

Blue Chip Financial Forecasts®

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

Vol. 42, No. 8, August 1, 2023

Wolters Kluwer

BLUE CHIP FINANCIAL FORECASTS®

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Blue Chip Financial Forecasts® (ISSN: 0741-8345) is published monthly by CCH Incorporated, 28 Liberty St., 44th Floor New York, NY 10005-1400. Printed in the U.S.A.

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Fed Funds Rate Path at a Crossroads

The Fed's July 25-26 decision to raise the federal funds rate by 25bps, bringing the policy target to a range of 5.25% to 5.5%, was widely expected in markets. However, the path forward from here is much less clear, especially since there have been mixed signals from the economy and the Fed has already tightened more aggressively in the past year and a half than at any other time in the past four decades. On the one hand, the labor market remains tight and core inflation continues to run well above target, suggesting a need for even more restraint. In his press conference, Fed Chair Powell stated that "the process of getting inflation down to 2% has a long way to go." On the other hand, there have been leading signals that the economy may be headed for a downturn in coming quarters. Against this backdrop, Fed officials have left their policy options open.

Near-term rate expectations. Since the Fed's rate decision and press conference, markets give low odds for further rate hikes this year. Fed funds futures prices imply there is less than 30% probability of another rate hike at each of the next three FOMC meetings. Likewise, the Blue Chip Financial Forecasts (BCFF) consensus also indicates no change in the funds rate. However, these summary measures are averages and obscure the fact that there is considerable uncertainty surrounding the near-term policy path.

We can look under the surface at the individual BCFF policy projections to obtain insights into market thinking. More than half of the panelists look for no further changes in the funds rate this year. However, a significant group of panelists, 38%, are focused on the robust labor market and elevated inflation, and they expect the Fed to raise rates again this year. Conversely, three forecasters worry that the economy may be headed for a hard landing, and they look for rate cuts by the end of this year.

Labor market and inflation. Nonfarm payrolls have increased by 316,000 per month on average over the past year, the unemployment rate is hovering near 70-year lows, and the participation rate is rising. Importantly, wage gains have remained high, with average hourly earnings up 4.4% over the past year. Likewise, the employment cost index has increased by 4.5% in that time. Tight labor market conditions imply further second-round pressures on inflation.

Any further Fed tightening will depend on the path of inflation. Thus far, the progress in lowering inflation has been frustratingly slow. Headline PCE inflation has subsided notably, from a peak of 7.0% a year ago to the latest reading of 3.0%, but the declines have been centered in the volatile food and energy sectors. In contrast, core PCE inflation has declined much more gradually, from a peak of 5.4% in February 2022 to 4.1% currently. The latest core reading is more than double the Fed's 2% target. The Fed continues to believe that a period of below-trend growth is needed to bring down core inflation.

Economic downturn? The economy has continued to expand at a healthy pace, with real GDP growing at a 2.4% annualized pace in the second quarter. The gains were led by a solid contribution from nonresidential investment and resilient consumer spending. Despite these gains, leading indicators of eco-

omic activity point to a period of below-trend growth or a mild recession going forward. The Conference Board's index of leading indicators has fallen sharply for more than a year. The yield curve, which is one of the individual leading indicators with an exceptional track record predicting downturns, has been sharply negative. In fact, the yield curve remains near the lowest levels in the past 40 years, signaling a strong possibility of a slump. Based on the yield curve, the Federal Reserve Bank of New York's recession gauge gives a 67% probability that the economy will experience a downturn in the next year, and the Federal Reserve Bank of Cleveland's measure gives the odds at 75%.

The BCFF consensus agrees with this assessment. Over the next four quarters, GDP growth is expected to be just 0.5%, which is well below trend. In fact, 51% of the respondents are projecting two consecutive quarterly declines in GDP in the coming year. In addition, all BCFF respondents who answered the special questions anticipate some rise in the unemployment rate. The median expected increase in the jobless rate is 0.9 percentage point. Historically, increases of that magnitude have been associated with declines in economic activity. This weakness would be expected to help alleviate underlying price pressures. Indeed, BCFF panelists projected in another special question that core inflation would subside to 3.5% by yearend 2023 and 2.4% by the end of 2024.

First rate cut. Even though there is much uncertainty about the near-term path of policy, with an outlook for below-trend growth and subsiding inflation, every BCFF panelist expects the Fed to cut rates by the end of 2024. In fact, based on panelists' quarterly forecasts, 81% expect the first cut to occur by midyear 2024. The BCFF consensus expects the Fed to cut by more than is penciled into the Fed's June Statement of Economic Projections. BCFF respondents expect the fed funds rate to be 4.0% at the end of 2024 versus the FOMC rate projection of 4.6%.

Market rates. BCFF consensus projections for Treasury yields indicate that the yield curve will remain inverted over the forecast horizon, consistent with their forecast of below-trend economic growth. Interestingly, the consensus looks for real interest rates to rise over the next six quarters. For example, the 10-year yield is expected to fall 0.4 percentage point to 3.5%, while core inflation is expected to decline by 1.7 percentage points to 2.4%.

Despite the belief that the economy will experience a mild recession, BCFF panelists do not anticipate an accompanying increase in credit spreads. In fact, the consensus suggests a period of only mild risk for corporations. One factor behind this benign outlook for credit spreads is that the banking sector now appears to be on a more solid footing. The Fed mentioned in its FOMC statement that "the US banking system is sound and resilient." In fact, measures of financial market stress, such as the OFR financial stress index, have remained near historical norms.

Peter D'Antonio (Haver Analytics, New York, NY)

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

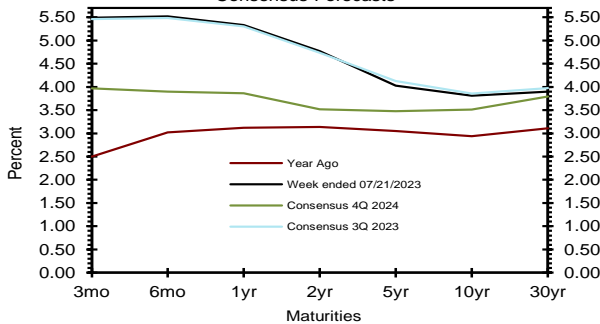
Interest Rates	History								Consensus Forecasts-Quarterly Avg.						
	Average For Week Ending				Average For Month				Latest Qtr	3Q 2023	4Q 2023	1Q 2024	2Q 2024	3Q 2024	4Q 2024
	Jul 21	Jul 14	Jul 7	Jun 30	Jun	May	Apr	2Q 2023	2023	2023	2024	2024	2024	2024	
Federal Funds Rate	5.08	5.08	5.08	5.07	5.08	5.06	4.83	4.99	5.4	5.4	5.2	4.9	4.4	4.0	
Prime Rate	8.25	8.25	8.25	8.25	8.25	8.23	8.00	8.16	8.5	8.5	8.4	8.0	7.5	7.1	
SOFR	5.06	5.06	5.06	5.06	5.06	5.02	4.81	4.96	5.3	5.4	5.2	4.9	4.4	4.0	
Commercial Paper, 1-mo.	5.16	5.14	5.11	5.12	5.10	5.06	4.82	4.99	5.4	5.4	5.3	4.9	4.4	4.1	
Treasury bill, 3-mo.	5.49	5.48	5.45	5.45	5.42	5.31	5.07	5.27	5.5	5.4	5.2	4.7	4.3	4.0	
Treasury bill, 6-mo.	5.52	5.53	5.53	5.47	5.42	5.27	4.99	5.23	5.5	5.4	5.0	4.7	4.2	3.9	
Treasury bill, 1 yr.	5.33	5.36	5.42	5.35	5.24	4.91	4.68	4.94	5.3	5.1	4.8	4.5	4.2	3.9	
Treasury note, 2 yr.	4.77	4.76	4.95	4.77	4.64	4.13	4.02	4.26	4.7	4.5	4.2	4.0	3.8	3.5	
Treasury note, 5 yr.	4.03	4.11	4.29	4.04	3.95	3.59	3.54	3.69	4.1	4.0	3.8	3.7	3.6	3.5	
Treasury note, 10 yr.	3.81	3.89	3.98	3.77	3.75	3.57	3.46	3.59	3.9	3.8	3.7	3.6	3.6	3.5	
Treasury note, 30 yr.	3.90	3.97	3.97	3.85	3.87	3.86	3.68	3.80	4.0	3.9	4.0	3.9	3.9	3.8	
Corporate Aaa bond	4.91	5.00	5.02	4.92	4.95	4.95	4.76	4.88	4.9	4.9	4.9	4.9	4.8	4.7	
Corporate Baa bond	5.58	5.67	5.69	5.60	5.64	5.66	5.44	5.58	6.0	6.0	6.0	6.0	5.9	5.7	
State & Local bonds	4.16	4.24	4.24	4.20	4.23	4.21	4.07	4.17	4.2	4.2	4.2	4.1	4.0	4.0	
Home mortgage rate	6.78	6.96	6.81	6.71	6.71	6.43	6.34	6.49	6.7	6.6	6.4	6.2	6.1	5.9	

Key Assumptions	History								Consensus Forecasts-Quarterly					
	3Q 2021	4Q 2021	1Q 2022	2Q 2022	3Q 2022	4Q 2022	1Q 2023	2Q 2023	3Q 2023	4Q 2023	1Q 2024	2Q 2024	3Q 2024	4Q 2024
	2021	2021	2022	2022	2022	2022	2023	2023	2023	2023	2024	2024	2024	2024
Fed's AFE \$ Index	104.9	106.9	108.3	113.5	118.8	119.8	115.5	114.6	114.4	114.1	113.6	113.1	112.7	112.4
Real GDP	2.7	7.0	-1.6	-0.6	3.2	2.6	2.0	2.4	0.8	0.0	0.2	0.8	1.6	1.8
GDP Price Index	6.2	6.8	8.3	9.0	4.4	3.9	4.1	2.2	2.7	2.6	2.5	2.3	2.3	2.3
Consumer Price Index	6.6	8.8	9.2	9.7	5.5	4.2	3.8	2.7	2.9	2.8	2.6	2.4	2.4	2.3
PCE Price Index	5.6	6.2	7.5	7.3	4.3	3.7	4.1	2.6	2.7	2.7	2.4	2.3	2.2	2.2

Forecasts for interest rates and the Federal Reserve's Advanced Foreign Economics 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).

