this is likely to be an increasingly important factor.

The dovish camp at the MPC -- first and foremost MPC member Tenreyro -- continues to warn that the central bank needs to be patient as "so far only one fifth of the rate hikes have actually fed through to the economy". Tenreyro won't be a member of the MPC much longer, as her term ends in July. The finance ministry has named Megan Green, chief economist at Kroll, to succeed Silvana Tenreyro. However, while Green is likely to take a less dovish stance, it will still be Tenreryo who will cast a vote in May. Still, even chief economist Pill flagged that the BoE has already raised rates by 400 basis points, while highlighting that "these measures take up to eighteen months to take effect."

And there are signs now that financial conditions and the availability of credit are tightening -- also thanks to recent financial market jitters. The Bank of England's latest quarterly credit conditions survey showed that the availability of home loans is set to decline in the second quarter. Lenders reported that default rates on mortgages, unsecured credit to households, and loans to small and medium sized businesses all rose in the first quarter and are expected to increase further. Demand for mortgages meanwhile is expected to pick up, partly because many fixed rate terms are coming to an end this year. So far there is no real sign of a credit crunch that could force the BoE to review policy settings, but developments won't make the BoE's decision any easier.

All this means that it will likely be a difficult and hotly debated decision, but after this week's inflation numbers our best bet is that the BoE will react by delivering another 25 basis point hike in May that will bring the Bank Rate to 4.50%. In the central scenario this will be the BoE's last hike in the current cycle, with just a 30% chance of another quarter point hike if and when growth turns out to be even stronger than currently anticipated. We don't see any scope for rate cuts this year at the moment, although clearly uncertainty remains high and data-dependency key also in the U.K.

(Natascha Gewaltig, Action Economics)

Special Questions:

1. How much do you expect the fed funds rate to be changed in total in: 2023? 53.2 bps 2024? -156.2 bps

2. a. What do you think will be the terminal fed funds rate (average of target range) in the current tightening cycle? 5.15%

   b. When will the terminal rate be reached?

Q2 2023	Q3 2023	Q4 2023	Later
97%	0%	3%	0%

   c. Has the recent financial market unrest from the failure of a couple of regional banks caused you to lower your estimate of the terminal FFR? Yes 45% No 55%

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

Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Later
0%	3%	33%	48%	9%	6%

   b. What will motivate the first fed funds rate cut the most?

A sharp slowdown in the economy	24%
A meaningful and persistent slowing in inflation	73%
The current tension in regional banks	3%

   c. Has the recent financial market unrest from the failure of a couple of regional banks caused you to move forward your expected date for the first FFR cut? Yes 15% No 85%

4. What probability do you attach to a recession beginning in 2023 in the:

US	58%
euro area	53%
UK	61%

5. Has the recent turmoil in the banking sector caused you to lower your outlook for the US and broader world economy?
   Yes 69% No 31%

6. a. Do you expect the US unemployment rate to increase in 2023? Yes 94% No 6%

   b. If yes, by how much? 0.9%

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

   d. What will be the change in total nonfarm payrolls for December/December in 2023? 931 thous

7. The US Fed has recently promoted core PCE services excluding housing as a key measure of inflation to guide monetary policy. In February 2023, this index was up 4.6% y/y. What do you expect this inflation rate to be for:
   Dec/Dec 2023 3.6% Dec/Dec 2024 2.6%

8. a. Will the uncertainty surrounding the extension of the US debt limit put upward pressure on US interest rates?
   Yes 52% No 48%

   b. Will it weaken the foreign exchange value of the US dollar? Yes 40% No 60%

Databank:

