

# 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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**Wolters Kluwer**

# BLUE CHIP FINANCIAL FORECASTS®

Executive Editor: Joseph Aguinaldo  
Assistant Editor: Jules Valencia  
Haver Analytics  
60 East 42<sup>nd</sup> Street  
New York, NY 10165  
Phone (212) 986-9300  
E-mail: [bluechip@haver.com](mailto:bluechip@haver.com)

Robert J. Eggert, Founder  
Randell E. Moore, Editor Emeritus  
Chris Sullivan, General Manager

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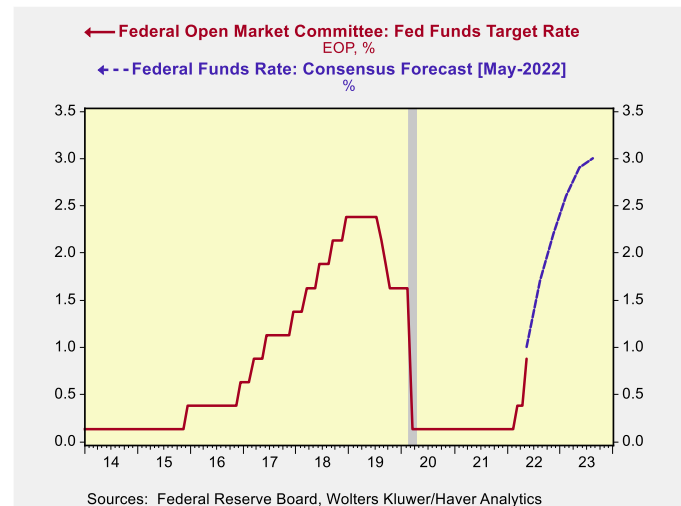
## More Fed Tightening To Fight Inflation

**Inflation Can Moderate without Recession.** Inflation continues to be the main issue facing policymakers, investor and traders, to say nothing of consumers and business managers. To combat rising inflation, the Federal Reserve is tightening monetary policy with both interest rate and balance sheet tools. Against this backdrop, the Blue Chip Financial Forecast panelists generally believe that inflation can be slowed without the economy entering a recession. Indeed, in response to a specific Special Question, 72% of panelists believe this is the likely outcome. Indeed, another Special Question's results show that the panel believes the probability of recession this year is just 25%, although it is expected to rise to 38% during 2023. This latter expectation is still noticeably below 50%.

The Blue Chip Financial Forecasts inflation prospects are slightly higher this month than last month. The personal consumption expenditure price index rose at a 7.0% annual rate in Q1 2022, unrevised from the initial report; the Blue Chip panel's estimate for Q2 is 5.8%, the same as last month. For Q3, the panel currently looks for 4.3%, up from the May forecast of 3.9%. While these forecasts are modestly higher, both are well above the Federal Reserve's target pace of 2%.

**Fed Expected To Invoke Larger Increases in Rates.** Thus, there is clearly considerable work to be done to reduce inflation. In a speech on Monday, May 30, Fed Governor Christopher Waller emphasized the Fed's shift to 50-basis-point increases in the federal funds rate, and he expects at least a couple more of them after the one at the May 3-4 FOMC meeting. This view does correspond to the Blue Chip panel's forecast the rate rising to 2.4% for the fourth quarter of this year. In addition, as Waller pointed out, the Fed's purchases of Treasury securities and mortgage-backed bonds ceased in March and beginning today, June 1, the Fed will reduce its balance sheet holdings by replacing only a portion of those securities that mature. This may well contribute to increases in long-term interest rates.

**Long-Term Rates, Already Up, Expected To Rise Moderately More.** Longer-term interest rates are already reflecting some response to higher inflation and the Fed's shifting portfolio strategy. Ten-year Treasury yields averaged 1.94% in Q1 this year but then reached 3.01% in the first week of May. On May 31, they were trading at 2.86%. The Blue Chip panel expects them to settle above 3% for the rest of this year and at 3.4% for much of 2023. With the tightening of monetary policy and still higher inflation, the greater financial risk would generate somewhat wider credit spreads even in high-quality securities. The spreads to Treasuries for high-rated corporate bonds would also be somewhat wider; Aaa corporate bond yields are seen by the panel to rise to 4.7% by Q4 this year, 130 basis points over 30-year Treasuries, and to maintain that spread through 2023. For comparison, this spread averaged 80 basis points last year and 116 basis points during 2020.



Mortgage rates pierced 5% during April, according to Freddie Mac data; this is the first time they have been that high since 2011. The Blue Chip panel projects them to increase to 5.5% by Q4 2022 and to stay there during 2023.

### Semi-Annual Long-Term Financial Outlook

The Blue Chip surveys check out longer-term prospects twice a year. The last check on a longer-term view of financial markets was in December. The pace of inflation and the overall level of interest rates are considerably higher now than they were back then. In particular, the 7.0% inflation rate for the PCE price index in Q1 and the current Blue Chip 5.8% estimate for Q2 compare to 2.9% and 2.5%, respectively, in the December forecasts. The 2022 inflation forecast is noticeably higher than it was the last time longer-run estimates were collected. The earlier projection put 2022 inflation at 3.9% over 2021 while the current estimate is 5.8%. By 2025, the Blue Chip panel projects that PCE inflation will slow to 2.3%, just marginally higher than the 2.1% in the December survey. This suggests longer-term interest rates at 3.4% for 10-year Treasuries in 2025 would be somewhat higher than the 3.1% expected back in December. And the 3.4% level indicates that the current rate range would be sustained over the long haul.

This is the first longer-term look at SOFR, the secured overnight financing rate that we began to cover late in 2021 as the key measure of short-term private sector borrowing cost. It is currently at 0.78% and estimated for this year to average 1.3%. Going forward, that is for 2025, the Blue Chip Financial Forecasts panel projects it at 2.5% and at levels very similar to the fed funds rate.

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

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

Interest Rates	History								Consensus Forecasts-Quarterly Avg.						
	Average For Week Ending				Average For Month				Latest Qtr	2Q 2022	3Q 2022	4Q 2022	1Q 2023	2Q 2023	3Q 2023
	May 20	May 13	May 6	Apr 29	Apr	Mar	Feb	1Q 2022	2022	2022	2022	2023	2023	2023	
Federal Funds Rate	0.83	0.83	0.33	0.33	0.33	0.20	0.08	0.12	1.0	1.9	2.4	2.8	3.0	3.1	
Prime Rate	4.00	4.00	3.50	3.50	3.50	3.37	3.25	3.29	4.0	5.0	5.5	5.9	6.1	6.2	
SOFR	0.79	0.78	0.49	0.28	0.29	0.16	0.05	0.09	0.9	1.8	2.3	2.7	2.9	3.0	
Commercial Paper, 1-mo.	0.83	0.82	0.71	0.55	0.44	0.32	0.16	0.18	0.9	1.8	2.4	2.8	3.0	3.0	
Treasury bill, 3-mo.	1.05	0.94	0.88	0.85	0.76	0.45	0.31	0.30	1.1	1.9	2.4	2.7	2.9	3.0	
Treasury bill, 6-mo.	1.54	1.44	1.43	1.40	1.26	0.86	0.64	0.61	1.5	2.2	2.6	2.9	3.1	3.1	
Treasury bill, 1 yr.	2.11	2.00	2.10	2.03	1.89	1.34	1.00	0.96	2.0	2.6	2.9	3.1	3.2	3.2	
Treasury note, 2 yr.	2.64	2.61	2.72	2.62	2.54	1.91	1.44	1.44	2.6	2.9	3.1	3.2	3.3	3.2	
Treasury note, 5 yr.	2.86	2.89	3.00	2.84	2.78	2.11	1.81	1.82	2.8	3.1	3.2	3.3	3.4	3.4	
Treasury note, 10 yr.	2.87	2.94	3.01	2.83	2.75	2.13	1.93	1.94	2.9	3.1	3.2	3.3	3.4	3.4	
Treasury note, 30 yr.	3.07	3.09	3.10	2.91	2.81	2.41	2.25	2.25	3.0	3.3	3.4	3.5	3.6	3.6	
Corporate Aaa bond	4.43	4.42	4.40	4.19	4.01	3.63	3.36	3.35	4.1	4.5	4.7	4.8	4.9	4.9	
Corporate Baa bond	5.13	5.10	5.06	4.84	4.63	4.23	3.92	3.90	5.0	5.4	5.6	5.7	5.8	5.8	
State & Local bonds	4.09	4.03	3.93	3.84	3.70	3.30	3.01	3.02	3.5	3.8	4.0	4.1	4.2	4.2	
Home mortgage rate	5.25	5.30	5.27	5.10	4.98	4.17	3.76	3.79	5.1	5.3	5.5	5.6	5.6	5.5	

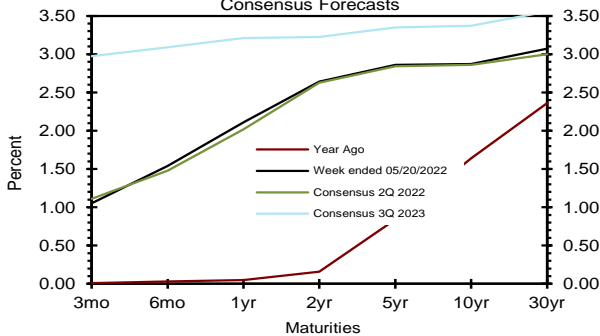
  

Key Assumptions	History								Consensus Forecasts-Quarterly					
	2Q		3Q		4Q		1Q		2Q	3Q	4Q	1Q	2Q	3Q
	2020	2020	2020	2021	2021	2021	2021	2022	2022	2022	2023	2023	2023	2023
Fed's AFE \$ Index	112.4	107.2	105.1	103.4	102.9	105.0	107.0	108.4	112.7	113.9	114.1	114.0	113.6	112.9
Real GDP	-31.2	33.8	4.5	6.3	6.7	2.3	6.9	-1.5	2.9	2.5	2.2	1.8	1.6	1.6
GDP Price Index	-1.5	3.6	2.2	4.3	6.1	6.0	7.1	8.1	5.9	4.6	3.5	3.1	2.8	2.7
Consumer Price Index	-3.4	4.8	2.2	4.1	8.2	6.7	7.9	9.2	7.6	4.8	3.4	3.0	2.6	2.6
PCE Price Index	-1.6	3.7	1.5	3.8	6.5	5.3	6.4	7.0	5.8	4.3	3.2	2.8	2.6	2.5

