# Blue Chip Financial Forecasts<sup>®</sup>

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

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### BLUE CHIP FINANCIAL FORECASTS®

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### **Economic Surprises Continue**

**Full of surprises.** The US economy surprised forecasters yet again in last year's fourth quarter with stronger-than-expected growth and lower-than-expected inflation. The last BCFF Q4 real GDP forecast (from the survey taken at the end of November) was for growth of 1.2% q/q saar. Just prior to the release on January 25, the market consensus expected a 2.0% increase. The actual figure was 3.3%. To be sure, some of the Q4 strength will likely be ephemeral, notably the increase in inventory investment. The inventory investment in Q4 was a little faster than needed to keep pace with trend demand growth. So, some slowdown ahead is likely.

However, demand was also solid in Q4. Personal consumption expenditures rose a solid 2.8% as continued robust labor market conditions boosted disposable income. Nonresidential investment, government spending and exports also made meaningful contributions in Q4. All in all, private domestic demand (final sales to private domestic purchasers) increased a respectable 2.6% q/q saar in Q4 2023 and 2.7% Q4/Q4.

Even as growth has remained above trend, inflation has continued to surprise on the downside. The GDP price index increased only 1.5% q/q saar in Q4, more than one percentage point below expectations. The PCE price index, the one on which the Fed places the most emphasis, increased just 1.7%, nearly one percentage point below expectations. The combination of above-trend growth and falling inflation has brightened the BCFF outlook considerably. In this month's survey, 81% of respondents think the US economy will achieve a "soft landing," that is a return of inflation to around the Fed's 2% target without the economy experiencing a recession, up markedly from 63% last month.

**Expected slowdown.** Still, the BCFF consensus expects much slower growth in 2024 than in 2023. It looks for real GDP growth to slow to 1.4% in Q1, and 0.9% in both Q2 and Q3. For the four quarters of 2024, the consensus looks for real GDP to advance just 1.2%, in stark contrast to the 3.1% increase in the four quarters of 2023 but up from 0.8% expected in last month's survey. Even though the consensus expects anemic growth throughout much of this year, it does not foresee a recession. The panel thinks there is only a 39% probability of a US recession occurring over the next 12 months versus 45% last month and a recent peak of 63% last February.

While the BCFF panel is not queried about the source of the expected slowdown, inferences can be made from the answers given to several special questions. First and foremost, the panel considers the current stance of monetary policy to be quite restrictive. The consensus estimate of the neutral fed funds rate (FFR) (the rate that is neither restrictive nor stimulative) is 2.86%, more than 250bps lower than the current FFR target of 5.375%, indicating a meaningfully tight policy. Furthermore, the panel accepts that changes in monetary policy impact the economy with a lag, with 80% thinking that the economy has yet to feel the full impact of previous tightening.

Less fiscal accommodation and weak growth abroad also appear to factor into the consensus US outlook. 93% of respondents think that accommodative fiscal policy played a key role

in the resilience of the economy in 2023. 77% expect less accommodation this year with 52% thinking that the reduced fiscal boost will meaningfully slow the economy. Also, the consensus does not expect much help from abroad. The euro area economy contracted slightly in the second half of last year, and respondents place a 54% probability of a recession emerging within the next 12 months. The UK economy has also been struggling. Real GDP declined in the three months to November with respondents assigning a 56% probability of a recession ahead.

**Fed prepares for rate cuts.** The FOMC met at the end of January and as almost universally expected, left its FFR target unchanged at 5.375%, where it has been since last July. In the announcement following the meeting, it moved to a more neutral position concerning the likely direction of future policy actions and noted explicitly that it would keep policy sufficiently restrictive until the committee is confident that inflation is on a path to the 2% target. Message to financial markets: the next move in the FFR will be down but it might not occur as soon as you expect. With the Fed expected to reduce the FFR, economic growth expected to slow, and inflation anticipated to remain near target, the BCFF consensus expects market interest rates across all maturities to decline throughout the six-quarter forecast horizon.

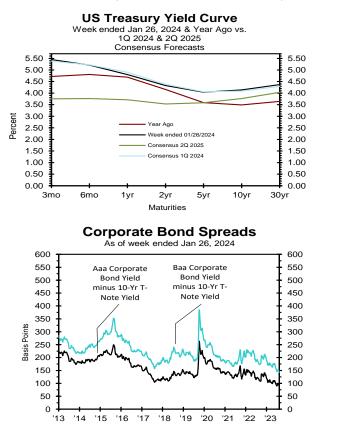
BCFF panelists were queried about several aspects of the nearterm course for monetary policy. First was the timing of the first FFR cut. A plurality of respondents (41%) looks for the first cut to occur at the May FOMC meeting with 16% expecting one in March and 25% anticipating the first cut in June. All respondents except one expect the first cut to have occurred by July. On average, the group anticipates the FFR target to be reduced by 112bps during 2024. This stands in contrast to the FOMC which expects only 75bps of rate cuts this year. And while the fed funds futures market has recently priced out some of the rate cuts it had previously priced in, it still envisages a much larger 125bps of FFR cuts in 2024.

What about QT? A component of the recent tightening of monetary policy that has received less attention is the decline in the Fed's security holdings on its balance sheet. In support of its tightening of monetary policy via increases in the FFR target that began in March 2022, the Fed has also been allowing its security holdings to decline since June 2022 at a pace of \$80 billion per month. This is known as quantitative tightening (QT) as it reduces the reserves held by the banking system. Since June 2022, the Fed's security holdings have declined by more than \$1.3 trillion but are still more than 80% larger than they were prior to the pandemic. A question that has arisen in financial markets as they anticipate the first FFR cut is whether the Fed would stop the reduction in its balance sheet when it began to cut the FFR. BCFF panelists mostly think it won't, with only 23% expecting that QT will be halted when the Fed begins to lower interest rates.

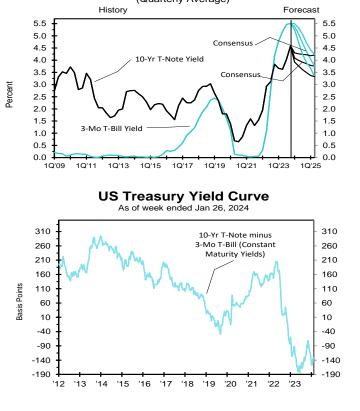
				Histor	ry				Cons	ensus l	Forecas	sts-Qua	arterly	Avg.
	Av	erage For	Week End	ling	Ave	erage For	Month	Latest Qtr	1Q	2Q	3Q	4Q	1Q	2Q
Interest Rates	Jan 26	Jan 19	Jan 12	<u>Jan 6</u>	Dec	Nov	Oct	<u>4Q 2023</u>	<u>2024</u>	<u>2024</u>	<u>2024</u>	<u>2024</u>	<u>2025</u>	<u>2025</u>
Federal Funds Rate	5.33	5.33	5.33	5.33	5.33	5.33	5.33	5.33	5.3	5.1	4.7	4.4	4.1	3.8
Prime Rate	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.50	8.5	8.2	7.9	7.6	7.3	7.0
SOFR	5.31	5.31	5.31	5.36	5.33	5.32	5.31	5.32	5.3	5.2	4.8	4.5	4.2	3.9
Commercial Paper, 1-mo.	5.32	5.33	5.32	5.32	5.32	5.33	5.33	5.33	5.3	5.1	4.7	4.4	4.1	3.9
Treasury bill, 3-mo.	5.45	5.46	5.47	5.47	5.44	5.52	5.60	5.52	5.4	5.1	4.7	4.3	4.0	3.8
Treasury bill, 6-mo.	5.21	5.20	5.22	5.25	5.34	5.44	5.57	5.45	5.2	5.0	4.6	4.3	4.0	3.8
Treasury bill, 1 yr.	4.80	4.79	4.77	4.83	4.96	5.28	5.42	5.22	4.9	4.7	4.4	4.1	3.9	3.7
Treasury note, 2 yr.	4.33	4.32	4.30	4.36	4.46	4.88	5.07	4.80	4.4	4.2	4.0	3.8	3.7	3.5
Treasury note, 5 yr.	4.04	4.02	3.93	3.96	4.00	4.49	4.77	4.42	4.1	3.9	3.8	3.7	3.6	3.6
Treasury note, 10 yr.	4.14	4.12	4.00	3.98	4.02	4.50	4.80	4.44	4.1	4.0	3.9	3.9	3.8	3.8
Treasury note, 30 yr.	4.37	4.34	4.19	4.12	4.14	4.66	4.95	4.58	4.3	4.2	4.2	4.1	4.0	4.0
Corporate Aaa bond	5.07	5.04	4.98	4.97	4.95	5.52	5.87	5.45	5.0	5.0	4.9	4.9	4.8	4.8
Corporate Baa bond	5.57	5.55	5.50	5.51	5.51	6.15	6.53	6.07	6.0	6.0	5.9	5.9	5.8	5.8
State & Local bonds	4.17	4.10	4.05	4.03	4.13	4.56	4.88	4.52	4.3	4.3	4.2	4.2	4.1	4.1
Home mortgage rate	6.69	6.60	6.66	6.62	6.82	7.44	7.62	7.29	6.7	6.6	6.5	6.3	6.2	6.1
				Histor	y				Co	onsensu	ıs Fore	casts-(	)uartei	ly
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
Key Assumptions	2022	2022	2022	2022	2023	2023	2023	2023	<u>2024</u>	<u>2024</u>	<u>2024</u>	<u>2024</u>	<u>2025</u>	2025
Fed's AFE \$ Index	108.3	113.5	118.8	119.8	115.5	114.6	115.0	116.6	115.2	114.9	114.7	114.5	114.7	114.6
Real GDP	-2.0	-0.6	2.7	2.6	2.2	2.1	4.9	3.3	1.4	0.9	0.9	1.4	1.8	2.0
GDP Price Index	8.5	9.1	4.4	3.9	3.9	1.7	3.3	1.5	2.2	2.2	2.3	2.2	2.2	2.1
Consumer Price Index	9.2	9.7	5.5	4.2	3.8	2.7	3.6	2.8	2.5	2.4	2.4	2.3	2.2	2.2
PCE Price Index	7.7	7.2	4.7	4.1	4.2	2.5	2.6	1.7	2.2	2.3	2.2	2.2	2.1	2.1

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

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







		Policy	V Rates <sup>1</sup> -			
		-History-		Cons	ensus Fo	recasts
		Month	Year	Mon	ths From	Now:
	Latest:	Ago:	Ago:	3	6	12
U.S.	5.38	5.38	4.38	5.31	4.95	4.24
Japan	-0.10	-0.10	-0.10	-0.07	0.03	0.04
U.K.	5.25	5.25	3.50	5.17	4.93	4.27
Switzerland	1.75	1.75	1.00	1.71	1.63	1.41
Canada	5.00	5.00	4.50	4.96	4.56	3.83
Australia	4.35	4.35	3.10	4.36	4.21	3.71
Euro area	4.50	4.50	2.50	4.33	4.05	3.38

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

		10 110	00.0111	mente Do	110 1 1010	
		History		Cons	ensus Foi	recasts
		Month	Year	Mon	ths From	Now:
	Latest:	Ago:	Ago:	3	6	12
U.S.	4.15	3.88	3.52	4.02	3.92	3.89
Germany	2.30	2.03	2.23	2.35	2.29	2.24
Japan	0.72	0.65	0.50	0.75	0.82	0.95
U.K.	4.06	3.62	3.46	3.89	3.81	3.81
France	2.78	2.56	2.70	2.82	2.75	2.70
Italy	3.83	3.69	4.23	4.00	3.97	3.92
Switzerland	0.87	0.66	1.23	1.03	1.10	1.37
Canada	3.52	3.11	2.89	3.41	3.36	3.33
Australia	4.19	3.96	3.54	4.51	4.28	4.21
Spain	3.25	2.88	3.19	3.27	3.22	3.19

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

			0	0		
		-History-		Cons	ensus For	recasts
		Month	Year	Mon	ths From	Now:
	Latest:	Ago:	Ago:	3	6	12
U.S.	115.23	112.81	113.82	113.9	113.3	113.4
Japan	147.94	140.92	129.94	145.4	140.7	135.8
U.K.	1.27	1.27	1.24	1.26	1.27	1.27
Switzerland	0.86	0.84	0.92	0.87	0.87	0.86
Canada	1.35	1.32	1.33	1.34	1.33	1.30
Australia	0.66	0.68	0.71	0.66	0.67	0.69
Euro	1.09	1.11	1.09	1.09	1.10	1.12

	Poli	isensus cy Rates US Rate		10-	nsensus Year Gov't vs. U.S. Yie	ld
	Now	In 12 Mo.		Now	In 12 Mo.	
Japan	-5.48	-4.19	Germany	-1.85	-1.64	
U.K.	-0.13	0.04	Japan	-3.43	-2.94	
Switzerland	-3.63	-2.82	U.K.	-0.09	-0.08	
Canada	-0.38	-0.41	France	-1.37	-1.19	
Australia	-1.03	-0.52	Italy	-0.32	0.04	
Euro area	-0.88	-0.86	Switzerland	-3.28	-2.52	
			Canada	-0.63	-0.56	
			Australia	0.04	0.32	
			Spain	-0.90	-0.69	

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.

**International.** Global bond yields have generally been climbing in the early weeks of this year as investors have been re-evaluating the scope for central banks to swiftly pivot toward looser monetary policy. This reassessment has, in turn, been reinforced by some hawkish remarks from some policymakers coupled with evidence suggesting that US and European labor markets remain tight. In the meantime, escalating tensions in the Middle East have also been choking off key shipping routes and raising concerns about the resilience of global supply chains. Despite these setbacks, global equity markets have recovered some poise in recent days and, on the whole, remain resilient. This can partly be traced to some stronger-than-expected US growth data and upbeat news on the corporate earnings front, particularly from the technology sector

How central banks now respond to these crosscurrents remains to be seen. The recent disruption of Red Sea shipping routes has arguably shifted global growth risks to the downside. It was certainly of note that January's flash PMI data showed that manufacturers are now reporting growing issues with supply chains. Across the four largest developed economies, the US, Euro area, Japan and the UK, average supplier delivery times lengthened in January for the first time in 12 months. Still, some economies were more affected than others. The UK, for example, was worst hit, with lead times lengthening to a degree not seen since September 2022. But longer deliveries were also reported in the US, Euro area and Japan. It was notable too, however, in these surveys that this lengthening of supplier lead times was accompanied by a broadly-based rise in manufacturers' input costs.

