

ALLIANT ENERGY NDO-LNT										RECENT PRICE	63.85	P/E RATIO	20.1 (Trailing: 21.0 Median: 21.0)	RELATIVE P/E RATIO	1.12	DIV'D YLD	3.0%	VALUE LINE											
TIMELINESS 3 Raised 5/3/24 SAFETY 1 Raised 9/6/24 TECHNICAL 3 Lowered 2/28/25 BETA .95 (1.00 = Market) 18-Month Target Price Range Low-High Midpoint (% to Mid) \$46-\$73 \$60 (-5%) 2028-30 PROJECTIONS Price Gain Ann'l Total High Low 80 65 (+25%) 9% Low 85 60 (Nil) 4% Institutional Decisions 10/2024 2020/24 30/2024 to Buy 290 314 338 to Sell 311 265 271 Hld's(000) 208018 205430 229417 Percent shares traded 24 16 8										High: 34.9 35.4 41.0 45.6 46.6 55.4 60.3 62.3 65.4 56.3 64.2 64.0 Low: 25.0 27.1 30.4 36.6 36.8 40.8 37.7 46.0 47.2 45.2 46.8 56.3 LEGENDS — 28.00 x Dividends p sh Relative Price Strength 2-for-1 split 5/16 Options: Yes Shaded area indicates recession										Target Price Range 2028 2029 2030 128 96 80 64 48 40 32 24 16 12									
2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026										© VALUE LINE PUB. LLC 28-30 Revenues per sh 18.95 "Cash Flow" per sh 6.85 Earnings per sh A 4.25 Div'd Decl'd per sh B + † 2.43 Cap'l Spending per sh 5.40 Book Value per sh C 31.90 Common Shs Outst'g D 257.00 Avg Ann'l P/E Ratio 17.5 Relative P/E Ratio .95 Avg Ann'l Div'd Yield 3.7%																			
CAPITAL STRUCTURE as of 12/31/24 Total Debt \$10406 mill. Due in 5 Yrs \$4371 mill. LT Debt \$8677 mill. LT Interest \$370 mill. (LT interest earned: 2.8x) Leases, Uncapitalized Annual rentals \$3 mill. Pension Assets-12/24 \$715 mill. Oblig \$841 mill. Pfd Stock None Common Stock 256,690,000 shs. MARKET CAP: \$16.4 billion (Large Cap) ELECTRIC OPERATING STATISTICS % Change Retail Sales (KWH) 2022 2023 2024 -7 -4 Unc Avg. Indust. Use (MWH) 11494 11435 11161 Avg. Indust. Revs. per KWH (c) 8.39 8.47 8.53 Capacity at Peak (MW) NA NA NA Peak Load, Summer (MW) 5629 5856 5638 Annual Load Factor (%) NA NA NA % Change Customers (yr-end) +7 +7 +7										3253.6 3320.0 3382.2 3534.5 3647.7 3416.0 3669.0 4205.0 4027.0 3981.0 4420 4610 Revenues (\$mill) 4870 390.9 384.0 466.1 522.3 567.4 624.0 674.0 686.0 703.0 690.0 835 885 Net Profit (\$mill) 975 15.3% 13.4% 12.5% 8.4% 10.8% -- -- 3.1% .6% 2.0% 2.0% 2.0% Income Tax Rate 2.0% 9.4% 16.3% 10.7% 14.5% 16.3% 8.8% 3.7% 8.7% 14.2% 10.9% 10.0% 10.0% AFUDC % to Net Profit 4.0% 47.3% 51.5% 47.8% 52.3% 50.6% 53.5% 52.9% 55.0% 54.8% 55.3% 55.5% 55.5% Long-Term Debt Ratio 52.0% 50.0% 46.1% 49.8% 45.7% 47.6% 44.9% 47.1% 45.0% 45.2% 44.7% 44.5% 44.5% Common Equity Ratio 48.0% 7446.3 8377.6 8392.8 10032 10938 12657 12725 13944 15002 15681 16530 16750 Total Capital (\$mill) 17070 8970.2 9809.9 10798 12462 13527 14336 14987 16247 17157 18701 18600 18900 Net Plant (\$mill) 19180 6.3% 5.6% 6.7% 6.3% 6.3% 5.9% 6.3% 6.1% 6.0% 5.8% 6.5% 6.5% Return on Total Cap'l 7.0% 10.0% 9.5% 10.6% 10.9% 10.5% 10.6% 11.3% 10.9% 10.4% 9.9% 11.5% 11.5% Return on Shr. Equity 12.0% 10.2% 9.7% 10.9% 11.2% 10.7% 10.8% 11.0% 10.9% 10.4% 9.9% 11.5% 11.5% Return on Com Equity E 12.0% 3.6% 2.8% 4.0% 4.4% 4.2% 4.2% 4.3% 4.1% 3.6% 2.8% 4.0% 4.0% Retained to Com Eq 4.5% 66% 72% 64% 62% 61% 62% 62% 62% 65% 71% 63% 63% All Div'ds to Net Prof 62%										BUSINESS: Alliant Energy Corporation is the parent company of Interstate Power and Light Company (IPL) and Wisconsin Power and Light Company (WPL). Together, the utility subsidiaries serve approximately one million electric and 430,000 natural gas customers in Wisconsin and Iowa. Electric revenue: residential, 37%; commercial, 24%; industrial, 28%; wholesale, 8%; other, 3%. Generation sources: coal, 18%; gas, 41%; wind, 16%; other, 1%; purchased, 24%. Fuel costs: 19% of revenues. '24 reported depreciation rates: 2.9%-6.1%. Has 2,998 employees. President & CEO: Lisa M. Barton. Incorporated: Wisconsin. Address: 4902 North Biltmore Lane, Madison, Wisconsin 53718-2148. Telephone: 608-458-3311. Internet: www.alliantenergy.com.									
Alliant Energy ended 2024 on a fairly positive note. Indeed, in the December quarter, the Wisconsin-based electric and gas utility earned \$0.58 a share, up 23% from the prior-year period, on a modest sub-2% rise in overall revenue. Notably, the parent company of Interstate Power and Light (IPL) and Wisconsin P&L (WPL) benefited from a sharp 26% reduction in the cost of fuel to power its plants and in the amount of money it paid to third-party power providers. That said, full-year GAAP earnings declined an uncharacteristic 3%, largely reflecting a one-time charge that IPL incurred in the June quarter, writing down the carrying value of its Lansing Generating Station. Excluding unusual items such as 2024's writedown at IPL, management continues to target normalized bottom-line growth of between 5%-7% a year. That goal seems well within reach, thanks to, among other things, leadership's efforts in helping to foster economic development within Alliant's two state service area. To wit, it's having good success these days attracting data-center customers to the Midwest.										IPL met its 2024 goal of building out 400 megawatts of solar power generation. Meantime, WPL recently completed several projects that increased the utility's overall solar-power capacity in the Badger State to 1.1 gigawatts. Importantly, these solar projects have zero fuel costs, thus reducing Alliant's susceptibility to swings in natural-gas prices and the like. Its investments in "green" power also yield significant tax credits that can be sold to regional manufacturers and other third parties looking to maintain compliance with restrictions on harmful carbon emissions. In 2025 alone, Alliant could realize as much as \$400 million from the sale of tax credits. Alliant Energy shares remain neutrally ranked for relative year-ahead price performance. And with the stock up 15% in price last year, long-term appreciation potential no longer stands out. Still, the utility company boasts an attractive, well-covered dividend that could hold some appeal for income-oriented accounts (current yield: 3.0% versus 2.1% for the Value Line universe as a whole).																			
Nils C. Van Liew										March 7, 2025																			
(A) Diluted EPS. Excl. nonrecurring losses: '11, 1c; '12, 8c. '20 & '21 EPS don't sum due to rounding. Next earnings report due early May. (B) Dividends historically paid in mid-Feb., May, Aug., and Nov. (C) Dividend reinvestment plan avail. (D) Shareholder investment plan avail. (E) Incl. deferred charges. In '21: \$1,980 mill., \$7.91/sh. (F) In millions, adj. for split. (G) Rate base: Orig. cost. Rates all'd on com. eq. in IA in '20: various; in WI in '22: 10%; earned on avg. com. eq., '21: 11.3%. Regulatory Climate: Wisconsin, Above Average; Iowa, Average.										Company's Financial Strength A+ Stock's Price Stability 95 Price Growth Persistence 55 Earnings Predictability 100																			