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

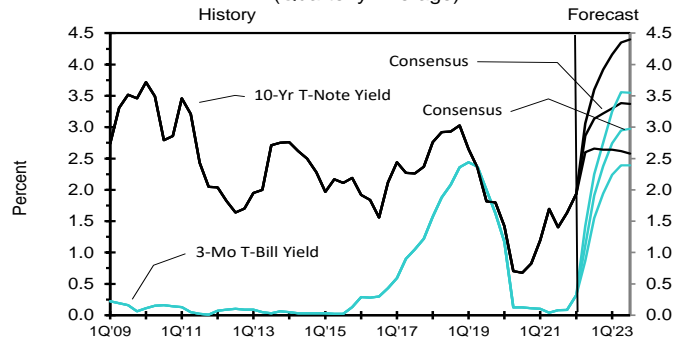
#### U.S. Treasury Yield Curve

Week ended May 20, 2022 & Year Ago vs. 2Q 2022 & 3Q 2023 Consensus Forecasts



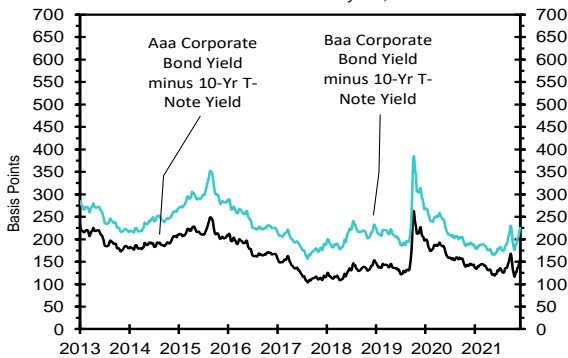
#### US 3-Mo T-Bills & 10-Yr T-Note Yield

(Quarterly Average)



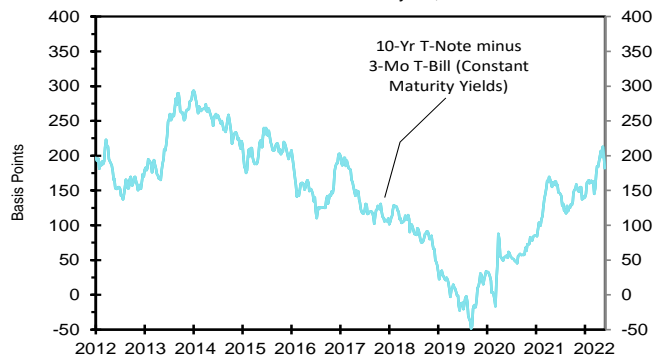
#### Corporate Bond Spreads

As of week ended May 20, 2022



#### U.S. Treasury Yield Curve

As of week ended May 20, 2022



-----Policy Rates<sup>1</sup>-----

	History			Consensus Forecasts		
	Month	Year	Months From Now:			
Latest:	Ago:	Ago:	3	6	12	
U.S.	0.88	0.38	0.13	<b>1.88</b>	<b>2.45</b>	<b>3.19</b>
Japan	-0.10	-0.10	-0.10	<b>-0.09</b>	<b>-0.06</b>	<b>-0.03</b>
U.K.	1.00	0.75	0.10	<b>1.26</b>	<b>1.45</b>	<b>1.84</b>
Switzerland	-0.75	-0.75	-0.75	<b>-0.69</b>	<b>-0.56</b>	<b>-0.18</b>
Canada	1.00	1.00	0.25	<b>2.00</b>	<b>2.46</b>	<b>3.07</b>
Australia	0.35	0.10	0.10	<b>0.82</b>	<b>1.13</b>	<b>1.65</b>
Euro area	0.00	0.00	0.00	<b>0.06</b>	<b>0.21</b>	<b>0.48</b>

-----10-Yr. Government Bond Yields<sup>2</sup>-----

	History			Consensus Forecasts		
	Month	Year	Months From Now:			
Latest:	Ago:	Ago:	3	6	12	
U.S.	2.78	2.90	1.63	<b>3.08</b>	<b>3.12</b>	<b>3.19</b>
Germany	0.94	0.97	-0.13	<b>1.15</b>	<b>1.23</b>	<b>1.35</b>
Japan	0.24	0.25	0.09	<b>0.26</b>	<b>0.26</b>	<b>0.25</b>
U.K.	1.90	1.98	0.92	<b>1.91</b>	<b>2.19</b>	<b>2.35</b>
France	1.47	1.43	0.25	<b>1.68</b>	<b>1.72</b>	<b>1.81</b>
Italy	2.99	2.69	1.03	<b>3.00</b>	<b>3.01</b>	<b>2.98</b>
Switzerland	0.69	0.91	-0.14	<b>0.86</b>	<b>1.01</b>	<b>1.15</b>
Canada	2.83	2.87	1.54	<b>3.12</b>	<b>3.21</b>	<b>3.28</b>
Australia	3.31	3.13	1.63	<b>3.27</b>	<b>3.53</b>	<b>3.66</b>
Spain	2.02	1.83	0.58	<b>2.11</b>	<b>2.21</b>	<b>2.35</b>

-----Foreign Exchange Rates<sup>3</sup>-----

	History			Consensus Forecasts		
	Month	Year	Months From Now:			
Latest:	Ago:	Ago:	3	6	12	
U.S.	114.22	112.44	101.68	<b>114.0</b>	<b>113.4</b>	<b>112.4</b>
Japan	127.86	128.78	108.94	<b>126.9</b>	<b>125.1</b>	<b>122.7</b>
U.K.	1.25	1.28	1.42	<b>1.26</b>	<b>1.27</b>	<b>1.29</b>
Switzerland	0.97	0.96	0.90	<b>0.96</b>	<b>0.94</b>	<b>0.93</b>
Canada	1.28	1.27	1.21	<b>1.25</b>	<b>1.24</b>	<b>1.24</b>
Australia	0.70	0.73	0.77	<b>0.72</b>	<b>0.72</b>	<b>0.71</b>
Euro	1.06	1.08	1.22	<b>1.07</b>	<b>1.07</b>	<b>1.11</b>

Consensus Policy Rates vs. US Rate

	Now	In 12 Mo.
Japan	-0.98	<b>-3.22</b>
U.K.	0.13	<b>-1.35</b>
Switzerland	-1.63	<b>-3.36</b>
Canada	0.13	<b>-0.12</b>
Australia	-0.53	<b>-1.54</b>
Euro area	-0.88	<b>-2.71</b>

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

	Now	In 12 Mo.
Germany	-1.84	<b>-1.84</b>
Japan	-2.54	<b>-2.94</b>
U.K.	-0.88	<b>-0.83</b>
France	-1.31	<b>-1.38</b>
Italy	0.21	<b>-0.20</b>
Switzerland	-2.09	<b>-2.04</b>
Canada	0.05	<b>0.09</b>
Australia	0.53	<b>0.47</b>
Spain	-0.76	<b>-0.84</b>

**International.** The global economic recovery from the pandemic, which has been rather resilient, is beginning to show signs of cracking under the strain of the ongoing fallout from the Russia-Ukraine conflict, lingering supply-chain problems exacerbated by COVID lockdowns in China, a further rise in food and energy prices, and a broadening bevy of central banks attempting to corral inflation with higher domestic policy interest rates. Real GDP in the first quarter declined in several major economies—e.g., the US, Japan, France and Italy. And while UK GDP posted a solid increase in Q1, the pace of activity slowed during the quarter with monthly GDP declining in March. Looking into Q2, flash Purchasing Managers' Indexes generally pointed to a further slowing in activity in May, notably in China. By contrast and despite inflation delivering a big blow to purchasing power, consumer spending was comparatively solid in Q1 across most developed economies.

At the center of the rising global recession risk is the move to less accommodative monetary policy all across the globe to combat decades-high inflation rates. In May, there were 34 policy interest rate increases with the vast majority made by emerging market central banks in an attempt to stem the fall in their currencies. For developed economies, the increased intensity of policy rate hikes has been led by the US Fed, the Bank of England and the Reserve Bank of New Zealand with each increasing their policy interest rates in May. The Fed raised its federal funds rate target by 50bps, the first increase of this size in more than 20 years. Moreover, subsequent comments from myriad Fed officials have led financial markets to expect additional 50bp increases in the near term (see lead commentary). The Bank of England raised its base interest rate for the fourth time in as many meetings. The increase was 25 bps with three members of the committee voting for a 50bp hike, although the committee's rhetoric concerning likely future rate increases was softened a bit. The RBNZ raised its policy interest rate, also for the fourth time in as many meetings, by 50 bps, the second consecutive 50bp increase and raising the rate to 2.00%, above where it was just prior to the pandemic.

A major policy reversal came from the Reserve Bank of Australia. It completely surprised financial market expectations and retreated markedly from previous guidance by raising its policy rate 25 bps at its early May meeting, the first increase in more than a decade. With inflation having accelerated markedly in recent months and the Bank having raised its inflation outlook meaningfully, financial markets are now looking for a series of further policy rate increases ahead.

The European Central Bank came in a close second for policy U-turns. In a blog on the Bank's website, President Lagarde provided a very detailed argument as to why the pre-pandemic and the ensuing emergency pandemic policy settings are no longer appropriate. She argued that the inflation outlook has shifted upwards relative to prior to the pandemic. And so policy interest rates should also be adjusted up. Leaving policy rates unchanged in such an environment, she noted, would be an implicit easing of monetary policy, which would not be warranted. She expects asset purchases to end early in the third quarter, which "would allow us a rate lift-off at our meeting in July...and be in a position to exit negative interest rates by the end of the third quarter." Market rate expectations have been adjusted up accordingly.

The central banks of Japan and China continue to be the outliers in the global shift to less accommodative monetary policies. In the face of a sharply slowing domestic economy owing in large part to extremely onerous COVID lockdowns, the People's Bank of China unexpectedly eased policy on May 20 with a 15bp cut in its benchmark rate on loans of five years or more to 4.45%, the largest single reduction since the rate took on policy significance in 2019. The Bank of Japan left its extremely accommodative policy unchanged at its late April meeting.

Forecasts of panel members are on pages 10 and 11. Definitions of variables are as follows: <sup>1</sup>Monetary policy rates. <sup>2</sup>Government bonds are yields to maturity. <sup>3</sup>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.