Against that backdrop, the responses to one of our special questions this month reveals heightened optimism among our panelists about the US economic outlook, presumably, in part, due to stronger-thanexpected growth momentum in Q4 2023. Specifically, our panelists now assign only a 39% probability to the likelihood of a US recession within the next 12 months, a decrease from 45% in last month's survey. However, this optimism contrasts with persistent pessimism about the European economic outlook. The probability of a recession in the Euro area is specifically placed at 54%, and 56% for the UK, with both figures little changed from last month's survey.

Our panelists' forecasts for the calibration of monetary policy in the Euro area and UK are also little-changed compared with last month with their respective policy rates expected to decline modestly within the next 3 to 6 months. When specifically asked about the timing of rate cuts by central banks, 9% of our panelists foresee the ECB starting to reduce rates in Q1 2024, 61% predict a cut in Q2, and 26% in Q3. Regarding the BoE, 4% of our panelists expect a rate cut in Q1, while 39% anticipate a move in Q2, and 48% anticipate Q3.

As for the BoJ, our panelists continue to expect a monetary policy normalization phase to proceed in the coming months. But there is now a little more unanimity about when exactly this process will commence. For example, in this month's survey 57% of panelists expect a first policy rate hike from the BoJ in Q2 2024. That contrasts with just 5% expecting a hike in Q1, a further 14% expecting a hike in Q3 with a further 24% opting for Q4 or later. These expectations also differ from last month's survey, where 16% predicted a Q1 hike, 37% a Q2 hike, 16% a Q3 hike, and 31% a hike in Q4 or later. The emerging consensus for a first rate hike in Q2 2024 could be influenced by the BoJ's recent statements emphasizing the upcoming Spring wage negotiations and the general importance of wage inflation in shaping monetary policy.

Finally, amid much uncertainty about China's economic prospects, the PBoC has recently announced that it will cut the reserve requirement ratio (RRR) for banks by 50 bps, effective February 5. Whether this latest easing initiative can alleviate the challenges China currently faces is open to much debate, however, not least given the structural roots of its many economic problems.

# First Quarter 2024

Interest Rate Forecasts

						Per	cent Per	Annum	Average F	For Quarte	er					Avg. For		(Q-Q	% Change	9)
Blue Chip			{	Short-Ter	rm			Inte	rmediate-7	Term		Lo	ng-Term			Qtr		(	SAAR)	
Financial Forecasts	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Α.	В.	C.	D.	E.
Panel Members	Federal	Prime	SOFR	Com.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Aaa	Baa	State &	Home	Fed's Adv		GDP	Cons.	PCE
	Funds	Bank	Rate	Paper	Bills	Bills	Bills	Notes	Notes		Bond	Corp.	Corp.	Local	Mtg.	Fgn Econ	Real	Price	Price	Price
	Rate	Rate		1 <b>-</b> Mo.	3-Mo.	6-Mo.	1-Yr.	2-Yr.	5-Yr.	10-Yr.	30-Yr.	Bond	Bond	Bonds	Rate	\$ Index	GDP	Index	Index	Index
J.P. Morgan Chase Scotiabank Group	5.5 H 5.5 H	na na	na 5.3	na	na 5.4	na	na	4.4 4.1	3.9 L 3.9	3.9 3.8 l	4.1 L 4.1	na	na	na	na	na	1.8 0.5	1.9 1.1 I	2.1 L 3.0	1.8 2.8
Chmura Economics & Analytics	э.э п 5.4	па 8.5 Н		na 5.3	5.4 5.5	na 5.3	na 4.8	4.1 4.4	L 3.9 4.0	3.0 I 4.1	4.1	na 5.0	na na	na na	na 6.7	na na	0.5 1.8	3.3		2.0 H 3.1
EY-Parthenon	5.4	na	na	na	5.3	na	na	na	na	4.1	na	na	na	na	na	na	1.7	2.0	2.4	2.3
Fannie Mae	5.4	8.5 H		na	5.3	5.0	L 4.7	4.3	4.0	4.1	4.3	na	na	na	6.6	na	0.9	1.6	2.0	1.5
ING	5.4	na	na	na	na	na	na	4.4	4.0	4.0	4.2	na	na	na	na	na	1.8	na	na	na
KPMG	5.4	8.5 H	5.4	5.3	5.5	5.4	4.9	4.3	3.8 l	L 3.8 I	L 4.0	L 4.7	5.8	na	6.7	na	1.3	1.4	2.4	1.5
Naroff Economics LLC	5.4	8.4	5.3	5.2	5.4	5.2	4.8	4.4	4.0	4.1	4.3	5.0	5.5	L 4.1	6.6	115.1	0.5	3.2	3.3	H 3.0
Nomura Securities, Inc.	5.4	8.5 H		na	na	na	na	4.3	4.1	4.2	na	na	na	na	na	na	2.4	1.3	2.5	1.7
Oxford Economics	5.4	8.5 H		na	5.4	5.3	4.9	4.4	4.1	4.1	4.3	4.4	L na	na	6.9	114.1	1.9	2.0	1.8	L 1.8
Roberts Capital Advisors	5.4	8.5 H		5.4		5.4	5.3	4.8	4.6 H	H 4.6 H		H 5.5	6.5	4.8	7.0	116.0	2.1	2.5	2.8	2.5
The Lonski Group	5.4	8.5 H			H 5.4	5.1	4.7	4.3	3.9	4.0	4.2	5.2	5.7	4.2	6.6	115.5	0.7	2.1	2.0	1.8
The Northern Trust Company	5.4	8.5 H			H 5.5	5.4	5.2	4.4	4.2	4.1	4.4	5.0	6.0	4.3	7.0	116.0	1.1	2.3	2.8	2.6
Action Economics	5.3	8.5 H			5.4	5.3	5.0	4.5	4.2	4.2	4.3	4.8	5.8	4.3	7.3 H	117.3 H	1.8	1.7	2.2	1.4 L
BMO Capital Markets	5.3	8.5 H		5.4		5.2	4.8	4.3	4.0	4.0	4.3	4.9	5.9	4.2	6.6	114.9	1.5	2.0	3.0	2.3
Comerica Bank Daiwa Capital Markets America	5.3	8.5 H 8.5 H		na	5.3	5.2	4.7	4.2	3.9	4.0	4.1	4.7	5.6	na	6.5 6.5	na 116.0	1.0 1.2	3.5 H		3.3 H
DePrince & Assoc.	5.3 5.3	8.5 H 8.5 H		na 5.4	5.3 H 5.5	na 5.2	na 4.8	4.3 4.3	3.9 3.9	4.0 4.0	4.2 4.2	na 4.9	na 5.7	na 4.0	0.5 6.6	115.6	1.2	2.2 2.6	2.6 2.7	2.6 2.5
Economist Intelligence Unit	5.3	о.5 п 8.3	na	5.4	5.5	5.2 5.3	4.0 4.9	4.3 4.3	3.9 4.0	4.0	4.2 4.3	4.9 na	na	4.0 na	6.7	na	0.9	2.0 na	2.1	2.5 na
Georgia State University	5.3	8.4	na	na	5.4	5.2	4.8	4.2	4.0	4.0	4.3	4.7	5.9	na	6.9	na	0.3	L 2.3	2.2	2.4
GLC Financial Economics	5.3	8.4	5.3	5.3	5.4	5.3	5.3		H 4.6 H	4.3	4.4	5.2	6.2	4.4	7.0	115.5	0.9	2.4	2.4	2.2
Loomis, Sayles & Company	5.3	8.5 H		5.3	5.5	5.4	5.0	4.3	4.0	4.1	4.3	4.9	5.9	4.1	6.8	115.2	1.5	1.5	2.6	1.5
MacroFin Analytics & Rutgers Bus School	5.3	8.5 H	5.3	5.3	5.4	5.2	4.8	4.3	4.0	4.1	4.4	5.0	5.8	4.1	6.7	115.3	1.1	2.6	2.8	2.6
Moody's Analytics	5.3	8.5 H	5.3	5.4	H 5.2	5.1	5.0	4.8	4.5	4.2	4.6	5.2	6.1	4.0	7.1	na	1.5	2.5	2.5	2.3
NatWest Markets	5.3	8.5 H	na	5.4	H 5.6	H 5.7	H 5.8	H 4.5	4.3	4.4	4.7	H 5.7	H 6.6	H 5.1 H	H 6.9	na	2.0	1.7	2.5	2.2
PNC Financial Services Corp.	5.3	8.5 H	5.4	na	5.3	5.3	4.8	4.4	4.0	4.0	4.1	na	5.9	3.9	6.6	117.0	0.7	2.3	2.1	1.8
Regions Financial Corporation	5.3	8.3	5.3	5.4	H 5.4	5.2	4.8	4.3	4.0	4.1	4.3	5.1	6.1	4.4	6.7	114.9	1.8	2.1	2.0	1.6
S&P Global Market Intelligence	5.3	8.4	5.3	na	5.3	5.1	4.8	4.2	3.8 l	L 3.8 I	L 4.0	L na	na	na	6.6	na	1.2	1.4	2.4	1.5
Santander Capital Markets	5.3	8.5 H		5.3	5.4	5.2	4.9	4.4	4.1	4.2	4.4	5.0	5.8	3.5 l	6.7	115.5	1.6	3.0	2.8	2.1
Societe Generale	5.3	8.5 H		na	5.3	5.1	4.6	L 4.2	4.0	4.0	4.2	na	na	na	na	na	0.4	L 1.8	2.2	2.2
TS Lombard	5.3	8.4	5.3	5.3	5.2	5.3	4.8	4.3	3.9	4.0	4.1	4.9	5.7	4.0	5.8 L	110.0 L	1.0	2.5	2.5	2.5
Via Nova Investment Mgt.	5.3	8.5 H		5.3	5.5	5.3	4.8	4.3	4.0	4.1	4.4	5.2	5.9	4.1	6.9	114.8	2.5	2.1	2.1	2.1
Bank of America	5.1 L	na	na	na	na	na	na	4.8	4.5	4.4		H na	na	na	na	na	1.0	2.7	2.2	2.0
Barclays Chan Economics	5.1 L	na o 4 u	na FO I	na 5 0	na L 5 1	na 1 E O	na 5.0	4.3	4.1	4.3	4.5	na F 2	na	na 47	na	na 114.0	2.0	2.0	2.5	1.6
Goldman Sachs & Co.	5.1 L 5.1 L	8.1 L na	5.0 L na	- 5.0 na	L 5.1 5.5	L 5.2 na	5.0 na	4.5 4.2	4.0 3.8 l	4.1 L 3.9	4.3 4.1	5.3 na	6.3 na	4.7 na	6.9 na	114.0 na	2.5 2.8	2.2 H 2.2	2.4 2.8	2.1 2.1
Wells Fargo	5.1 L	8.5 H		5.1	5.2	5.0			3.0 I 4.0	4.0	4.1	11a 5.2	6.2	11a 4.6	6.8	na	2.0 1.4	2.0	2.0	2.1
February Consensus	5.3	8.5	5.3	5.3	5.4	5.2	4.9	4.4	4.1	4.1	4.3	5.0	6.0	4.3	6.7	115.2	1.4	2.2	2.5	2.2
Top 10 Avg.	5.4	8.5	5.4	5.4	5.5	5.4	5.1	4.6	4.3	4.3	4.5	5.3	6.2	4.5	7.0	116.0	2.2	2.8	2.9	2.8
Bottom 10 Avg.	5.2	8.4	5.3	5.2	5.3	5.1	4.7	4.2	3.9	3.9	4.1	4.8	5.7	4.0	6.5	114.4	0.7	1.5	2.1	1.6
January Consensus	5.3	8.4	5.3	5.3	5.4	5.3	5.0	4.5	4.2	4.2	4.3	5.1	6.1	4.3	6.9	115.2	0.9	2.3	2.4	2.2
Number of Forecasts Changed From A Mon	th Ago:																			
Down	8	2	2	4	4	15	17	17	17	18	18	9	11	8	19	6	3	21	12	18
Same	27	26	19	14	21	12	8	15	13	11	8	8	6	6	6	7	6	10	11	9
Up	2	2	4	3	7	1	3	4	6	8	9	5	4	4	3	5	28	4	13	8
Diffusion Index	42%	50%	54%	48%	55%	25%	25%	32%	35%	36%	37%	41%	33%	39%	21%	47%	84%	26%	51%	36%