2023 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	2.8	-0.7	-0.6	....	....	....	....	....	....	....	....	....
Auto & Light Truck Sales (b)	16.05	15.02	14.84	....	....	....	....	....	....	....	....	....
Personal Income (a, current $)	0.6	0.3	0.3	....	....	....	....	....	....	....	....	....
Personal Consumption (a, current $)	2.0	0.1	0.0	....	....	....	....	....	....	....	....	....
Consumer Credit (e)	4.9	3.8	....	....	....	....	....	....	....	....	....	....
Consumer Sentiment (U. of Mich.)	64.9	67.0	62.0	63.5	....	....	....	....	....	....	....	....
Household Employment (c)	894	177	577	....	....	....	....	....	....	....	....	....
Nonfarm Payroll Employment (c)	472	326	236	....	....	....	....	....	....	....	....	....
Unemployment Rate (%)	3.4	3.6	3.5	....	....	....	....	....	....	....	....	....
Average Hourly Earnings (All, cur. $)	33.02	33.09	33.18	....	....	....	....	....	....	....	....	....
Average Workweek (All, hrs.)	34.6	34.5	34.4	....	....	....	....	....	....	....	....	....
Industrial Production (d)	1.4	0.9	0.5	....	....	....	....	....	....	....	....	....
Capacity Utilization (%)	79.5	79.6	79.8	....	....	....	....	....	....	....	....	....
ISM Manufacturing Index (g)	47.4	47.7	46.3	....	....	....	....	....	....	....	....	....
ISM Nonmanufacturing Index (g)	55.2	55.1	51.2	....	....	....	....	....	....	....	....	....
Housing Starts (b)	1.334	1.432	1.420	....	....	....	....	....	....	....	....	....
Housing Permits (b)	1.339	1.550	1.430	....	....	....	....	....	....	....	....	....
New Home Sales (1-family, c)	648	623	683	....	....	....	....	....	....	....	....	....
Construction Expenditures (a)	0.4	-0.1	....	....	....	....	....	....	....	....	....	....
Consumer Price Index (nsa, d)	6.4	6.0	5.0	....	....	....	....	....	....	....	....	....
CPI ex. Food and Energy (nsa, d)	5.6	5.5	5.6	....	....	....	....	....	....	....	....	....
PCE Chain Price Index (d)	5.4	5.1	4.2	....	....	....	....	....	....	....	....	....
Core PCE Chain Price Index (d)	4.7	4.7	4.6	....	....	....	....	....	....	....	....	....
Producer Price Index (nsa, d)	5.9	4.9	2.7	....	....	....	....	....	....	....	....	....
Durable Goods Orders (a)	-5.0	-1.2	3.2	....	....	....	....	....	....	....	....	....
Leading Economic Indicators (a)	-0.5	-0.5	-1.2	....	....	....	....	....	....	....	....	....
Balance of Trade & Services (f)	-68.7	-70.5	....	....	....	....	....	....	....	....	....	....
Federal Funds Rate (%)	4.33	4.57	4.65	....	....	....	....	....	....	....	....	....
3-Mo. Treasury Bill Rate (%)	4.69	4.79	4.86	....	....	....	....	....	....	....	....	....
10-Year Treasury Note Yield (%)	3.53	3.75	3.66	....	....	....	....	....	....	....	....	....