# Fourth Quarter 2022

## Interest Rate Forecasts

## Key Assumptions

Blue Chip Financial Forecasts Panel Members	Percent Per Annum -- Average For Quarter															Avg. For --Qtr-- A.	------(Q-Q % Change)----- ------(SAAR)-----													
	-----Short-Term-----					--Intermediate-Term--					-----Long-Term-----						B.	C.	D.	E.										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15															
	Federal Funds Rate	Prime Bank Rate	SOFR Rate	Com. Paper 1-Mo.	Treas. Bills 3-Mo.	Treas. Bills 6-Mo.	Treas. Bills 1-Yr.	Treas. Notes 2-Yr.	Treas. Notes 5-Yr.	Treas. Notes 10-Yr.	Treas. Bonds 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Local Bonds	Home Mtg. Rate						Fed's Adv Fgn Econ \$ Index	Real GDP	GDP Price Index	Cons. Price Index	PCE Price Index					
Scotiabank Group	3.0	H	6.0	H	2.8	na	2.8	na	2.9	3.0	3.1	3.1	na	na	na	na	na	na	na	na	3.5	3.9	4.1	2.9						
BNP Paribas Americas	2.9	na	na	na	na	na	na	na	2.8	na	2.7	2.8	na	na	na	na	na	na	na	na	2.2	na	2.8	na						
Nomura Securities, Inc.	2.9	6.0	H	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.8	2.9	4.0	3.4						
Wells Fargo	2.8	5.8	2.6	2.8	H	2.8	3.0	3.2	3.3	3.2	3.3	3.5	4.8	5.7	4.1	5.5	na	na	na	na	2.1	3.6	3.9	3.6						
ING	2.7	na	3.0	H	na	na	na	na	3.0	3.0	3.0	3.1	na	na	na	na	na	na	na	na	2.1	na	na	na						
Bank of America	2.6	na	2.8	na	na	na	na	na	3.5	3.4	3.3	3.3	na	na	na	na	na	na	na	na	1.8	5.0	3.3	3.1						
Barclays	2.6	5.8	na	na	na	na	na	na	3.0	3.0	2.8	3.0	na	na	na	na	na	na	na	na	2.5	2.4	1.8	2.2						
Goldman Sachs & Co.	2.6	na	na	na	2.5	na	na	3.2	3.3	3.3	3.4	na	na	na	na	na	na	na	na	na	1.5	4.0	2.7	3.3						
Loomis, Sayles & Company	2.6	5.8	2.6	2.6	2.9	H	3.2	H	3.2	3.2	3.3	3.4	3.5	4.7	5.6	4.6	5.4	114.6	na	2.3	3.5	4.0	3.9							
NatWest Markets	2.6	5.6	na	2.7	2.9	H	3.0	3.1	2.8	2.6	2.5	2.5	4.3	5.2	3.5	4.3	L	na	2.0	4.5	2.0	3.1								
TS Lombard	2.6	5.7	2.6	2.6	2.9	H	2.9	3.1	3.2	3.9	3.5	3.6	4.4	5.2	3.5	5.3	118.0	H	3.0	4.0	4.0	4.0								
ACIMA Private Wealth	2.5	4.5	L	2.5	2.6	2.6	2.5	2.4	2.3	2.3	L	2.0	L	2.1	L	3.7	L	5.3	1.0	L	4.5	118.0	H	0.5	L	3.0	3.3	2.0		
BMO Capital Markets	2.5	5.6	2.4	na	2.4	2.7	2.8	2.9	3.1	3.1	3.3	na	na	na	na	5.5	113.8	na	1.9	3.6	3.7	3.5								
Chan Economics	2.5	5.5	2.5	2.5	2.7	3.2	H	3.7	4.3	4.4	4.5	4.6	5.4	6.2	5.3	6.7	115.0	na	3.0	4.0	4.5	4.4								
J.P. Morgan Chase	2.5	na	na	na	na	na	na	2.8	2.9	2.8	2.8	na	na	na	na	na	na	na	na	na	2.0	2.1	2.5	2.2						
MacroFin Analytics & Rutgers Bus School	2.5	5.4	2.4	2.6	2.6	2.8	3.3	3.9	4.1	4.2	4.5	5.7	6.5	5.1	6.2	115.8	na	2.5	2.7	3.2	2.9									
Swiss Re	2.5	5.6	na	2.5	2.4	2.5	2.6	2.8	2.8	2.8	3.0	4.4	5.1	na	5.1	113.7	na	2.8	4.8	2.3	2.6									
Via Nova Investment Mgt.	2.5	5.8	2.5	2.6	2.7	3.2	H	3.9	H	4.4	H	4.6	H	4.7	H	4.8	H	6.1	H	6.7	H	5.7	H	7.1	H	115.0	2.7	3.5	3.3	3.0
Action Economics	2.4	5.5	2.0	2.4	2.4	2.4	2.5	2.7	3.0	3.1	3.2	4.1	5.1	3.0	5.6	115.7	na	3.4	3.3	2.5	2.3									
Bank of the West	2.4	5.5	2.2	2.4	2.3	2.6	2.9	3.3	3.4	3.3	3.3	4.6	5.5	4.5	5.6	115.9	na	1.8	3.5	4.7	4.2									
Chmura Economics & Analytics	2.4	5.5	2.4	2.4	2.4	2.7	3.1	3.5	3.4	3.6	3.8	4.8	na	na	5.8	109.7	na	1.4	6.4	H	7.1	H	5.1							
Daiwa Capital Markets America	2.4	5.6	1.9	2.0	2.6	3.0	3.4	3.9	4.0	4.1	4.2	5.7	6.7	H	na	6.6	115.0	na	1.3	3.9	4.0	3.8								
DePrince & Assoc.	2.4	5.5	2.2	2.5	2.5	2.8	3.3	3.6	3.5	3.5	3.5	4.9	5.7	4.1	5.6	113.3	na	2.6	3.6	3.7	3.4									
Economist Intelligence Unit	2.4	5.5	na	2.3	2.5	3.0	3.6	4.0	4.0	4.0	4.2	na	na	na	5.5	na	na	1.4	na	3.7	na									
Oxford Economics	2.4	5.5	2.3	na	2.5	2.6	3.0	3.3	3.3	3.2	3.3	3.8	na	na	5.8	111.8	na	1.8	1.7	1.4	1.5									
Amherst Pierpont Securities	2.3	5.5	2.3	2.4	2.5	2.8	3.1	3.2	3.5	3.5	3.7	4.8	5.9	3.9	5.8	115.0	na	3.7	H	4.5	3.8	3.4								
Comerica Bank	2.3	5.4	na	na	2.4	2.6	2.8	3.0	3.1	3.1	3.3	4.3	5.3	na	5.4	na	na	2.4	3.8	5.6	5.3	H								
Fannie Mae	2.3	5.5	na	na	2.3	2.5	2.7	2.9	2.9	2.8	3.0	na	na	na	4.9	na	na	2.0	3.1	3.2	3.2									
PNC Financial Services Corp.	2.3	5.5	2.3	na	2.3	2.5	2.7	2.9	3.0	3.0	3.1	na	5.0	3.4	5.2	109.3	L	1.8	3.7	3.0	3.1									
S&P Global Market Intelligence	2.3	5.5	2.3	na	2.0	2.2	2.7	3.0	3.1	3.0	3.1	na	na	na	5.3	na	na	2.4	2.9	3.0	2.8									
The Northern Trust Company	2.3	5.5	2.3	2.4	2.4	2.7	3.0	3.3	3.4	3.4	3.9	4.9	5.8	4.9	5.3	110.5	na	2.5	3.6	3.1	3.1									
GLC Financial Economics	2.2	5.3	2.0	2.0	2.1	2.2	2.6	3.1	3.1	3.1	3.3	4.4	5.5	3.8	5.2	111.5	na	2.4	3.7	2.5	2.6									
Societe Generale	2.2	5.4	2.2	na	2.4	2.5	2.5	2.6	2.7	2.8	3.1	na	na	na	na	na	na	1.3	3.2	4.1	3.8									
Thru the Cycle	2.2	5.3	2.1	2.3	2.2	2.5	2.4	2.4	2.7	2.7	2.9	4.1	4.8	L	3.8	4.8	115.6	na	2.1	3.4	5.3	4.9								
Grant Thornton/Diane Swonk	2.1	5.3	2.1	1.1	L	1.1	L	2.2	2.3	2.6	2.9	3.2	3.4	4.4	5.3	na	6.1	na	1.2	2.6	1.4	2.1								
Moodys Analytics	2.1	5.2	2.0	2.1	2.0	2.1	2.6	2.8	3.1	3.2	3.4	4.7	5.7	3.7	5.2	na	na	2.7	3.5	2.6	2.6									
Regions Financial Corporation	2.1	5.2	1.8	2.0	2.0	2.2	2.3	2.9	3.0	3.0	3.1	4.5	5.4	3.9	5.4	114.8	na	2.5	3.8	4.5	4.1									
Georgia State University	2.0	5.2	na	na	1.9	2.0	2.7	3.3	3.6	3.6	3.7	5.0	6.0	na	5.5	na	na	1.4	3.4	4.0	2.6									
Mizuho Research Institute	1.9	na	na	na	na	na	na	na	na	2.9	na	na	na	na	na	na	na	na	na	na	na	na								
S&P Global Ratings	1.5	L	4.6	1.5	L	na	1.5	1.5	L	1.6	L	1.9	L	2.3	L	2.5	2.7	na	na	na	na	na	na							
<b>June Consensus</b>	<b>2.4</b>	<b>5.5</b>	<b>2.3</b>	<b>2.4</b>	<b>2.4</b>	<b>2.6</b>	<b>2.9</b>	<b>3.1</b>	<b>3.2</b>	<b>3.2</b>	<b>3.4</b>	<b>4.7</b>	<b>5.6</b>	<b>4.0</b>	<b>5.5</b>	<b>114.1</b>	<b>2.2</b>	<b>3.5</b>	<b>3.4</b>	<b>3.2</b>										
Top 10 Avg.	2.7	5.8	2.6	2.6	2.8	3.0	3.4	3.8	3.9	3.9	4.1	5.2	6.1	4.6	6.1	115.9	na	3.0	4.5	4.8	4.4									
Bottom 10 Avg.	2.1	5.1	2.0	2.1	1.9	2.2	2.4	2.6	2.7	2.6	2.8	4.2	5.2	3.4	4.9	112.3	na	1.4	2.4	2.0	2.1									
May Consensus	2.2	5.2	2.1	2.1	2.2	2.4	2.7	3.0	3.1	3.1	3.2	4.4	5.3	3.8	5.2	111.7	na	2.4	3.4	3.4	3.2									
<b>Number of Forecasts Changed From A Month Ago:</b>																														
Down	1	3	2	1	4	3	3	5	5	5	4	2	2	1	3	2	21	4	9	9										
Same	12	8	7	6	9	9	8	12	9	12	9	4	5	5	5	1	9	10	11	9										
Up	27	23	19	15	20	19	21	21	23	22	24	18	16	12	22	16	9	22	18	18										
Diffusion Index	83%	79%	80%	82%	74%	76%	78%	71%	74%	72%	77%	83%	80%	81%	82%	87%	35%	75%	62%	63%										