# Second Quarter 2024

Interest Rate Forecasts

						Per	cent Per	Annum	Average F	For Quart	er					Avg. For		(Q-Q	% Change	)
Blue Chip			{	Short-Terr	m			Inter	mediate-7	Term		Lo	ng-Term			Qtr		(	SAAR)	
Financial Forecasts	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Α.	В.	C.	D.	Ε.
Panel Members	Federal	Prime	SOFR	Com.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Aaa	Baa	State &	Home	Fed's Adv		GDP	Cons.	PCE
	Funds	Bank	Rate	Paper	Bills	Bills	Bills	Notes	Notes		Bond	Corp.	Corp.	Local	Mtg.	Fgn Econ	Real	Price	Price	Price
	Rate	Rate		1-Mo.	3-Mo.	6-Mo.	1-Yr.	2-Yr.	5-Yr.	10-Yr.	30-Yr.	Bond	Bond	Bonds	Rate	\$ Index	GDP	Index	Index	Index
Chmura Economics & Analytics	5.4 H	8.5 H	5.4	5.4 H	1 5.3	••••	H 5.0	4.5	4.1	4.2	4.3	5.1	na	na	6.7	na	-0.2	3.0		H 2.9 H
J.P. Morgan Chase	5.4 H	na	na	na	na	na	na	4.2	3.8	3.9	4.2	na	na	na	na	na	0.5	2.0	2.2	1.9
Action Economics	5.3	8.4	5.8 H		5.2	5.1	4.8	4.4	4.2	4.2	4.3	4.8	5.8	4.3	7.3 H	116.5	1.9	1.4	2.3	1.7
BMO Capital Markets	5.3	8.5 H	5.3	5.4 H		1 5.2	4.7	4.1	4.0	3.9	4.2	4.8	5.8	4.2	6.5	114.3	0.8	2.6	2.6	2.5
Comerica Bank Daiwa Capital Markets America	5.3	8.5 H	5.3	na	5.2	5.0	4.5	3.9	3.6	3.7	3.9	4.6	5.5	L na	6.1	na	1.0	3.3 H		2.4
MacroFin Analytics & Rutgers Bus School	5.3 5.3	8.4 8.5 H	5.2 5.3	na 5.3	4.9 5.2	na 5.2	na 4.7	4.1 4.3	3.7 3.8	3.9 3.9	4.2 4.0	na 5.0	na 5.8	na 4.0	6.3 6.8	116.0 115.1	-0.1 1.0	2.5 2.3	2.4 2.5	2.3 2.5
Naroff Economics LLC	5.3	8.4	5.3 5.2	5.3 5.2	5.2 5.2	5.2 5.0	4.7	4.3 4.3	3.0 3.9	3.9 4.0	4.0 4.3	5.0 5.0		4.0 L 4.1	0.0 6.5	113.1	2.1	2.3		2.5 H 2.8
PNC Financial Services Corp.	5.3	о.4 8.5 Н	5.2 5.3	na	5.2 5.2	5.0 5.1	4.0 4.8	4.3 4.3	3.9 4.0	4.0 4.0	4.3 4.2	na			0.5 H 6.6	114.7 117.8 H	0.0	2.0 1.8	3.0 1.5	п 2.0 L 1.4 L
Roberts Capital Advisors	5.3	8.4	5.3	5.3	5.3	5.2	4.0 5.0	4.6	4.4		ч. <u>-</u> Н 4.6	5.4	6.4	4.7	6.7	115.5	2.2	2.5	2.5	2.4
Santander Capital Markets	5.3	8.5 H	5.3	5.3	5.4 H	1 5.2	4.9	4.6	4.3	4.3	4.5	5.2	6.1	3.7	L 6.8	115.0	1.5	2.8	2.9	2.6
Scotiabank Group	5.3	na	5.1	na	5.0	na	na	3.7	3.8	3.7	4.0	na	na	na	na	na	0.1	0.5 L	2.8	2.6
The Lonski Group	5.3	8.5 H	5.3	5.4 H		1 5.0	4.6	4.3	3.9	3.9	4.1	5.1	5.8	4.2	6.4	116.1	0.6	2.2	2.3	2.0
The Northern Trust Company	5.3	8.4	5.2	5.4 H		5.2	5.0	4.3	4.3	4.3	4.6	5.3	6.4	4.6	7.1	115.0	1.0	2.3	2.5	2.4
DePrince & Assoc.	5.2	8.3	5.1	5.2	5.3	5.1	4.7	4.2	3.8	4.0	4.2	5.0	5.8	4.1	6.4	116.2	1.4	2.6	2.6	2.5
Economist Intelligence Unit	5.2	8.2	na	5.2	5.3	5.2	4.8	4.3	4.0	4.1	4.1	na	na	na	6.6	na	0.7	na	2.2	na
Fannie Mae	5.2	8.3	na	na	4.7	4.6	4.3	4.1	4.0	4.1	4.4	na	na	na	6.5	na	0.7	2.3	2.8	2.5
KPMG	5.2	8.3	5.2	5.0	5.2	5.1	4.6	4.1	3.7	3.7	3.9	4.5	5.6	na	6.4	na	0.9	2.2	2.9	2.5
Oxford Economics	5.2	8.3	5.2	na	5.2	5.1	4.6	4.2	3.8	3.9	4.2	4.2	L na	na	6.8	114.6	1.3	2.1	2.2	2.0
EY-Parthenon	5.1	na	na	na	5.0	na	na	na	na	3.9	na	na	na	na	na	na	1.0	2.2	1.9	2.1
GLC Financial Economics	5.1	8.2	5.1	5.1	5.1	5.0	5.1	H 4.7	H 4.3	4.1	4.4	5.1	6.1	4.4	6.8	114.9	0.6	2.4	2.4	2.2
Loomis, Sayles & Company	5.1	8.3	5.1	5.1	5.3	5.2	4.8	4.0	3.9	4.0	4.2	4.8	5.8	4.0	6.7	114.5	1.0	2.0	2.9	2.1
Moody's Analytics	5.1	8.3	5.1	5.1	4.9	4.9	4.8	4.6	4.4 H	H 4.2	4.6	5.5 I	H 6.4	4.2	6.9	na	1.3	2.0	2.8	2.3
Nomura Securities, Inc.	5.1	8.3	na	na	na	na	na	4.2	4.0	4.1	na	na	na	na	na	na	1.7	1.6	2.0	2.1
S&P Global Market Intelligence	5.1	8.2	5.1	na	4.9	4.7	4.4	3.9	3.6	3.7	3.9	na	na	na	6.4	na	1.1	2.2	2.8	2.4
Societe Generale	5.1	8.3	5.1	na	4.9	4.6	4.1	L 3.7	3.8	3.8	4.0	na	na	na	na	na	-1.4 L	1.8	2.2	2.6
Regions Financial Corporation	5.0	8.0	5.0	5.1	5.2	5.0	4.6	4.1	3.9	4.1	4.3	5.1	6.1	4.3	6.6	114.6	1.7	2.6	2.3	2.4
Via Nova Investment Mgt.	5.0	8.3	5.1	5.1	5.0	5.0	5.0	4.0	3.9	3.9	4.1	5.0	5.7	3.9	6.7	114.0	2.5 H	2.1	2.1	2.1
Bank of America	4.9	na	na	na	na	na	na	4.5	4.4 H	4.3	4.7	H na	na	na	na	na	1.0	2.4	2.5	2.3
Barclays	4.9	na	na	na	na	na	na	4.1	4.0	4.3	4.6	na	na	na	na	na	1.5	2.2	2.1	2.0
Chan Economics	4.9	7.9	4.8	4.8	4.9	5.0	4.8	4.3	3.8	3.9	4.1	5.1	6.1	4.5	6.7	113.8	1.5	2.1	2.3	2.0
ING	4.9	na	na	na	na	na	na	3.7	3.5 I	L 3.5	L 3.8	L na	na	na	na	na	0.1	na	na	na
Wells Fargo	4.8	8.0	4.9	4.8	4.6	4.5	4.3	3.9	3.8	3.9	4.1	5.1	6.1	4.5	6.6	na	1.1	2.0	2.3	2.0
Goldman Sachs & Co.	4.6	na	na	na	5.3	na	na	4.0	3.7	3.8	4.0	na	na	na	na	na	2.5 H	I 1.9	2.5	2.0
Georgia State University	4.5	7.6	na	na	4.5	4.2	L 4.2	3.8	3.7	3.9	4.2	4.8	5.9	na	6.8	na	-0.2	2.5	2.7	2.6
TS Lombard NatWest Markets	4.5	7.6	4.5 L	. 4.5 4.4 l	4.4 L	- 4.5	4.3	4.0	3.9 L 3.8	4.0	4.1	4.9 H 5.2	5.7	4.0	5.8 L H 6.7	. 110.0 L	0.4 -1.0	2.0 1.5	2.0 1.7	2.0
	4.3 L	7.5 L	lia	4.4	- 4.0	4.7	4.8	3.0	L 3.0	4.3	4./	п р.2	6.1	4.9	□ 0.7	na	-1.0	1.5	1.7	1.9
February Consensus	5.1	8.2	5.2	5.1	5.1	5.0	4.7	4.2	3.9	4.0	4.2	5.0	6.0	4.3	6.6	114.9	0.9	2.2	2.4	2.3
	•	0.2	0.2	•	•	0.0			0.0			0.0	0.0		010		0.0			
Top 10 Avg.	5.3	8.5	5.4	5.3	5.3	5.2	4.9	4.5	4.2	4.3	4.5	5.2	6.2	4.5	6.9	115.8	1.9	2.7	2.9	2.6
Bottom 10 Avg.	4.7	8.0	5.0	4.9	4.7	4.7	4.4	3.8	3.7	3.8	4.0	4.7	5.7	4.0	6.3	114.0	-0.2	1.7	2.0	1.9
January Consensus	5.1	8.2	5.1	5.1	5.1	5.0	4.7	4.2	4.0	4.1	4.3	5.0	6.0	4.3	6.8	114.9	0.5	2.3	2.4	2.2
Number of Forecasts Changed From A Mon	th Ago:	-																		
Down	10	7	7	4	9	12	14	15	15	13	13	6	8	6	14	6	2	16	9	12
Same	22	18	13	13	19	11	9	15	15	18	14	11	9	9	12	7	11	12	16	11
Up	5	5	5	4	4	5	5	6	6	6	8	5	4	3	2	5	24	7	11	12
																-				
Diffusion Index	43%	47%	46%	50%	42%	38%	34%	38%	38%	41%	43%	48%	40%	42%	29%	47%	80%	37%	53%	50%

# Third Quarter 2024

Interest Rate Forecasts

						Pero	ent Per	Annum	Average	For Quart	er				-	Avg. For		(Q-Q	% Change	9)
Blue Chip				Short-Terr	n			Inter	mediate-	Term		Lo	ong-Term			Qtr		· ·	SAAR)	
Financial Forecasts	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Α.	В.	C.	D.	E.
Panel Members	Federal	Prime	SOFR	Com.	Treas.	Treas.	Treas.	Treas.	Treas	. Treas.	Treas.	Aaa	Baa	State &	Home	Fed's Adv		GDP	Cons.	PCE
	Funds	Bank	Rate	Paper	Bills	Bills	Bills	Notes	Notes	Notes	Bond	Corp.	Corp.	Local	Mtg.	Fgn Econ	Real	Price	Price	Price
	Rate	Rate		1-Mo.	3-Mo.	6-Mo.	1-Yr.	2-Yr.	5-Yr.	10-Yr.	30-Yr.	Bond	Bond	Bonds	Rate	\$ Index	GDP	Index	Index	Index
Santander Capital Markets	5.3 H	8.5 H	5.3	5.2 H	1 5.2 H	5.1	4.8	4.6 H			4.5	5.3	6.3	3.8 l	6.8	114.0	0.9	2.7	2.7	2.3
J.P. Morgan Chase	5.2	na	na	na	na	na	na	3.9	3.6	3.8	4.2	na	na	na	na	na	0.5	2.5	2.8	2.4
PNC Financial Services Corp.	5.2	8.3	5.2	na	5.0	4.9	4.6	4.2	4.0	4.0	4.2	na	6.6	H 4.9 H	6.6	118.5 H	-0.8	1.7	L 1.6	L 1.5
BMO Capital Markets Chmura Economics & Analytics	5.1 5.1	8.2 8.3	5.0 5.1	5.1 5.1	5.2 H 5.1	5.0 5.1 I	4.5 	4.0 H 4.6 H	3.9 1 4.2	3.8 4.2	4.2 4.4	4.8 5.2	5.9	4.2 na	6.4 6.7	114.1 na	1.3 -0.5	2.3 3.1	2.5 2.9	2.3 H 2.6
Economist Intelligence Unit	5.1	8.1	na	5.0	5.0	4.8	4.6	4.0 r	1 4.2 3.9	4.2 3.9	4.4 3.9	na	na na	na	6.5	na	-0.5 0.5	na	2.9	na 2.0
MacroFin Analytics & Rutgers Bus School	5.1	8.3	5.1	5.1	5.0	5.1 I		4.2	3.8	3.8	3.9	4.9	5.7	4.0	6.8	114.9	1.3	2.2	2.3	2.4
Action Economics	5.0	8.2	5.6 H		5.0	4.8	4.6	4.2	4.2	4.2	4.3	4.8	5.8	4.3	7.3 H	116.6	1.7	2.0	2.4	1.8
Comerica Bank	5.0	8.2	5.0	na	5.0	4.8	4.3	3.7	3.5	3.6		L 4.5	5.4	Lna	5.9 L	na	1.9	4.0	- 2.3	2.3
The Lonski Group	5.0	8.1	4.9	5.0	5.1	4.9	4.5	4.2	3.8	3.8	4.0	5.0	5.8	4.1	6.3	116.7	0.8	2.0	1.9	2.1
Daiwa Capital Markets America	4.9	8.0	4.9	na	4.4	na	na	3.7	3.5	3.6	4.3	na	na	na	6.0	115.0	-0.6	2.3	2.3	2.2
KPMG	4.9	8.1	4.9	4.6	4.8	4.8	4.4	4.0	3.6	3.6	3.8	L 4.4	5.6	na	6.1	na	1.4	2.2	2.9	H 2.4
Naroff Economics LLC	4.9	7.9	4.8	4.8	4.7	4.7	4.7	4.3	3.8	3.9	4.2	4.8	5.4	L 4.0	6.3	114.0	3.6	H 2.6	2.8	2.6
Oxford Economics	4.9	8.0	4.9	na	4.9	4.7	4.3	3.9	3.6	3.9	4.1	3.9	L na	na	6.6	114.3	0.8	2.5	2.3	2.1
Roberts Capital Advisors	4.9	8.2	4.9	4.9	5.0	4.8	4.7	4.4	4.2	4.3	4.6	5.4	6.4	4.6	6.5	115.5	2.2	2.4	2.4	2.3
The Northern Trust Company	4.9	8.0	4.8	5.0	4.8	4.7	4.5	4.1	4.2	4.2	4.5	5.3	6.4	4.5	6.7	114.0	0.9	2.2	2.3	2.3
EY-Parthenon	4.8	na	na	na	4.7	na	na	na	na	3.8	na	na	na	na	na	na	1.6	2.2	2.4	2.2
Fannie Mae	4.8	7.9	na	na	4.4	4.3	4.1	3.9	3.9	4.1	4.3	na	na	na	6.3	na	1.2	2.3	2.7	2.4
GLC Financial Economics	4.8	7.9	4.8	4.7	4.7	4.6	4.8	4.4	4.0	4.0	4.3	5.0	6.1	4.3	6.6	115.0	1.0	2.4	2.4	2.2
Regions Financial Corporation S&P Global Market Intelligence	4.8 4.8	7.8 7.9	4.8	4.9	4.9 4.6	4.8	4.5 4.1	3.9 3.7	3.8 3.4	4.0 L 3.5	4.2 L 3.8	5.0	6.1	4.3	6.5 6.1	114.3	2.0 1.5	2.7 2.2	2.3 2.8	2.3 2.4
Scotiabank Group	4.0 4.8	na	4.8 4.6	na na	4.0 4.2	4.4 na	4.1 na	3.7 3.5	3.4 3.7	L 3.5 3.8		L na L na	na na	na na	na	na na	1.5 1.0	2.2 3.1		2.4 H 2.7 H
Via Nova Investment Mgt.	4.8	8.0	4.8	4.9	4.8	4.8	4.8	4.0	3.9	3.9	4.1	5.0	5.7	3.9	6.7	112.0 L	2.5	2.1	2.5	2.1
DePrince & Assoc.	4.7	7.9	4.7	4.8	4.8	4.7	4.3	3.9	3.7	3.9	4.2	5.0	5.9	4.2	6.2	116.1	1.5	2.5	2.6	2.4
Loomis, Sayles & Company	4.7	7.8	4.6	4.6	4.8	4.7	4.3	3.6	3.6	3.8	3.9	4.6	5.6	3.8 l	6.4	114.1	-1.3	1.8	1.9	1.4 L
Moody's Analytics	4.7	7.8	4.6	4.6	4.5	4.5	4.5	4.4	4.2	4.1	4.6	5.6	H 6.5	4.3	6.7	na	1.6	1.7	2.6	2.2
Bank of America	4.6	na	na	na	na	na	na	4.3	4.3	H 4.3	4.7	H na	na	na	na	na	1.5	2.7	2.6	2.3
Barclays	4.6	na	na	na	na	na	na	3.9	4.0	4.4	H 4.6	na	na	na	na	na	1.0	2.6	2.7	2.4
Chan Economics	4.6	7.6	4.5	4.5	4.6	4.7	4.5	4.0	3.5	3.6	3.8	L 4.8	5.8	4.2	6.4	113.7	0.5	2.1	2.3	2.0
Nomura Securities, Inc.	4.6	7.8	na	na	na	na	na	3.9	4.0	4.0	na	na	na	na	na	na	1.7	1.9	2.1	2.2
Societe Generale	4.6	7.8	4.6	na	4.4	4.1	3.7	3.3	3.5	3.6	3.9	na	na	na	na	na	-1.5	L 1.8	2.2	2.5
Goldman Sachs & Co.	4.4	na	na	na	5.0	na	na	3.8	3.7	3.9	4.1	na	na	na	na	na	2.3	2.0	2.4	2.0
ING	4.4	na	na	na	na	na	na	3.4	3.4	L 3.5	L 3.9	na	na	na	na	na	-1.0	na	na	na
Wells Fargo	4.4	7.5	4.4	4.4	4.4	4.2	4.0	3.7	3.6	3.7	4.0	4.9	5.9	4.3	6.4	na	0.5	1.7	L 2.0	1.7
Georgia State University TS Lombard	4.0 4.0	7.2 7.1	na 4.0 L	na 4.0	3.9 3.9	3.7 4.0	L 3.6 4.1	L 3.4 4.3	3.4 4.2	L 3.6 4.3	3.9 4.4	4.5 5.1	5.6 6.0	na 4.3	6.4 6.1	na 112.0 L	0.6 1.5	2.6 2.0	2.1 2.0	2.5 2.0
NatWest Markets	4.0 3.3 L	6.5 L	4.0 L na	. 4.0 3.4 L			4.1 - 3.8	4.5 3.2 L		4.3 4.1	4.4	4.9	5.8	4.5 4.6	6.4	na	-0.5	2.0 1.9	2.0 1.7	2.0
															-					
February Consensus	4.7	7.9	4.8	4.7	4.7	4.6	4.4	4.0	3.8	3.9	4.2	4.9	5.9	4.2	6.5	114.7	0.9	2.3	2.4	2.2
Top 10 Avg.	5.1	8.2	5.1	5.0	5.1	4.9	4.7	4.4	4.2	4.2	4.5	5.2	6.2	4.4	6.8	115.7	2.1	2.9	2.8	2.5
Bottom 10 Avg.	4.3	7.5	4.6	4.4	4.2	4.2	4.0	3.5	3.5	3.6	3.9	4.6	5.6	4.1	6.2	113.7	-0.5	1.9	2.0	1.8
January Consensus	4.8	7.9	4.8	4.7	4.7	4.6	4.4	4.0	3.9	3.9	4.2	4.9	6.0	4.2	6.6	114.8	0.7	2.3	2.4	2.2
Number of Forecasts Changed From A Mor	nth Ago:	-																		
Down	10	9	6	4	7	9	13	15	16	12	12	6	7	4	13	6	6	8	8	13
Same	19	14	13	11	19	12	8	14	13	18	15	11	9	10	8	7	14	17	18	11
Up	8	7	6	6	6	7	7	7	7	7	8	5	5	4	7	5	17	10	10	11
Diffusion Index	47%	47%	50%	55%	48%	46%	39%	39%	38%	43%	44%	48%	45%	50%	39%	47%	65%	53%	53%	47%
Dillusion Index	4170	41 /0	JU %	00%	40%	40%	39%	39%	30%	43%	44%	40%	40%	00%	33%	4170	00%	JJ%	03%	4170