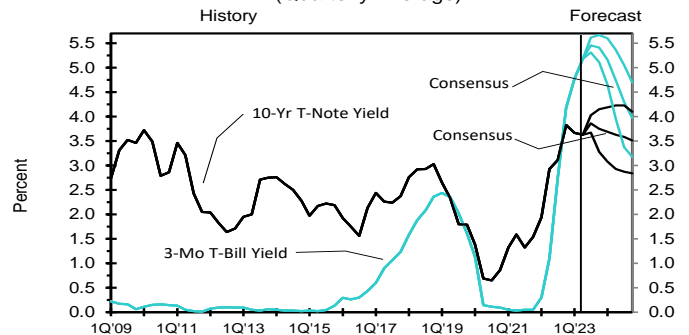
US Treasury Yield Curve

Week ended Jul 21, 2023 & Year Ago vs. 3Q 2023 & 4Q 2024



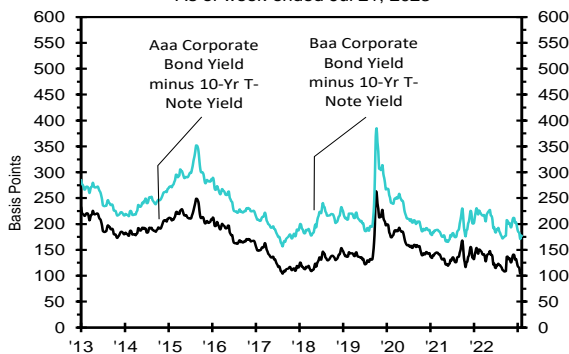
US 3-Mo T-Bills & 10-Yr T-Note Yield

(Quarterly Average)



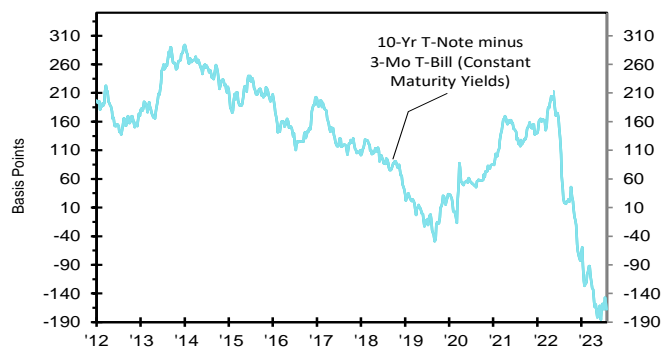
Corporate Bond Spreads

As of week ended Jul 21, 2023



US Treasury Yield Curve

As of week ended Jul 21, 2023



-----Policy Rates¹-----

	History			Consensus Forecasts		
	Latest:	Month Ago:	Year Ago:	Months From Now:		
				3	6	12
U.S.	5.13	5.13	1.63	5.42	5.44	4.92
Japan	-0.10	-0.10	-0.10	-0.08	-0.08	-0.06
U.K.	5.00	5.00	1.25	5.59	5.69	5.41
Switzerland	1.75	1.75	-0.25	1.96	2.04	1.94
Canada	5.00	4.75	2.50	4.98	5.00	4.64
Australia	4.10	4.10	1.35	4.36	4.35	4.10
Euro area	4.00	4.00	0.00	4.27	4.34	4.12

-----10-Yr. Government Bond Yields²-----

	History			Consensus Forecasts		
	Latest:	Month Ago:	Year Ago:	Months From Now:		
				3	6	12
U.S.	3.84	3.74	2.77	3.82	3.68	3.47
Germany	2.44	2.37	1.04	2.44	2.40	2.27
Japan	0.48	0.39	0.22	0.48	0.58	0.61
U.K.	4.30	4.37	2.07	4.30	4.23	4.03
France	2.99	2.88	1.62	2.95	2.89	2.74
Italy	4.07	4.00	3.46	4.21	4.10	3.89
Switzerland	0.92	0.93	0.72	1.29	1.41	1.37
Canada	3.41	3.36	2.84	3.46	3.41	3.32
Australia	4.00	4.00	3.45	4.03	3.96	3.77
Spain	3.41	3.42	2.40	3.51	3.46	3.32

-----Foreign Exchange Rates³-----

	History			Consensus Forecasts		
	Latest:	Month Ago:	Year Ago:	Months From Now:		
				3	6	12
U.S.	112.96	114.54	116.89	112.8	112.4	110.2
Japan	141.75	143.78	136.12	138.3	135.8	129.9
U.K.	1.29	1.27	1.20	1.30	1.30	1.34
Switzerland	0.87	0.90	0.96	0.89	0.89	0.87
Canada	1.32	1.32	1.29	1.32	1.32	1.29
Australia	0.67	0.67	0.69	0.68	0.68	0.71
Euro	1.11	1.09	1.02	1.10	1.11	1.14

Consensus Policy Rates vs. US Rate

	Now	In 12 Mo.
Japan	-5.23	-4.98
U.K.	-0.13	0.49
Switzerland	-3.38	-2.98
Canada	-0.13	-0.28
Australia	-1.03	-0.82
Euro area	-1.13	-0.79

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

	Now	In 12 Mo.
Germany	-1.40	-1.19
Japan	-3.36	-2.86
U.K.	0.46	0.56
France	-0.85	-0.73
Italy	0.23	0.43
Switzerland	-2.92	-2.10
Canada	-0.43	-0.14
Australia	0.16	0.31
Spain	-0.43	-0.15

International. The mood in the world's financial markets has been more upbeat over the past few weeks partly thanks to some stronger-than-expected US corporate earnings reports. Investors have also become more optimistic that central banks either already have completed, or are now close to completing, their monetary policy tightening campaigns. Further downside inflation surprises in many major economies coupled with tentative evidence suggesting that labor markets are cooling off have been pivotal for that view. But, more ominously, so too have data suggesting that economic growth is cooling more rapidly than expected in Europe and China.

That loss of growth momentum was evidenced by July's flash PMI surveys showing a broadly based slowdown at the start of Q3. Country-specific data revealed that US business activity growth slipped to a five-month low, that Japan's activity slowed to a four-month low, that the UK slowed to near-stagnation and that the euro area fell into a much steeper decline. The latter also chimes with more backward-looking data suggesting that activity has been slipping in the euro area's industrial and retail sectors. It chimes too with GDP data suggesting that the German economy has recently entered a recession.

The news from China has been equally downbeat. GDP growth in Q2, 0.8% compared with the previous quarter, was well shy of expectations with accompanying detail from June's retail sales data suggesting that flagging consumption is an important reason for this. Property sector investment, in the meantime, is also still sinking, a symptom of excess capacity that's engulfing the housing market. Sub-par levels of CPI inflation in July coupled with negative rates of PPI inflation speak to excess capacity issues lurking in the broader economy as well.

But while those sub-par inflation rates have given cover to China's authorities to announce a package of fiscal policy support in recent days, above-par core inflation levels elsewhere leave limited scope for policy support. And this may be one reason, notwithstanding a raft of inflation-friendly data, why the decisions and communications from central banks, as well as the views of our BCFF panelists, are not fully synchronized with the views of financial market participants.

Indeed, most major central banks appear willing, at least in their communications, to calibrate monetary policy at a more restrictive level than financial market participants are (or had been) anticipating. The ECB, for example, enacted a further 25bps of policy rate hikes at their latest meeting. While that was in line with expectations, the subsequent post-meeting commentary from President Lagarde appeared to be inconsistent with the idea that the ECB's inflation battle is now over. In the meantime, both the RBA and the BoC have wrong-footed financial markets by lifting their policy rates by 25bps in recent weeks, having previously communicated that they would pause their tightening cycles. As a result, there is now much uncertainty about both central banks' intentions at their upcoming meetings in August. In the meantime, large positive surprises on inflation and pay growth forced the BoE to respond with a 50bps rate hike in June and have raised the possibility that it will keep hiking until it sees clear evidence that services inflation is cooling.

Not for the first time the BoJ is an outlier in this narrative. However, while monetary policy was ostensibly left unchanged at its July 28 meeting, as expected, greater flexibility was announced in its yield curve control policy. That might be seen as a prelude to an eventual shift away from its ultra-loose monetary policy.

Against this backdrop, our latest survey reveals persistent concerns about the global economic outlook. The BCFF consensus estimates a 52% probability of a recession in the euro area and 58% of one in the UK over the next 12 months. As for monetary policy, our panelists have marked up their near- and medium-term projections for policy rates in Canada, Australia, the euro area, and the UK this month. Notwithstanding those recession concerns, hardly any easing is anticipated from the ECB or the BoE over the next 12 months. Finally, expectations for Japan's policy rates in 12 months have been lifted slightly.

Forecasts of panel members are on pages 10 and 11. Definitions of variables are as follows: ¹Monetary policy rates. ²Government bonds are yields to maturity. ³Foreign 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 2023