# First Quarter 2023

## Interest Rate Forecasts

## Key Assumptions

Blue Chip Financial Forecasts Panel Members	Percent Per Annum -- Average For Quarter															Avg. For ---Qtr--- A. Fed's Adv Fgn Econ \$ Index	(Q-Q % Change) ---(SAAR)---											
	Short-Term					Intermediate-Term					Long-Term						B. Real GDP	C. Price Index	D. Cons. Price Index	E. PCE Price Index								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15													
	Federal Funds Rate	Prime Bank Rate	SOFR Rate	Com. Paper 1-Mo.	Treas. Bills 3-Mo.	Treas. Bills 6-Mo.	Treas. Bills 1-Yr.	Treas. Notes 2-Yr.	Treas. Notes 5-Yr.	Treas. Notes 10-Yr.	Treas. Bonds 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Local Bonds	Home Mtg. Rate													
TS Lombard	4.3	H	7.4	H	4.2	H	4.2	H	4.3	H	4.0	4.5	3.8	3.9	4.7	5.5	3.8	5.6	120.0	H	2.5	3.8	3.8	3.8				
Nomura Securities, Inc.	3.4		6.5		na		na		na		na		na		na		na		na		1.0	2.5	3.6	2.8				
Wells Fargo	3.3		6.3		3.0		3.2		3.3		3.4		3.5		3.4		3.6		3.4		2.3	3.7	2.2	2.7				
Bank of America	3.1		na		3.0		na		na		na		3.3		3.1		3.1		3.1		1.5	4.7	2.9	2.7				
BNP Paribas Americas	3.1		na		na		na		na		na		2.8		na		2.7		2.8		1.6	na	2.6	na				
ING	3.1		na		3.2		na		na		na		3.0		2.9		2.8		3.0		1.6	na	na	na				
Loomis, Sayles & Company	3.1		6.3		3.1		3.2		3.5		3.7		3.5		3.2		3.3		3.3		114.6	2.2	3.6	3.6	3.5			
Economist Intelligence Unit	3.0		6.1		na		2.9		3.1		3.6		4.2	H	4.5		4.4		4.4		1.3	na	3.6	na				
J.P. Morgan Chase	3.0		na		na		na		na		na		3.0		3.0		2.9		2.9		1.8	2.2	2.9	2.5				
MacroFin Analytics & Rutgers Bus School	3.0		5.9		2.9		3.2		3.1		3.3		3.8		4.4		4.7		4.8		116.0	2.0	2.3	2.2	2.2			
Scotiabank Group	3.0		6.0		2.8		na		2.8		na		3.0		3.1		3.1		3.2		3.1	H	3.9	3.9	3.0			
Barclays	2.9		6.0		na		na		na		na		3.0		2.9		2.8		3.0		2.0	2.3	2.1	2.0				
Chan Economics	2.9		5.9		2.9		2.9		3.1		3.6		4.1		4.7	H	4.8	H	4.9	H	114.9	2.5	3.7	4.4	4.1			
Daiwa Capital Markets America	2.9		6.1		2.2		2.3		3.1		3.4		3.8		4.3		4.3		4.3		116.0	1.1	3.5	3.5	3.3			
Goldman Sachs & Co.	2.9		na		na		na		2.8		na		3.3		3.2		3.2		3.3		1.3	3.6	3.0	3.0				
NatWest Markets	2.9		5.9		na		3.0		3.1		3.2		3.3		2.8		2.6		2.5		1.8	4.0	2.3	3.3				
Amherst Pierpont Securities	2.8		6.0		2.8		2.9		3.0		3.2		3.5		3.7		3.8		4.0		115.5	2.9	4.1	3.4	3.1			
Bank of the West	2.8		5.9		2.7		2.8		2.7		3.0		3.1		3.7		3.7		3.6		115.3	1.6	2.9	3.4	3.2			
Chmura Economics & Analytics	2.8		5.9		2.8		2.9		2.8		3.0		3.2		3.6		3.5		3.6		109.3	2.3	5.6	H	6.5	H	4.9	H
DePrince & Assoc.	2.8		5.9		2.6		2.8		2.9		3.1		3.5		3.8		3.6		3.6		113.8	2.3	3.3	3.4	3.2			
Fannie Mae	2.8		6.0		na		na		2.6		2.7		2.9		2.9		2.8		3.0		na	1.0	3.0	2.7	2.6			
Oxford Economics	2.8		5.9		2.8		na		2.9		3.0		3.1		3.3		3.3		3.3		110.5	1.7	1.8	1.2	1.2	L		
PNC Financial Services Corp.	2.8		6.0		2.8		na		2.7		2.8		2.9		3.0		3.0		3.0		108.9	L	1.6	3.2	2.5	2.6		
S&P Global Market Intelligence	2.8		6.0		2.8		na		2.4		2.5		3.0		3.2		3.1		3.1		na	2.2	2.8	2.7	2.5			
The Northern Trust Company	2.8		6.0		2.8		2.9		2.8		3.0		3.2		3.4		3.5		3.5		110.0	2.1	3.2	2.7	2.8			
Via Nova Investment Mgt.	2.8		6.1		2.8		2.9		2.9		3.2		4.0		4.5		4.7		4.7		114.0	2.5	3.0	3.0	2.7			
BMO Capital Markets	2.7		5.8		2.7		na		2.7		2.8		2.9		3.0		3.1		3.2		113.3	1.4	3.1	3.4	3.2			
Comerica Bank	2.7		5.8		na		na		2.8		2.8		2.9		3.0		3.0		2.9		na	1.4	3.5	3.6	3.9			
Action Economics	2.6		5.8		2.5		2.7		2.5		2.5		2.6		2.7		3.0		3.1		115.8	2.8	2.2	2.5	2.2			
Grant Thornton/Diane Swonk	2.6		5.8		2.6		1.3	L	1.3	L	2.4		2.4		2.6		2.9		3.3		na	0.7	3.0	3.1	2.6			
Swiss Re	2.6		5.8		na		2.7		2.5		2.6		2.6		2.7		2.7		2.8		112.9	0.5	3.8	2.2	2.3			
ACIMA Private Wealth	2.5		4.5	L	2.5		2.6		2.6		2.5		2.3		2.0	L	2.0	L	1.8	L	117.0	-2.0	L	1.0	L	0.8	L	1.8
Moody's Analytics	2.5		5.7		2.5		2.5		2.3		2.4		2.7		2.9		3.1		3.2		na	2.8	2.6	2.2	2.2			
Regions Financial Corporation	2.5		5.7		2.0	L	2.4		2.2		2.5		2.5		3.0		3.1		3.1		114.8	2.2	3.1	3.6	3.4			
Societe Generale	2.5		5.7		2.5		na		2.5		2.5		2.4		2.6		2.7		2.8		na	1.3	3.0	3.5	3.2			
Georgia State University	2.4		5.5		na		na		2.3		2.3		3.0		3.2		3.7		3.7		na	1.6	3.3	3.5	2.5			
GLC Financial Economics	2.4		5.5		2.2		2.3		2.4		2.4		2.6		3.2		3.4		3.4		111.6	2.9	2.9	2.9	2.2			
Mizuho Research Institute	2.4		na		na		na		na		na		na		na		na		na		na	na	na	na	na			
Thru the Cycle	2.4		5.5		2.3		2.5		2.4		2.6		2.5		2.4		2.6		2.7		116.4	1.9	3.0	3.2	3.2			
S&P Global Ratings	2.1	L	5.2		2.1		na		2.1	L	2.2	L	2.3		2.6		2.7		2.7		na	2.1	1.5	1.8	1.6			
<b>June Consensus</b>	<b>2.8</b>		<b>5.9</b>		<b>2.7</b>		<b>2.8</b>		<b>2.7</b>		<b>2.9</b>		<b>3.1</b>		<b>3.2</b>		<b>3.3</b>		<b>3.3</b>		<b>114.0</b>	<b>1.8</b>	<b>3.1</b>	<b>3.0</b>	<b>2.8</b>			
Top 10 Avg.	3.2		6.3		3.1		3.1		3.3		3.5		3.8		4.1		4.2		4.2		116.2	2.7	4.1	4.0	3.7			
Bottom 10 Avg.	2.4		5.5		2.3		2.4		2.2		2.4		2.5		2.6		2.7		2.6		111.9	0.8	2.1	2.0	2.0			
May Consensus	2.6		5.6		2.5		2.6		2.6		2.8		3.0		3.2		3.3		3.3		111.5	2.3	3.0	3.0	2.8			
Number of Forecasts Changed From A Month Ago:																												
Down	2		3		3		2		4		5		3		5		6		6		2	27	6	10	11			
Same	12		9		7		7		9		7		8		11		8		12		1	7	13	15	12			
Up	26		22		17		13		20		19		21		21		22		20		16	5	17	13	13			
Diffusion Index	80%		78%		76%		75%		74%		73%		78%		72%		72%		68%		87%	22%	65%	54%	53%			





International Interest Rate And Foreign Exchange Rate Forecasts

Blue Chip Forecasters	Fed Fund Target Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	2.13	2.63	--
BMO Capital Markets	1.88	2.38	2.88
ING Financial Markets	1.88	2.88	3.13
Mizuho Research Institute	1.88	1.88	2.88
Moody's Analytics	0.80	1.62	2.55
Northern Trust	1.88	2.38	2.88
Oxford Economics	1.88	2.38	3.13
S&P Global Market Intelligence	--	--	--
Scotiabank	2.50	3.00	3.00
TS Lombard	2.00	2.63	4.50
Wells Fargo	2.00	2.75	3.75
<b>June Consensus</b>	<b>1.88</b>	<b>2.45</b>	<b>3.19</b>
High	2.50	3.00	4.50
Low	0.80	1.62	2.55
Last Months Avg.	1.49	2.03	2.88

Blue Chip Forecasters	Policy-Rate Balance Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	-0.10	-0.10	--
BMO Capital Markets	-0.10	-0.10	-0.10
ING Financial Markets	-0.10	-0.10	-0.10
Mizuho Research Institute	-0.10	-0.10	-0.10
Moody's Analytics	-0.10	-0.10	-0.10
Nomura Securities	--	--	--
Northern Trust	-0.10	-0.10	-0.10
Oxford Economics	-0.03	-0.04	-0.05
S&P Global Market Intelligence	--	--	--
Scotiabank	-0.10	-0.10	-0.10
TS Lombard	-0.10	0.20	0.50
Wells Fargo	-0.10	-0.10	-0.10
<b>June Consensus</b>	<b>-0.09</b>	<b>-0.06</b>	<b>-0.03</b>
High	-0.03	0.20	0.50
Low	-0.10	-0.10	-0.10
Last Months Avg.	-0.09	-0.06	-0.03

Blue Chip Forecasters	Official Bank Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	1.25	1.50	--
BMO Capital Markets	1.50	1.75	2.25
ING Financial Markets	1.50	1.50	1.50
Moody's Analytics	0.91	1.16	1.50
Nomura Securities	--	--	--
Northern Trust	1.25	1.25	1.25
Oxford Economics	1.42	1.50	1.50
S&P Global Market Intelligence	--	--	--
Scotiabank	1.25	1.25	1.50
TS Lombard	1.00	1.63	3.50
Wells Fargo	1.25	1.50	1.75
<b>June Consensus</b>	<b>1.26</b>	<b>1.45</b>	<b>1.84</b>
High	1.50	1.75	3.50
Low	0.91	1.16	1.25
Last Months Avg.	1.05	1.27	1.58