# Fourth Quarter 2024

Interest Rate Forecasts

						Perce	ent Per A	nnum A	verage Fo	or Quarter	·				-	Avg. For		(Q-Q	% Change	)
Blue Chip				Short-Terr	n			Inter	mediate-7	Term		Lo	ong-Term			Qtr		(;	SAAR)	
Financial Forecasts	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Α.	В.	C.	D.	Ε.
Panel Members	Federal	Prime	SOFR	Com.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Aaa	Baa	State &	Home	Fed's Adv		GDP	Cons.	PCE
	Funds	Bank	Rate	Paper	Bills	Bills	Bills	Notes	Notes		Bond	Corp.	Corp.	Local	Mtg.	Fgn Econ	Real	Price	Price	Price
	Rate	Rate		1-Mo.	3-Mo.	6-Mo.	1-Yr.	2-Yr.	5-Yr.	10-Yr.	30-Yr.	Bond	Bond	Bonds	Rate	\$ Index	GDP	Index	Index	Index
Santander Capital Markets	5.1 H	8.3 H	5.1	5.0 H		4.6	4.5	4.4	4.2	4.1	4.4	5.3	6.4	3.6 L	. 6.5	113.0	1.1	2.5	2.5	2.1
Chmura Economics & Analytics PNC Financial Services Corp.	4.9	8.0	4.9	4.9	4.9 H	+ 4.9 I		H 4.6	H 4.3	4.3	4.5	5.3	na	na	6.6	na 110.0 U	1.0	2.8	2.8	2.5 H
Action Economics	4.9 4.8	8.1 7.9	4.9 5.3 H	na 4.8	4.5 4.7	4.4 4.6	4.3 4.3	4.1 4.2	4.0 4.1	4.1 4.1	4.2 4.3	na 4.8	6.3 5.8	4.8 ⊦ 4.3	H 6.5 7.3 H	119.8 H 116.8	-1.2 1.7	1.8 1.5	1.8 2.4	1.7 1.8
Comerica Bank	4.0 4.8	7.9 8.0	5.5 F	na na	4.7	4.0 4.4	4.5 3.8	4.2 3.3	4.1 3.2 I	4.1 L 3.3 I	4.5 L 3.6	4.0 L 4.3	5.8	4.5 L na	5.5 L	na	2.0	4.0 F		2.1
Economist Intelligence Unit	4.8	7.8	na	4.7	4.8	4.6	4.5	4.0	3.8	3.7	3.8	na	na	na	6.4	na	0.9	na	2.0	na
J.P. Morgan Chase	4.8	na	na	na	na	na	na	3.5	3.5	3.7	4.2	na	na	na	na	na	0.8	2.3	2.4	2.0
BMO Capital Markets	4.7	7.8	4.6	4.7	4.7	4.6	4.2	3.9	3.8	3.8	4.1	4.9	5.9	4.3	6.3	113.9	1.5	2.1	2.2	2.0
Oxford Economics	4.7	7.8	4.7	na	4.6	4.4	4.0	3.6	3.5	3.8	4.0	3.8	L na	na	6.5	113.6	1.1	2.6	2.4	2.2
Roberts Capital Advisors	4.7	7.8	4.7	4.7	4.7	4.5	4.4	4.1	4.2	4.2	4.5	5.3	6.3	4.6	6.3	115.0	2.2	2.3	2.4	2.3
MacroFin Analytics & Rutgers Bus School	4.6	7.8	4.6	4.6	4.4	4.6	4.3	4.1	3.7	3.8	3.8	4.9	5.7	3.9	6.7	114.7	1.6	2.2	2.1	2.2
The Northern Trust Company	4.6	7.7	4.5	4.7	4.4	4.3	4.1	4.0	4.1	4.1	4.4	5.4	6.5	H 4.5	6.6	112.0	1.0	2.2	2.2	2.2
EY-Parthenon	4.5	na	na	na	4.5	na	na	na	na	3.7	na	na	na	na	na	na	1.7	2.1	2.1	2.1
Fannie Mae	4.5	7.6	na	na	4.1	4.1	4.0	3.9	3.9	4.1	4.3	na	na	na	6.2	na	1.5	2.3		H 2.5 H
KPMG	4.5	7.6	4.5	4.1	4.3	4.3	4.0	3.7	3.4	3.5	3.8	4.3	5.5	na	5.9	na	1.6	2.1	2.1	2.1
Moody's Analytics	4.5	7.7	4.5	4.4	4.3	4.3	4.3	4.2	4.2	4.1	4.6			H 4.3	6.6	na	1.5	1.9	2.4	2.4
S&P Global Market Intelligence The Lonski Group	4.5	7.7 7.6	4.6	na	4.3	4.1	3.9	3.5	3.2 I	L 3.4	3.7	na 40	na 5 7	na	5.8	na	1.7 1.2	2.1 2.1	2.0	2.0
Via Nova Investment Mat.	4.5 4.5	7.6 7.8	4.4 4.6	4.5 4.6	4.5 4.5	4.3 4.5	4.2 4.5	4.0 3.9	3.7 3.9	3.7 3.9	3.9 4.0	4.9 5.0	5.7 5.7	4.0 3.9	6.1 6.7	117.3 110.0 L	2.5	2.1	2.0 2.0	2.2 2.1
Bank of America	4.4	na	na	na	na	na	na	3. <del>9</del> 4.0	3. <del>3</del> 4.2	4.3		H na	na	na	na	na	1.5	2.1	2.0	2.1
Barclays	4.4	na	na	na	na	na	na	3.8	4.0	4.4	4.6	na	na	na	na	na	1.0	2.6	2.0	2.0
Chan Economics	4.4	7.4	4.3	4.3	4.4	4.5	4.3	3.8	3.3	3.4	3.6	L 4.6	5.6	4.0	6.2	113.5	0.8	2.1	2.3	2.0
Daiwa Capital Markets America	4.4	7.5	4.4	na	4.0	na	na	3.4	3.3	3.5	4.2	na	na	na	5.8	115.0	0.5	2.2	2.2	2.1
GLC Financial Economics	4.4	7.6	4.5	4.4	4.3	4.3	4.5	4.2	3.8	3.9	4.2	4.9	6.0	4.3	6.4	114.9	1.3	2.3	2.3	2.2
Nomura Securities, Inc.	4.4	7.5	na	na	na	na	na	3.8	3.8	4.0	na	na	na	na	na	na	1.8	1.6	2.0	2.2
Regions Financial Corporation	4.4	7.4	4.4	4.5	4.5	4.4	4.4	3.6	3.6	3.9	4.1	4.9	6.0	4.2	6.4	114.0	2.4	2.5	2.2	2.1
DePrince & Assoc.	4.3	7.5	4.3	4.4	4.4	4.3	3.9	3.6	3.5	3.8	4.2	5.0	5.9	4.2	6.0	115.9	1.9	2.5	2.6	2.4
Naroff Economics LLC	4.3	7.3	4.3	4.4	4.3	4.5	4.6	4.3	3.7	3.8	3.9	4.8	5.3	4.0	6.1	113.3	2.2	2.5	2.5	2.4
Societe Generale	4.2	7.3	4.2	na	3.9	3.6	3.3	3.1	L 3.5	3.6	3.9	na	na	na	na	na	3.0 I	H 1.8	2.2	2.3
Goldman Sachs & Co.	4.1	na	na	na	4.8	na	na	3.7	3.7	4.0	4.2	na	na	na	na	na	2.0	1.9	2.3	1.9
Loomis, Sayles & Company Wells Fargo	4.1	7.3 7.3	4.1 4.2	4.0	4.2 4.1	4.2	3.9 3.7	3.4 3.5	3.4 3.5	3.6 3.6	3.8 3.9	4.4 4.8	5.4	3.6 L	- 6.0 6.1	114.0	-2.2 1 1.0	L 1.9 2.0	1.9 2.2	1.6 L 2.0
Scotiabank Group	4.1 4.0	na	4.2 3.8 L	4.1 na	4.1 3.8	4.0 na	o./ na	3.5 3.4	3.5 3.6	3.0 3.9	3.9 4.0	4.0 na	5.8 na	4.2 na	na	na na	1.0	2.0 0.5 L	2.2	2.0
ING	3.9	na	na L	na	na	na	na	3.3	3.3	3.5	3.9	na	na	na	na	na	1.2	na	na na	na
TS Lombard	3.8	6.9	3.8 L	3.8	3.7	3.8	4.0	4.3	4.4		H 4.6	5.4	6.2	4.5	6.3	115.0	2.5	2.5	2.5	2.5 H
Georgia State University	3.6	6.8	na	na	3.5	3.2		L 3.4	3.3	3.5	3.8	4.5	5.6	na	6.4	na	0.7	2.3		L 2.1
NatWest Markets	3.1 L	6.3 L	na	3.2 L	. 3.4 L	3.5	3.6	3.1	L 3.4	4.0	4.6	4.8	5.7	4.5	6.3	na	1.5	2.1	2.7	2.3
February Consensus	4.4	7.6	4.5	4.4	4.3	4.3	4.1	3.8	3.7	3.9	4.1	4.9	5.9	4.2	6.3	114.5	1.4	2.2	2.3	2.2
Top 10 Avg.	4.8	7.9	4.8	4.7	4.7	4.6	4.5	4.3	4.2	4.2	4.5	5.2	6.2	4.4	6.6	115.8	2.3	2.7	2.6	2.4
Bottom 10 Avg.																				
	3.9	7.2	4.2	4.1	3.9	3.9	3.7	3.3	3.3	3.5	3.8	4.5	5.5	4.0	6.0	113.2	0.3	1.7	2.0	1.9
January Consensus Number of Forecasts Changed From A Mor		7.6	4.5	4.4	4.3	4.3	4.2	3.8	3.8	3.9	4.1	4.8	5.9	4.2	6.4	114.7	1.2	2.2	2.3	2.2
Down	<u>9</u>	7	5	2	10	8	10	12	14	12	12	6	7	5	13	7	10	10	11	12
Same	20	16	14	13	16	13	12	17	17	19	16	9	8	9	9	7	15	18	17	14
Up	8	7	6	6	6	7	6	7	5	6	7	7	6	4	6	4	12	7	8	9
Diffusion Index	49%	50%	52%	60%	44%	48%	43%	43%	38%	42%	43%	52%	48%	47%	38%	42%	53%	46%	46%	46%