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AMERICAN ELEC. PWR. NDQ-AEP										RECENT PRICE	106.29	P/E RATIO	18.4	(Trailing: 18.9 Median: 18.0)	RELATIVE P/E RATIO	1.02	DIV'D YLD	3.6%	VALUE LINE	
TIMELINESS	4	Lowered 6/14/24	High: 63.2 Low: 45.8	65.4 52.3	71.3 56.8	78.1 61.8	81.1 62.7	96.2 72.3	105.0 65.1	91.5 74.8	105.6 80.3	98.3 69.4	105.2 75.2	107.4 89.9					Target Price	Range
SAFETY	1	Raised 3/17/17	LEGENDS --- 29.40 x Dividends p sh Relative Price Strength Options: Yes Shaded area indicates recession																	200
TECHNICAL	4	Lowered 2/21/25																		160
BETA	.85	(1.00 = Market)																		
18-Month Target Price Range																				
Low-High Midpoint (% to Mid)																				
\$73-\$122 \$98 (-10%)																				
2028-30 PROJECTIONS																				
Price Gain Ann'l Total																				
High Low 150 120 (+40%) 12% 7%																				
Institutional Decisions																				
1Q2024 2Q2024 3Q2024																				
to Buy 661 695 712																				
to Sell 572 540 590																				
Hld's(000) 402930 404836 455335																				
Percent shares traded 24 16 8																				
2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026																				
28.22 30.01 31.27 30.77 31.48 34.78 33.51 33.31 31.35 32.84 31.49 30.04 33.30 38.20 36.08 37.01 39.65 41.20																				
6.32 6.29 6.83 6.92 7.02 7.57 7.98 8.47 7.95 8.77 9.35 10.28 10.98 10.72 10.92 11.71 12.20 12.80																				
2.97 2.60 3.13 2.98 3.18 3.34 3.59 4.23 3.62 3.90 4.08 4.42 4.96 5.09 5.24 5.61 5.85 6.30																				
1.64 1.71 1.85 1.88 1.95 2.03 2.15 2.27 2.39 2.53 2.71 2.84 3.00 3.17 3.37 3.57 3.80 3.98																				
6.19 5.07 5.74 6.45 7.75 8.68 9.37 9.98 11.79 12.89 12.43 12.72 11.43 13.18 13.89 14.02 14.10 14.10																				
27.49 28.33 30.33 31.37 32.98 34.37 36.44 35.38 37.17 38.58 39.73 41.38 44.49 46.60 48.46 50.63 52.35 55.55																				
478.05 480.81 483.42 485.67 487.78 489.40 491.05 491.71 492.01 493.25 494.17 496.60 504.21 513.87 526.18 532.9 535.00 540.00																				
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5.5% 4.9% 5.0% 4.6% 4.2% 3.8% 3.8% 3.5% 3.4% 3.6% 3.1% 3.3% 3.5% 3.3% 4.5% 3.6% 3.6% 3.6%																				
CAPITAL STRUCTURE as of 12/31/24																				
Total Debt \$41832 mill. Due in 5 Yrs \$12886 mill.																				
LT Debt \$39308 mill. LT Interest \$1400 mill.																				
Leases, Uncapitalized Annual rentals \$119.6 mill.																				
Pfd Stock None																				
Common Stock 532,907,715 shs.																				
MARKET CAP: \$56.6 billion (Large Cap)																				
ELECTRIC OPERATING STATISTICS																				
2020 2021 2022																				
% Change Retail Sales (KWH) -- -- +3.0 --																				
Avg. Indust. Use (MWH) NA NA NA																				
Avg. Indust. Revs. per KWH (¢) NA NA NA																				
Capacity at Peak (MW) NA NA NA																				
Peak Load (MW) NA NA NA																				
Annual Load Factor (%) NA NA NA																				
% Change Customers (yr-end) +1.0 NA NA																				
Fixed Charge Cov. (%) 243 272 285																				
ANNUAL RATES																				
Past 10 Yrs. Past 5 Yrs. Est'd '22-'24 to '28-'30																				
Revenues 5.5% 5.5% 3.0%																				
"Cash Flow" 5.0% 5.5% 5.5%																				
Earnings 5.0% 4.0% 6.5%																				
Dividends 5.0% 5.0% 5.5%																				
Book Value 3.5% 3.5% 6.0%																				
Cal-endar																				
QUARTERLY REVENUES (\$ mill.)																				
Mar.31 Jun.30 Sep.30 Dec.31 Full Year																				
2022 4593 4640 5526 4881 19640																				
2023 4690 4373 5342 4577 18982																				
2024 5026 4579 5420 4696 19721																				
2025 5000 4900 5800 5500 21200																				
2026 5300 5200 5900 5850 22250																				
Cal-endar																				
EARNINGS PER SHARE																				
Mar.31 Jun.30 Sep.30 Dec.31 Full Year																				
2022 1.22 1.20 1.62 1.05 5.09																				
2023 1.11 1.13 1.77 1.23 5.24																				
2024 1.27 1.25 1.85 1.24 5.61																				
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2026 1.50 1.45 1.95 1.40 6.30																				
Cal-endar																				
QUARTERLY DIVIDENDS PAID																				
Mar.31 Jun.30 Sep.30 Dec.31 Full Year																				
2021 .74 .74 .74 .78 3.00																				
2022 .78 .78 .78 .83 3.17																				
2023 .83 .83 .83 .88 3.37																				
2024 .88 .88 .88 .93 3.57																				
2025 .93																				
(A) Diluted EPS. Excl. nonrec. gains (losses): 10, (7¢); '11, 89¢; '12, (38¢); '13, (14¢); '16, (32.99¢); '17, 26¢; '19, (20¢); gains (loss) from disc. ops.: '15, 58¢; '16, (1¢); '22, (58¢); '23, (34¢). Next earnings report due late May. (B) Divs paid early Mar., June, Sept., & Dec. (C) Div'd reinvestment plan avail. † Shareholder invest. plan avail. (C) Incl. intang. In '23: \$52.5 million (D) In mill. (E) Rev. may not sum due to rounding.																				
Business: American Electric Power Company Inc. (AEP), through 10 operating utilities, serves 5.5 million customers in Arkansas, Kentucky, Indiana, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia, & West Virginia. Has a transmission subsidiary. Electric revenue breakdown: residential, 43%; commercial, 23%; industrial, 18%; wholesale, 10%; other, 6%. Sold commercial																				
These shares have risen nearly 10% in value since our early December review. The stock is now up about 30% over the past year as the utility looks increasingly well positioned to benefit from its investments and power demand increases. American Electric Power recently raised its dividend, as is typical. The company continues to target a payout ratio of 60%-70%, which ought to ensure the dividend continues growing.																				
These untimely shares are best suited for conservative, income-oriented investors. Despite being a weak selection for the year ahead, the stock is ranked 1 (Highest) for Safety and has a dividend yield of 3.6%, which stands above the industry-wide average. The dividend likely remains AEP's most notable feature. Intermediate- and long-term capital appreciation potential is nothing exciting here. Indeed, after rolling out to 2028-2030, we expect the stock to trade around \$120-\$150 and earn about \$7.50 a share over that interim.																				
and projects retail demand growth of up to 9% annually over the next three years.																				
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AVISTA CORP. NYSE-AVA