Blue Chip Forecasters	SNB Policy Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	-0.75	-0.75	--
ING Financial Markets	-0.50	-0.25	0.00
Moody's Analytics	-0.75	-0.75	-0.75
Nomura Securities	--	--	--
Northern Trust	-0.75	-0.50	0.25
Oxford Economics	-0.63	-0.38	-0.13
S&P Global Market Intelligence	--	--	--
Scotiabank	--	--	--
TS Lombard	-0.75	-0.75	-0.25
<b>June Consensus</b>	<b>-0.69</b>	<b>-0.56</b>	<b>-0.18</b>
High	-0.50	-0.25	0.25
Low	-0.75	-0.75	-0.75
Last Months Avg.	-0.75	-0.75	-0.53

Blue Chip Forecasters	O/N MMkt Financing Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	2.00	2.50	--
BMO Capital Markets	2.00	2.25	2.75
ING Financial Markets	2.50	3.00	3.50
Moody's Analytics	1.13	1.78	2.50
Nomura Securities	--	--	--
Northern Trust	2.00	2.50	3.00
Oxford Economics	1.63	1.75	2.00
S&P Global Market Intelligence	--	--	--
Scotiabank	2.50	3.00	3.00
TS Lombard	2.25	2.88	4.75
Wells Fargo	--	--	--
<b>June Consensus</b>	<b>2.00</b>	<b>2.46</b>	<b>3.07</b>
High	2.50	3.00	4.75
Low	1.13	1.75	2.00
Last Months Avg.	1.49	2.02	2.61

United States			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
2.85	2.75	--	
3.05	3.10	3.20	
3.25	3.00	2.50	
2.75	2.85	2.95	
2.96	3.05	3.19	
3.20	3.40	3.50	
3.15	3.23	3.20	
2.96	2.97	3.07	
3.05	3.10	3.20	
3.50	3.50	3.80	
3.20	3.35	3.25	
<b>3.08</b>	<b>3.12</b>	<b>3.19</b>	
3.50	3.50	3.80	
2.75	2.75	2.50	
2.80	2.89	2.99	

Japan			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
0.40	0.40	--	
0.25	0.25	0.30	
0.20	0.20	0.20	
0.25	0.25	0.25	
0.24	0.23	0.20	
--	--	--	
0.25	0.25	0.25	
0.21	0.18	0.08	
--	--	--	
--	--	--	
0.25	0.35	0.45	
0.25	0.25	0.25	
<b>0.26</b>	<b>0.26</b>	<b>0.25</b>	
0.40	0.40	0.45	
0.20	0.18	0.08	
0.24	0.24	0.24	

United Kingdom			
10 Yr. Gilt Yields %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.90	1.90	--	
2.25	2.60	2.70	
1.90	1.80	1.70	
1.95	2.14	2.44	
--	--	--	
1.95	2.05	2.15	
1.88	1.94	2.03	
--	--	--	
--	--	--	
1.50	3.10	3.40	
1.95	2.00	2.05	
<b>1.91</b>	<b>2.19</b>	<b>2.35</b>	
2.25	3.10	3.40	
1.50	1.80	1.70	
1.80	2.08	2.22	

Switzerland			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
--	--	--	
1.05	1.05	0.95	
0.90	1.07	1.35	
--	--	--	
0.75	0.80	0.90	
0.92	0.96	1.04	
--	--	--	
--	--	--	
0.67	1.19	1.49	
<b>0.86</b>	<b>1.01</b>	<b>1.15</b>	
1.05	1.19	1.49	
0.67	0.80	0.90	
0.63	0.73	0.89	

Canada			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
--	--	--	
3.05	3.10	3.15	
3.25	3.40	3.00	
2.87	3.01	3.27	
--	--	--	
2.95	3.10	3.25	
3.05	3.12	3.14	
--	--	--	
2.95	3.10	3.20	
3.60	3.60	3.90	
3.20	3.25	3.30	
<b>3.12</b>	<b>3.21</b>	<b>3.28</b>	
3.60	3.60	3.90	
2.87	3.01	3.00	
2.72	2.85	2.94	

Fed's AFE \$ Index		
In 3 Mo.	In 6 Mo.	In 12 Mo.
--	--	--
114.3	113.8	112.9
114.6	112.3	109.7
--	--	--
112.0	111.0	110.0
112.9	111.8	109.5
--	--	--
--	--	--
116.0	118.0	120.0
--	--	--
<b>114.0</b>	<b>113.4</b>	<b>112.4</b>
116.0	118.0	120.0
112.0	111.0	109.5
109.8	109.2	108.0

Yen per US\$		
In 3 Mo.	In 6 Mo.	In 12 Mo.
118.0	116.0	--
131.0	132.0	131.0
130.0	128.0	126.0
126.0	127.0	127.0
126.5	124.5	120.9
123.0	120.0	118.0
126.0	124.0	123.0
126.2	124.1	118.5
134.6	135.2	132.2
130.0	125.0	120.0
125.0	120.0	110.0
--	--	--
<b>126.9</b>	<b>125.1</b>	<b>122.7</b>
134.6	135.2	132.2
118.0	116.0	110.0
124.3	124.2	122.2

US\$ per Pound Sterling		
In 3 Mo.	In 6 Mo.	In 12 Mo.
1.35	1.39	--
1.24	1.25	1.26
1.24	1.26	1.29
1.28	1.31	1.41
1.31	1.34	1.45
1.25	1.26	1.27
1.26	1.28	1.32
1.21	1.21	1.23
1.24	1.25	1.27
1.22	1.15	1.10
--	--	--
<b>1.26</b>	<b>1.27</b>	<b>1.29</b>
1.35	1.39	1.45
1.21	1.15	1.10
1.30	1.30	1.31

CHF per US\$		
In 3 Mo.	In 6 Mo.	In 12 Mo.
0.94	0.92	--
1.00	1.00	0.99
0.96	0.93	0.84
0.94	0.92	0.92
0.95	0.93	0.92
0.97	0.95	0.94
0.99	0.98	0.97
0.97	0.95	0.96
0.92	0.92	0.92
<b>0.96</b>	<b>0.94</b>	<b>0.93</b>
1.00	1.00	0.99
0.92	0.92	0.84
0.93	0.93	0.92

C\$ per US\$		
In 3 Mo.	In 6 Mo.	In 12 Mo.
1.24	1.23	--
1.26	1.24	1.24
1.24	1.22	1.21
1.27	1.25	1.22
1.26	1.26	1.25
1.27	1.26	1.25
1.28	1.29	1.30
1.21	1.21	1.22
1.20	1.20	1.22
1.26	1.26	1.26
--	--	--
<b>1.25</b>	<b>1.24</b>	<b>1.24</b>
1.28	1.29	1.30
1.20	1.20	1.21
1.25	1.24	1.24

## International Interest Rate And Foreign Exchange Rate Forecasts

Blue Chip Forecasters	Official Cash Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	1.50	1.75	--
ING Financial Markets	1.10	1.60	2.50
Moody's Analytics	0.43	0.75	1.50
Nomura Securities	--	--	--
Northern Trust	1.25	1.50	2.00
Oxford Economics	0.85	1.23	1.73
S&P Global Market Intelligence	--	--	--
Scotiabank	0.50	0.75	1.50
TS Lombard	0.10	0.35	0.65
<b>June Consensus</b>	<b>0.82</b>	<b>1.13</b>	<b>1.65</b>
High	1.50	1.75	2.50
Low	0.10	0.35	0.65
Last Months Avg.	0.18	0.52	1.03

Australia		
10 Yr. Gov't Bond Yield %		
In 3 Mo.	In 6 Mo.	In 12 Mo.
--	--	--
3.80	4.00	3.80
2.99	2.93	3.39
--	--	--
3.35	3.45	3.55
3.38	3.41	3.39
--	--	--
--	--	--
2.84	3.85	4.15
<b>3.27</b>	<b>3.53</b>	<b>3.66</b>
3.80	4.00	4.15
2.84	2.93	3.39
2.86	3.11	3.30

US\$ per A\$		
In 3 Mo.	In 6 Mo.	In 12 Mo.
0.74	0.76	--
0.70	0.72	0.74
0.72	0.71	0.72
0.73	0.74	0.75
0.71	0.70	0.69
0.73	0.73	0.75
0.71	0.71	0.66
0.72	0.74	0.74
0.75	0.70	0.65
<b>0.72</b>	<b>0.72</b>	<b>0.71</b>
0.75	0.76	0.75
0.70	0.70	0.65
0.74	0.74	0.73

Blue Chip Forecasters	Main Refinancing Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	0.25	0.50	--
BMO Capital Markets	0.00	0.25	0.75
ING Financial Markets	0.25	0.50	0.75
Mizuho Research Institute	0.00	0.00	0.00
Moody's Analytics	0.00	0.06	0.56
Nomura Securities	--	--	--
Northern Trust	0.25	0.25	0.25
Oxford Economics	0.06	0.31	0.50
S&P Global Market Intelligence	--	--	--
Scotiabank	0.00	0.00	0.50
TS Lombard	0.00	0.25	0.50
Wells Fargo	-0.25	0.00	0.50
<b>June Consensus</b>	<b>0.06</b>	<b>0.21</b>	<b>0.48</b>
High	0.25	0.50	0.75
Low	-0.25	0.00	0.00
Last Months Avg.	-0.06	0.01	0.27

## Euro area

US\$ per Euro		
In 3 Mo.	In 6 Mo.	In 12 Mo.
1.12	1.15	--
1.06	1.06	1.08
1.05	1.08	1.12
1.08	1.10	1.10
1.07	1.08	1.17
1.10	1.14	1.20
1.08	1.09	1.10
1.07	1.09	1.12
1.06	1.07	1.08
1.08	1.10	1.10
1.00	0.85	1.00
--	--	--
<b>1.07</b>	<b>1.07</b>	<b>1.11</b>
1.12	1.15	1.20
1.00	0.85	1.00
1.08	1.07	1.11

Blue Chip Forecasters	10 Yr. Gov't Bond Yields %											
	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.
Barclays	1.25	1.30	--	--	--	--	--	--	--	--	--	--
BMO Capital Markets	1.15	1.30	1.45	--	--	--	--	--	--	--	--	--
ING Financial Markets	1.20	1.20	1.10	1.65	1.60	1.40	2.95	2.70	2.10	1.80	1.80	1.70
Mizuho Research Institute	0.73	0.78	0.78	--	--	--	--	--	--	--	--	--
Moody's Analytics	1.02	1.20	1.51	1.52	1.65	1.86	2.88	3.04	3.04	1.93	2.24	2.48
Northern Trust	1.00	1.10	1.20	1.55	1.65	1.75	3.00	3.10	3.20	2.20	2.30	2.40
Oxford Economics	1.03	1.09	1.21	1.51	1.54	1.59	3.08	3.12	3.18	2.09	2.17	2.30
TS Lombard	1.80	1.80	2.10	2.15	2.15	2.45	3.10	3.10	3.40	2.55	2.55	2.85
Wells Fargo	1.20	1.30	1.45	--	--	--	--	--	--	--	--	--
<b>June Consensus</b>	<b>1.15</b>	<b>1.23</b>	<b>1.35</b>	<b>1.68</b>	<b>1.72</b>	<b>1.81</b>	<b>3.00</b>	<b>3.01</b>	<b>2.98</b>	<b>2.11</b>	<b>2.21</b>	<b>2.35</b>
High	1.80	1.80	2.10	2.15	2.15	2.45	3.10	3.12	3.40	2.55	2.55	2.85
Low	0.73	0.78	0.78	1.51	1.54	1.40	2.88	2.70	2.10	1.80	1.80	1.70
Last Months Avg.	0.77	0.90	1.07	1.21	1.30	1.45	2.30	2.36	2.47	1.65	1.74	1.92