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	Percent Per Annum -- Average For Quarter															Avg. For --Qtr-- A.	(Q-Q % Change)																						
	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																								
Chan Economics	5.7	H	8.7	5.6	5.7	H	5.8	H	5.8	H	5.6	5.0	4.4	4.4	4.5	H	5.5	6.5	5.0	H	6.9	112.7	1.0	2.6	2.8	2.3													
Action Economics	5.6		8.8	H	5.9	H	5.6		5.6		5.5	5.3	4.5	4.1	4.0		4.8	5.9	3.9		7.3	H	113.2	1.2	2.4	2.5	2.2												
Bank of America	5.6		na		na		na		na		na		4.3	3.9	3.5		3.8	na	na		na		na	0.5	3.5	3.0	2.7												
Bank of the West	5.6		8.8	H	5.5		5.6		5.7		5.5		4.9	4.3	4.1		4.2	5.0	6.1		4.6		7.0	112.8	0.4	2.6	2.5	2.4											
Barclays	5.6		na		na		na		na		na		4.5	3.9	3.9		3.9	na	na		na		na	na	0.0	2.4	1.7	2.2											
Chmura Economics & Analytics	5.6		8.7		5.6		5.7	H	5.8	H	5.8	H	5.7	H	5.1	H	4.7	H	4.5	H	4.4		5.4	na	na	7.0	na	-1.8	3.5	3.6	3.8	H							
Daiwa Capital Markets America	5.6		8.8	H	na		na		5.6		na		na		4.7		3.9		3.8		4.1		na	na	na	6.9	115.0	-0.7	3.0	3.0	3.1								
Fannie Mae	5.6		8.8	H	na		na		5.4		5.3		5.1		4.5		4.0		3.8		3.9		na	na	na	6.6	na	-0.4	2.9	2.7	2.8								
Naroff Economic Advisors	5.6		8.6		5.6		5.7	H	5.6		5.7		5.1		4.7		4.2		3.8		4.0		na	na	4.1	6.6	114.2	-3.5	L	3.6	3.5	3.4							
The Northern Trust Company	5.6		8.8	H	5.6		5.7	H	5.6		5.5		5.3		4.8		3.8		3.7		3.9		4.9	6.1	4.4	5.9	116.0	0.7	2.3	2.5	2.3								
KPMG	5.5		8.7		5.5		5.5		5.7		5.5		5.5		4.9		4.2		4.0		4.1		4.9	6.0	na	6.8	na	0.5	3.0	3.4	3.2								
S&P Global Market Intelligence	5.5		8.6		5.5		na		5.5		5.3		5.5		4.9		4.3		4.0		4.0		na	na	na	6.6	na	0.9	3.0	3.5	3.2								
Santander Capital Markets	5.5		8.7		5.5		5.6		5.6		5.6		5.3		5.1	H	4.4		4.2		4.3		5.1	6.2	4.1	7.0	114.0	1.9	H	3.2	3.7	3.3							
Scotiabank Group	5.5		na		5.3		na		5.3		na		na		4.4		3.9		3.6		3.9		na	na	na	na	na	-0.3	1.4	3.9	3.7								
BMO Capital Markets	5.4		8.5		5.3		na		5.7		5.7		5.3		4.5		4.0		3.7		3.8		na	na	na	6.7	112.1	1.0	2.9	3.3	3.1								
DePrince & Assoc.	5.4		8.5		5.4		5.4		5.6		5.6		5.5		5.0		4.4		4.0		4.0		5.0	5.9	4.2	6.7	115.7	0.1	3.0	3.0	2.9								
Economist Intelligence Unit	5.4		8.4		na		5.3		5.4		5.5		5.0		4.8		4.0		3.8		3.9		na	na	na	6.8	na	0.2	na	1.8	na								
Goldman Sachs & Co.	5.4		na		na		na		5.1		na		na		4.5		4.0		3.9		4.0		na	na	na	na	na	1.0	4.1	H	4.4	H	3.3						
ING	5.4		na		na		na		na		na		na		4.3		3.8		3.5		3.7		na	na	na	na	na	-0.7	na	na	na								
J.P. Morgan Chase	5.4		na		na		na		na		na		na		4.4		3.7		3.7		3.9		na	na	na	na	na	-0.5	3.2	2.9	3.0								
Loomis, Sayles & Company	5.4		8.5		5.4		5.4		5.6		5.6		5.1		3.9		3.7		3.1		3.7		4.1	L	5.1	L	3.7	6.0	112.3	-2.1	2.3	1.9	1.9						
MacroPolicy Perspectives	5.4		8.5		5.3		na		na		na		5.4		4.7		4.3		4.1		4.2		4.9	5.8	na	6.9	na	1.1	2.1	1.6	1.7								
Nomura Securities, Inc.	5.4		8.5		na		na		na		na		na		3.9		3.3		2.9		na		na	na	na	na	na	-1.6	2.3	2.5	2.2								
Oxford Economics	5.4		8.5		5.4		na		5.3		5.2		5.1		4.6		3.8		3.6		3.7		4.2	na	na	6.3	114.9	-1.6	-0.6	3.2	2.7								
RDQ Economics	5.4		8.5		5.4		5.5		5.4		5.4		4.8		4.2		4.1		4.0		4.0		5.6	H	6.4	4.4	6.6	112.7	0.8	3.6	3.6	3.5							
The Lonski Group	5.4		8.5		5.3		5.7	H	5.4		5.4		5.0		4.6		3.9		3.7		3.8		4.9	5.7	4.2	6.6	114.8	0.2	2.5	2.9	3.1								
Wells Fargo	5.4		8.5		5.4		5.4		5.3		5.3		4.8		4.2		3.7		3.6		3.8		4.8	5.8	4.2	6.5	na	0.2	2.6	3.0	2.6								
EY-Parthenon	5.3		na		na		na		5.2		na		na		na		na		3.3		na		na	na	na	na	na	-0.6	1.8	2.6	2.2								
MacroFin Analytics & Rutgers Bus School	5.3		8.5		5.3		5.4		5.4		5.4		5.4		5.0		4.3		4.1		4.2		5.2	6.2	4.4	7.1	113.4	1.2	2.6	2.8	2.8								
Moody's Analytics	5.3		8.5		5.3		5.5		5.2		5.1		4.9		4.6		4.2		3.9		4.3		5.4	6.4	4.4	6.7	na	0.4	2.9	3.3	3.1								
PNC Financial Services Corp.	5.3		8.5		5.3		na		5.3		5.3		4.8		4.5		4.1		3.9		4.0		na	6.9	H	4.9	6.7	116.3	0.2	2.5	2.5	2.2							
Regions Financial Corporation	5.3		8.5		5.3		5.4		5.4		5.5		5.3		4.4		4.0		3.7		3.9		5.2	6.1	4.4	6.6	113.3	0.6	2.7	3.0	2.8								
Societe Generale	5.3		8.5		5.3		na		5.3		5.1		4.7		3.9		3.6		3.5		3.7		na	na	na	na	na	1.0	2.7	3.1	2.8								
Via Nova Investment Mgt.	5.3		8.5		5.3		5.3		5.6		5.7		5.5		4.3		3.6		3.3		3.6		4.5	5.3	3.8	6.0	112.0	L	1.5	2.5	2.4	2.3							
GLC Financial Economics	5.2		8.3		5.1		5.2		5.2		5.2		5.0		4.6		4.3		4.1		4.4		5.1	6.1	4.2	6.5	115.2	0.4	2.9	2.9	2.8								
Georgia State University	5.0		8.2		na		na		5.0		4.8		4.7		4.0		3.8		3.6		3.7		4.4	5.5	na	6.1	na	0.1	3.4	2.4	2.8								
ACIMA Private Wealth	4.1	L	7.1	L	4.1	L	4.2	L	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	2.2	L	5.0	L	118.0	H	-2.0	-1.5	L	-1.0	L	-1.1	L		
August Consensus	5.4		8.5		5.4		5.4		5.4		5.4		5.1		4.5		4.0		3.8		3.9		4.9	6.0	4.2	6.6	114.1	0.0	2.6	2.8	2.7								
Top 10 Avg.	5.6		8.7		5.6		5.6		5.7		5.7		5.5		5.0		4.4		4.2		4.3		5.3	6.4	4.5	7.0	115.4	1.2	3.4	3.6	3.4								
Bottom 10 Avg.	5.1		8.3		5.2		5.3		5.1		5.0		4.7		4.0		3.6		3.3		3.6		4.6	5.7	3.9	6.2	112.9	-1.5	1.5	1.8	1.8								
July Consensus	5.2		8.4		5.2		5.2		5.2		5.1		4.9		4.3		3.8		3.6		3.9		4.9	5.9	4.2	6.4	115.1	-0.2	2.8	2.8	2.7								
Number of Forecasts Changed From A Month Ago:																																							
Down	2		2		0		0		0		0		0		2		1		3		3		5		1		1	11	10	15	12	11							
Same	16		12		9		6		10		6		4		8		12		15		16		6		4		6	6	14	12	13	11							
Up	19		16		16		14		21		21		23		28		21		21		15		11		10		11	2	13	8	11	13							
Diffusion Index	73%		73%		82%		85%		84%		89%		93%		89%		77%		77%		68%		70%		63%		78%	26%	54%	40%	49%	53%							

Second Quarter 2024

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)															
	Short-Term					Intermediate-Term					Long-Term						B. Real GDP	C. Price GDP 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																	
Barclays	5.6	H	na	na	na	na	na	4.0	3.7	3.8	3.9	na	na	na	na	na	na	-1.0	2.4	2.0	2.2											
Santander Capital Markets	5.6	H	8.8	H	5.6	5.7	H	5.5	5.4	5.1	4.8	4.3	4.2	4.4	5.3	6.5	4.1	6.9	112.5	1.0	2.9	2.9	2.6									
The Northern Trust Company	5.6	H	8.8	H	5.6	5.7	H	5.4	5.5	5.1	4.9	4.4	3.5	3.3	3.6	4.5	5.7	4.1	5.1	112.0	1.1	2.1	2.2	2.1								
Chmura Economics & Analytics	5.5	8.6	5.4	5.5	5.6	H	5.7	H	5.7	H	5.5	H	5.5	H	5.6	H	6.0	H	na	na	6.7	na	2.1	3.4	3.5	3.6	H					
Chan Economics	5.4	8.4	5.3	5.4	5.5	5.5	5.3	4.7	4.1	4.1	4.2	5.2	6.2	4.7	6.6	112.0	-0.2	2.3	2.5	2.0												
Daiwa Capital Markets America	5.4	8.5	na	na	4.9	na	na	4.2	3.8	3.7	4.2	na	na	na	6.5	114.0	1.2	2.7	2.6	2.5												
Economist Intelligence Unit	5.4	8.4	na	5.3	5.2	5.0	4.7	4.5	3.8	3.5	3.7	na	na	na	6.0	na	1.4	na	2.4	na												
J.P. Morgan Chase	5.4	na	na	na	na	na	na	4.0	3.4	3.4	3.7	na	na	na	na	na	0.5	2.4	2.4	2.2												
S&P Global Market Intelligence	5.4	8.5	5.4	na	5.2	4.7	4.8	4.2	3.8	3.8	3.9	na	na	na	6.1	na	1.2	2.8	3.0	2.6												
Action Economics	5.3	8.4	5.8	H	5.3	5.2	5.0	4.8	4.2	3.9	3.9	4.0	4.7	5.8	3.8	7.3	H	113.6	1.6	1.7	2.3	2.0										
BMO Capital Markets	5.3	8.4	5.3	na	5.6	H	5.6	5.0	3.9	3.7	3.4	3.5	na	na	na	6.4	110.8	1.0	2.2	2.4	2.2											
Moody's Analytics	5.3	8.5	5.3	5.3	5.0	4.9	4.8	4.5	4.2	4.0	4.4	5.4	6.4	4.4	6.4	na	1.6	2.1	2.4	2.4												
Regions Financial Corporation	5.3	8.5	5.3	5.3	5.2	5.3	5.2	3.8	3.7	3.6	3.8	5.1	6.0	4.2	6.3	113.0	1.2	2.1	2.1	2.1												
Scotiabank Group	5.3	na	5.2	na	4.8	na	na	3.8	3.8	3.8	3.9	na	na	na	na	na	0.6	4.0	H	1.0	1.8											
KPMG	5.2	8.3	5.2	4.9	5.1	5.0	5.0	4.5	3.8	3.6	3.9	4.5	5.7	na	6.1	na	1.1	2.7	3.0	2.6												
MacroPolicy Perspectives	5.2	8.4	5.1	na	na	na	4.9	4.5	4.3	4.1	4.3	4.9	5.8	na	6.9	na	1.5	1.7	1.4	1.3												
Bank of America	5.1	na	na	na	na	na	na	3.5	3.5	3.4	3.7	na	na	na	na	na	-0.5	3.1	2.2	1.9												
Bank of the West	5.1	8.3	5.0	5.1	5.1	5.1	5.0	4.5	4.2	4.0	4.1	5.1	6.2	4.7	6.9	112.2	1.0	2.3	2.3	2.2												
DePrince & Assoc.	5.1	8.2	5.0	5.1	5.2	5.2	5.2	4.9	4.4	4.1	4.1	5.3	6.2	4.5	6.5	116.5	1.5	2.7	2.8	2.6												
Goldman Sachs & Co.	5.1	na	na	na	4.8	na	na	4.2	3.9	3.8	3.9	na	na	na	na	na	1.9	2.7	2.6	2.4												
Fannie Mae	5.0	8.1	na	na	4.8	4.7	4.4	4.1	3.8	3.7	3.8	na	na	na	6.2	na	-0.7	2.5	2.5	2.3												
Naroff Economic Advisors	5.0	8.0	5.0	5.1	5.2	5.3	4.5	4.5	4.1	3.9	4.1	na	na	4.0	6.2	114.0	2.1	3.0	3.0	3.0												
Oxford Economics	5.0	7.8	5.0	na	4.5	4.5	4.3	3.8	3.2	3.2	3.4	3.5	L	na	na	5.4	113.6	1.2	1.5	2.4	2.1											
Via Nova Investment Mgt.	4.8	8.0	4.8	4.9	4.8	4.9	4.9	4.9	4.5	4.4	4.7	5.6	6.4	4.8	H	7.1	110.0	2.5	2.1	2.1	2.1											
EY-Parthenon	4.7	na	na	na	4.2	na	na	na	na	2.8	na	na	na	na	na	na	na	1.4	1.2	1.8	1.6											
PNC Financial Services Corp.	4.7	7.8	4.7	na	4.2	4.2	3.8	3.8	3.7	3.7	4.0	na	6.5	4.8	H	6.1	118.2	H	-1.2	1.1	L	0.9	L	0.8	L							
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	4.3	6.3	109.4	L	-1.8	L	3.2	3.2	3.2									
The Lonski Group	4.7	7.8	4.7	5.0	4.6	4.7	4.4	4.2	3.7	3.5	3.7	4.8	5.6	4.1	6.5	116.8	0.2	2.2	2.4	2.3												
Nomura Securities, Inc.	4.6	7.8	na	na	na	na	na	2.8	2.8	2.8	na	na	na	na	na	na	na	0.3	1.5	1.9	1.8											
Societe Generale	4.6	7.8	4.6	na	4.4	4.1	3.6	3.1	3.2	3.2	3.5	na	na	na	na	na	na	-1.5	1.8	2.2	2.2											
GLC Financial Economics	4.5	7.7	4.6	4.5	4.6	4.5	4.5	4.0	4.0	3.9	4.2	4.8	5.8	4.0	5.8	114.4	1.1	2.4	2.7	2.6												
Loomis, Sayles & Company	4.4	7.5	4.4	4.4	4.5	4.5	3.7	2.1	2.4	2.7	2.9	3.7	4.7	L	3.3	5.4	112.1	1.5	2.6	3.9	H	2.9										
MacroFin Analytics & Rutgers Bus School	4.4	7.8	4.3	4.4	4.7	4.9	5.0	4.8	3.9	4.0	4.0	5.0	6.0	4.1	6.8	113.0	1.5	2.5	2.6	2.6												
Wells Fargo	4.4	7.5	4.4	4.4	4.0	3.8	3.2	3.2	3.1	3.2	3.6	4.4	5.4	3.8	5.9	na	-1.8	L	1.4	1.5	1.4											
ING	3.9	na	na	na	na	na	na	3.2	3.1	3.0	3.4	na	na	na	na	na	na	-0.6	na	na	na	na										
Georgia State University	3.6	6.7	na	na	3.4	3.1	4.0	3.6	3.4	3.6	3.9	4.6	5.7	na	5.9	na	0.8	2.9	2.1	2.4												
ACIMA Private Wealth	1.0	L	4.0	L	1.0	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	4.0	H	1.8	2.0	2.2
August Consensus	4.9	8.0	4.9	4.9	4.7	4.7	4.5	4.0	3.7	3.6	3.9	4.9	6.0	4.1	6.2	113.1	0.8	2.3	2.4	2.3												
Top 10 Avg.	5.5	8.5	5.4	5.4	5.4	5.3	5.1	4.8	4.4	4.2	4.4	5.4	6.3	4.5	6.8	114.7	2.0	3.1	3.1	2.8												
Bottom 10 Avg.	4.0	7.2	4.2	4.4	4.0	3.9	3.6	3.0	2.9	2.9	3.4	4.4	5.6	3.7	5.5	111.4	-0.9	1.6	1.7	1.7												
July Consensus	4.6	7.7	4.7	4.6	4.6	4.5	4.3	3.8	3.6	3.5	3.8	4.6	5.6	4.0	6.1	114.7	1.1	2.4	2.3	2.2												
Number of Forecasts Changed From A Month Ago:																																
Down	1	1	2	2	2	1	0	0	1	4	5	3	3	2	1	11	18	15	9	9												
Same	15	12	6	7	12	7	8	14	15	16	15	7	6	8	7	6	16	14	17	20												
Up	21	17	17	11	17	19	19	22	19	17	14	10	10	8	20	2	3	6	10	6												
Diffusion Index	77%	77%	80%	73%	74%	83%	85%	81%	76%	68%	63%	68%	68%	67%	84%	26%	30%	37%	51%	46%												