RECENT PRICE

39.56

P/E RATIO

16.2

(Trailing: 17.4 Median: 19.0)

RELATIVE P/E RATIO

1.03

DIV YLD

4.9%

VALUE LINE

TIMELINESS

3

Raised 3/14/25

SAFETY

3

Lowered 1/19/24

TECHNICAL

4

Lowered 3/14/25

BETA

.75

(1.00 = Market)

18-Month Target Price Range

Low-High

Midpoint (% to Mid)

\$29-\$48

\$39 (-5%)

2028-30 PROJECTIONS

High

Price

Gain

Ann'l Total

Low

40

(+65%)

(Nil)

16%

5%

Institutional Decisions

202024

3Q2024

4Q2024

To Buy

184

156

170

To Sell

102

140

143

Hld's(000)

67784

82402

84841

LEGENDS

— 25.00 x Dividends p.sh divided by Interest Rate

.... Relative Price Strength

Options: Yes

Shaded area indicates recession

Percent shares traded

18

12

6

% TOT. RETURN 3/25

THIS STOCK

25.6

2.2

1 yr.

7.1

12.5

3 yr.

23.7

137.1

2009

2010

2011

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

2023

2024

2025

2026

© VALUE LINE PUB. LLC

28-30

27.58

27.29

27.73

25.86

26.94

23.66

23.83

22.47

22.08

21.27

20.03

19.09

20.13

22.82

22.43

24.21

23.45

23.75

Revenues per sh

24.75

4.45

3.62

3.78

3.70

4.36

4.36

4.92

5.30

4.87

5.01

6.06

5.16

5.34

5.47

5.63

5.67

6.30

6.50

"Cash Flow" per sh

6.75

1.58

1.65

1.72

1.32

1.85

1.84

1.89

2.15

1.95

2.07

2.97

1.90

2.10

2.12

2.24

2.29

2.60

2.75

Earnings per sh ^A

2.95

.81

1.00

1.10

1.16

1.22

1.27

1.32

1.37

1.43

1.49

1.55

1.62

1.69

1.76

1.84

1.90

2.00

2.10

Div'd Dec'd per sh ^B

2.20

3.86

3.64

4.20

4.61

5.05

5.47

6.46

6.34

6.30

6.46

6.59

5.84

6.15

6.03

6.39

6.66

6.60

7.00

Cap'l Spending per sh

8.75

19.17

19.71

20.30

21.06

21.61

23.84

24.53

25.69

26.41

26.99

28.87

29.31

30.14

31.15

31.83

32.37

34.40

35.25

Book Value per sh ^C

35.75

54.84

57.12

58.42

59.81

60.08

62.24

62.31

64.19

65.49

65.69

67.18

69.24

71.50

74.95

78.08

80.04

81.00

83.00

Common Shs Outst'g ^D

85.00

11.4

12.7

14.1

19.3

14.6

17.3

17.6

18.8

23.4

24.5

15.0

21.2

20.2

20.0

17.1

15.9

Bold figures are Value Line estimates

Avg Ann'l P/E Ratio

18.0

.76

.81

.88

1.23

.82

.91

.89

.99

1.18

1.32

.80

1.09

1.09

1.16

.95

.84

Relative P/E Ratio

1.00

4.5%

4.8%

4.5%

4.6%

4.5%

4.0%

4.0%

3.4%

3.1%

2.9%

3.5%

4.0%

4.0%

4.2%

4.8%

5.2%

Avg Ann'l Div'd Yield

4.2%

CAPITAL STRUCTURE as of 12/31/24

1484.8 1442.5 1445.9 1396.9 1345.6 1321.9 1438.9 1710.2 1751.6 1938.0 1900 1970

Total Debt \$3055.0 mill. Due in 5 Yrs \$40.0 mill.