	Consensus Forecasts			
	10-year Bond Yields vs U.S. Yield			
	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-2.54	-2.83	-2.86	-2.94
United Kingdom	-0.88	-1.17	-0.93	-0.83
Switzerland	-2.09	-2.23	-2.10	-2.04
Canada	0.05	0.03	0.09	0.09
Australia	0.53	0.19	0.41	0.47
Germany	-1.84	-1.93	-1.89	-1.84
France	-1.31	-1.41	-1.40	-1.38
Italy	0.21	-0.08	-0.11	-0.20
Spain	-0.76	-0.97	-0.91	-0.84

	Consensus Forecasts			
	Policy Rates vs U.S. Target Rate			
	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-0.98	-1.98	-2.39	-3.22
United Kingdom	0.13	-0.62	-1.00	-1.35
Switzerland	-1.63	-2.57	-3.02	-3.36
Canada	0.13	0.12	0.00	-0.12
Australia	-0.53	-1.06	-1.32	-1.54
Euro area	-0.88	-1.83	-2.24	-2.71

## Special Questions:

1. How much do you expect the FFR to be increased in total:

in 2022 (incl the 75bps increase so far)?	<u>244 bps</u>
in 2023?	<u>55 bps</u>

2. a. What do you think is the neutral (long-run) Fed funds rate? 2.45%

b. When do you think the neutral FFR will be achieved?

<u>by the end 2022</u>	<u>by the end 2023</u>	<u>by the end 2024</u>	<u>by the end 2025</u>	<u>Later</u>
62%	24%	14%	0%	0%

3. a. Do you think that by removing monetary accommodation the US Fed will be successful in slowing inflation without precipitating a recession?

<u>Yes</u>	<u>No</u>
72%	28%

b. What probability do you attach to a US recession beginning in 2022? In 2023?

	<u>2022</u>	<u>2023</u>
<b>Consensus</b>	<b>25%</b>	<b>38%</b>
Top 10	40%	57%
Bot 10	11%	23%

4. In your view, which of the following factors poses the biggest risk to global financial stability at present:

A much more aggressive response from Central Banks to persistently high levels of inflation	44%
A further escalation of the conflict in Ukraine accompanied by even higher energy and food prices	19%
The discovery of another dangerous mutation of the COVID virus that is both more transmissible and more immune to existing vaccines	6%
More intense financial instability in emerging economies triggered by e.g. a sovereign debt default in Russia	3%
Growing alarm on outlook for global growth triggered by eg higher food+energy prices/ebbing purch power/tighter global fiscal policies	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**

### Beauty walks a razor's edge

The global economy continues to display impressive resilience in the face of large drags. This week's data releases from the US suggest that surging inflation is not derailing consumers, whose spending is expanding at a faster than 3%ar pace in the first two quarters of the year in response to boomy labor income gains and falling saving rates. In Europe, a modest rebound in activity is underway despite surging energy prices and concerns around the Russian war in Ukraine. On balance, the DM looks to be sustaining solid growth into May according to this week's flash PMIs. Together, DM demand gains are promoting resiliency across Asia in the face of a sharp downturn in China.

Although the global economy (outside China) is passing its 1H22 resilience test with flying colors, the anticipated reward for this achievement (a return to above-potential growth in 2H22) can no longer be forecasted confidently. The headwinds holding back growth are not fading as anticipated. Although April inflation delivered a much-needed moderation from the spike in March, global consumer prices still posted a large 0.6% gain last month. Moreover, near-term moderation looks less likely as energy prices have jumped over the past six weeks amid supply concerns related to a European embargo on Russian oil, the souring of chances for a deal with Iran, and the lack of a supply response from OPEC and US producers. At the same time, refining bottlenecks are boosting gasoline and diesel margins. In the US, the risk of \$6/gallon gasoline poses yet another potential body-blow to the US consumer.

Alongside the continued purchasing power squeeze, China's COVID drag is proving to be deeper and more persistent. We revised down current-quarter GDP growth dramatically this week to -5.4%ar and look for only a partial rebound in 2H22 given the government's continued adherence to its zero-COVID policy. The risks of a meaningful negative spillover to growth elsewhere are increasing. We estimate that the China shock could shave 0.6% off the level of GDP outside China. Finally, the additional tightening in US financial conditions over the past month has been a surprise, and there are now clear signs that this will produce a contraction in residential investment.

Recession risks remain low as a result of the health of the private sector that has delivered 1H22 resiliency. Next week's US labor market report should support this point; we expect jobs to rise 375k. But this week's US data also highlight the cost of this resiliency to the underlying fundamentals. Corporate profits are reported to have contracted last quarter as pricing power did not keep pace with surging labor costs and a tumble in productivity.

Meanwhile, 1H22 headwinds have driven the US saving rate to 4.4% in April (nearly 3%-pts below its pre-pandemic level). Saving rates are falling elsewhere across the DM. Excess saving remains considerable—as much as 10%-12% of household income. However, with saving rates now below pre-pandemic norms and wealth declining in response to equity and housing market cooling, it is unclear how much further households will be willing to reduce saving rates if inflation does not moderate as much as we anticipate. These risks are underscored by the sharp

drop in confidence of late suggesting household patience is running thin.

**Policy tensions and offsets.** In addition to the tension between resiliency and drags, there is a building tension in macro policy setting. Fiscal authorities are responding to high inflation with additional stimulus. This week, the UK announced new measures to support growth. Combining this with actions expected in China, we have added 0.7% to our global fiscal thrust estimate in recent months. However, rising fiscal supports contrast with the sharp tightening forecasted for central banks. This week's minutes from the recent Fed meeting reinforced the message of continued 50bp hikes at the coming meetings. Next week, we expect the BoC to follow with a 50bp hike for the second meeting in a row and we expect a third 50bp increase in July. Deputy Governor Gravelle noted recently “we are taking actions to normalize our policy rate quickly and are prepared to be as forceful as needed.” Similarly, we added a 50bp rate hike to our Riksbank forecast reflecting signals of higher and more broad-based underlying price pressure as well as elevated inflation expectations. Overall, our global policy rate forecast for end 2022 is up nearly 100bp since the start of the year.

However, it is important to note that central banks are not immune to growth risks. Although they are on the march, a part of our call for global resilience incorporates a judgment that DM central banks stay committed to sustaining the expansion. We see them being sensitive to signs of slowing growth—underscored by our forecast that the Fed returns to a 25bp tightening pace as US growth slows to 2%ar by 4Q22. A counterpoint to this call for sensitivity, however, came this week from a hawkish RBNZ that boosted its terminal rate forecast to nearly 4% (well above neutral) despite already-weaker activity and housing data.

**Risks to rebound from China slump.** A deeper slowdown in April activity has led us to revise down forecasts of current-quarter growth in China to -5.4%q/q, saar (1.5%o/a and full-year growth to 3.7%yoy). Despite the downgrade, our GDP Nowcaster is tracking a contraction of 10.1%ar this quarter. New COVID infections are moderating and this should set up a strong bounce back starting in May and June as the economy reopens. The high-frequency indicators show modest improvement in passenger and freight flows in May, though economic activity was still weak. The PMI readings to be released next week will provide the first signal of whether the Omicron drag has started to fade. We expect May activity will be only marginally better than April's, and a more meaningful recovery will take place in June. Hence, we look for next week's NBS manufacturing PMI to improve to 48.5, compared to 47.4 in May. However, risks are skewed to the downside as improvement could be short-circuited by a resurgence in cases as the economy reopens. Importantly, policy continues to ramp up. This week, the State Council announced policy measures to support growth, adding as much as another 1.5%-pts to annual fiscal thrust. However, the actual impact could be more muted given the countervailing policies around zero-COVID.

# Long-Range Survey:

The table below contains the results of our twice-annual long-range CONSENSUS survey. There are also Top 10 and Bottom 10 averages for each variable. Shown are consensus estimates for the years 2023 through 2028 and averages for the five-year periods 2024-2028 and 2029-2033. Apply these projections cautiously. Few if any economic, demographic and political forces can be evaluated accurately over such long time spans.