Third Quarter 2024

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	Percent Per Annum -- Average For Quarter															Avg. For --Qtr.-- A.	(Q-Q % Change)															
	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																	
Santander Capital Markets	5.4	H	8.6	H	5.4	H	5.3	H	5.2	5.0	4.6	4.2	4.0	4.2	5.1	6.3	4.0	6.7	112.0	0.9	2.7	2.7	2.3									
Chan Economics	5.2		8.2		5.1		5.2	H	5.3	H	5.1	4.5	3.9	3.9	4.0	5.0	6.0	4.5	6.4	112.2	0.8	2.3	2.5	2.0								
Barclays	5.1		na		na		na		na		na		na		na		na		na	na	0.0	2.7	2.6	2.6								
Economist Intelligence Unit	5.1		8.1		na		5.0		4.9		4.9	4.5	4.4	3.5	3.3	3.5	na	na	na	5.5	na	2.1	na	2.4	na							
Regions Financial Corporation	5.1		8.3		5.0		5.2		4.9		5.0	5.0	3.5	3.6	3.5	3.7	5.0	5.9	4.1	6.2	112.9	1.4	1.9	2.0	1.9							
The Northern Trust Company	5.1		8.3		5.1		5.2		4.9		4.5	4.3	3.8	3.4	3.3	3.6	4.5	5.7	4.1	5.1	111.0	1.4	2.0	2.1	2.0							
Action Economics	5.0		8.2	H	5.5	H	5.1		5.0		4.8	4.5	4.0	3.9	3.9	3.9	4.7	5.8	3.8	7.2	113.7	1.9	1.4	2.3	1.9							
BMO Capital Markets	5.0		8.2		5.0		na	H	5.3	H	5.3	H	4.7	3.7	3.5	3.4	3.5	na	na	na	6.3	110.2	1.5	2.0	2.2	2.0						
Chmura Economics & Analytics	5.0		8.2		5.0		5.1	H	5.3	H	5.4	H	5.5	H	5.6	H	5.6	H	6.0	H	na	na	6.7	na	3.0	3.2	3.4	3.4	H			
J.P. Morgan Chase	5.0		na		na		na		na		na		na		na		na		na		na	na	na	na	na	2.3	2.3	2.3	2.1			
Daiwa Capital Markets America	4.9		8.0		na		na		4.7		na		na	3.9	3.7	3.6	4.3	na	na	na	6.3	113.5	1.3	2.5	2.5	2.4						
Goldman Sachs & Co.	4.9		na		na		na		4.6		na		4.1	3.8	3.8	3.9	na	na	na	na	na	na	na	na	na	1.9	2.3	2.1	2.1			
Moody's Analytics	4.9		8.0		4.8		4.8		4.6		4.5	4.5	4.5	4.3	4.1	3.9	4.4	5.4	6.3	4.3	6.1	na	na	1.9	1.9	2.2	2.2					
S&P Global Market Intelligence	4.9		8.0		4.8		na		4.6		4.3	4.3	3.9	3.6	3.7	3.9	na	na	na	5.9	na	na	1.3	2.4	2.7	2.4						
Bank of the West	4.8		7.9		4.7		4.7		4.8		4.8	4.6	4.2	4.1	3.9	4.0	5.0	6.1	4.7	6.7	112.4	1.2	2.2	2.2	2.2							
Scotiabank Group	4.8		na		4.6		na		4.1		na		3.6	3.7	3.8	3.9	na	na	na	na	na	na	na	na	1.1	0.0	L	3.5	H	1.4		
DePrince & Assoc.	4.7		7.8		4.7		4.7		4.8		4.9	4.9	4.7	4.3	4.1	4.1	5.3	6.2	4.5	6.3	115.8	2.1	2.5	2.5	2.4							
Fannie Mae	4.7		7.8		na		na		4.5		4.3	4.2	3.9	3.7	3.6	3.8	na	na	na	6.1	na	na	0.3	2.4	2.8	2.4						
MacroPolicy Perspectives	4.7		7.8		4.6		na		na		na	4.8	4.0	4.2	4.1	4.3	4.9	5.8	na	6.9	na	na	1.8	2.4	2.4	2.0						
Bank of America	4.6		na		na		na		na		na	3.3	3.3	3.3	3.7	na	na	na	na	na	na	na	na	0.5	3.2	2.2	2.2					
Oxford Economics	4.6		7.1		4.6		na		4.2		4.3	3.8	3.3	3.0	3.0	3.2	3.5	L	na	na	5.0	112.6	1.6	3.5	H	2.2	2.1					
Naroff Economic Advisors	4.5		7.5		4.5		4.6		4.5		4.5	4.5	4.5	4.0	4.0	4.2	na	na	na	4.0	6.0	113.5	3.6	H	2.6	2.8	2.9					
Via Nova Investment Mgt.	4.5		7.8		4.6		4.6		4.5		4.6	4.7	4.8	4.8	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			
KPMG	4.4		7.5		4.4		4.1		4.3		4.3	4.3	4.0	3.6	3.5	3.9	4.5	5.7	na	5.8	na	na	1.5	2.4	2.7	2.4						
GLC Financial Economics	4.3		7.4		4.3		4.2		4.3		4.2	4.2	3.9	3.9	4.0	4.2	4.8	5.8	4.0	5.7	114.3	1.7	2.2	2.8	2.6							
EY-Parthenon	4.2		na		na		na		3.9		na	na	na	na	2.9	na	na	na	na	na	na	na	na	na	1.9	2.5	2.2	2.0				
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	4.1	6.1	109.1	1.0	3.0	3.0	3.1							
The Lonski Group	4.2		7.3		4.2		4.4		4.1		4.2	4.1	4.0	3.5	3.4	3.6	4.6	5.5	4.0	6.3	117.0	1.2	2.0	2.2	2.1							
Nomura Securities, Inc.	4.1		7.3		na		na		na		na	na	2.5	2.7	2.8	na	na	na	na	na	na	na	na	na	1.3	1.5	2.5	2.2				
Societe Generale	4.1		7.3		4.1		na		3.9		3.6	3.2	2.9	3.1	3.1	3.4	na	na	na	na	na	na	na	na	2.3	1.8	2.2	2.0				
MacroFin Analytics & Rutgers Bus School	3.9		7.3		3.8		3.9		4.1		4.3	4.7	4.7	3.9	3.9	4.0	4.9	5.9	4.0	6.7	112.8	1.6	2.5	2.3	2.4							
PNC Financial Services Corp.	3.8		6.9		3.8		na		3.5		3.6	3.3	3.4	3.6	3.7	3.9	na	6.1	4.6	5.9	118.8	H	-1.0	L	1.1	0.9	L	0.7	L			
Loomis, Sayles & Company	3.5		6.6		3.4		3.4		3.5		3.5	3.0	2.0	2.4	2.7	2.9	3.7	4.7	L	3.3	5.3	112.0	2.2	2.2	2.8	2.3						
ING	3.4		na		na		na		na		na	na	3.0	3.0	3.0	3.4	na	na	na	na	na	na	na	na	1.3	na	na	na				
Wells Fargo	3.4		6.5		3.4		3.4		3.0		3.0	3.0	3.1	3.1	3.1	3.5	4.3	5.3	3.7	5.8	na	na	2.1	2.4	2.8	2.4						
Georgia State University	3.3		6.4		na		na		3.0		2.9	3.6	3.3	3.2	3.5	3.9	4.6	5.7	na	5.8	na	na	1.4	2.4	2.5	2.3						
ACIMA Private Wealth	0.5	L	3.5	L	0.5	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	3.3	2.7	2.2	2.2
August Consensus	4.4		7.5		4.4		4.4		4.3		4.2	4.2	3.8	3.6	3.6	3.9	4.8	5.9	4.0	6.1	112.7		1.6	2.3	2.4	2.2						
Top 10 Avg.	5.1		8.2		5.0		5.0		5.1		5.0	4.9	4.6	4.3	4.2	4.4	5.3	6.2	4.4	6.7	114.5		2.6	2.9	2.9	2.7						
Bottom 10 Avg.	3.4		6.6		3.6		3.8		3.4		3.4	3.3	2.8	2.8	2.9	3.3	4.3	5.5	3.6	5.3	111.0		0.6	1.6	2.0	1.8						
July Consensus	4.3		7.3		4.3		4.2		4.2		4.1	4.0	3.6	3.5	3.5	3.8	4.6	5.6	4.0	6.0	114.7		1.7	2.2	2.4	2.2						
Number of Forecasts Changed From A Month Ago:																																
Down	4		3		2		4		4		1	1	2	3	6	4	3	3	2	3	10		14	6	8	9						
Same	14		11		8		6		11		8	8	14	16	17	17	9	7	9	7	7		14	23	20	20						
Up	19		16		15		10		16		18	18	18	14	12	11	8	9	7	18	2		9	6	8	6						
Diffusion Index	70%		72%		76%		65%		69%		81%	81%	74%	67%	59%	61%	63%	66%	64%	77%	29%		43%	50%	50%	46%						