# First Quarter 2025

Interest Rate Forecasts

						Pero	cent Per	Annum	Average F	For Quar	ter					Avg. For		(Q-Q	% Chang	9)
Blue Chip			8	Short-Terr	n			Inter	mediate-7	Term		Lo	ng-Term			Qtr			(SAAR)	
Financial Forecasts	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Α.	В.	C.	D.	E.
Panel Members	Federal	Prime	SOFR	Com.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Aaa	Baa	State &	Home	Fed's Adv		GDP	Cons.	PCE
	Funds	Bank	Rate	Paper	Bills	Bills	Bills	Notes	Notes	Notes	Bond	Corp.	Corp.	Local	Mtg.	Fgn Econ	Real	Price	Price	Price
	Rate	Rate		1-Mo.	3-Mo.	6-Mo.	1-Yr.	2-Yr.	5-Yr.	10-Yr.	30-Yr.	Bond	Bond	Bonds	Rate	\$ Index	GDP	Index	Index	Index
Chmura Economics & Analytics	4.6 H	7.8 H		4.7 H				H 4.7 I		4.4	4.6	5.3	na	na	6.4	na	1.8	2.5	2.6	2.4
Economist Intelligence Unit	4.6 H	7.6	na	4.5	4.6 H	4.4	4.3	3.8	3.6	3.6	3.7	na	na	na	6.3	na	1.9	na	2.1	na
Santander Capital Markets Action Economics	4.6 H 4.5	7.8 H 7.7	4.6 5.1 H	4.6 4.5	4.2 4.5	4.1 4.3	4.0 4.1	4.0 4.0	3.8 4.1	3.8 4.1	4.1 4.2	4.9 4.7	6.0	3.3 4.2	L 6.1 7.2 H	112.0 117.0	1.3 1.7	2.8 1.5	2.4 2.4	2.1 1.8
Oxford Economics	4.5 4.5	7.6	4.5	na na	4.5	4.3 4.2	4.1 3.9	4.0 3.5	4.1 3.4	3.7	4.2 3.8	4.7 3.7	5.7 L na	4.2 na	6.4	112.7	1.7	2.3	2.4	2.1
PNC Financial Services Corp.	4.4	7.6	4.4	na	4.1	4.1	4.1	4.0	4.0	4.1	4.2	na	6.1	4.7	6.4	120.7 H	-0.2	L 2.0	1.9	1.7
Roberts Capital Advisors	4.4	7.6	4.4	4.5	4.5	4.3	4.2	4.0	4.0	4.0	4.3	5.2	6.2	4.5	6.1	115.0	2.1	2.3	2.4	2.3
BMO Capital Markets	4.3	7.4	4.2	4.3	4.4	4.3	4.0	3.7	3.7	3.7	4.1	4.7	5.7	4.1	6.3	113.6	2.0	1.6	2.3	2.1
Comerica Bank	4.3	7.5	4.3	na	4.2	4.0	3.4	3.0	3.1	3.3	3.6	4.3	5.2	L na	5.3 L	. na	1.7	3.6	H 2.0	2.2
J.P. Morgan Chase	4.3	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	2.0	2.3	2.5	2.1
Moody's Analytics	4.3	7.5	4.3	4.2	4.1	4.1	4.1	4.1	4.1	4.1	4.6	5.6 I		H 4.3	6.5	na	1.6	2.2	2.3	2.3
Regions Financial Corporation	4.3	7.3	4.2	4.3	4.3	4.3	4.3	3.5	3.6	3.8	4.0	4.8	5.8	4.2	6.4	113.7	2.5	2.4	2.3	2.1
Via Nova Investment Mgt.	4.3	7.5	4.3	4.4	4.2	4.3	4.4	3.9	4.1	4.1	4.1	5.2	5.8	4.1	6.9	110.0 L	2.5	2.0	2.0	2.1
GLC Financial Economics KPMG	4.2	7.3	4.3	4.2	4.1	4.1	4.2	4.0	3.7	3.7	4.1	4.8	5.9	4.2	6.3	114.6	1.8	2.2	2.2	2.2 L 1.7
S&P Global Market Intelligence	4.2 4.2	7.3 7.3	4.1 4.2	3.8	4.0 3.9	4.1 3.7	3.9 3.6	3.6 3.3	3.3 3.1	3.4 3.3	3.7 3.6	4.2 na	5.5	na	5.6 5.6	na na	1.4 1.5	2.1 2.1	1.3 1.3	L 1.7 L 1.7
Bank of America	4.2 4.1	na	4.2 na	na na	na	na	na	o.o na	na	o.o na	na	na	na na	na na	na	na	2.0	2.1	2.5	2.4
Barclays	4.1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.0	2.6	2.8	2.4
Chan Economics	4.1	7.1	4.0	4.0	4.1	4.2	4.0	3.5	3.0	3.1	L 3.3	L 4.3	5.3	3.7	5.9	113.2	1.5	2.0	2.2	1.9
MacroFin Analytics & Rutgers Bus School	4.1	7.3	4.1	4.1	3.9	4.1	4.1	4.0	3.7	3.7	3.8	4.8	5.6	3.9	6.7	114.5	2.0	2.0	2.0	2.0
Nomura Securities, Inc.	4.1	7.3	na	na	na	na	na	3.6	3.8	4.0	na	na	na	na	na	na	2.2	1.6	2.4	2.3
The Northern Trust Company	4.1	7.3	4.1	4.2	3.9	3.7	3.5	3.8	3.9	4.1	4.4	5.4	6.5	H 4.5	6.6	111.0	1.4	2.1	2.1	2.1
Daiwa Capital Markets America	4.0	7.1	4.0	na	3.8	na	na	3.1	3.1	3.3	4.1	na	na	na	5.7	115.0	1.3	2.2	2.0	2.0
DePrince & Assoc.	4.0	7.1	4.0	4.0	4.0	4.0	3.6	3.4	3.4	3.7	4.1	5.0	5.8	4.2	5.9	115.8	2.0	2.5	2.6	2.4
EY-Parthenon	4.0	na	na	na	3.9	na	na	na	na	3.6	na	na	na	na	na	na	2.0	2.0	2.1	2.1
Fannie Mae	4.0	7.2	na	na	4.0	3.9	3.9	3.8	3.9	4.1	4.3	na	na	na	6.0	na	1.6	2.3	2.8	2.4
TS Lombard Goldman Sachs & Co.	4.0 3.9	7.1 na	4.0 na	4.0	3.9 4.6 H	4.0 H na	4.2	4.4 3.6	4.7 H 3.7	H 4.8 4.0	H 4.9 4.2			H 4.8 I	H 6.6 na	120.0 na	2.0 2.0	3.0 2.1	3.0 2.3	H 3.0 H 2.1
The Lonski Group	3.9	7.0	3.9	na 4.0	3.9	3.8	na 3.8	3.8	3.6	3.6	3.8	na 4.8	na 5.5	na 3.9	5.8	117.9	1.8	2.1	1.4	1.9
Naroff Economics LLC	3.8	6.8	3.9	3.9	3.9	4.0	4.2	4.2	3.7	3.9	4.1	4.9	5.4	3.9	5.9	113.8	3.0	2.4	2.4	2.3
Scotiabank Group	3.8	na	3.6 L	na	3.3 l	na	na	3.4	3.5	4.0	4.0	na	na	na	na	na	1.5	1.1	L 2.4	2.2
Wells Fargo	3.8	7.0	3.9	3.8	3.9	3.7	3.6	3.4	3.4	3.6	3.9	4.8	5.8	4.2	5.9	na	1.8	2.3	2.5	2.3
Loomis, Sayles & Company	3.7	6.9	3.7	3.6	3.8	3.7	3.5	3.3	3.3	3.5	3.8	4.3	5.3	3.5	5.8	113.9	1.0	2.0	2.5	2.0
Georgia State University	3.6	6.7	na	na	3.4	3.1	L 3.1	3.3	3.1	3.4	3.7	4.4	5.5	na	6.0	na	1.4	2.0	1.4	1.4
Societe Generale	3.6	6.8	3.6 L	na	3.4	3.2	3.0	L 2.9		L 3.2	3.5	na	na	na	na	na	3.7	H 2.0	2.2	2.2
ING	3.4	na	na	na	na	na	na	3.2	3.6	3.8	4.2	na	na	na	na	na	1.5	na	na	na
NatWest Markets	3.1 L	6.3 L	na	3.2 L	. 3.4	3.5	3.6	3.1	3.4	4.0	4.6	4.8	5.7	4.5	6.3	na	2.1	1.8	1.4	1.3 L
February Consensus	4.1	7.3	4.2	4.1	4.0	4.0	3.9	3.7	3.6	3.8	4.0	4.8	5.8	4.1	6.2	114.7	1.8	2.2	2.2	2.1
Top 10 Avg.	4.5	7.6	4.5	4.4	4.4	4.3	4.3	4.1	4.1	4.2	4.4	5.2	6.1	4.4	6.6	116.4	2.4	2.7	2.6	2.4
Bottom 10 Avg.	3.7	6.9	3.9	3.8	3.7	3.6	3.5	3.2	3.2	3.4	3.7	4.4	5.5	3.9	5.7	112.8	1.1	1.8	1.7	1.7
January Consensus		7.2	4.2	4.1	4.0	4.0	3.9	3.7	3.6	3.8	4.0	4.8	5.8	4.1	6.3	114.4	1.8	2.2	2.2	2.1
Number of Forecasts Changed From A Mon	•															_				_
Down	10	7	6	3	8	8	11	9	10	11	11	6	8	4	11	7	10	10	6	7
Same Up	19 8	16 7	12 7	13 5	18 6	14 6	11 6	14 9	15 7	14 8	11 9	8 7	6 6	9 4	11 5	7 4	17 10	20 5	22 8	22 6
Diffusion Index	47%	50%	52%	55%	47%	46%	41%	50%	45%	45%	47%	52%	45%	50%	39%	42%	50%	43%	53%	49%