		----- Average For The Year -----						Five-Year Averages	
		2023	2024	2025	2026	2027	2028	2024-2028	2029-2033
1. Federal Funds Rate	<b>CONSENSUS</b>	<b>3.0</b>	<b>2.7</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.6</b>	<b>2.5</b>
	Top 10 Average	3.5	3.3	3.0	2.8	2.8	2.8	3.0	2.8
	Bottom 10 Average	2.6	2.1	2.0	2.2	2.2	2.2	2.2	2.1
2. Prime Rate	<b>CONSENSUS</b>	<b>6.1</b>	<b>5.9</b>	<b>5.7</b>	<b>5.6</b>	<b>5.6</b>	<b>5.6</b>	<b>5.7</b>	<b>5.6</b>
	Top 10 Average	6.6	6.4	6.1	6.0	6.0	6.0	6.1	5.9
	Bottom 10 Average	5.6	5.3	5.2	5.3	5.3	5.3	5.3	5.2
3. SOFR	<b>CONSENSUS</b>	<b>3.0</b>	<b>2.8</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.6</b>	<b>2.5</b>
	Top 10 Average	3.4	3.3	3.0	2.9	2.8	2.8	3.0	2.8
	Bottom 10 Average	2.7	2.2	2.0	2.2	2.2	2.2	2.2	2.1
4. Commercial Paper, 1-Mo	<b>CONSENSUS</b>	<b>3.2</b>	<b>2.9</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.7</b>	<b>2.6</b>
	Top 10 Average	3.5	3.4	3.1	2.9	2.9	2.9	3.0	2.9
	Bottom 10 Average	2.8	2.5	2.3	2.4	2.4	2.3	2.3	2.3
5. Treasury Bill Yield, 3-Mo	<b>CONSENSUS</b>	<b>3.0</b>	<b>2.8</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.5</b>	<b>2.6</b>	<b>2.5</b>
	Top 10 Average	3.6	3.4	3.1	3.1	3.0	2.9	3.1	2.9
	Bottom 10 Average	2.5	2.2	2.0	2.1	2.2	2.2	2.1	2.2
6. Treasury Bill Yield, 6-Mo	<b>CONSENSUS</b>	<b>3.2</b>	<b>2.9</b>	<b>2.7</b>	<b>2.7</b>	<b>2.7</b>	<b>2.6</b>	<b>2.7</b>	<b>2.6</b>
	Top 10 Average	3.8	3.6	3.2	3.2	3.1	3.0	3.2	3.0
	Bottom 10 Average	2.6	2.2	2.1	2.2	2.3	2.3	2.2	2.3
7. Treasury Bill Yield, 1-Yr	<b>CONSENSUS</b>	<b>3.2</b>	<b>3.0</b>	<b>2.9</b>	<b>2.9</b>	<b>2.8</b>	<b>2.8</b>	<b>2.9</b>	<b>2.8</b>
	Top 10 Average	3.9	3.8	3.5	3.4	3.3	3.2	3.4	3.2
	Bottom 10 Average	2.6	2.4	2.2	2.4	2.4	2.4	2.3	2.4
8. Treasury Note Yield, 2-Yr	<b>CONSENSUS</b>	<b>3.4</b>	<b>3.2</b>	<b>3.1</b>	<b>3.1</b>	<b>3.0</b>	<b>3.0</b>	<b>3.1</b>	<b>3.0</b>
	Top 10 Average	4.3	4.1	3.8	3.6	3.5	3.5	3.7	3.5
	Bottom 10 Average	2.7	2.4	2.3	2.5	2.6	2.5	2.4	2.5
9. Treasury Note Yield, 5-Yr	<b>CONSENSUS</b>	<b>3.5</b>	<b>3.4</b>	<b>3.3</b>	<b>3.3</b>	<b>3.3</b>	<b>3.2</b>	<b>3.3</b>	<b>3.3</b>
	Top 10 Average	4.3	4.2	4.1	3.9	3.8	3.8	3.9	3.8
	Bottom 10 Average	2.8	2.6	2.5	2.7	2.7	2.7	2.6	2.8
10. Treasury Note Yield, 10-Yr	<b>CONSENSUS</b>	<b>3.5</b>	<b>3.5</b>	<b>3.4</b>	<b>3.5</b>	<b>3.5</b>	<b>3.4</b>	<b>3.5</b>	<b>3.5</b>
	Top 10 Average	4.4	4.4	4.2	4.2	4.1	4.1	4.2	4.1
	Bottom 10 Average	2.8	2.5	2.6	2.9	2.9	2.8	2.7	2.8
11. Treasury Bond Yield, 30-Yr	<b>CONSENSUS</b>	<b>3.8</b>	<b>3.8</b>	<b>3.8</b>	<b>3.9</b>	<b>3.8</b>	<b>3.8</b>	<b>3.8</b>	<b>3.9</b>
	Top 10 Average	4.6	4.7	4.5	4.5	4.4	4.5	4.5	4.5
	Bottom 10 Average	3.0	2.9	3.0	3.3	3.2	3.2	3.1	3.2
12. Corporate Aaa Bond Yield	<b>CONSENSUS</b>	<b>5.0</b>	<b>5.0</b>	<b>4.9</b>	<b>5.0</b>	<b>5.0</b>	<b>4.9</b>	<b>4.9</b>	<b>5.0</b>
	Top 10 Average	5.7	5.7	5.6	5.5	5.5	5.5	5.5	5.6
	Bottom 10 Average	4.4	4.2	4.3	4.4	4.4	4.4	4.3	4.4
13. Corporate Baa Bond Yield	<b>CONSENSUS</b>	<b>6.0</b>	<b>5.9</b>	<b>5.8</b>	<b>5.9</b>	<b>5.9</b>	<b>5.9</b>	<b>5.9</b>	<b>5.9</b>
	Top 10 Average	6.6	6.6	6.4	6.3	6.3	6.3	6.4	6.4
	Bottom 10 Average	5.4	5.3	5.2	5.4	5.4	5.4	5.3	5.4
14. State & Local Bonds Yield	<b>CONSENSUS</b>	<b>4.3</b>	<b>4.3</b>	<b>4.2</b>	<b>4.3</b>	<b>4.3</b>	<b>4.3</b>	<b>4.3</b>	<b>4.3</b>
	Top 10 Average	5.0	5.0	4.8	4.8	4.7	4.7	4.8	4.8
	Bottom 10 Average	3.7	3.7	3.7	3.9	3.9	3.9	3.8	3.9
15. Home Mortgage Rate	<b>CONSENSUS</b>	<b>5.7</b>	<b>5.5</b>	<b>5.4</b>	<b>5.4</b>	<b>5.4</b>	<b>5.4</b>	<b>5.4</b>	<b>5.4</b>
	Top 10 Average	6.4	6.4	6.1	6.0	6.0	6.0	6.1	6.0
	Bottom 10 Average	4.9	4.7	4.6	4.8	4.8	4.8	4.7	4.8
A. Fed's AFE Nominal \$ Index	<b>CONSENSUS</b>	<b>113.8</b>	<b>112.8</b>	<b>111.9</b>	<b>111.0</b>	<b>110.6</b>	<b>110.4</b>	<b>111.3</b>	<b>109.8</b>
	Top 10 Average	115.6	114.7	114.0	113.4	113.1	112.8	113.6	112.7
	Bottom 10 Average	112.2	111.0	109.9	108.8	108.2	107.9	109.2	107.4
		----- Year-Over-Year, % Change -----						Five-Year Averages	
		2023	2024	2025	2026	2027	2028	2024-2028	2029-2033
B. Real GDP	<b>CONSENSUS</b>	<b>2.0</b>	<b>2.0</b>	<b>2.1</b>	<b>2.1</b>	<b>2.1</b>	<b>2.1</b>	<b>2.1</b>	<b>2.0</b>
	Top 10 Average	2.6	2.4	2.4	2.4	2.4	2.4	2.4	2.3
	Bottom 10 Average	1.5	1.5	1.8	1.8	1.8	1.8	1.7	1.8
C. GDP Chained Price Index	<b>CONSENSUS</b>	<b>3.0</b>	<b>2.4</b>	<b>2.3</b>	<b>2.3</b>	<b>2.2</b>	<b>2.2</b>	<b>2.3</b>	<b>2.2</b>
	Top 10 Average	3.7	2.8	2.7	2.6	2.6	2.6	2.7	2.6
	Bottom 10 Average	2.3	2.0	1.9	1.9	1.9	1.9	1.9	1.9
D. Consumer Price Index	<b>CONSENSUS</b>	<b>3.2</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>	<b>2.3</b>	<b>2.3</b>	<b>2.4</b>	<b>2.3</b>
	Top 10 Average	4.1	3.0	2.9	2.8	2.7	2.7	2.8	2.7
	Bottom 10 Average	2.3	1.8	2.0	2.0	1.9	1.9	1.9	1.9
E. PCE Price Index	<b>CONSENSUS</b>	<b>3.0</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<b>2.2</b>	<b>2.3</b>	<b>2.3</b>
	Top 10 Average	3.8	2.8	2.8	2.7	2.7	2.6	2.7	2.7
	Bottom 10 Average	2.2	1.8	1.9	1.9	1.9	1.8	1.9	1.9



**2022 Historical Data**

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	2.7	1.7	1.4	0.9	....	....	....	....	....	....	....	....
Auto & Light Truck Sales (b)	15.05	13.98	13.41	14.28	....	....	....	....	....	....	....	....
Personal Income (a, current \$)	0.1	0.6	0.5	0.4	....	....	....	....	....	....	....	....
Personal Consumption (a, current \$)	2.1	0.6	1.4	0.9	....	....	....	....	....	....	....	....
Consumer Credit (e)	4.6	10.2	14.0	....	....	....	....	....	....	....	....	....
Consumer Sentiment (U. of Mich.)	67.2	62.8	59.4	65.2	58.4	....	....	....	....	....	....	....
Household Employment (c)	1199	548	736	-353	....	....	....	....	....	....	....	....
Nonfarm Payroll Employment (c)	504	714	428	428	....	....	....	....	....	....	....	....
Unemployment Rate (%)	4.0	3.8	3.6	3.6	....	....	....	....	....	....	....	....
Average Hourly Earnings (All, cur. \$)	31.56	31.60	31.75	31.85	....	....	....	....	....	....	....	....
Average Workweek (All, hrs.)	34.6	34.7	34.6	34.6	....	....	....	....	....	....	....	....
Industrial Production (d)	3.2	7.5	5.4	6.4	....	....	....	....	....	....	....	....
Capacity Utilization (%)	76.9	77.6	78.2	79.0	....	....	....	....	....	....	....	....
ISM Manufacturing Index (g)	57.6	58.6	57.1	55.4	....	....	....	....	....	....	....	....
ISM Nonmanufacturing Index (g)	59.9	56.5	58.3	57.1	....	....	....	....	....	....	....	....
Housing Starts (b)	1.666	1.777	1.728	1.724	....	....	....	....	....	....	....	....
Housing Permits (b)	1.841	1.857	1.879	1.823	....	....	....	....	....	....	....	....
New Home Sales (1-family, c)	831	792	709	591	....	....	....	....	....	....	....	....
Construction Expenditures (a)	3.0	0.5	0.1	....	....	....	....	....	....	....	....	....
Consumer Price Index (nsa, d)	7.5	7.9	8.5	8.3	....	....	....	....	....	....	....	....
CPI ex. Food and Energy (nsa, d)	6.0	6.4	6.5	6.2	....	....	....	....	....	....	....	....
PCE Chain Price Index (d)	6.0	6.3	6.6	6.3	....	....	....	....	....	....	....	....
Core PCE Chain Price Index (d)	5.1	5.3	5.2	4.9	....	....	....	....	....	....	....	....
Producer Price Index (nsa, d)	10.1	10.4	11.5	11.0	....	....	....	....	....	....	....	....
Durable Goods Orders (a)	3.1	-0.7	0.6	0.4	....	....	....	....	....	....	....	....
Leading Economic Indicators (a)	-0.6	0.7	0.1	-0.3	....	....	....	....	....	....	....	....
Balance of Trade & Services (f)	-89.2	-89.8	-109.8	....	....	....	....	....	....	....	....	....
Federal Funds Rate (%)	0.08	0.08	0.20	0.33	....	....	....	....	....	....	....	....
3-Mo. Treasury Bill Rate (%)	0.15	0.31	0.45	0.76	....	....	....	....	....	....	....	....
10-Year Treasury Note Yield (%)	1.76	1.93	2.13	2.75	....	....	....	....	....	....	....	....