Fourth Quarter 2024

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.	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									
Chan Economics	4.9	H	7.9	4.8	4.9	H	5.0	H	5.0	4.8	4.2	3.6	3.6	3.7	4.7	5.7	4.2	6.1	112.5	1.5	2.2	2.4	1.9	
Santander Capital Markets	4.9	H	8.1	H	4.9	H	4.8	4.7	4.6	4.2	4.0	3.8	4.1	5.0	6.2	3.8	6.4	111.5	1.1	2.5	2.5	2.1		
Action Economics	4.8		7.9	5.3	H	4.8	4.7	4.5	4.3	4.0	3.8	3.8	3.9	4.6	5.7	3.7	7.2	113.9	na	na	na	na		
BMO Capital Markets	4.8		7.9	4.8	na	5.0	H	5.0	4.4	3.5	3.4	3.3	3.4	na	na	na	6.3	109.6	2.0	1.9	2.1	1.9		
Chmura Economics & Analytics	4.7		7.8	4.7	4.8	5.0	H	5.1	H	5.1	H	5.2	H	5.3	H	5.7	na	6.6	na	2.5	3.0	3.2	3.2	
Economist Intelligence Unit	4.7		7.7	na	4.8	4.7	4.4	4.3	4.3	3.3	3.2	3.3	na	na	na	5.3	na	na	2.5	na	2.1	na		
Barclays	4.6		na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.0	2.7	2.5	2.5	
Goldman Sachs & Co.	4.6		na	na	na	4.4	na	na	3.9	3.8	3.8	3.9	na	na	na	na	na	na	na	1.9	3.0	3.3	2.6	
Regions Financial Corporation	4.6		7.8	4.5	4.7	4.5	4.6	4.7	3.4	3.4	3.4	3.6	4.9	5.8	4.0	6.0	112.7	1.5	1.9	2.0	1.8			
The Northern Trust Company	4.6		7.8	4.6	4.7	4.4	3.8	3.6	3.5	3.3	3.3	3.6	4.5	5.7	4.1	5.1	110.0	1.6	2.0	2.0	1.9			
Bank of the West	4.5		7.7	4.4	4.5	4.5	4.4	4.0	4.0	3.8	3.9	5.0	6.1	4.7	6.5	112.6	1.5	2.2	2.2	2.1				
J.P. Morgan Chase	4.5		na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.8	2.3	2.3	2.1	
Daiwa Capital Markets America	4.4		7.5	na	na	4.3	na	na	3.6	3.5	3.6	4.3	na	na	na	6.2	113.5	1.5	2.3	2.4	2.3			
S&P Global Market Intelligence	4.4		7.5	4.3	na	4.1	3.9	3.9	3.6	3.4	3.6	3.9	na	na	na	5.7	na	na	1.5	2.3	1.7	1.9		
DePrince & Assoc.	4.3		7.5	4.3	4.3	4.4	4.6	4.6	4.4	4.2	4.1	4.1	5.3	6.2	4.5	6.2	115.0	2.2	2.4	2.5	2.4			
Via Nova Investment Mgt.	4.3		7.5	4.3	4.4	4.3	4.4	4.5	4.6	4.6	4.6	4.6	5.8	H	6.6	H	5.0	H	7.3	H	2.5	2.1	2.1	
Fannie Mae	4.2		7.4	na	na	4.2	4.1	4.0	3.8	3.7	3.6	3.8	na	na	na	5.9	na	na	1.5	2.3	3.0	2.4		
MacroPolicy Perspectives	4.2		7.4	4.2	na	na	na	4.7	3.5	4.0	3.9	4.1	4.7	5.6	na	6.7	na	na	2.0	2.6	2.7	2.2		
Bank of America	4.1		na	na	na	na	na	na	3.0	3.2	3.3	3.7	na	na	na	na	na	na	1.0	3.1	1.8	2.0		
Oxford Economics	4.1		6.5	4.1	na	3.8	3.8	3.5	3.0	2.9	2.9	3.1	3.4	L	na	na	4.7	111.7	1.8	3.5	H	2.2		
EY-Parthenon	4.0		na	na	na	3.7	na	na	na	na	2.9	na	na	na	na	na	na	na	na	1.9	2.3	2.1	1.9	
Naroff Economic Advisors	4.0		7.0	4.0	4.1	3.9	3.9	3.9	3.9	3.9	3.9	4.2	na	na	4.1	5.8	113.0	2.2	2.5	2.5	2.2			
Scotiabank Group	4.0		na	3.9	na	3.7	na	na	3.5	3.7	3.9	3.9	na	na	na	na	na	na	na	1.6	0.4	L	3.3	
GLC Financial Economics	3.9		7.1	3.9	4.0	4.0	3.9	4.0	3.8	3.9	3.9	4.2	4.8	5.8	3.9	5.3	114.1	2.0	2.2	2.2	2.2			
KPMG	3.9		7.1	3.9	3.5	3.8	3.8	3.7	3.5	3.2	3.4	3.8	4.3	5.5	na	5.5	na	na	1.5	2.2	1.8	1.9		
RDQ Economics	3.9		7.0	3.9	4.0	3.8	3.8	3.7	3.5	3.7	3.8	3.7	5.4	6.1	4.1	6.0	108.5	1.2	2.9	3.0	3.0			
Moody's Analytics	3.8		6.9	3.7	3.9	3.7	3.7	3.8	3.8	3.8	3.9	4.3	5.3	6.3	4.3	5.8	na	na	2.1	2.0	2.0	2.1		
The Lonski Group	3.7		6.8	3.6	3.9	3.7	3.8	3.6	3.5	3.3	3.2	3.4	4.5	5.3	3.8	6.0	116.3	1.7	2.1	2.1	2.0			
Nomura Securities, Inc.	3.6		6.8	na	na	na	na	na	2.3	2.7	2.7	na	na	na	na	na	na	na	1.9	1.3	2.6	2.2		
Societe Generale	3.6		6.8	3.6	na	3.4	3.1	2.9	2.7	3.0	3.1	3.4	na	na	na	na	na	na	4.3	H	1.8	2.2		
PNC Financial Services Corp.	3.5		6.6	3.5	na	3.2	3.3	3.1	3.2	3.4	3.7	3.9	na	5.7	4.4	5.6	118.7	H	0.8	L	0.8	0.9		
MacroFin Analytics & Rutgers Bus School	3.4		6.8	3.3	3.4	3.6	4.0	4.3	4.5	3.8	3.8	4.0	4.8	5.8	3.9	6.6	112.6	1.8	2.2	2.1	2.2			
Georgia State University	3.3		6.4	na	na	2.9	2.9	3.4	3.2	3.2	3.5	3.9	4.6	5.7	na	5.6	na	na	2.1	2.3	2.5	2.2		
Loomis, Sayles & Company	3.1		6.2	3.1	3.0	3.1	3.1	2.7	2.0	2.5	2.8	3.0	3.8	4.8	L	3.4	5.2	111.9	2.2	2.0	2.0	1.8		
ING	2.9		na	na	na	na	na	na	3.0	3.1	3.0	3.4	na	na	na	na	na	na	2.2	na	na	na		
Wells Fargo	2.9		6.0	2.9	2.9	2.9	2.9	3.0	3.0	3.1	3.1	3.5	4.3	5.3	3.7	5.6	na	na	2.6	3.0	3.6	H		
ACIMA Private Wealth	1.5	L	4.5	L	1.5	L	1.6	L	1.6	L	0.6	L	0.7	L	0.7	L	1.5	L	2.3	L	4.0	5.0	1.5	L
August Consensus	4.0		7.1	4.0	4.1	4.0	3.9	3.9	3.5	3.5	3.5	3.8	4.7	5.7	4.0	5.9	112.4		1.8	2.3	2.3	2.2		
Top 10 Avg.	4.7		7.8	4.7	4.7	4.7	4.7	4.6	4.3	4.1	4.1	4.3	5.2	6.1	4.3	6.6	114.2		2.5	2.9	3.0	2.7		
Bottom 10 Avg.	3.2		6.3	3.3	3.4	3.2	3.1	3.0	2.6	2.8	2.8	3.2	4.3	5.4	3.6	5.1	110.6		1.2	1.6	1.8	1.8		
July Consensus	3.9		7.0	3.9	3.9	3.9	3.8	3.8	3.5	3.5	3.5	3.8	4.6	5.5	4.0	5.9	114.1		2.0	2.2	2.4	2.2		
Number of Forecasts Changed From A Month Ago:																								
Down	4		1	1	2	2	1	2	2	2	3	3	2	2	2	2	9		13	4	6	7		
Same	11		11	7	7	11	7	9	16	17	15	15	8	7	8	9	6		13	21	21	20		
Up	22		18	17	11	18	19	16	16	14	17	14	10	10	8	17	4		10	9	8	7		
Diffusion Index	74%		78%	82%	73%	76%	83%	76%	71%	68%	70%	67%	70%	71%	67%	77%	37%		46%	57%	53%	50%		

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	5.63	5.63	5.38
BMO Capital Markets	5.38	5.38	5.38
ING Financial Markets	5.38	5.38	3.88
Moody's Analytics	5.30	5.37	5.34
Northern Trust	5.63	5.63	4.88
Oxford Economics	5.31	5.38	4.96
S&P Global Market Intelligence	--	--	--
Scotiabank	5.38	5.38	5.13
Wells Fargo	5.38	5.38	4.38
August Consensus	5.42	5.44	4.92
High	5.63	5.63	5.38
Low	5.30	5.37	3.88
Last Months Avg.	5.20	5.06	4.50