LT Debt \$2701.0 mill. LT Interest \$150.0 mill.

Incl. \$52 mill. debt to affiliated trusts; \$35 mill. finance leases.

(LT interest earned: 2.1x)

Leases, Uncapitalized Annual rentals \$10.4 mill.

Pension Assets-12/24 \$608 mill.

Oblig \$600 mill.

36.3%

36.3%

36.5%

16.0%

13.8%

5.2%

7.5%

5.2%

7.5%

5.2%

7.5%

5.2%

7.5%

5.2%

7.5%

5.2%

7.5%

Income Tax Rate

15.0%

10.1%

8.1%

7.9%

7.7%

5.5%

8.5%

7.5%

2.4%

2.1%

2.8%

4.0%

4.0%

AFUDC % to Net Profit

4.0%

50.0%

51.2%

47.2%

50.5%

49.4%

50.4%

47.5%

50.4%

51.2%

51.0%

49.0%

48.0%

Long-Term Debt Ratio

46.5%

50.0%

48.8%

52.8%

49.5%

50.6%

49.6%

52.5%

49.6%

48.8%

49.0%

51.0%

52.0%

Common Equity Ratio

53.5%

3060.3

3379.0

3273.2

3580.3

3834.6

4089.8

4104.7

4709.7

5091.3

5292.0

5490

5625

Total Capital (\$mill)

5700

3898.6

4147.5

4398.8

4648.9

4797.0

4991.6

5225.5

5444.7

5700.1

6020.0

6255

6525

Net Plant (\$mill)

7225

5.1%

5.3%

5.0%

4.8%

6.2%

4.2%

4.7%

4.6%

4.8%

4.8%

5.0%

5.0%

Return on Total Cap'l

5.5%

7.7%

8.3%

7.3%

7.7%

10.2%

6.4%

6.8%

6.6%

6.9%

6.9%

7.5%

8.0%

Return on Shr. Equity

8.0%

7.7%

8.3%

7.3%

7.7%

10.2%

6.4%

6.8%

6.6%

6.9%

6.9%

7.5%

8.0%

Return on Com Equity ^E

8.0%

2.3%

3.0%

1.9%

2.2%

4.9%

.9%

1.4%

1.1%

1.2%

1.2%

2.0%

2.0%

Retained to Com Eq

2.0%

70%

64%

73%

72%

52%

85%

80%

83%

82%

83%

77%

76%

All Div's to Net Prof

75%

BUSINESS: Avista Corporation (formerly The Washington Water Power Company) supplies electricity & gas in eastern Washington & northern Idaho. Supplies electricity to part of Alaska & gas to part of Oregon. Customers: 422,000 electric, 383,000 gas. Acqd Alaska Electric Light and Power 7/14. Sold Ecova energy-management sub. 6/14. Electric revenue: residential, 36%; commercial, 29%; industrial, 9%; wholesale, 21%; other, 5%. Generating sources: gas & coal, 43%; hydro, 44%; purch., 42%. Fuel costs: 35% of rev. '24 depr. rate (Avista Utilities): 3.5%. Has 1,950 employees. Chairman: Scott L. Morris. Pres. & CEO: Heather L. Rosentrater. Inc.: WA. Address: 1411 E. Mission Ave., Spokane, WA 99202-2600. Telephone: 509-489-0500. Internet: www.avistacorp.com.

Avista Utilities, the primary operating division of Avista Corporation, has reached an all-party settlement in its Oregon rate case. The approved \$4.2 million revenue increase is based on a 7.219% rate of return and a 9.5% return on equity, lower than the initial request of \$7.8 million in November 2024, which had assumed a 7.67% rate of return and 10.4% return on equity. The company is now awaiting final approval. If granted, customers will see an average bill increase of 2%. This marks a key step toward implementing new rates in Oregon.

The company has also filed its 2025 Natural Gas Integrated Resource Plan (IRP). The filing was made with Washington, Idaho, and Oregon regulators and details how Avista plans to meet future natural gas demand and comply with emissions legislation over the next two decades. The IRP is filed every two years to show the utility's commitment to ensuring reliable natural gas service.

Avista continues to prioritize capital investments. The utility plans to spend \$525 million in 2025, \$575 million in 2026, and \$600 million in 2027, totaling nearly \$3 billion over five years ending in 2029. These investments support infrastructure modernization, grid expansion, and clean energy initiatives. A large portion of these funds will go toward electric and gas distribution upgrades, technology integration, and system reliability improvements. The company is also allocating capital toward transmission capacity enhancements and wildfire mitigation projects. Additionally, investments will support Avista's transition to cleaner energy resources, including the expansion of renewable natural gas and electrification infrastructure.

The near-term profit picture looks good. We estimate share earnings will grow in the low teens in 2025 before moderating to a mid-single-digit pace in 2026. All things considered, rate relief, customer growth, and a favorable return framework should help offset ongoing cost pressures.

Shares of Avista Corporation have below-average long-term capital appreciation potential. However, the dividend yield is above average for a utility company.

Emma Jalees

April 18, 2025

Cal-ender

QUARTERLY REVENUES (\$ mill.)

Mar.31

Jun.30

Sep.30

Dec.31

Full Year

2022

462.7

378.6

359.4

509.5

1710.2

2023

474.6

379.9

379.6

517.5

1751.6

2024

609.4

402.1

393.7

532.8

1938.0

2025

635

410

400

455

1900

2026

655

425

410

480

1970

Cal-ender

EARNINGS PER SHARE ^A

Mar.31

Jun.30

Sep.30

Dec.31

Full Year

2022

.99

.16

d.08

1.05

2.12

2023

.73

.23

.19

1.08

2.24

2024

.91

.29

.23

.84

2.29

2025

.95

.30

.35

1.00

2.60

2026

1.00

.35

.40

1.00

2.75

Cal-ender

QUARTERLY DIVIDENDS PAID ^B

Mar.31

Jun.30

Sep.30

Dec.31

Full Year

2021

.4225

.4225

.4225

.4225

1.69

2022

.44

.44

.44

.44

1.76

2023

.46

.46

.46

.46

1.84

2024

.475

.475

.475

.475

1.90

2025

.490

(A) Diluted EPS. Excl. nonrec. gain (loss): '14, 9c; '17, (16c); gains on discount. ops.: '14, \$1.17; '15, 8c. EPS may not sum due to rounding. Net earnings report due mid-May.