2022 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	1.4	1.4	2.1	1.1	0.1	0.6	-0.5	0.7	0.0	1.0	-1.3	-0.7
Auto & Light Truck Sales (b)	15.11	13.71	13.56	14.28	12.58	13.05	13.31	13.23	13.64	15.28	14.34	13.37
Personal Income (a, current $)	-0.1	0.5	0.5	0.2	0.5	0.5	0.8	0.6	0.5	0.9	0.4	0.3
Personal Consumption (a, current $)	1.2	0.7	1.2	0.4	0.7	1.2	-0.1	0.7	0.6	0.7	-0.2	0.0
Consumer Credit (e)	4.0	8.9	12.2	8.3	7.1	10.3	6.0	7.5	6.5	9.4	9.3	3.4
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)	364	904	414	254	364	370	568	352	350	324	290	239
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. $)	31.63	31.63	31.83	31.94	32.06	32.18	32.33	32.43	32.53	32.66	32.80	32.92
Average Workweek (All, hrs.)	34.6	34.7	34.7	34.6	34.6	34.6	34.6	34.5	34.6	34.6	34.5	34.4
Industrial Production (d)	2.3	6.6	4.4	4.6	3.7	3.2	3.0	3.1	4.5	3.1	1.9	0.6
Capacity Utilization (%)	79.4	79.9	80.5	80.7	80.6	80.5	80.7	80.7	80.8	80.6	80.3	78.9
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	1.419	1.348
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	589	582	622
Construction Expenditures (a)	2.7	1.5	0.9	0.7	0.7	0.6	0.8	-1.1	0.5	0.0	1.8	-0.1
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	5.7	5.3
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	4.8	4.6
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	7.4	6.6
Durable Goods Orders (a)	3.1	-0.7	0.7	0.4	0.8	2.3	-0.1	0.2	0.2	0.7	-1.8	5.1
Leading Economic Indicators (a)	-0.5	0.3	0.0	-0.6	-0.9	-0.7	-0.6	-0.3	-0.5	-0.9	-0.9	-0.7
Balance of Trade & Services (f)	-87.4	-87.3	-106.4	-86.0	-85.4	-80.8	-69.8	-64.6	-72.6	-77.2	-60.6	-67.2
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
May 1 Construction (Mar) ISM Manufacturing (Apr) S&P Global Mfg PMI (Apr)	**2** JOLTS (Mar) Manufacturers' Shipments, Inventories & Orders (Mar) FOMC Meeting	**3** ADP Employment (Apr) Housing Vacancies (Q1) ISM Services PMI (Apr) S&P Global Services PMI (Apr) BEA Auto & Truck Sales (Apr) FOMC Meeting EIA Crude Oil Stocks Mortgage Application	**4** Productivity & Costs (Q1) International Trade (Mar) Public Debt (Apr) Interest Expense on the Public Debt (Apr) Challenger Employment Report (Apr) Weekly Jobless Claims	**5** Employment Situation (Apr) Consumer Credit (Mar)
8 Wholesale Trade (Mar) Treasury Auction Allotments (Apr) Senior Loan Officer Survey (Q2)	**9** Kansas City Fed Labor Market Conditions Indicators (Apr) Kansas City Financial Stress Index (Apr) First Time Housing Affordability (Q1) NFIB (Apr) Short-Term Energy Outlook (Apr)	**10** CPI & Real Earnings (Apr) Transportation Services Index (Mar) Cleveland Fed Median CPI(Apr) Monthly Treasury (Apr) EIA Crude Oil Stocks Mortgage Application	**11** Producer Prices (Apr) OPEC Crude Oil Spot Prices (Apr) Weekly Jobless Claims	**12** Import & Export Prices (Apr) MSIO Revisions Consumer Sentiment (May, Preliminary) Survey of Professional Forecasters (Q2)
15 Empire State Mfg Survey (May) Dallas Fed Banking Condition Survey (May) TIC Data (Mar)	**16** Advance Retail Sales (Apr) IP & Capacity Utilization (Apr) MTIS (Mar) Business Leaders Survey (May) Home Builders (May)	**17** New Residential Construction (Apr & Revisions) EIA Crude Oil Stocks Mortgage Application	**18** Existing Home Sales (Apr) Retail E-Commerce Sales (Q1) Philadelphia Fed Mfg Business Outlook Survey (May) Composite Indexes (Apr) Weekly Jobless Claims	**19** Advance Quarterly Services(Q1)
22 Treasury Auction Allotments (May) NABE Outlook (Q2)	**23** New Residential Sales (Apr & Revisions) S&P Global Flash PMI (May) H.6 Money Stock (Apr) Final Building Permits (Apr) Philadelphia Fed Nonmanufacturing Business Outlook Survey (May) Richmond Fed Mfg & Service Sector Surveys (May)	**24** CEW (Q4) FRB Philadelphia Coincident Economic Activity Index (Apr) EIA Crude Oil Stocks Mortgage Application	**25** GDP & Corporate Profits (Q1, 2nd Estimate) Chicago Fed National Activity Index (Apr) Kansas City Fed Mfg (May) Steel Imports for Consumption (Apr, Preliminary) Pending Home Sales (Apr) Weekly Jobless Claims	**26** Dallas Fed Trimmed-Mean PCE (Apr) Adv Durable Goods (Apr) Adv Trade & Inventories (Apr) Personal Income (Apr) Strike Report (May) Consumer Sentiment (May, Final)
29 **MEMORIAL DAY** **ALL MARKETS COSED**	**30** FHFA HPI (Mar & Q1) Case-Shiller HPI (Mar) Consumer Confidence (May) Texas Manufacturing Outlook Survey (May)	**31** JOLTS (Apr) Agricultural Prices (Apr) Chicago PMI (May) Texas Service Sector Outlook Survey (May) Mortgage Application	**June 1** ADP Employment Report (May) Productivity & Costs (Q1) ISM Manufacturing (May) S&P Global Mfg PMI (May) Construction (Apr) Challenger Employment Report (May) EIA Crude Oil Stocks Weekly Jobless Claims	**2** Employment Situation (May)
5 Manufacturers' Shipments, Inventories & Orders (Apr) ISM Services PMI (May) S&P Global Services PMI (May) BEA Auto & Truck Sales (May)	**6** QFR (Q1) Public Debt (May) Interest Expense on the Public Debt (May) Kansas City Fed Labor Market Conditions Indicators (May)	**7** International Trade (Apr) Transportation Services Index (Apr) Consumer Credit (Apr) Treasury Auction Allotments (May) EIA Crude Oil Stocks Mortgage Application	**8** Wholesale Trade (Apr) Financial Account (Q1) Weekly Jobless Claims	**9** QSS (Q1) Kansas City Financial Stress Index (May)

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