United States			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
3.90	3.80	3.75	
3.77	3.63	3.48	
4.00	3.50	3.00	
3.84	3.94	3.96	
3.65	3.50	3.25	
3.80	3.64	3.16	
4.00	3.88	3.69	
3.65	3.60	3.75	
3.75	3.60	3.15	
3.82	3.68	3.47	
4.00	3.94	3.96	
3.65	3.50	3.00	
3.67	3.57	3.57	

Fed's AFE \$ Index			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
--	--	--	
112.4	111.6	111.0	
109.9	107.2	104.0	
--	--	--	
114.0	116.0	112.0	
115.0	114.9	113.6	
--	--	--	
--	--	--	
--	--	--	
112.8	112.4	110.2	
115.0	116.0	113.6	
109.9	107.2	104.0	
113.6	113.6	111.9	

Blue Chip Forecasters	Policy-Rate Balance Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	0.00	0.00	0.00
BMO Capital Markets	-0.10	-0.10	-0.10
ING Financial Markets	-0.10	-0.10	0.00
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	-0.04
S&P Global Market Intelligence	--	--	--
Scotiabank	--	--	--
Wells Fargo	-0.10	-0.10	-0.10
August Consensus	-0.08	-0.08	-0.06
High	0.00	0.00	0.00
Low	-0.10	-0.10	-0.10
Last Months Avg.	-0.07	-0.07	-0.05

Japan			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
0.35	0.30	0.25	
0.67	0.80	0.80	
0.50	0.75	1.00	
0.45	0.48	0.53	
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0.45	0.50	0.50	
0.45	0.46	0.48	
--	--	--	
--	--	--	
0.50	0.75	0.70	
0.48	0.58	0.61	
0.67	0.80	1.00	
0.35	0.30	0.25	
0.43	0.46	0.50	

Yen per US\$			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
137.0	135.0	128.0	
138.0	137.0	136.0	
135.0	130.0	120.0	
133.5	130.3	124.8	
138.0	130.0	122.5	
140.0	137.0	132.0	
144.6	144.9	139.6	
143.9	143.3	135.8	
135.0	135.0	130.0	
--	--	--	
138.3	135.8	129.9	
144.6	144.9	139.6	
133.5	130.0	120.0	
135.9	134.0	129.7	

Blue Chip Forecasters	Official Bank Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	5.75	5.75	5.75
BMO Capital Markets	5.75	5.75	5.75
ING Financial Markets	5.50	5.50	5.00
Moody's Analytics	5.35	5.75	5.75
Nomura Securities	--	--	--
Northern Trust	5.75	5.75	5.50
Oxford Economics	5.35	5.75	5.75
S&P Global Market Intelligence	--	--	--
Scotiabank	5.50	5.50	5.00
Wells Fargo	5.75	5.75	4.75
August Consensus	5.59	5.69	5.41
High	5.75	5.75	5.75
Low	5.35	5.50	4.75
Last Months Avg.	5.12	5.20	4.89

United Kingdom			
10 Yr. Gilt Yields %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
4.50	4.50	4.40	
3.96	3.71	3.51	
4.40	3.80	3.25	
4.33	4.99	5.11	
--	--	--	
4.30	4.20	4.00	
4.33	4.28	4.18	
--	--	--	
--	--	--	
4.25	4.10	3.75	
4.30	4.23	4.03	
4.50	4.99	5.11	
3.96	3.71	3.25	
4.16	4.00	3.78	

US\$ per Pound Sterling			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.29	1.29	1.29	
1.28	1.27	1.28	
1.29	1.31	1.34	
1.42	1.46	1.55	
1.26	1.27	1.33	
1.25	1.23	1.28	
1.27	1.27	1.28	
1.29	1.28	1.29	
1.35	1.35	1.38	
--	--	--	
1.30	1.30	1.34	
1.42	1.46	1.55	
1.25	1.23	1.28	
1.26	1.28	1.30	

Blue Chip Forecasters	SNB Policy Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	2.00	2.25	2.25
ING Financial Markets	2.00	2.00	2.00
Moody's Analytics	2.00	2.00	2.00
Nomura Securities	--	--	--
Northern Trust	2.00	2.00	1.75
Oxford Economics	1.77	2.00	1.88
S&P Global Market Intelligence	--	--	--
Scotiabank	--	--	--
Wells Fargo	2.00	2.00	1.75
August Consensus	1.96	2.04	1.94
High	2.00	2.25	2.25
Low	1.77	2.00	1.75
Last Months Avg.	1.86	1.91	1.79

Switzerland			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
--	--	--	
1.15	1.15	1.10	
1.90	2.11	2.22	
--	--	--	
1.00	1.00	0.80	
1.09	1.37	1.34	
--	--	--	
--	--	--	
1.29	1.41	1.37	
1.90	2.11	2.22	
1.00	1.00	0.80	
1.25	1.22	1.22	

CHF per US\$			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
0.90	0.88	0.87	
0.86	0.84	0.85	
0.88	0.86	0.82	
0.88	0.89	0.89	
0.91	0.93	0.88	
0.90	0.91	0.90	
0.91	0.90	0.89	
0.88	0.88	0.87	
--	--	--	
0.89	0.89	0.87	
0.91	0.93	0.90	
0.86	0.84	0.82	
0.90	0.89	0.89	

Blue Chip Forecasters	O/N MMkt Financing Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	5.00	5.00	4.75
BMO Capital Markets	5.00	5.00	4.75
ING Financial Markets	5.00	5.00	4.25
Moody's Analytics	4.94	5.00	4.71
Nomura Securities	--	--	--
Northern Trust	5.00	5.00	4.50
Oxford Economics	4.88	5.00	4.88
S&P Global Market Intelligence	--	--	--
Scotiabank	5.00	5.00	4.75
Wells Fargo	5.00	5.00	4.50
August Consensus	4.98	5.00	4.64
High	5.00	5.00	4.88
Low	4.88	5.00	4.25
Last Months Avg.	4.80	4.69	4.26

Canada			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
--	--	--	
3.33	3.21	3.08	
3.50	3.40	3.00	
3.82	4.02	4.21	
--	--	--	
3.40	3.30	3.10	
3.44	3.48	3.42	
--	--	--	
3.25	3.20	3.40	
3.45	3.25	3.05	
3.46	3.41	3.32	
3.82	4.02	4.21	
3.25	3.20	3.00	
3.36	3.22	3.14	

C\$ per US\$			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.33	1.32	1.30	
1.31	1.30	1.29	
1.29	1.27	1.25	
1.33	1.29	1.24	
1.36	1.35	1.33	
1.33	1.35	1.28	
1.32	1.32	1.31	
1.32	1.34	1.31	
1.30	1.30	1.27	
--	--	--	
1.32	1.32	1.29	
1.36	1.35	1.33	
1.29	1.27	1.24	
1.34	1.33	1.30	

International Interest Rate And Foreign Exchange Rate Forecasts

Blue Chip Forecasters	Official Cash Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	4.35	3.85	3.60
ING Financial Markets	4.35	4.35	4.10
Moody's Analytics	4.18	4.35	4.10
Nomura Securities	--	--	--
Northern Trust	4.60	4.60	4.10
Oxford Economics	4.35	4.60	4.60
S&P Global Market Intelligence	--	--	--
Scotiabank	--	--	--
Wells Fargo	4.35	4.35	4.10
August Consensus	4.36	4.35	4.10
High	4.60	4.60	4.60
Low	4.18	3.85	3.60
Last Months Avg.	4.16	4.10	3.64

Australia		
10 Yr. Gov't Bond Yield %		
In 3 Mo.	In 6 Mo.	In 12 Mo.
--	--	--
3.75	3.30	3.20
4.49	4.66	4.41
--	--	--
4.00	4.00	3.80
3.88	3.89	3.68
--	--	--
--	--	--
--	--	--
4.03	3.96	3.77
4.49	4.66	4.41
3.75	3.30	3.20
3.68	3.52	3.35

US\$ per A\$		
In 3 Mo.	In 6 Mo.	In 12 Mo.
0.67	0.68	0.70
0.68	0.70	0.74
0.68	0.69	0.72
0.68	0.69	0.70
0.66	0.64	0.68
0.66	0.67	0.68
0.68	0.70	0.72
0.69	0.69	0.70
--	--	--
0.68	0.68	0.71
0.69	0.70	0.74
0.66	0.64	0.68
0.67	0.68	0.70

Blue Chip Forecasters	Main Refinancing Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	4.25	4.25	4.25
BMO Capital Markets	4.25	4.25	4.25
ING Financial Markets	4.50	4.50	4.25
Moody's Analytics	4.19	4.50	4.45
Nomura Securities	--	--	--
Northern Trust	4.50	4.50	4.25
Oxford Economics	4.22	4.50	4.04
S&P Global Market Intelligence	--	--	--
Scotiabank	4.50	4.50	4.25
Wells Fargo	3.75	3.75	3.25
August Consensus	4.27	4.34	4.12
High	4.50	4.50	4.45
Low	3.75	3.75	3.25
Last Months Avg.	4.07	4.20	3.94

Euro area

US\$ per Euro		
In 3 Mo.	In 6 Mo.	In 12 Mo.
1.08	1.10	1.12
1.11	1.12	1.13
1.12	1.15	1.18
1.09	1.11	1.16
1.12	1.12	1.14
1.07	1.05	1.12
1.09	1.09	1.10
1.08	1.09	1.12
1.12	1.12	1.15
--	--	--
1.10	1.11	1.14
1.12	1.15	1.18
1.07	1.05	1.10
1.09	1.10	1.13

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	2.55	2.50	2.30	--	--	--	--	--	--	--	--	--
BMO Capital Markets	2.38	2.32	2.19	--	--	--	--	--	--	--	--	--
ING Financial Markets	2.30	2.20	2.10	2.90	2.75	2.65	4.30	4.10	3.90	3.40	3.25	3.10
Moody's Analytics	2.62	2.75	2.78	3.01	3.08	3.05	4.34	4.24	3.96	3.49	3.57	3.54
Northern Trust	2.40	2.40	2.20	2.90	2.90	2.70	4.00	4.00	3.80	3.70	3.70	3.50
Oxford Economics	2.42	2.30	2.08	2.97	2.82	2.54	4.18	4.07	3.91	3.44	3.32	3.13
Wells Fargo	2.40	2.35	2.25	--	--	--	--	--	--	--	--	--
August Consensus	2.44	2.40	2.27	2.95	2.89	2.74	4.21	4.10	3.89	3.51	3.46	3.32
High	2.62	2.75	2.78	3.01	3.08	3.05	4.34	4.24	3.96	3.70	3.70	3.54
Low	2.30	2.20	2.08	2.90	2.75	2.54	4.00	4.00	3.80	3.40	3.25	3.10
Last Months Avg.	2.38	2.35	2.35	2.86	2.82	2.87	4.09	4.06	4.05	3.40	3.35	3.42

	Consensus Forecasts			
	10-year Bond Yields vs U.S. Yield			
	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-3.36	-3.34	-3.10	-2.86
United Kingdom	0.46	0.48	0.55	0.56
Switzerland	-2.92	-2.53	-2.27	-2.10
Canada	-0.43	-0.36	-0.27	-0.14
Australia	0.16	0.21	0.29	0.31
Germany	-1.40	-1.38	-1.27	-1.19
France	-0.85	-0.87	-0.79	-0.73
Italy	0.23	0.39	0.43	0.43
Spain	-0.43	-0.31	-0.22	-0.15

	Consensus Forecasts			
	Policy Rates vs U.S. Target Rate			
	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-5.23	-5.50	-5.36	-4.98
United Kingdom	-0.13	0.16	0.25	0.49
Switzerland	-3.38	-3.46	-3.40	-2.98
Canada	-0.13	-0.45	-0.44	-0.28
Australia	-1.03	-1.06	-1.09	-0.82
Euro area	-1.13	-1.15	-1.10	-0.79

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****A “patient and resolute” Fed**

The goal is to defeat, not just cool, inflation.