(B) Div's paid in mid-Mar., June, Sept. & Dec. ■ Div'd reinvest. plan avail. (C) Incl. deferred chgs. In '24: \$961.0 mill., \$11.95/sh. (D) In mill. (E) Rate base: Net orig. cost. Rate allowed on com. eq. in WA in '21: 9.4%; in ID in '21: 9.4%; in OR in '21: 9.4%; earned on avg. com. eq., '22: 7.1%. Regulatory Climate: WA, Below Avg.; ID, Above Avg.

Company's Financial Strength

A

Stock's Price Stability

95

Price Growth Persistence

15

Earnings Predictability

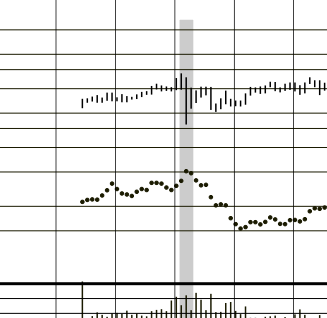
70

To subscribe call 1-800-VALUELINE

DOMINION ENERGY NYSE:D				RECENT PRICE	55.73	P/E RATIO	17.4	(Trailing: 22.6 Median: 21.0)	RELATIVE P/E RATIO	0.95	DIV'D YLD	4.8%	VALUE LINE						
TIMELINESS	3	Raised 3/29/24	High: 80.9	79.9	79.0	85.3	81.7	83.9	90.9	81.1	88.8	63.9	62.0	56.6	Target Price	Range			
SAFETY	2	Raised 11/8/24	Low: 63.1	64.5	66.3	70.9	61.5	67.4	57.8	67.9	57.2	39.2	43.5	52.8	2028	2029	2030		
TECHNICAL	3	Lowered 1/17/25	LEGENDS — 25.0 x Dividends p sh Relative Price Strength Options: Yes Shaded area indicates recession																
BETA	.90	(1.00 = Market)																	
18-Month Target Price Range																			
Low-High Midpoint (% to Mid)																			
\$36-\$64 \$50 (-10%)																			
2028-30 PROJECTIONS																			
Price Gain Ann'l Total																			
High 80 (+45%) 13%																			
Low 60 (+10%) 6%																			
Institutional Decisions																			
to Buy 580 569 657																			
to Sell 575 573 557																			
Hld's(000) 630872 629952 697124																			
			Percent	15															
			shares	10															
			traded	5															
2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	© VALUE LINE PUB. LLC 28-30	
25.26	26.16	25.23	22.73	22.58	21.26	19.60	18.69	19.51	19.63	19.78	17.58	17.24	20.57	17.18	17.75	18.95	19.75	Revenues per sh	21.60
4.82	5.10	5.04	5.24	5.47	5.71	5.99	6.32	6.89	7.24	7.65	7.17	7.27	7.81	5.58	6.45	7.30	7.55	"Cash Flow" per sh	8.15
2.64	2.89	2.76	2.75	3.09	3.05	3.20	3.44	3.53	4.05	4.24	3.54	3.86	4.11	1.99	2.75	3.40	3.60	Earnings per sh ^A	4.25
1.75	1.83	1.97	2.11	2.25	2.40	2.59	2.80	3.04	3.34	3.67	3.45	2.52	2.67	2.67	2.67	2.67	2.67	Div'd Dec'd per sh ^B	2.67
6.41	5.89	6.41	7.20	7.06	9.14	9.35	9.69	8.53	6.25	5.94	7.47	7.36	9.09	12.19	12.70	12.00	10.00	Cap'l Spending per sh	11.00
18.67	20.65	20.08	18.35	20.04	19.75	21.25	23.26	26.58	29.53	35.33	29.44	31.51	31.26	30.72	30.90	31.75	32.80	Book Value per sh ^C	38.00
599.00	581.00	570.00	576.00	581.00	585.00	596.00	628.00	645.00	681.00	838.00	806.00	810.00	835.00	838.00	841.00	844.00	848.00	Common Shs Outst'g ^D	880.00
12.7	14.3	17.3	18.9	19.2	23.0	22.1	21.3	22.2	17.5	18.2	22.6	19.5	18.7	26.1	19.0	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	16.0
.85	.91	1.09	1.20	1.08	1.21	1.11	1.12	1.12	.95	.97	1.16	1.05	1.08	1.45	1.05			Relative P/E Ratio	.90
5.2%	4.4%	4.1%	4.1%	3.8%	3.4%	3.7%	3.8%	3.9%	4.7%	4.8%	4.3%	3.3%	3.5%	5.1%	5.1%			Avg Ann'l Div'd Yield	3.9%
CAPITAL STRUCTURE as of 9/30/24																			
Total Debt \$43025 mill. Due in 5 Yrs \$13361 mill.																			
LT Debt \$37101 mill. LT Interest \$1900 mill.																			
(Total Interest coverage: 2.5x)																			
Leases, Uncapitalized Annual rentals \$36 mill.																			
Pension Assets-12/23 \$9087 mill.																			
Oblig. \$8431 mill.																			
Pfd Stock \$1783 mill. Pfd Divd \$81 mill.																			
Common Stock 840,009,626 shs. as of 10/25/24																			
MARKET CAP: \$46.8 billion (Large Cap)																			
ELECTRIC OPERATING STATISTICS																			
2021 2022 2023																			
% Change Retail Sales (MWH)				+2.1	+5.0	-1.1													
Avg. Indust. Use (MWH)				NA	NA	NA													
Avg. Indust. Revs. per KWH (¢)				NA	NA	NA													
Capacity at Peak (Mw)				NA	NA	NA													
Peak Load, Summer (Mw)				NA	NA	NA													
Annual Load Factor (%)				NA	NA	NA													
% Change Customers (yr-end)				+1.4	+1.1	+1.2													
Fixed Charge Cov. (%)				227	273	201													
ANNUAL RATES				Past 10 Yrs.	Past 5 Yrs.	Est'd '21-'23													
of change (per sh)				10 Yrs.	5 Yrs.	to '28-'30													
Revenues				-2.5%	-1.0%	2.5%													
"Cash Flow"				2.5%	-	2.5%													
Earnings				1.5%	-2.0%	3.5%													
Dividends				2.0%	-3.0%	.5%													
Book Value				5.0%	3.5%	3.0%													
QUARTERLY REVENUES (\$ mill.)				Mar.31	Jun.30	Sep.30	Dec.31	Full Year											
2022	4279	3596	4386	4913	17174														
2023	3883	3166	3810	3534	14393														
2024	3632	3486	3941	3866	14925														
2025	4025	3625	4250	4100	16000														
2026	4200	3800	4450	4100	16750														
EARNINGS PER SHARE ^A				Mar.31	Jun.30	Sep.30	Dec.31	Full Year											
2022	1.18	.77	1.11	1.06	4.11														
2023	.59	.35	.75	.29	1.99														
2024	.55	.65	.98	.57	2.75														
2025	.77	.75	1.11	.77	3.40														
2026	.80	.80	1.20	.80	3.60														
QUARTERLY DIVIDENDS PAID ^B				Mar.31	Jun.30	Sep.30	Dec.31	Full Year											
2021	.63	.63	.63	.63	2.52														
2022	.6675	.6675	.6675	.6675	2.67														
2023	.6675	.6675	.6675	.6675	2.67														
2024	.6675	.6675	.6675	.6675	2.67														