**2021 Historical Data**

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	5.5	-1.8	11.2	0.1	-1.0	1.1	-1.0	0.7	1.0	1.6	0.6	-1.6
Auto & Light Truck Sales (b)	16.78	15.93	17.64	18.30	16.89	15.47	14.66	13.09	12.29	13.05	13.04	12.54
Personal Income (a, current \$)	9.9	-7.2	21.0	-13.3	-2.0	0.3	1.3	0.4	-0.9	0.8	0.7	0.5
Personal Consumption (a, current \$)	3.3	-1.1	5.2	1.0	0.0	1.1	0.1	1.1	0.6	1.4	0.5	-0.9
Consumer Credit (e)	2.4	5.4	4.6	5.4	7.6	6.6	4.5	5.1	6.6	5.8	8.8	6.3
Consumer Sentiment (U. of Mich.)	79.0	76.8	84.9	88.3	82.9	85.5	81.2	70.3	72.8	71.7	67.4	70.6
Household Employment (c)	121	363	573	319	291	62	1092	463	639	428	1090	651
Nonfarm Payroll Employment (c)	520	710	704	263	447	557	689	517	424	677	647	588
Unemployment Rate (%)	6.4	6.2	6.0	6.0	5.8	5.9	5.4	5.2	4.7	4.6	4.2	3.9
Average Hourly Earnings (All, cur. \$)	29.93	30.04	30.06	30.20	30.36	30.52	30.67	30.76	30.92	31.11	31.23	31.38
Average Workweek (All, hrs.)	35.0	34.6	34.9	34.9	34.9	34.8	34.8	34.7	34.8	34.8	34.8	34.8
Industrial Production (d)	-1.7	-4.9	1.8	17.9	16.4	10.2	6.6	5.4	4.5	4.8	5.0	3.5
Capacity Utilization (%)	75.0	72.7	74.8	74.8	75.3	75.7	76.2	76.1	75.1	76.1	76.6	76.4
ISM Manufacturing Index (g)	59.4	60.9	63.7	60.6	61.6	60.9	59.9	59.7	60.5	60.8	60.6	58.8
ISM Nonmanufacturing Index (g)	58.5	55.9	62.2	62.7	63.2	60.7	64.1	62.2	62.6	66.7	68.4	62.3
Housing Starts (b)	1.602	1.430	1.711	1.505	1.605	1.664	1.573	1.576	1.559	1.563	1.706	1.768
Housing Permits (b)	1.843	1.743	1.773	1.765	1.691	1.661	1.655	1.772	1.615	1.698	1.729	1.896
New Home Sales (1-family, c)	911	768	881	809	740	714	726	686	732	671	756	839
Construction Expenditures (a)	3.0	-1.1	1.0	0.3	0.7	1.0	0.1	1.0	1.0	0.9	1.0	1.6
Consumer Price Index (nsa, d)	1.4	1.7	2.6	4.2	5.0	5.4	5.4	5.3	5.4	6.2	6.8	7.0
CPI ex. Food and Energy (nsa, d)	1.4	1.3	1.6	3.0	3.8	4.5	4.3	4.0	4.0	4.6	4.9	5.5
PCE Chain Price Index (d)	1.4	1.6	2.5	3.6	4.0	4.0	4.2	4.2	4.4	5.1	5.6	5.8
Core PCE Chain Price Index (d)	1.5	1.5	2.0	3.1	3.5	3.6	3.6	3.6	3.7	4.2	4.7	4.9
Producer Price Index (nsa, d)	1.6	3.0	4.1	6.5	7.0	7.6	8.0	8.7	8.8	8.9	9.9	10.0
Durable Goods Orders (a)	2.5	0.1	1.6	-2.0	2.1	1.8	0.4	1.6	-1.5	1.5	1.4	0.9
Leading Economic Indicators (a)	0.6	-0.1	1.1	1.1	0.9	0.6	1.0	0.7	0.2	0.4	0.6	0.4
Balance of Trade & Services (f)	-65.1	-67.5	-71.4	-65.4	-67.3	-72.2	-69.7	-72.5	-81.2	-66.9	-80.1	-82.0
Federal Funds Rate (%)	0.09	0.08	0.07	0.07	0.06	0.08	0.10	0.09	0.08	0.08	0.08	0.08
3-Mo. Treasury Bill Rate (%)	0.08	0.04	0.03	0.02	0.02	0.04	0.05	0.05	0.04	0.05	0.05	0.06
10-Year Treasury Note Yield (%)	1.08	1.26	1.61	1.64	1.62	1.52	1.32	1.28	1.37	1.58	1.56	1.47

(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
<p><b>30</b></p> <p><b>Memorial Day</b> All Markets Closed</p>	<p><b>31</b></p> <p>FHFA HPI (Mar &amp; Q1) Case-Shiller HPI (Mar) Chicago PMI (May) Texas Manufacturing Outlook Survey (May) Consumer Confidence (May) Agricultural Prices (May) Retail E-Commerce Sales (Q1)</p>	<p><b>June 1</b></p> <p>Construction (Apr) ISM Manufacturing (May) S&amp;P Global Mfg PMI (May) JOLTS (Apr) Texas Service Sector Outlook Survey (May) Mortgage Applications</p>	<p><b>2</b></p> <p>Productivity &amp; Costs (Q1) MSIO (Apr) Challenger Employment Report (May) BEA Auto Sales (May) BEA Truck Sales (May) ADP Employment Report (May) EIA Crude Oil Stocks Weekly Jobless Claims</p>	<p><b>3</b></p> <p>Employment Situation (May) ISM Services PMI (May) S&amp;P Global Services PMI (May)</p>
<p><b>6</b></p> <p>Public Debt (May) Interest on the Public Debt (Jun)</p>	<p><b>7</b></p> <p>Intl Trade (Apr &amp; Revisions) QFR (Q1) Consumer Credit (Apr) Treasury Auction Allotments (May) Kansas City Fed Labor Market Conditions Indicators (May)</p>	<p><b>8</b></p> <p>Wholesale Trade (Apr) EIA Crude Oil Stocks Mortgage Applications</p>	<p><b>9</b></p> <p>Financial Accounts (Q1) Kansas City Financial Stress Index (May) Weekly Jobless Claims</p>	<p><b>10</b></p> <p>CPI (May) Real Earnings (May) Housing Affordability (Apr) Consumer Sentiment (Jun, Preliminary) QSS (Q1) Cleveland Fed Median CPI (May) Monthly Treasury (May)</p>
<p><b>13</b></p>	<p><b>14</b></p> <p>Producer Prices (May) Manpower Survey (Q3) NFIB (May) OPEC Crude Oil Spot Prices (May) FOMC Meeting</p>	<p><b>15</b></p> <p>Import &amp; Export Prices (May) Advance Retail Sales (May) MTIS (Apr) Transportation Services (Apr) Empire State Mfg Survey (Jun) Home Builders (Jun) TIC Data (Apr) FOMC Meeting EIA Crude Oil Stocks Mortgage Applications</p>	<p><b>16</b></p> <p>New Residential Construction (May) ECEC (Q1) Business Leaders Survey (Jun) Philadelphia Fed Mfg Business Outlook Survey (Jun) Weekly Jobless Claims</p>	<p><b>17</b></p> <p>IP &amp; Capacity Utilization (May) Livingston Survey (Jun) Composite Indexes (May)</p>
<p><b>20</b></p> <p><b>Juneteenth Observed</b> All Markets Closed</p>	<p><b>21</b></p> <p>Existing Home Sales (May) Chicago Fed National Activity Index (May) Philadelphia Fed Nonmfg Business Outlook Survey (Jun)</p>	<p><b>22</b></p> <p>Treasury Auction Allotments (Jun) Mortgage Applications</p>	<p><b>23</b></p> <p>International Transactions (Q1 &amp; Revisions) Kansas City Fed Manufacturing Survey (Jun) S&amp;P Global Flash PMIs (Jun) EIA Crude Oil Stocks Weekly Jobless Claims</p>	<p><b>24</b></p> <p>New Residential Sales (May) Final Building Permits (May) Consumer Sentiment (Jun, Final) Steel Imports for Consumption (May)</p>
<p><b>27</b></p> <p>Advance Durable Goods (May) Texas Manufacturing Outlook Survey (Jun) Pending Home Sales (May)</p>	<p><b>28</b></p> <p>IIP (Q1 &amp; Revision) Adv Trade &amp; Inventories(May) FHFA HPI (Apr) Case-Shiller HPI (Apr) H.6 Money Stock (Apr) IP Revisions Consumer Confidence (Jun) Richmond Fed Mfg &amp; Service Sector Srvy (Jun) Texas Service Sector (Jun)</p>	<p><b>29</b></p> <p>GDP (Q1, 3rd Estimate) EIA Crude Oil Stocks Mortgage Applications</p>	<p><b>30</b></p> <p>Personal Income (May) Dallas Fed Trimmed-Mean PCE (May) Chicago PMI (Jun) Agricultural Prices (May) Weekly Jobless Claims</p>	<p><b>July 1</b></p> <p>Construction (May) ISM Manufacturing (Jun) S&amp;P Global Mfg PMI (Jun)</p>
<p><b>4</b></p> <p><b>Independence Day</b> All Markets Closed</p>	<p><b>5</b></p> <p>Manufacturers' Shipments, Inventories &amp; Orders (May) BEA Auto Sales (Jun) BEA Truck Sales (Jun)</p>	<p><b>6</b></p> <p>ISM Services PMI (Jun) S&amp;P Global Services PMI (Jun) JOLTS (May) Mortgage Applications</p>	<p><b>7</b></p> <p>ADP Employment Report (Jun) International Trade (May) Public Debt (Jun) Interest on the Public Debt (Jul) Challenger Employment Report (Jun) EIA Crude Oil Stocks Weekly Jobless Claims</p>	<p><b>8</b></p> <p>Employment Situation (Jun) Wholesale Trade (May) Consumer Credit (May)</p>

## BLUE CHIP FORECASTERS

### CONTRIBUTORS TO DOMESTIC SURVEY

**ACIMA Private Wealth**, Richmond, VA  
Ardavan Mobasheri

**Action Economics, LLC**, Boulder, CO  
Michael Englund

**AIG**, New York, NY  
Henry Mo and Jerry Cai

**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**, Murfreesboro, TN  
Albert E. DePrince Jr.

**Economist Intelligence Unit**, New York, NY  
Leo Abruzzese and Jan Friederich

**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

**Grant Thornton**, Chicago, IL  
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  
Takehiro Noguchi

**Moody's Analytics**, West Chester, PA  
Mark M. Zandi

**Naroff Economic Advisors**, Philadelphia, PA  
Joel L. Naroff

**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  
Gregory Daco

**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

**S&P Global Ratings**, New York, NY  
Beth Ann Bovino

**Swiss Re**, New York, NY  
Jerome Haegeli

**ThruTheCycle.com**, White Plains, NY  
John Lonski

**TS Lombard**, London, UK  
Steven Blitz

**Via Nova Investment Management**, Fredericksburg, 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

**S&P Global Ratings**, New York, NY

**TS Lombard**, London, UK

**Wells Fargo**, Charlotte, NC