The Federal Open Market Committee (FOMC) – the policy arm of the Federal Reserve voted to raise rates again in July after a brief reprieve in June. That increased the fed funds rate to a 5.25% - 5.5% range, the highest rate for short-term rates since 2001, before it cut rates to mop up in the wake of the dot.com bust. The vote to raise rates was once again unanimous, which underscored Chairman Powell’s finesse in corralling the cats in a key vote.

At least two meeting participants, Austan Goolsbee of Chicago and Raphael Bostic of Atlanta, had voiced their preferences to pause on rate hikes in July before this meeting. Powell hinted that they may have pushed back against this hike. He said that will be reflected in the minutes to this meeting, which will be released in three weeks. Debate is expected to intensify within the ranks of the Fed leadership about how far they should go on rate hikes given the cooling in inflation we have seen and the uncertainty about the path of inflation going forward.

The statement following the meeting was little changed. It left the door open to additional rate hikes, much to the chagrin of market participants eager for an end to rate hikes. Chairman Jay Powell emphasized the Fed’s commitment to hold rates higher for longer at the press conference following the meeting; that will raise real rates as inflation cools. A cut in rates by year-end or at the start of next year is unlikely, barring a full-blown recession.

The Fed worries that financial markets will front-run it on rate cuts and undo some of the progress made on inflation. The ground is fertile. The excess savings triggered by the pandemic are still significant, a GenAI bubble is taking root and earlier fiscal stimulus is boosting infrastructure investment. The construction of chip and EV plants is accelerating, while funds allocated to upgrade schools and roads during the pandemic are being deployed.

Chairman Jay Powell underscored that the Fed needs to see core inflation come down in a more “durable” way. The “historic record” is clear on the fact that the worst error would be to fail to fully derail inflation now. “Policy has not been restrictive enough for long enough” to ensure that inflation will come down and stay there.

Much of the cooling in goods inflation reflects a reversal of the supply chain problems triggered by an uneven reopening of the global economy. That is good news as it has alleviated inflation in the goods sector. However, supply chains remain fragile.

Concern is high that we could see a bump in inflation this Fall when a quirk in how medical insurance is measured plays out. The consumer price index (CPI) measure of medical insurance plummeted nearly 25% from a year ago in June; that measure reverses course and rises on both a month-on-month and year-over-year basis in October. That could prevent inflation from cooling as much as needed in the service sector. Nearly all other insurance costs are already rising rapidly, with extreme weather risks prompting insurers to pull out of some markets entirely.

Separately, recent improvements in inflation have likely emboldened the Fed to reach its 2% inflation target. There was an unspoken sense that the Fed would stop short of its actual target to avoid the pain – a rise in unemployment – necessary to get inflation back to its target. The resilience of the economy has helped alleviate those concerns, while simultaneously upping the risk of an overshoot on rate hikes by the Fed. Powell said, “We are determined to bring inflation down to 2% over time and no one should doubt that.”

The bulk of the drag associated with earlier rate hikes is still ahead of us. Business loans that were taken out when rates were much lower are about to reset, while rejections for credit card, mortgage and vehicle loans have surged since the turmoil we saw in financial markets in the Spring. Powell acknowledged that bank lending conditions continued to tighten since the last report; bank lending standards were in recession territory in the first quarter. That data is due to be released on Monday, July 31.

Powell was careful to point out that the Fed would not need to reach the 2% level before cutting rates. The Fed is expecting to cut rates well before inflation reaches 2%; it only needs to be moving toward 2% over a sustained period. Note: The Fed does not expect inflation to fall to 2% until 2025. Real or inflation-adjusted interest rates will rise as inflation decelerates. Those shifts coupled with the lags in monetary policy mean the Fed should cut rates before it hits the 2% target, or it will most definitely overshoot and trigger a much harder landing. He said that the Fed could keep reducing its balance sheet or what is known as quantitative tightening, even after starting to cut short-term rates.

Powell noted that the staff has a significant slowdown in the economy at the end of the year but no longer has a full-blown recession in their forecast. That is only one forecast. He cautioned that the historical record suggests some softening in labor market conditions, aka increases in unemployment, are likely before inflation is defeated.

Powell said that the short-term social costs of unemployment were less than the long-term social costs of inflation. He thinks some increase in unemployment will occur – the issue is how much.

Bottom Line

The Fed will stand its ground and hold rates high well into 2024, barring a more pronounced slowdown in the economy and rise in unemployment. The goal is to defeat, not just cool, inflation. Another rate hike is possible. Our current forecast has it in November, given the time needed to assess how rapidly the economy is actually cooling and the risk of noise due to strikes. The writers’ and actors’ strikes could hit payrolls in August in the movie and production sector, while the UAW is weighing a strike in September. The Fed is scheduled to release its next forecast in September, which would enable it to signal its intent to hold rates elevated or hike again. The goal is to keep real rates elevated.

Diane Swonk (KPMG)

Tight Job Market Limits Growth and Lifts Inflation Risk

A historically low unemployment rate and industry specific shortages of qualified workers are the biggest threat to continued declines by price inflation. A tight job market traps the economy. An ultra-low jobless rate limits the upside for noninflationary economic growth. Today's reality of a high rate of labor market utilization implies the economy can grow slowly at best. Little more than a near depletion of the available supply of qualified labor warns of slower growth rates for jobs and spending. As spending ebbs, more businesses may find that their sales fall short of what justifies current staffing levels. In turn, layoffs will mount. And it is a slackening of the labor market that will curb the growth of both consumer spending and prices. Not until wage growth subsides from June's 4.4% year-on-year increase to a pace no greater than 3% might the demise of rapid inflation be declared with confidence. The latest upturn by actual and potential strikes, as well as the growing number of announced pay hikes of 5% to 10% annually, warn of a possible upturn by the year-on-year growth of the average hourly wage from June's 4.4%. As long as the labor market remains tight, the risk of a wage driven upturn by price inflation persists. Faster wage growth will do more than just boost operating costs. In addition, faster wage growth will enliven consumer spending and enhance the ability of workers to absorb higher prices. Once a wage price spiral becomes entrenched, only a significantly higher unemployment rate might succeed at taming wage driven price inflation.

Slower jobs growth will decelerate business sales. Retail sales, which serve as a proxy for consumer spending, ultimately depend on personal income growth, which is closely tied to jobs growth. An unfolding deceleration by private sector jobs growth will curb consumer spending. The drop by monthly jobs growth from May's 306,000 to June's 209,000 would have been deeper were it not for an increase by the monthly change in public sector payrolls from 47,000 to 60,000. Far different was the drop by the monthly addition to private-sector payrolls from May's 259,000 to June's 149,000. June's results reflect a continuation of 2023's distribution of payrolls growth between the private and public sectors. Seasonally adjusted data show the average monthly increase for private-sector jobs fell from the 317,000 of 2022's second half to the 215,000 of 2023's first half. According to the same serial comparison, the average monthly addition to public-sector payrolls rose from H2-2022's 37,000 to H1-2023's 63,000.

The faster growth of government employment brings attention to how government spending now contradicts Fed efforts to slow expenditures via higher interest rates. By not raising any objections, the Fed is effectively complicit with the Biden Administration's aim to expand the role of government in the US economy. The current expansion of government in the economy warns of slower economic growth and faster price inflation than otherwise.

Yearly growth for core retail sales slumps from Q1-2023's 6.0% to Q2-2023's 3.9%. Ordinarily, the change in corporate revenues is expressed in terms of year-over-year growth rates

using data that is not adjusted for seasonality. When comparing second-quarter data with results from prior second quarters, it makes little sense to employ seasonal adjustment. Before seasonal adjustment, retail sales year-over-year growth rate decelerated from first quarter 2023's 5.1% to the second quarter's 1.6%. After excluding the downward bias imparted to total retail sales by gasoline's second quarter yearly price plunge of -19.8%, the yearly increase for retail sales excluding gas station sales, or core retail sales, fell from Q1-2023's 6.0% to 3.9% for the second quarter.

Strong retail sales confined to e-commerce and restaurants. However, Q2-2023's 3.9% year-over-year increase by core retail sales masked considerable variation across categories of core retail sales. For example, the second quarter's 9.0% yearly advance by restaurant and bar sales led all broad categories of retail sales. However, almost all of the 9.0% advance consisted of price increases as inferred from Q2-2023's 8.2% yearly increase by the CPI's "food away from home" component.

Restaurant sales now top food store sales. Americans are more inclined to either dine out or order takeout than to prepare food at home. According to the retail sales report, the \$1,065 billion of restaurant and bar sales from the 12-months-ended June 2023 topped the accompanying \$971 billion of food and beverage store sales. In fact, 2022 was the first calendar year, wherein restaurant and bar sales surpassed food and beverage store sales. Things were far different as recently as the five years ended 2015, or when the span's annual averages of \$647 billion for food and beverage store sales exceeded the \$553 billion of restaurant and bar sales by 17%. Nevertheless, a significant amount of grocery sales has moved from the food and beverage store category to the general merchandise store excluding department stores category. Still, restaurants and bars share of core retail sales has climbed up from 2019's 13.7% to the record high 14.2% of the year-ended June 2023.

Core retail sales growth drops from 3.9% to 3.1% excluding restaurants. Absent restaurants and bars, remaining core retail sales grew by a modest 3.1% yearly, which was faster than Q1-2023's 2.5% yearly increase but slower than yearlong 2022's 6.8% annual growth rate. Second-quarter's year-to-year growth rate for remaining core retail sales was led by the 8.2% increase for non-store sales that is heavily weighted towards e-commerce. The second quarter's yearly gain by non-store sales outran Q1-2023's 7.8%, but lagged calendar year 2022's 12.8% annual advance. The 3.4% yearly increase by Q2-2023's sales of motor vehicle and parts dealerships was up from both Q1-2023's 2.1% and yearlong 2022's 2.8%. The second-quarter's price index for new and used autos barely rose by 0.7% from a year earlier. By contrast, the CPI's price index for motor vehicle parts and equipment rose by a faster 4.6% yearly in the second quarter.

In addition, second-quarter 2023's seasonally-adjusted, annualized sales pace of 15.6 million units for new cars and light trucks was up by 17.4% year-over-year, but was -8.9% less than 2017-2019's 17.1-million units average.