BUSINESS: Dominion Energy, Inc. (formerly Dominion Resources) is a holding company for Virginia Power, North Carolina Electric, and South Carolina Electric & Gas. The company provides regulated electricity service to 3.6 million homes and businesses in VA, NC, & SC, and regulated natural gas service to 400,000 customers in SC. Acquired Questar 9/16; SCANA 1/19. Electric rev. break-																			
down: resid'l, 44%; commercial, 39%; ind'l, 7%; oth., 10%. Generating sources: gas, 36%; nuclear, 29%; coal, 5%; renewable, 5%; purchased, 25%. Power/fuel costs: 31% of rev. Deprec. rates: 2.3%-4.2%. Employs 17,700. Chair, Pres. & CEO: Robert M. Blue. Inc.: VA. Address: 120 Tredegar St., P.O. Box 26532, Richmond, VA 23261-6532. Tel.: 804-819-2000. Int.: dominionenergy.com.																			
Following the completion of a transition year in 2024, Dominion Energy believes it has positioned itself for solid sustainable profit growth. More specifically, leadership has reaffirmed its 2025 operating earnings target of \$3.25-\$3.54 per share, with a midpoint of \$3.40. Sticking with the company's midpoint of 5%-7% bottom-line growth, we derive a 2026 earnings target of \$3.60 per share. Dominion is expected to reveal a comprehensive capital investment forecast update through 2029 when it reports final 2024 results on February 12th. Following the closure of all of the natural gas divestitures (see below), Dominion will mainly be a regulated utility with 3.6 million electric customers in Virginia and the Carolinas and 400,000 gas customers in South Carolina. An expanding rate base from investments in modernization, transmission and distribution, and power generation capacity, along with demand growth driven by trends in electrification and data center buildouts give us confidence in the company's in-house targets for annual profit gains.																			
Dominion Energy's restructuring efforts have been fully completed. Numerous nonstrategic assets on the natural gas side of the business were divested from late 2023 through late 2024, with all of the moves together totaling about \$21 billion of debt reduction. To briefly recap, the 50% interest in the Cove Point liquefied natural gas operation was sold to Berkshire Hathaway in September of 2023 for \$3.3 billion. The East Ohio Gas Company, Questar Gas Company, Public Service Company of North Carolina, and the Wexpro exploration and production company all received regulatory sale approval at various points throughout 2024 and were sold to Enbridge for \$9.4 billion in cash and \$4.6 billion in assumed debt. The restructuring was finished upon last October's sale of a 50% equity position in Coastal Virginia Offshore Wind to Stonepeak Infrastructure, which is to share equally in future on-budget development costs. The main draw here is the high dividend yield. It compares favorably to the 3.7% median level of electric utility peers. Still, annual total return prospects aren't appealing from the recent valuation.																			
Anthony J. Glennon February 7, 2025																			
(A) Dil. egs. Excl. nonrec. gain/(loss): '09, 4.76; '10, \$2.13; '11, (31¢); '12, (\$2.18); '14, (81¢); '17, \$1.19; '18, (31¢); '19, (\$2.62); '20, (\$1.72); '21, (67¢); '22, (\$3.03); '23, 49¢; gain/(losses) from disc. ops.: '10, (26¢); '12, (4¢); '13, (16¢); '20, (\$2.39); '21, 79¢; '22, 1¢; '23, (19¢). Next egs. report due February 12th. (B) Divs paid mid-Mar., June, Sept., & Dec. (C) Incl. intang. In '23: \$16.04/sh. (D) In mill. (E) Rate base: Net orig. cost, adj. Rate all'd on com. eq. in VA: '22: 9.35¢; in SC in '21: 9.5¢. Regulat. Clim.: Avg. Divs paid mid-Mar., June, Sept., & Dec. (C) Incl. intang. In '23: \$16.04/sh. (D) In mill. (E) Rate base: Net orig. cost, adj. Rate all'd on com. eq. in VA: '22: 9.35¢; in SC in '21: 9.5¢. Regulat. Clim.: Avg. Divs paid mid-Mar., June, Sept., & Dec. (C) Incl. intang. In '23: \$16.04/sh. (D) In mill. (E) Rate base: Net orig. cost, adj. Rate all'd on com. eq. in VA: '22: 9.35¢; in SC in '21: 9.5¢. Regulat. Clim.: Avg. 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DTE ENERGY CO. NYSE-DTE										RECENT PRICE	132.38	P/E RATIO	18.9	(Trailing: 19.6 Median: 18.0)	RELATIVE P/E RATIO	1.05	DIV'D YLD	3.3%	VALUE LINE		
TIMELINESS	4	Lowered 11/29/24	High: 90.8	92.3	100.4	116.7	121.0	134.4	135.7	145.4	140.2	121.3	131.7	133.5					Target Price	Range	
SAFETY	2	Raised 12/21/12	Low: 64.8	73.2	78.0	96.6	94.3	107.3	71.2	108.2	100.6	90.1	102.2	116.3					2028	2029	2030
TECHNICAL	3	Lowered 2/21/25	LEGENDS — 28.00 x Dividends p sh Relative Price Strength Options: Yes Shaded area indicates recession																		
BETA	1.00	(1.00 = Market)																			
18-Month Target Price Range																					
Low-High		Midpoint (% to Mid)																			
\$100-\$150		\$125 (-5%)																			
2028-30 PROJECTIONS																					
Price		Gain																		Ann'l Total	
High	200	(+50%)																		13%	
Low	145	(+10%)	6%																		
Institutional Decisions																					
1Q2024		2Q2024																		3Q2024	
to Buy	371	382																		417	
to Sell	287	316																		300	
Hld's(000)	162212	159667	183304																		
Percent 21																					
shares		7																			
traded																					