# Second Quarter 2025

Interest Rate Forecasts

						Per	cent Per	Annum	Average	For Quarte	er				-	Avg. For		(0-0	% Change	)
Blue Chip				Short-Terr	n				mediate-			Lo	ng-Term			Qtr		,	SAAR)	,
Financial Forecasts	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Α.	В.	C.	D.	E.
Panel Members	Federal	Prime	SOFR	Com.	Treas.	Treas.	Treas.	Treas.	Treas.		Treas.	Aaa	Baa	State &	Home	Fed's Adv		GDP	Cons.	PCE
	Funds	Bank	Rate	Paper	Bills	Bills	Bills	Notes	Notes		Bond	Corp.	Corp.	Local	Mtg.	Fgn Econ	Real	Price	Price	Price
	Rate	Rate		1-Mo.	3-Mo.	6-Mo.	1-Yr.	2-Yr.	5-Yr.	10-Yr.	30-Yr.	Bond	Bond	Bonds	Rate	\$ Index	GDP	Index	Index	Index
TS Lombard	4.5 H	7.6 H	4.5	4.5 H	4.4	4.5	H 4.6	H 4.8	H 5.2 I	H 5.3 H	H 5.4	H 6.1 H	H 7.0	H 5.3 H	1 7.1	120.0	2.0	3.5 H	l 3.5	H 3.5 H
Chmura Economics & Analytics	4.4	7.5	4.4	4.4	4.3	4.4	4.5	4.6	4.4	4.4	4.5	5.2	na	na	6.2	na	2.7	2.4	2.5	2.4
Economist Intelligence Unit	4.4	7.4	na	4.3	4.3	4.2	4.1	3.7	3.5	3.5	3.6	na	na	na	6.0	na	2.2	na	2.2	na
Roberts Capital Advisors	4.4	7.6 H	4.4	4.5 H		4.3	4.2	4.0	4.0	4.0	4.3	5.2	6.2	4.5	6.1	115.0	2.2	2.2	2.3	2.2
Action Economics	4.3	7.4	4.8 ⊦		4.2	4.1	3.8	3.9	4.0	4.0	4.2	4.7	5.7	4.1	7.2 H	117.2	1.7	1.9	2.4	1.8
BMO Capital Markets	4.1	7.2	4.0	4.1	4.1	4.0	3.8	3.6	3.7	3.7	4.1	4.7	5.7	4.2	6.3	113.4	1.9	2.0	2.3	2.1
Moody's Analytics	4.1	7.2	4.0	4.0	3.8	3.9	4.0	4.0	4.0	4.1	4.6	5.5	6.5	4.2	6.4	na 111.6	1.6	2.3	2.3	2.3
Oxford Economics PNC Financial Services Corp.	4.1 4.1	7.3 7.3	4.1 4.1	na	4.1 4.0	4.0 4.0	3.7 4.0	3.3 4.0	3.2 4.0	3.7 4.1	3.7 4.2	3.7 l	L na 5.9	na 4.6	6.1 6.3	111.6 121.2 H	1.7 1.4	1.9 1.9	2.0 1.9	2.0 1.7
Santander Capital Markets	4.1	7.3 7.3	4.1 4.1	na 4.1	4.0 3.7	4.0 3.6	4.0 3.5	4.0 3.7	4.0 3.5	4.1 3.5	4.2 3.8	na 4.6	5.9 5.7	4.0 3.1 L	0.3 - 5.7	121.2 H	1.4	2.5	2.4	2.1
Regions Financial Corporation	4.0	7.0	4.0	4.1	4.0	3.0 4.1	4.2	3.4	3.5 3.5	3.7	3.0 4.0	4.0	5.7	4.1	6.3	113.9	2.6	2.3	2.4	2.1
Via Nova Investment Mot.	4.0	7.3	4.0	4.1	3.9	4.0	4.1	3.8	4.0	4.0	4.1	5.1	5.7	4.0	6.8	110.0 L	2.5	2.0	2.0	2.0
Bank of America	3.9	na	na	na	na	2.0	2.0	2.0	2.0											
Barclays	3.9	na	na	na	na	1.5	2.3	2.3	2.1											
Chan Economics	3.9	6.9	3.8	3.8	3.9	4.0	3.8	3.3	2.8	2.9 l	3.1	L 4.1	5.1	L 3.5	5.7	113.0	1.0	L 2.0	2.2	1.9
Comerica Bank	3.9	7.1	3.9	na	3.8	3.5	3.1	2.7	L 2.9	3.3	3.6	4.3	5.2	na	5.2 L	na	1.6	3.5 H		2.2
GLC Financial Economics	3.9	7.1	3.9	3.9	3.8	3.9	3.9	3.8	3.7	3.7	4.1	4.8	5.9	4.2	6.1	114.6	2.1	2.2	2.2	2.2
Nomura Securities, Inc.	3.9	7.0	na	na	na	na	na	3.4	3.7	4.0	na	na	na	na	na	na	2.4	1.2	2.1	1.9
Daiwa Capital Markets America	3.8	6.9	3.7	na	3.6	na	na	3.0	3.1	3.3	4.1	na	na	na	5.7	115.0	1.4	2.1	2.1	2.0
J.P. Morgan Chase	3.8	na	na	na	na	2.3	2.3	1.9	1.8											
DePrince & Assoc.	3.7	6.8	3.7	3.7	3.7	3.7	3.3	3.2	3.3	3.7	4.1	5.0	5.8	4.2	5.8	115.7	2.2	2.4	2.5	2.3
Fannie Mae	3.7	6.8	na	na	3.9	3.8	3.8	3.8	3.9	4.1	4.3	na	na	na	6.0	na	1.6	2.2	2.3	2.2
KPMG	3.7	6.8	3.7	3.3	3.5	3.6	3.4	3.3	3.1	3.3	3.6	4.1	5.4	na	5.4	na	1.6	2.2	1.7	1.8
Goldman Sachs & Co.	3.6	na	na	na	4.3	na	na	3.6	3.7	4.0	4.2	na	na	na	na	na	2.1	2.2	2.4	2.1
MacroFin Analytics & Rutgers Bus School	3.6	6.8	3.6	3.6	3.4	3.7	3.8	3.8	3.7	3.7	3.8	4.8	5.6	3.9	6.7	114.3	2.0	2.0	2.0	2.0
S&P Global Market Intelligence	3.6	6.8	3.6	na	3.4	3.4	3.3	3.1	3.0	3.3	3.6	na	na	na	5.4	na	1.4	2.2	1.7	1.9
The Northern Trust Company	3.6	6.8	3.6	3.7	3.4	3.3	3.4	3.6	3.8	4.0	4.3	5.3	6.4	4.4	6.5	110.0 L	1.6	2.0	2.0	2.0
Wells Fargo	3.6	6.8	3.7	3.6	3.6	3.5	3.4	3.3	3.4	3.5	3.8	4.7	5.7	4.1	5.8	na	2.2	2.1	2.3	2.1
EY-Parthenon	3.5	na	na	na	3.5	na	na	na	na	3.5	na	na	na	na	na	na	2.1	2.0	2.1	2.2
Georgia State University Loomis, Sayles & Company	3.5 3.5	6.7 6.7	na 3.5	na 3.4	3.3 3.6	3.2 3.5	3.2 3.4	3.2 3.3	3.2 3.3	3.4 3.5	3.8 3.8	4.6 4.3	5.6 5.2	na 3.5	5.8 5.7	na 113.8	2.2 2.2	2.1 1.9	1.6 2.3	1.7 1.8
Scotiabank Group	3.5 3.5	na	3.3 3.3	o.4 na	3.0 3.1	o.o na	5.4 na	3.3 3.3	3.5 3.5	3.5 4.0	3.0 4.0	4.3 na	o.z na		o.r na	na	1.8	1.9 0.9 L	2.3 . 2.4	2.2
The Lonski Group	3.5 3.5	6.6	3.4	3.5	3.6	3.6	3.6	3.5 3.5	3.5 3.5	4.0 3.5	4.0 3.7	4.8	5.4	na 3.7	5.5	118.4	2.0	2.0	2.4	2.2
Naroff Economics LLC	3.1	6.1 L	3.2	3.2 L		3.3	3.5	3.6	3.9	4.1	4.3	5.1	5.6	4.1	5.6	114.4	3.2	2.4	2.2	2.0
NatWest Markets	3.1	6.3	na	3.2 L		3.5	3.6	3.1	3.4	4.0	4.6	4.8	5.7	4.5	6.3	na	2.0	1.8		L 1.3 L
Societe Generale	3.1	6.3	3.1 L	. na	2.9 L	2.9		L 2.9	2.7	L 3.2	3.5	na	na	na	na	na		H 2.0	2.2	2.2
ING	2.9 L	na	na	na	na	na	na	3.0	3.7	4.0	4.4	na	na	na	na	na	1.8	na	na	na
February Consensus	3.8	7.0	3.9	3.9	3.8	3.8	3.7	3.5	3.6	3.8	4.0	4.8	5.8	4.1	6.1	114.6	2.0	2.1	2.2	2.1
Top 10 Avg.	4.3	7.4	4.2	4.2	4.2	4.2	4.1	4.1	4.1	4.2	4.5	5.2	6.1	4.4	6.6	116.6	2.7	2.6	2.5	2.4
Bottom 10 Ava.	30	6.6	3.5	3.5	3.3	<b>2</b> /	3.3	3.1	3.1	2.2	3.6		E F	3.8	5.6	112.5	1.5	1.8	1.8	1.8
	3.3					3.4				3.3		4.4	5.5							
,	3.8	7.0	3.8	3.8	3.7	3.8	3.7	3.6	3.6	3.7	4.0	4.7	5.8	4.1	6.1	114.4	2.1	2.1	2.2	2.0
Number of Forecasts Changed From A Mon	th Ago:	-																		
Down	8	6	5	3	7	8	10	8	9	6	8	4	7	4	8	7	9	5	8	5
Same	23	19	16	14	20	15	14	19	18	22	16	13	10	11	15	8	23	25	24	24
Up	6	5	5	4	5	5	4	5	5	5	7	4	3	2	4	3	5	5	4	6
Diffusion Index	47%	48%	50%	52%	47%	45%	39%	45%	44%	48%	48%	50%	40%	44%	43%	39%	45%	50%	44%	51%

#### International Interest Rate And Foreign Exchange Rate Forecasts

	Fed F	und Targe	t Rate
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	5.13	4.88	
BMO Capital Markets	5.38	5.13	4.38
ING Financial Markets	5.38	4.88	3.88
Moody's Analytics	5.38	5.18	4.57
Northern Trust	5.38	5.32	4.58
Oxford Economics	5.38	5.21	4.71
S&P Global Market Intelligence			
Scotiabank	5.13	4.63	3.63
TS Lombard	5.25	4.50	4.00
Wells Fargo	5.38	4.83	4.13
February Consensus	5.31	4.95	4.24
High	5.38	5.32	4.71
Low	5.13	4.50	3.63
Last Months Avg.	5.30	5.02	4.27

	Policy-Rate Balance Rate		
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	0.00	0.25	
BMO Capital Markets	-0.10	0.00	0.00
ING Financial Markets	-0.10	0.00	0.00
Moody's Analytics	-0.10	-0.03	0.00
Nomura Securities			
Northern Trust	-0.10	0.00	0.20
Oxford Economics	-0.04	0.00	0.00
S&P Global Market Intelligence			
Scotiabank			
TS Lombard	-0.01	0.00	0.10
Wells Fargo	-0.10	0.00	0.00
February Consensus	-0.07	0.03	0.04
High	0.00	0.25	0.20
Low	-0.10	-0.03	0.00
Last Months Avg.	-0.07	-0.01	0.00

	Official Bank Rate		
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	5.00	4.50	
BMO Capital Markets	5.00	4.75	4.25
ING Financial Markets	5.25	5.25	4.25
Moody's Analytics	5.25	5.25	4.57
Nomura Securities			
Northern Trust	5.25	5.00	4.25
Oxford Economics	5.25	5.08	4.35
S&P Global Market Intelligence			
Scotiabank	5.00	4.50	3.75
TS Lombard	5.25	5.00	4.75
Wells Fargo	5.25	5.00	4.00
February Consensus	5.17	4.93	4.27
High	5.25	5.25	4.75
Low	5.00	4.50	3.75
Last Months Avg.	5.25	5.09	4.20

	SNB Policy Rate		
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	1.75	1.75	
BMO Capital Markets	1.75	1.75	1.75
ING Financial Markets	1.75	1.75	1.75
Moody's Analytics	1.75	1.75	1.50
Nomura Securities			
Northern Trust	1.50	1.25	1.25
Oxford Economics	1.75	1.75	1.38
S&P Global Market Intelligence			
Scotiabank			
TS Lombard	1.65	1.50	1.25
Wells Fargo	1.75	1.50	1.00
February Consensus	1.71	1.63	1.41
High	1.75	1.75	1.75
Low	1.50	1.25	1.00
Last Months Avg.	1.75	1.66	1.41

	O/N MMkt Financing Rate		ng Rate
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	5.00	4.75	
BMO Capital Markets	5.00	4.50	4.00
ING Financial Markets	5.00	4.50	3.50
Moody's Analytics	4.93	4.45	3.50
Nomura Securities			
Northern Trust	5.00	4.75	4.00
Oxford Economics	5.00	4.88	4.38
S&P Global Market Intelligence			
Scotiabank	4.75	4.25	3.50
TS Lombard	5.00	4.25	3.75
Wells Fargo	5.00	4.75	4.00
February Consensus	4.96	4.56	3.83
High	5.00	4.88	4.38
Low	4.75	4.25	3.50
Last Months Avg.	5.00	4.66	3.77

	United States		
- 1	10 Yr. (	Gov't Bond	Yield %
E	In 3 Mo.	In 6 Mo.	In 12 Mo.
	4.28	4.33	
	3.93	3.82	3.74
	4.00	3.50	3.50
	4.24	4.18	4.11
	4.30	4.20	4.10
	4.07	3.95	3.81
	3.75	3.58	3.37
	3.70	3.80	4.00
	4.00	4.00	4.75
	3.95	3.85	3.60
	4.02	3.92	3.89
	4.30	4.33	4.75
	3.70	3.50	3.37
	4.26	4.09	3.83
		lanan	

Japan			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
0.93	0.98		
0.80	0.89	0.97	
0.60	0.80	1.00	
0.84	0.84	0.84	
0.75	0.85	0.95	
0.66	0.70	0.71	
0.72	0.72	1.47	
0.70	0.75	0.70	
0.75	0.82	0.95	
0.93	0.98	1.47	
0.60	0.70	0.70	
0.83	0.84	0.85	

United Kingdom		
10 \	r. Gilt Yield	ds %
In 3 Mo.	In 6 Mo.	In 12 Mo.
4.10	4.03	
3.77	3.76	3.74
3.80	3.65	3.65
3.93	3.81	3.65
4.00	3.90	3.80
3.77	3.69	3.60
3.90	3.85	4.60
3.85	3.80	3.60
3.89	3.81	3.81
4.10	4.03	4.60
3.77	3.65	3.60
4.06	3.94	3.65

Switzerland			
	Gov't Bond		
In 3 Mo.	In 6 Mo.	In 12 Mo.	
0.90	0.85	1.10	
1.55	1.73	1.78	
0.95	1.00	1.00	
0.86	1.03	1.32	
0.90	0.90	1.65	
1.03	1.10	1.37	
1.55	1.73	1.78	
0.86	0.85	1.00	
0.95	1.03	1.09	

Canada			
	10 Yr. Gov't Bond Yield %		
In 3 Mo.	In 6 Mo.	In 12 Mo.	
3.19	3.08	3.00	
3.20	3.00	3.25	
4.00	4.04	4.04	
3.50	3.40	3.30	
3.25	3.45	3.49	
3.20	3.35	3.60	
3.50	3.25	2.75	
3.40	3.30	3.20	
3.41	3.36	3.33	
4.00	4.04	4.04	
3.19	3.00	2.75	
3.47	3.27	3.14	

	Fed's AFE \$ Index			
In 3 Mo.	In 6 Mo.	In 12 Mo.		
114.3	114.1	113.6		
115.0	112.7	108.0		
116.0	115.0	112.0		
114.1	114.6	113.6		
110.0	110.0	120.0		
113.9	113.3	113.4		
116.0	115.0	120.0		
110.0	110.0	108.0		
115.4	114.3	112.9		

	Yen per US\$			
In 3 Mo.	In 6 Mo.	In 12 Mo.		
152.3	150.0			
143.0	142.0	139.0		
140.0	135.0	130.0		
142.0	136.6	128.2		
142.0	140.0	135.0		
148.0	144.0	138.0		
146.2	144.0	137.2		
140.1	135.4	130.0		
150.0	140.0	135.0		
150.0	140.0	150.0		
145.4	140.7	135.8		
152.3	150.0	150.0		
140.0	135.0	128.2		
145.2	142.6	137.2		

US\$ per Pound Sterling							
In 3 Mo.	In 6 Mo.	In 12 Mo.					
1.22	1.26						
1.27	1.28	1.28					
1.23	1.24	1.28					
1.26	1.26	1.26					
1.27	1.28	1.30					
1.26	1.26	1.29					
1.28	1.26	1.27					
1.27	1.28	1.29					
1.25	1.30	1.32					
1.27	1.25	1.15					
1.26	1.27	1.27					
1.28	1.30	1.32					
1.22	1.24	1.15					
1.25	1.25	1.26					

In 6 Mo.	In 12 Mo.						
0.91							
0.86	0.85						
0.86	0.83						
0.85	0.83						
0.87	0.86						
0.87	0.85						
0.87	0.89						
0.86	0.86						
0.88	0.88						
0.90	0.90						
0.87	0.86						
0.91	0.90						
0.85	0.83						
0.88	0.86						
	0.86 0.86 0.85 0.87 0.87 0.87 0.87 0.86 0.88 0.90  0.87 0.91 0.85						

C\$ per US\$							
In 3 Mo.	In 6 Mo.	In 12 Mo.					
1.38	1.37						
1.33	1.33	1.31					
1.35	1.33	1.28					
1.33	1.30	1.26					
1.34	1.33	1.31					
1.36	1.34	1.30					
1.33	1.33	1.32					
1.33	1.31	1.30					
1.33	1.28	1.27					
1.35	1.35	1.35					
1.34	1.33	1.30					
1.38	1.37	1.35					
1.33	1.28	1.26					
1.36	1.34	1.31					

### International Interest Rate And Foreign Exchange Rate Forecasts

	Official Cash Rate						
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.				
Barclays	4.35	4.35					
BMO Capital Markets	4.35	4.10	3.60				
ING Financial Markets	4.35	4.10	3.60				
Moody's Analytics	4.35	4.35	3.85				
Nomura Securities							
Northern Trust	4.35	4.35	3.60				
Oxford Economics	4.46	4.60	4.48				
S&P Global Market Intelligence							
Scotiabank							
TS Lombard	4.32	3.50	3.00				
Wells Fargo	4.35	4.35	3.85				
February Consensus	4.36	4.21	3.71				
High	4.46	4.60	4.48				
Low	4.32	3.50	3.00				
Last Months Avg.	4.32	4.24	3.75				

Australia									
10 Yr. Gov't Bond Yield %									
In 3 Mo.	In 6 Mo.	In 12 Mo.							
4.80	4.30	3.70							
4.72	4.47	4.14							
4.30	4.20	4.10							
4.55	4.21	4.14							
4.20	4.20	4.95							
4.51	4.28	4.21							
4.80	4.47	4.95							
4.20	4.20	3.70							
4.51	4.17	3.86							
E	uro are	ea							