John Lonski (The Lonski Group)

Special Questions:

1. What do you think will be the peak federal funds rate target (midpoint of range) in the current tightening cycle? 5.47%
2. What do you think the fed funds rate target (midpoint of range) will be at the end of: 2023 5.40% 2024 3.82%
3. a. When will the first fed funds rate cut occur?
- | <u>Q3 2023</u> | <u>Q4 2023</u> | <u>Q1 2024</u> | <u>Q2 2024</u> | <u>Later</u> |
|----------------|----------------|----------------|----------------|--------------|
| 6% | 6% | 47% | 28% | 13% |
- b. What will likely be the primary factor behind the first fed funds rate cut?
- | | |
|---|-----|
| <u>A sharp slowdown in the economy</u> | 26% |
| <u>A meaningful and persistent slowing in inflation</u> | 74% |
| <u>Global financial market stress</u> | 0% |
4. What probability do you attach to a recession beginning over the next 12 months in the:
- | | |
|------------------|-----|
| <u>US</u> | 48% |
| <u>euro area</u> | 52% |
| <u>UK</u> | 58% |
5. a. Repayments of U.S. student loan debt will resume in October. Will this lower your outlook for the US economy in:
- | | <u>Yes</u> | <u>No</u> |
|------|------------|-----------|
| 2023 | 37% | 63% |
| 2024 | 63% | 37% |
- b. Have your forecasts for global growth been adversely impacted by recent sluggish data releases, notably in Asia and Europe?
- | | | | |
|------------|-----|-----------|-----|
| <u>Yes</u> | 81% | <u>No</u> | 19% |
|------------|-----|-----------|-----|
- c. Does China's recent disappointing data threaten to weaken the global outlook for economic growth in 2023?
- | | | | |
|------------|-----|-----------|-----|
| <u>Yes</u> | 89% | <u>No</u> | 11% |
|------------|-----|-----------|-----|
6. While the headline US PCE price index has slowed markedly, core inflation, which excludes food and energy prices, has slowed much less. What do you expect the core inflation rate to be for:
- | | | | |
|---------------------|------|---------------------|------|
| <u>Dec/Dec 2023</u> | 3.5% | <u>Dec/Dec 2024</u> | 2.4% |
|---------------------|------|---------------------|------|
7. What is your US unemployment rate forecast for:
- | | |
|---------------|------|
| December 2023 | 3.9% |
| June 2024 | 4.4% |
| December 2024 | 4.5% |

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	-0.9	0.4	0.5	0.2	....	....	....	....	....	....
Auto & Light Truck Sales (b)	15.95	14.92	14.92	16.09	15.08	15.68	....	....	....	....	....	....
Personal Income (a, current \$)	0.7	0.4	0.4	0.3	0.5	0.3	....	....	....	....	....	....
Personal Consumption (a, current \$)	1.9	0.3	0.1	0.6	0.2	0.5	....	....	....	....	....	....
Consumer Credit (e)	5.3	2.9	4.8	5.0	1.8	....	....	....	....	....	....	....
Consumer Sentiment (U. of Mich.)	64.9	67.0	62.0	63.5	59.2	64.4	71.6	....	....	....	....	....
Household Employment (c)	894	177	577	139	-310	273	....	....	....	....	....	....
Nonfarm Payroll Employment (c)	472	248	217	217	306	209	....	....	....	....	....	....
Unemployment Rate (%)	3.4	3.6	3.5	3.4	3.7	3.6	....	....	....	....	....	....
Average Hourly Earnings (All, cur. \$)	33.02	33.11	33.20	33.34	33.46	33.58	....	....	....	....	....	....
Average Workweek (All, hrs.)	34.6	34.5	34.4	34.4	34.3	34.4	....	....	....	....	....	....
Industrial Production (d)	1.5	0.9	0.2	0.5	0.0	-0.4	....	....	....	....	....	....
Capacity Utilization (%)	79.6	79.6	79.5	79.9	79.4	78.9	....	....	....	....	....	....
ISM Manufacturing Index (g)	47.4	47.7	46.3	47.1	46.9	46.0	....	....	....	....	....	....
ISM Nonmanufacturing Index (g)	55.2	55.1	51.2	51.9	50.3	53.9	....	....	....	....	....	....
Housing Starts (b)	1.340	1.436	1.380	1.348	1.559	1.434	....	....	....	....	....	....
Housing Permits (b)	1.354	1.482	1.437	1.417	1.496	1.441	....	....	....	....	....	....
New Home Sales (1-family, c)	649	625	640	671	715	697	....	....	....	....	....	....
Construction Expenditures (a)	2.2	0.4	0.6	0.4	0.9	....	....	....	....	....	....	....
Consumer Price Index (nsa, d)	6.4	6.0	5.0	4.9	4.0	3.0	....	....	....	....	....	....
CPI ex. Food and Energy (nsa, d)	5.6	5.5	5.6	5.5	5.3	4.8	....	....	....	....	....	....
PCE Chain Price Index (d)	5.4	5.0	4.2	4.3	3.8	3.0	....	....	....	....	....	....
Core PCE Chain Price Index (d)	4.7	4.7	4.6	4.6	4.6	4.1	....	....	....	....	....	....
Producer Price Index (nsa, d)	5.7	4.7	2.7	2.1	0.9	0.1	....	....	....	....	....	....
Durable Goods Orders (a)	-1.3	-2.7	3.3	1.2	2.0	4.7	....	....	....	....	....	....
Leading Economic Indicators (a)	-0.5	-0.5	-1.2	-0.7	-0.6	-0.7	....	....	....	....	....	....
Balance of Trade & Services (f)	-70.2	-70.2	-60.6	-74.4	-69.0	....	....	....	....	....	....	....
Federal Funds Rate (%)	4.33	4.57	4.65	4.83	5.06	5.08	....	....	....	....	....	....
3-Mo. Treasury Bill Rate (%)	4.69	4.79	4.86	5.07	5.31	5.42	....	....	....	....	....	....
10-Year Treasury Note Yield (%)	3.53	3.75	3.66	3.46	3.57	3.75	....	....	....	....	....	....

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	1.3	-0.1	0.7	-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	0.6	0.2	0.2
Personal Consumption (a, current \$)	1.2	0.7	1.2	0.4	0.7	1.2	-0.1	0.7	0.6	0.7	-0.2	0.0
Consumer Credit (e)	5.0	8.6	11.0	7.8	7.4	9.2	7.3	7.4	7.2	8.9	8.3	4.9
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)	1.669	1.771	1.713	1.803	1.543	1.561	1.371	1.505	1.463	1.432	1.427	1.357
Housing Permits (b)	1.898	1.817	1.877	1.795	1.708	1.701	1.658	1.586	1.588	1.555	1.402	1.409
New Home Sales (1-family, c)	810	773	707	611	636	563	543	638	567	577	582	636
Construction Expenditures (a)	2.4	1.5	1.4	1.8	-0.1	-0.4	-0.2	-1.2	-0.6	-0.4	0.6	-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	6.4
Durable Goods Orders (a)	2.0	-1.4	-0.1	1.0	0.7	1.6	-0.8	-0.1	0.3	1.0	-3.1	4.5
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)	-86.5	-87.0	-102.5	-86.0	-84.1	-80.9	-71.7	-67.3	-71.7	-78.3	-63.8	-71.4
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
	August 1 Construction (Jun & Revisions) JOLTS (Jun) ISM Manufacturing (Jul) S&P Global Mfg PMI (Jul) Texas Service Sector Outlook Survey (Jul)	2 ADP Employment Report (Jul) BEA Auto and Truck Sales (Jul) Housing Vacancies (Q2) EIA Crude Oil Stocks Mortgage Application	3 Productivity & Costs (Q2) Manufacturers' Shipments, Inventories & Orders (Jun) ISM Services PMI (Jul) S&P Global Services PMI (Jul) Challenger Employment Report (Jul) CEO Confidence Survey (Q3) Weekly Jobless Claims	4 Employment Situation (Jul) Public Debt (Jul) Interest Expense on the Public Debt (Jul)
7 Consumer Credit (Jun) Treasury Auction Allotments (Jul)	8 International Trade (Jun) Wholesale Trade (Jun) NFIB (Jul) Kansas City Fed Labor Market Conditions Indicators (Jul)	9 Transportation Services Index (Jun) Kansas City Financial Stress Index (Jul) EIA Crude Oil Stocks Mortgage Application	10 CPI & Real Earnings (Jul) Cleveland Fed Median CPI (Jul) First Time Housing Affordability (Q2) Housing Affordability (Jun) NAHB-Wells Fargo Housing Opportunity Index (Q2) Monthly Treasury (Jul) Weekly Jobless Claims	11 Producer Prices (Jul) Consumer Sentiment (Aug, Preliminary) Survey of Professional Forecasters (Q3)
14	15 Advance Retail Sales (Jul) Import & Export Prices (Jul) MTIS (Jun) Empire State Mfg Survey (Aug) Home Builders (Aug) TIC Data (Jun)	16 New Residential Construction (Jul) IP & Capacity Utilization (Jul) Business Leaders Survey (Aug) EIA Crude Oil Stocks Mortgage Application	17 Retail E-Commerce Sales (Q2) Philadelphia Fed Mfg Business Outlook Survey (Aug) Composite Indexes (Jul) Weekly Jobless Claims	18 Advance Quarterly Services(Q2)
21 Dallas Fed Banking Conditions Survey (Jul)	22 Existing Home Sales (Jul) H.6 Money Stock (Jul) Treas Auction Allotments (Aug) Philadelphia Fed Nonmfg Business Outlook Survey (Aug) Richmond Fed Mfg & Service Sector Surveys (Aug)	23 New Residential Sales (Jul) CEW (Q1) S&P Global Flash PMIs (Aug) FRB Philadelphia Coincident Economic Activity Index (Jul) Final Building Permits (Jul) EIA Crude Oil Stocks Mortgage Application	24 Advance Durable Goods (Jul) Chicago Fed National Activity Index (Jul) Kansas City Fed Manufacturing Survey (Aug) Weekly Jobless Claims	25 Consumer Sentiment (Aug, Final) Strike Report (Aug) Steel Imports for Consumption (Jul, Preliminary)
28 Texas Manufacturing Outlook Survey (Aug)	29 Case-Shiller HPI (Jun) FHFA HPI (Jun & Q2) Consumer Confidence (Aug) JOLTS (Jul) Texas Service Sector Outlook Survey (Aug)	30 ADP Employment Report (Aug) GDP (Q2, 2nd Estimate) Adv Trade & Inventories (Jul) Pending Home Sales (Jul) EIA Crude Oil Stocks Mortgage Application	31 Dallas Fed Trimmed Mean PCE (Jul) Personal Income (Jul) Agricultural Prices (Jul) Underlying NIPA Tables (Q2, 2 nd Estimate) Challenger Employment Report (Aug) Chicago PMI (Aug) Weekly Jobless Claims	September 1 Employment Situation (Aug) ISM Manufacturing (Aug) S&P Global Mfg PMI (Aug) Construction (Jul)
4 LABOR DAY ALL MARKETS CLOSED	5 Manufacturers' Shipments, Inventories & Orders (Jul) BEA Auto & Truck Sales (Aug)	6 International Trade (Jul) ISM Services PMI (Aug) S&P Global Services PMI (Aug) QFR (Q2) Kansas City Fed Labor Market Conditions Indicators (Aug) Mortgage Application	7 Productivity & Costs (Q2) QSS (Q2) Weekly Jobless Claims EIA Crude Oil Stocks	8 Wholesale Trade (Jul) Treasury Auction Allotments (Aug) Consumer Credit (Jul) Public Debt (Aug) Interest Expense on the Public Debt (Aug)

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