TIMELINE		SAFETY		TECHNICAL		18-Month Target Price Range		2028-30 PROJECTIONS		DUKE ENERGY	
4	Lower 10/4/24	2	New 6/1/07	2	Lower 12/4/25	Shaded area indicates recession		2028-30 PROJECTIONS		DUKE ENERGY	
High: 87.3		Low: 67.1		High: 90.0		Low: 70.2		High: 91.8		Low: 72.0	
High: 87.3		Low: 67.1		High: 90.0		Low: 70.2		High: 91.8		Low: 72.0	
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EVERGY, INC. NYSE-EVRG										RECENT PRICE	68.39	P/E RATIO	17.3 (Trailing: 18.5 Median: NMF)	RELATIVE P/E RATIO	0.96	DIV'D YLD	4.0%	VALUE LINE								
TIMELINESS	3	Raised 11/22/24								High:	61.1	67.8	76.6	69.4	73.1	65.4	65.5	68.8		Target Price	2028	2029	2030			
SAFETY	2	New 9/14/18								Low:	50.9	54.6	42.0	51.9	54.1	46.9	48.0	59.7								
TECHNICAL	3	Lowered 1/31/25																								
BETA	.95	(1.00 = Market)																								
18-Month Target Price Range																										
Low-High Midpoint (% to Mid)																										
\$47-\$77 \$62 (-10%)																										
2028-30 PROJECTIONS																										
Price Gain Ann'l Total																										
High Low 100 75 (+45%) (+10%) 13% 7%																										
Institutional Decisions																										
to Buy 102024 202024 302024																										
to Sell 308 344 339																										
Hld's(000) 198283 197848 222197																										
Percent shares traded 36 24 12																										
Every, Inc. was formed through the merger of Great Plains Energy and Westar Energy in June of 2018. Great Plains Energy holders received .5981 of a share of Every for each of their shares, and Westar Energy holders received one share of Every for each of their shares. The merger was completed on June 4, 2018. Shares of Every began trading on the New York Stock Exchange one day later.																										
CAPITAL STRUCTURE as of 9/30/24																										
Total Debt \$11976 mill. Due in 5 Yrs \$4388 mill.																										
LT Debt \$11571 mill. LT Interest \$306 mill.																										
Incl. \$40.9 mill. finance leases.																										
(LT interest earned: 3.8x)																										
Leases, Uncapitalized Annual rentals \$18.8 mill.																										
Pension Assets-12/22 \$1714.7 mill.																										
Oblig \$2561.7 mill.																										
Pfd Stock None																										
Common Stock 229,976,171 shs.																										
MARKET CAP: \$15.7 billion (Large Cap)																										
ELECTRIC OPERATING STATISTICS																										
2020 2021 2022																										
% Change Retail Sales (KWH)																										
Avg. Indust. Use (MWH)																										
Avg. Indust. Revs. per KWH (¢)																										
Capacity at Peak (Mw)																										
Peak Load, Summer (Mw)																										
Annual Load Factor (%)																										
% Change Customers (yr-end)																										
Fixed Charge Cov. (%)																										
ANNUAL RATES																										
Past 10 Yrs. Past 5 Yrs. Est'd '22-'24																										
of change (per sh)																										
Revenues																										
"Cash Flow"																										
Earnings																										
Dividends																										
Book Value																										
Cal-endar																										
QUARTERLY REVENUES (\$ mill.)																										
Mar.31 Jun.30 Sep.30 Dec.31 Full Year																										
2022																										
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LEGENDS
... Relative Price Strength
Options: Yes
Shaded area indicates recession

% TOT. RETURN 1/25
THIS STOCK 32.8
3 yr. 12.5
5 yr. 8.6
VL ARITH' INDEX 20.7
25.6
83.9

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2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026

Revenues (per sh) 30.45
"Cash Flow" per sh 9.60
Earnings per sh ^ 5.00
Div'd Decl'd per sh ^ 3.25
Cap'l Spending per sh 9.50
Book Value per sh ^ 47.50
Common Shs Outst'g ^ 230.00
Avg Ann'l P/E Ratio 17.5
Relative P/E Ratio .95
Avg Ann'l Div'd Yield 3.7%

Revenues (\$mill) 7000
Net Profit (\$mill) 1150
Income Tax Rate 9.0%
AFUDC % to Net Profit 5.0%
Long-Term Debt Ratio 53.5%
Common Equity Ratio 46.5%
Total Capital (\$mill) 23400
Net Plant (\$mill) 26300
Return on Total Cap'l 6.0%
Return on Shr. Equity 10.0%
Return on Com Equity ^ 10.0%
Retained to Com Eq 3.5%
All Div's to Net Prof 63%

Revenues (\$mill) 26.95
"Cash Flow" per sh 8.85
Earnings per sh ^ 4.25
Div'd Decl'd per sh ^ 2.84
Cap'l Spending per sh 9.35
Book Value per sh ^ 45.85
Common Shs Outst'g ^ 230.00
Avg Ann'l P/E Ratio 17.5
Relative P/E Ratio .95
Avg Ann'l Div'd Yield 3.7%