		-						
	US\$ per A\$							
In 3 Mo.	In 6 Mo.	In 12 Mo.						
0.64	0.65							
0.67	0.67	0.67						
0.67	0.69	0.70						
0.67	0.69	0.72						
0.68	0.69	0.71						
0.65	0.66	0.69						
0.66	0.68	0.68						
0.68	0.68	0.69						
0.66	0.68	0.70						
0.65	0.65	0.65						
0.66	0.67	0.69						
0.68	0.69	0.72						
0.64	0.65	0.65						
0.65	0.67	0.69						

	Main	Main Refinancing Rate				
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.			
Barclays	4.25	3.75				
BMO Capital Markets	4.50	4.25	3.75			
ING Financial Markets	4.50	4.25	3.75			
Moody's Analytics	4.50	4.45	3.53			
Nomura Securities						
Northern Trust	4.50	4.25	3.25			
Oxford Economics	4.50	4.21	3.24			
S&P Global Market Intelligence						
Scotiabank	4.25	3.75	3.25			
TS Lombard	4.00	4.00	3.50			
Wells Fargo	4.00	3.50	2.75			
February Consensus	4.33	4.05	3.38			
High	4.50	4.45	3.75			
Low	4.00	3.50	2.75			
Last Months Avg.	4.34	3.93	3.32			

	US\$ per Euro							
In 3 Mo.	In 6 Mo.	In 12 Mo.						
1.06	1.07							
1.10	1.11	1.12						
1.08	1.10	1.15						
1.10	1.11	1.12						
1.12	1.13	1.15						
1.07	1.06	1.12						
1.09	1.08	1.09						
1.10	1.11	1.13						
1.10	1.12	1.15						
1.10	1.15	1.05						
1.09	1.10	1.12						
1.12	1.15	1.15						
1.06	1.06	1.05						
1.08	1.09	1.12						

	10 Yr. Gov't Bond Yields %											
	Germany				France		Italy			Spain		
Blue Chip Forecasters	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	2.67	2.52										
BMO Capital Markets	2.20	2.26	2.28									
ING Financial Markets	2.20	2.10	2.30	2.80	2.70	2.85	4.00	4.00	3.95	3.30	3.20	3.30
Moody's Analytics	2.33	2.33	2.30	2.78	2.74	2.68	4.37	4.36	4.30	3.31	3.33	3.32
Northern Trust	2.35	2.25	2.15	2.85	2.75	2.65	3.90	3.80	3.70	3.25	3.15	3.05
Oxford Economics	2.16	2.17	2.12	2.71	2.70	2.57	3.85	3.89	3.97	3.15	3.16	3.15
TS Lombard	2.60	2.50	2.40	2.95	2.85	2.75	3.90	3.80	3.70	3.35	3.25	3.15
Wells Fargo	2.25	2.20	2.15									
February Consensus	2.35	2.29	2.24	2.82	2.75	2.70	4.00	3.97	3.92	3.27	3.22	3.19
High	2.67	2.52	2.40	2.95	2.85	2.85	4.37	4.36	4.30	3.35	3.33	3.32
Low	2.16	2.10	2.12	2.71	2.70	2.57	3.85	3.80	3.70	3.15	3.15	3.05
Last Months Avg.	2.38	2.24	2.11	2.96	2.78	2.72	4.16	4.05	4.01	3.44	3.25	3.23

	Consensus Forecasts									
	10-year Bond Yields vs U.S. Yield									
	Current	Current In 3 Mo. In 6 Mo. In 12 Mo.								
Japan	-3.43	-3.27	-3.10	-2.94						
United Kingdom	-0.09	-0.13	-0.11	-0.08						
Switzerland	-3.28 -2.99 -2.82 -2.52									
Canada	-0.63	-0.62	-0.56	-0.56						
Australia	0.04	0.49	0.36	0.32						
Germany	-1.85	-1.68	-1.63	-1.64						
France	-1.37	-1.20	-1.17	-1.19						
Italy	-0.32 -0.02 0.05 0.04									
Spain	-0.90	-0.75	-0.70	-0.69						

	Consensus Forecasts							
	Policy Rates vs U.S. Target Rate							
	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.				
Japan	-5.48	-5.38	-4.98	-4.19				
United Kingdom	-0.13 -0.14 -0.03 0.04							
Switzerland	-3.63	-3.60	-3.33	-2.82				
Canada	-0.38	-0.35	-0.39	-0.41				
Australia	-1.03 -0.95 -0.74 -0.52							
Euro area	-0.88	-0.98	-0.91	-0.86				

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#### 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

#### Let's Get Real about GDP

Viewpoints:

#### US' real private-sector spending lagged real GDP ....

Real GDP outran real private sector spending on final products by 7/10th of a percentage point in 2023. The annual growth rate for real private-sector spending on final goods and services slowed from yearlong 2022's 2.3% to yearlong 2023's 1.8%. By contrast, real GDP growth quickened from 2022's 1.9% to 2023's 2.5%. (Real GDP adds government spending, the trade deficit and the change inventories to real private sector spending on final products.)

Remember real GDP's great head fake of 2022's first half. That was when real GDP's back-to-back annualized quarterly setbacks of -2.0% for Q1-2022 and -0.6% for Q2-2022 were incorrectly viewed by some as evidence of a recession. One of the principal reasons why the unemployment rate did not rise in a manner that would confirm a recession was because real private sector spending on final products posted back-to-back annualized quarterly increases of 1.5% for both the first and second quarters of 2022.

In terms of annualized quarterly growth rates, real private sector purchases of final products slowed from Q3-2023's 3.0% to Q4-2023's 2.6%, which differed considerably from real GDP's accompanying deceleration from 4.9% to 3.3%.

Also, in terms of year-to-year increases, real private sector spending on final products quickened from Q4-2022's 0.8% to Q4-2023's 2.7%, which was more muted than the comparably measured jump by yearly real GDP growth from 0.7% to 3.1%.

*Real private sector spending shows highest correlation with US equity market performance ...* 

In terms of year-on-year growth rates, the market value of US common stock shows a slightly higher correlation of 0.49 with real US private sector purchases of final products compared to the common equity market's 0.45 correlation with real GDP.

Real private sector spending on final products approximates real GDP less real net exports less the change in real inventories less real government spending.

The nominal version of US private sector purchases of final products generates a correlation of 0.42 with the market value of US common stock, where the latter generates a lower correlation of 0.35 with nominal GDP.

Unexpected surge by government spending amplified real GDP's upside surprise ...

Though real GDP's annualized quarter-to-quarter growth rate slowed from Q3-2023's 4.9% to Q4-2023's 3.3%, the latter was well above the consensus projection of 2.0% growth. Calendar year 2023's 2.5% annual advance by real GDP far outpaced the consensus' year earlier prediction that called for a 0.5% rise by 2023's US economy.

At the start of 2023, the consensus was looking for a further deceleration of US real GDP following a plunge by real GDP's annual growth rate from 2021's post-COVID surge of 5.8% to 2022's 1.9%. Few expected the US economy would accelerate given monetary tightening that both ratcheted up the federal funds rate from 0.13% to its current 5.38% and the Fed's reduced holdings of US Treasury bonds and mortgage-backed securities.

The upside growth surprise of 2023 owes something not only to the unexpected continuation of massive government stimulus, but also to the overhang of highly liquid assets stemming from 2020-2021's most rapid expansion of the money supply since World War II.

Of special importance to 2023's US economy was the rapid growth of government spending. Yearlong 2023's 4.0% annual advance by real government spending towered over the 2.5% rate of real GDP growth. Real government spending's 4.0% increase for 2023 consisted of gains of 4.2% for real federal spending and 3.8% for real spending by state and local governments.

Without the surge in real government spending, calendar year 2023's 2.5% increase by real GDP slows to an estimated 1.9% matching its 1.9% gain for 2022.

#### *GDP's estimate of government spending excludes social security, Medicare, and Medicaid* ...

Worth noting is how real government spending does not include government transfer payments such as social security, Medicare, and Medicaid. Transfer payments enter into GDP via personal spending. For example, while the sum of spending by federal, state, and local governments included in the GDP accounts approximated 17.4% of 2023's GDP, total gross federal outlays for calendar-year 2023 approached 23.0% of GDP.

Calendar-year (CY) 2023's 7.8% annual increase by the sum of outlays for social security, Medicare, and Medicaid was faster than CY 2023's 5.6% annual increase by nominal private sector spending on final goods and services. CY 2023's nominal government spending contained in the GDP accounts that excludes transfer payments grew by a much faster 6.6% annually compared to private sector spending on final products.

Among major categories of GDP's estimate of consumer spending, government support stands out in health care spending. CY 2023's 7.7% annual increase by nominal consumer spending on health care easily outran the 5.7% increase by the rest of consumer spending.

Moreover, government subsidies and tax breaks for green energy projects and electric vehicles explained why CY 2023's 19.4% annual increase by nominal business investment spending on structures was so much faster than the comparably measured gains of 4.2% for business purchases of equipment and 6.2% for business investment in intellectual property products (including software).

Unlike the switch in real government spending's annual percent change from 2022's -0.9% drop to 2023's 4.0% advance, the calendar year growth rates for each of real GDP's broad private-sector categories slowed from 2022 to 2023.

By private sector category, the growth of real consumer spending eased from CY 2022's 2.5% to CY 2023's 2.2%, real business investment spending in capital products slowed from 5.2% to 4.4%, and the annual contraction by real residential investment spending deepened from -9.0% to -10.7%.

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Spending on recreational goods led real consumer spending growth in 2023 ...

I doubt if anyone can guess the fastest growing category for CY 2023's real consumer spending? The winner was the 7.6% annual advance by real spending on recreational goods and vehicles. This category has been hot for some time. After surging by 10.3% annually, on average, during the four years ended 2019, real outlays on recreational goods and vehicles accelerated to the 14.3% average annual advance of the four years ended 2023.

But some may view 2023's 7.6% annual advance by real spending on recreational goods and vehicles to be very misleading. Investors may view the 7.6% real increase to be useless information given how nominal, or actual, consumer spending on recreational goods and vehicles rose by a much slower 4.2% annually in 2023. Inflation adjusted, or real, data must be viewed with caution.

#### Dollar value of consumer spending slows appreciably year-toyear ...

From the perspective of the real world, nominal consumer spending has slowed noticeably from its unsustainably rapid pace of a year ago. The annual increase of nominal consumer spending slowed from CY 2022's 9.2% to CY 2023's 6.0%. In addition, the year-on-year growth rate for nominal consumer spending dropped from Q4-2022's 7.2% to Q4-2023's 5.4%. I think the deceleration by consumer spending is far from over given (i) rising consumer loan delinquency rates, (ii) a historically low personal savings rate, and (iii) the likelihood of slower growth rates for payrolls and employment-derived income.

The annualized quarterly growth rate for real consumer spending eased from Q3-2023's 3.1% to Q4-2023's 2.8%. The latter was slightly above the latest consensus projection of 2.5%. However, not that long ago, the consensus believed Q4-2023's annualized sequential growth rate for real consumer spending would be less than 2%.

### Inventory build and thinner trade gap pushes Q4-2023's real GDP growth above 3%

The contribution to GDP from changes in unsold inventories supplied an unexpected lift to Q4-2023's real GDP. Early January's Blue Chip consensus expected the increase in real inventories would drop to \$33.2 billion in 2023's final quarter following a jump from Q2-2023's \$14.9 billion to Q3-2023's \$77.8 billion.

Much to the contrary, Q4-2023 showed an advance by real inventory accumulation to \$82.7 billion. So instead of conforming to the consensus forecast and reducing real GDP by -\$44.6 billion, the change in inventories added \$4.9 billion to Q4-2023's real GDP.

Moreover, the consensus was looking for a widening of Q4-2023's real trade deficit that would have subtracted nearly -\$10 billion from real GDP. Instead, the real trade deficit narrowed from Q3-2023's -\$930.7 billion to Q4-2023's -\$908.2 billion and, thereby, added +\$22.5 billion to GDP.

After excluding the volatile additions to real GDP stemming from changes in inventories and changes in the real trade deficit, the remainder of Q4-2023's real GDP grew by a slower 2.7% annualized from Q3-2023's pace. The latter was down from Q3-2023's 3.5% comparably measured gain.

In terms of calendar year growth rates, real GDP excluding the change in inventories and the trade deficit rose from 2022's 1.7% to 2023's 2.2%, where the latter was slower than the 2.5% rise for the entirety of 2023's real GDP.

Furthermore, if we exclude only the 0.6 percentage points of growth supplied CY 2023's US real GDP by a narrower trade deficit, the annual rate of real GDP growth slows to 1.9%, which represents a slowdown from the hybrid metric's 2.3% increase of CY 2022.

John Lonski (The Lonski Group)

# U.S. Job Openings Up, Quits Down ...and Jobs are "Plentiful"

Between the two surveys released at the same time.... one on confidence (and jobs) and job availability... these days, I'll go with the job survey as being more important. The two big items to focus on: 1) jobs and 2) inflation expectations

Job openings actually rose in December (Side note: Anyone remember how exciting it was when the number of openings cracked 10 mln? And they stayed there for nearly two years!) We're back over the 9 million mark, which is a 3-month high... and the bulk of the gains were in the private sector. So the good news is that there are options out there... if one is still unemployed or is looking for extra work. The bad news is that it means that the consumer could spend more and that's not what the Fed wants right now.

Firms increased their hires (so they're finding the right person), while the number of people who quit (either for those options noted above or for other personal reasons) fell for the fourth month in a row, which is noteworthy as it suggests that there is less pressure to boost wages. So that is good news.

And, yes, the Conference Board's headline index of consumer confidence showed a bigger-than-expected 6.8 pt jump in January to a 7-month high of 114.8 (lots of excitement around the 'present situation' .... was it the potential for rate cuts?), but check out the jobs section of the survey. Inflation expectations for the next 12 months dropped for the third month in a row to a 46-month low.

"Show of hands! Anyone still finding jobs plentiful these days? How about hard to get?" More respondents found jobs plentiful and fewer found those jobs difficult to come by. Let's go back to the opening segment here .... the good news is that Americans are confident about their job situation; but, the bad news is that means the U.S. economy could stay resilient for longer. Not a bad thing in the grand scheme of things, but bad for Fed Chair Powell. Also, note this suggest that the January jobless rate could fall (we will find out on Friday).

Separately.... House prices are still rising but at a more modest pace.... the S&P CoreLogic Case-Shiller Home Price Index (say that quickly 3x) edged up just 0.2% in November (still sizeable gains in Vegas.... maybe the New Edition reunion is bringing more buyers into town... but they were offset by sizeable declines in San Francisco and Seattle), while the FHFA House Price Index continued to rise at a more sedate rate of 0.3% for the second month in a row.

Bottom Line: It will be challenging to push for earlier rate cuts in this environment.

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# **Special Questions:**

1. a. At y	what FOMC n	neeting will th	e first FFR cut	occur?				
	<u>Mar 2024</u>	16%	<u>May 2024</u>	41%	Jun 2024	25%	Jul 2024	16%
	<u>Sep 2024</u>	0%	<u>Nov 2024</u>	3%	Dec 2024	0%	Later	0%
b. Ho	w much will th	he FFR target	decline in 2024	4? <u>112 bps</u>				
2. a. Wh	at is your estin	mate of the lor	ng-term neutra	l fed funds rat	e? <u>2.</u>	<u>86%</u>		
b. Sin	ce before the j	pandemic, has	it: <u>incre</u>	<u>ased</u> 79%	<u>decreased</u>	7% <u>rema</u>	ained the san	<u>ne</u> 14%
			rity holdings s the fed funds r			own as quantita 23% <u>No</u>	tive tighteni 77%	ng. Will it halt this
		y policy affect JS economy h		with a lag, pos <u>Yes</u>		there further me <u>No</u> 20%	eaningful res	straint from earlier
	JS economy h iencing a reces		oft landing," tl <u>Yes</u> 81%	nat is a return <u>No</u> 19		around the Fed	's 2% target	without the economy
6. a. Did	l accommodati	ive US fiscal p	olicy play a k	ey role in the i	resilience of t	he economy in 2	2023? <u>Yes</u>	93% <u>No</u> 7%
b. Do	you expect les	ss accommoda	tion in 2024?	2	<u>Yes</u> 77%	<u>No</u> 23%		
c. If s	o, will this slo	w the econom	y meaningfully	y? <u>Y</u>	<u>Yes</u> 52%	<u>No</u> 48%		
7. What i	s your US une	employment ra	te forecast for:	Jun 2024	<u>4</u> 4.1%	<u>Dec 2024</u>	4.3%	
8. What p	probability do	you attach to a	recession beg	inning over th	ne next 12 mo	nths in the:		
		C		<u>US</u>	euro are			
			<b>nsensus</b> Top 10	<b>39%</b> 53%	<b>54%</b> 66%	<b>56%</b> 69%		
			Bot 10	27%	42%	44%		
0	·····		······································	49				
9. a. wn		DB begin cuttii D <u>1 2024</u>	ng its policy ra <u>O2 2024</u>		<u>3 2024</u>	<u>O2 2024</u>	т	atar
	7	9%	<u>02 2024</u> 61%	-	<u>5 2024</u> 26%	<u>02 2024</u> 4%		Later 0%
b. Wh	en will the Bo		ig its Bank rate		2070	7/0		070
0		<u>)1 2024</u>	<u>Q2 2024</u>		3 2024	<u>Q2 2024</u>	Ι	Later
	-	4%	39%		48%	9%		0%
c. Wh	en will the first	st hike in the H	Bank of Japan'	s short-term p	olicy interest	rate occur?		
		<u>)1 2024</u>	<u>Q2 2024</u>	-	<u>3 2024</u>	<u>Q2 2024</u>	Ī	Later
		5%	57%		14%	5%		19%

### Databank:

2024 Historical Data												
Monthly Indicator	Jan	Feb	Mar	<b>A</b>	Man	T	Jul	<b>A</b>	<b>C</b>	0-4	Nam	Dee
Retail and Food Service Sales (a)				Apr	May	Jun		Aug	Sep	Oct	Nov	Dec
		••••		••••	••••		••••			••••		
Auto & Light Truck Sales (b)	••••			••••			••••			••••	••••	
Personal Income (a, current \$)	••••	••••	••••	••••	••••	••••	••••	••••	••••	••••	••••	••••
Personal Consumption (a, current \$)	••••	••••		••••	••••	••••	••••	••••	••••	••••	••••	••••
Consumer Credit (e)		••••	••••	••••	••••	••••	••••	••••	••••	••••	••••	••••
Consumer Sentiment (U. of Mich.)	78.8	••••		••••	••••		••••			••••	••••	
Household Employment (c)		••••		••••	••••		••••			••••	••••	
Nonfarm Payroll Employment (c)				••••	••••		••••	••••	••••	••••	••••	
Unemployment Rate (%)	••••	••••	••••	••••	••••	••••	••••	••••		••••	••••	
Average Hourly Earnings (All, cur. \$)	••••		••••	••••	••••		••••		••••	••••	••••	
Average Workweek (All, hrs.)					••••		••••			••••		
Industrial Production (d)	••••		••••		••••		••••			••••		
Capacity Utilization (%)	••••		••••		••••		••••			••••		
ISM Manufacturing Index (g)					••••							
ISM Nonmanufacturing Index (g)												
Housing Starts (b)		••••										
Housing Permits (b)												
New Home Sales (1-family, c)												
Construction Expenditures (a)												
Consumer Price Index (nsa, d)												
CPI ex. Food and Energy (nsa, d)												
PCE Chain Price Index (d)												
Core PCE Chain Price Index (d)												
Producer Price Index (nsa, d)												
Durable Goods Orders (a)												
Leading Economic Indicators (a)												
Balance of Trade & Services (f)												
Federal Funds Rate (%)												
3-Mo. Treasury Bill Rate (%)												
10-Year Treasury Note Yield (%)												

### 2023 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	3.0	-0.7	-0.9	0.4	0.7	0.2	0.6	0.7	0.8	-0.3	0.3	0.6
Auto & Light Truck Sales (b)	15.11	14.88	14.93	15.68	15.52	16.06	15.94	15.30	15.77	15.49	15.39	15.89
Personal Income (a, current \$)	1.0	0.5	0.5	0.2	0.3	0.2	0.2	0.4	0.3	0.3	0.4	0.3
Personal Consumption (a, current \$)	1.6	0.4	-0.1	0.4	0.2	0.4	0.6	0.3	0.8	0.0	0.4	0.7
Consumer Credit (e)	5.4	2.7	4.6	3.5	-0.2	2.9	3.0	-3.5	2.6	1.4	5.7	
Consumer Sentiment (U. of Mich.)	64.9	66.9	62.0	63.7	59.0	64.2	71.5	69.4	67.9	63.8	61.3	69.7
Household Employment (c)	852	149	523	138	-255	297	205	291	50	-270	586	-683
Nonfarm Payroll Employment (c)	472	248	217	217	281	105	236	165	262	105	173	216
Unemployment Rate (%)	3.4	3.6	3.5	3.4	3.7	3.6	3.5	3.8	3.8	3.8	3.7	3.7
Average Hourly Earnings (All, cur. \$)	33.02	33.11	33.20	33.34	33.45	33.60	33.73	33.82	33.91	34.00	34.12	34.27
Average Workweek (All, hrs.)	34.6	34.5	34.4	34.4	34.3	34.4	34.3	34.4	34.4	34.3	34.4	34.3
Industrial Production (d)	1.5	0.9	0.2	0.3	0.1	-0.4	0.1	0.0	-0.2	-0.9	-0.6	1.0
Capacity Utilization (%)	79.6	79.5	79.5	79.8	79.5	78.9	79.5	79.5	79.5	78.7	78.6	78.6
ISM Manufacturing Index (g)	47.4	47.7	46.3	47.1	46.9	46.0	46.4	47.6	49.0	46.7	46.7	47.4
ISM Nonmanufacturing Index (g)	55.2	55.1	51.2	51.9	50.3	53.9	52.7	54.5	53.6	51.8	52.7	50.6
Housing Starts (b)	1.340	1.436	1.380	1.348	1.583	1.418	1.451	1.305	1.356	1.376	1.525	1.460
Housing Permits (b)	1.354	1.482	1.437	1.417	1.496	1.441	1.443	1.541	1.471	1.498	1.467	1.493
New Home Sales (1-family, c)	649	625	640	679	710	683	728	654	698	676	615	664
Construction Expenditures (a)	2.2	0.4	0.6	0.3	2.0	0.5	0.7	2.1	0.4	1.2	0.4	
Consumer Price Index (nsa, d)	6.4	6.0	5.0	4.9	4.0	3.0	3.2	3.7	3.7	3.2	3.1	3.4
CPI ex. Food and Energy (nsa, d)	5.6	5.5	5.6	5.5	5.3	4.8	4.7	4.3	4.1	4.0	4.0	3.9
PCE Chain Price Index (d)	5.5	5.2	4.4	4.4	4.0	3.2	3.3	3.3	3.4	2.9	2.6	2.6
Core PCE Chain Price Index (d)	4.9	4.8	4.8	4.8	4.7	4.3	4.2	3.7	3.6	3.4	3.2	2.9
Producer Price Index (nsa, d)	5.7	4.7	2.7	2.3	1.1	0.3	1.1	1.9	2.0	1.2	0.8	1.0
Durable Goods Orders (a)	-1.3	-2.7	3.3	1.2	2.0	4.3	-5.6	-0.1	4.0	-5.1	5.5	0.0
Leading Economic Indicators (a)	-0.5	-0.6	-1.2	-0.7	-0.7	-0.7	-0.3	-0.4	-0.8	-1.0	-0.5	-0.1
Balance of Trade & Services (f)	-70.8	-70.6	-60.4	-72.9	-66.9	-64.0	-65.0	-58.6	-61.2	-64.5	-63.2	
Federal Funds Rate (%)	4.33	4.57	4.65	4.83	5.06	5.08	5.12	5.33	5.33	5.33	5.33	5.33
3-Mo. Treasury Bill Rate (%)	4.69	4.79	4.86	5.07	5.31	5.42	5.49	5.56	5.56	5.60	5.52	5.44
10-Year Treasury Note Yield (%)	3.53	3.75	3.66	3.46	3.57	3.75	3.90	4.17	4.38	4.80	4.50	4.02

(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.

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### Calendar of Upcoming Economic Data Releases

Monday	Tuesday	Wednesday	Thursday	Friday
January 29 Texas Manufacturing Outlook Survey (Jan) Short-Term Energy Outlook (Dec)	, i i i i i i i i i i i i i i i i i i i	31 ADP Employment Report (Jan) Employment Cost Index (Q4) Chicago PMI (Jan) EIA Crude Oil Stocks Mortgage Applications FOMC Meeting	February 1 Productivity & Costs (Q4) ISM Manufacturing (Jan & Rev) S&P Global Mfg PMI (Jan) Construction (Dec) Challenger Employment Report (Jan) Weekly Jobless Claims	2 Employment Situation (Jan) Consumer Sentiment (Jan, Final) Manufacturers' Shipments, Inventories & Orders (Dec) BEA Auto and Truck Sales (Jan)
<b>5</b> ISM Services PMI (Jan) S&P Global Services PMI (Jan) Senior Loan Officer Survey (Q1)	6 Public Debt (Jan) Kansas City Fed Labor Market Conditions Indicators (Jan) Interest on Public Debt (Jan)	7 International Trade (Dec) Transportation Services (Dec) Consumer Credit (Dec) Treasury Auction Allotments (Jan) EIA Crude Oil Stocks Mortgage Applications	8 Wholesale Trade (Dec) CEO Confidence Survey (Q1) Housing Affordability (Dec) Weekly Jobless Claims	9 Survey of Professional Forecasters (Q1) Seas Adj CPI Revisions Kansas City Financial Stress Index (Jan)
12 Monthly Treasury (Jan)	13 CPI & Real Earnings (Jan) Cleveland Fed Median CPI (Jan) NFIB (Jan) OPEC Crude Oil Spot Prices (Jan)	14 Seas Adj PPI Revisions EIA Crude Oil Stocks Mortgage Applications	<b>15</b> Import & Export Prices (Jan) Advance Retail Sales (Jan) IP & Capacity Utilization (Jan) MTIS (Dec) Philadelphia Fed Mfg Business Outlook Survey (Feb) Empire State Mfg Survey (Feb) Home Builders (Feb) TIC Data (Dec) Weekly Jobless Claims	16 New Residential Construction (Jan) Producer Prices (Jan) Consumer Sentiment (Feb, Preliminary) Business Leaders Survey (Feb)
19 PRESIDENTS' DAY ALL MARKETS CLOSED	20 Retail E-Commerce Sales (Q4) Philly Fed Nonmanufacturing Business Outlook (Feb) Dallas Fed Banking Conditions Survey (Feb) Composite Indexes (Jan)	21 CEW (Q3)	22 Adv Quarterly Services (Q4) Existing Home Sales (Jan) S&P Global Flash PMIs (Feb) Chicago Fed National Activity Index (Jan) EIA Crude Oil Stocks Mortgage Applications Weekly Jobless Claims	23 Treasury Auction Allotments (Feb)
26 Final Building Permits (Jan) New Residential Sales (Jan) H.6 Money Stock (Jan) Texas Manufacturing Outlook Survey (Feb) NABE Outlook (Q1) Steel Imports for Consumption (Jan, Preliminary)	27 Adv Durable Goods (Jan) FHFA HPI (Dec & Q4) Case Shiller HPI (Dec) Richmond Fed Mfg & Service Sector (Feb) Texas Service Sector Outlook Survey (Feb) Consumer Confidence (Feb)	28 GDP (Q4, 2nd Estimate) Adv Trade & Inventories (Jan) EIA Crude Oil Stocks Mortgage Applications	29 Personal Income (Jan) Agricultural Prices (Jan) Dallas Fed Trimmed Mean (Jan) Underlying NIPA Tables (Q4, 2nd Estimate) Chicago PMI (Feb) Kansas City Fed Manufacturing Survey (Feb) Pending Home Sales (Jan) Weekly Jobless Claims	March 1 Construction (Jan) ISM Manufacturing (Feb) S&P Global Mfg PMI (Feb) Consumer Sentiment (Feb, Final) Strike Report (Feb)
<b>4</b> BEA Auto and Truck Sales (Feb)	5 ISM Services PMI (Feb) S&P Global Services PMI (Feb) Manufacturers' Shipments, Inventories & Orders (Jan)	<b>6</b> ADP Employment Report (Feb) Wholesale Trade (Jan) JOLTS (Jan) Public Debt (Feb) Interest on the Public Debt (Feb) EIA Crude Oil Stocks Mortgage Applications	7 International Trade (Jan) Productivity & Costs (Q4) Treasury Auction Allotments (Feb) Financial Accounts (Q4) Consumer Credit (Jan) Challenger Employment (Feb) Weekly Jobless Claims	8 Employment Situation (Feb)

#### **BLUE CHIP FORECASTERS**

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