Revenues (\$mill) 5800
Net Profit (\$mill) 930
Income Tax Rate 6.5%
AFUDC % to Net Profit 6.0%
Long-Term Debt Ratio 52.0%
Common Equity Ratio 48.0%
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Net Plant (\$mill) 25300
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Revenues (\$mill) 5800
Net Profit (\$mill) 930
Income Tax Rate 6.5%
AFUDC % to Net Profit 6.0%
Long-Term Debt Ratio 52.0%
Common Equity Ratio 48.0%
Total Capital (\$mill) 22500
Net Plant (\$mill) 25300
Return on Total Cap'l 5.5%
Return on Shr. Equity 9.0%
Return on Com Equity ^ 9.0%
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NEXTERA ENERGY NYSE-NEE				RECENT PRICE	73.83	P/E RATIO	20.6 (Trailing: 21.5 Median: 24.0)	RELATIVE P/E RATIO	1.13	DIV'D YLD	3.1%	VALUE LINE							
TIMELINESS 3 Lowered 5/24/24	SAFETY 2 Raised 11/8/24	TECHNICAL 2 Lowered 1/10/25	BETA 1.05 (1.00 = Market)	High: 27.7 28.2 33.0 39.8 46.1 61.3 83.3 93.7 93.6 86.5 86.1 74.1	Low: 21.0 23.4 25.5 29.3 36.3 42.2 43.7 68.3 67.2 47.2 53.9 65.9							Target Price Range 2028 2029 2030	128 96 80 64 48 40 32 24 16 12						
18-Month Target Price Range				LEGENDS 31.3 x Dividends p sh Relative Price Strength 4-for-1 split 10/20 Options: Yes Shaded area indicates recession															
Low-High Midpoint (% to Mid)																			
\$56-\$106 \$81 (10%)																			
2028-30 PROJECTIONS																			
Price Gain Ann'l Total																			
High 115 85 (+55%) 14%																			
Low 85 (+15%) 7%																			
Institutional Decisions																			
to Buy 1287 1315 1324																			
to Sell 970 1015 1096																			
Hld's(000)159308216666831762540																			
Percent shares traded																			
15 10 5																			
2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026				© VALUE LINE PUB. LLC 28-30															
9.45 9.10 9.22 8.41 8.70 9.61 9.48 8.63 9.13 8.75 9.82 9.18 8.70 10.55 13.70 12.05 14.55 15.50				Revenues per sh				18.00											
2.19 2.41 2.32 2.17 2.63 3.03 3.23 3.24 3.03 3.84 4.22 4.52 4.70 5.30 6.14 6.25 6.55 6.75				"Cash Flow" per sh				8.00											
.99 1.19 1.21 1.14 1.21 1.40 1.52 1.45 1.63 1.67 1.94 2.31 2.55 2.90 3.17 3.43 3.70 4.00				Earnings per sh A				5.10											
.47 .50 .55 .60 .66 .73 .77 .87 .98 1.11 1.25 1.40 1.54 1.70 1.87 2.06 2.26 2.50				Div'd Decl'd per sh B = †				3.22											
3.63 3.47 3.98 5.58 3.84 3.96 4.54 5.15 5.70 6.80 6.29 7.45 8.19 9.70 12.24 12.00 11.00 11.00				Cap'l Spending per sh				12.00											
7.84 8.59 8.98 9.47 10.37 11.24 12.24 13.00 14.97 17.86 18.92 18.63 18.95 19.74 23.13 24.35 26.05 28.25				Book Value per sh C				36.00											
1654.5 1683.4 1664.0 1696.0 1740.0 1772.0 1844.0 1872.0 1884.0 1912.0 1956.0 1960.0 1963.0 1987.0 2052.0 2058.0 2065.0 2100.0				Common Shs Outst'g D				2200.0											
13.4 10.8 11.5 14.4 16.6 17.3 16.9 20.7 21.6 24.8 26.8 28.9 31.3 27.8 22.0 20.8 20.8 20.8				Avg Ann'l P/E Ratio				20.0											
.89 .69 .72 .92 .93 .91 .85 1.09 1.09 1.34 1.43 1.48 1.69 1.61 1.22 1.16 1.16 1.16				Relative P/E Ratio				1.10											
3.5% 3.9% 4.0% 3.6% 3.3% 3.0% 3.0% 2.9% 2.8% 2.7% 2.4% 2.1% 1.9% 2.1% 2.7% 2.9% 2.9% 2.9%				Avg Ann'l Div'd Yield				3.2%											
CAPITAL STRUCTURE as of 12/31/24				BUSINESS: NextEra Energy, Inc. is a holding company for Florida Power & Light Co. (FPL), which provides electricity to roughly 5.9 million customers in eastern, southern, & northwestern Florida. NextEra Energy Resources is a nonregulated power generator with nuclear, gas, & renewables. Has 51.4% stake in NextEra Energy Partners. Acquired Gulf Power 1/19; Florida City Gas 7/18. Revenue: residential, about 55%; commercial/industrial/other, 45%. Generating sources: gas, 73%; nuclear, 20%; solar, 6%; other, 1%. Fuel costs: 19.4% of revenues. '23 depreciation rate: 3.4%. Employs about 16,800. Chairman, President and CEO: John W. Ketchum, Inc.: Florida. Address: 700 Universe Blvd., Juno Beach, FL 33408. Tel.: 561-694-4000. Internet: www.nexteraenergy.com.															
Total Debt \$82333 mill. Due in 5 Yrs \$32228 mill.																			
LT Debt \$72385 mill. LT Interest \$2500 mill.																			
(Total Interest coverage: 3.0x)																			
Pension Assets-12/23 \$4897 mill.																			
Oblig. \$2785 mill.																			
Pfd Stock None																			
Common Stock 2,056,404,540 shs. as of 9/30/24																			
MARKET CAP: \$151.8 billion (Large Cap)																			
ELECTRIC OPERATING STATISTICS																			
2021 2022 2023																			
% Change Retail Sales (KWH)																			
Avg. Indust. Use (MWH)																			
Avg. Indust. Revs. per KWH (¢)																			
Capacity at Peak (MW)																			
Peak Load, Summer (MW)																			
Annual Load Factor (%)																			
% Change Customers (yr-end)																			
Fixed Charge Cov. (%)																			
ANNUAL RATES																			
Past 10 Yrs. 5 Yrs. Past 5 Yrs. Est'd '21-'23 to '28-'30																			
Revenues																			
"Cash Flow"																			
Earnings																			
Dividends																			
Book Value																			
QUARTERLY REVENUES (\$mill.)																			
Mar.31 Jun.30 Sep.30 Dec.31 Full Year																			
2022 2890 5183 6719 6164 20956																			
2023 6716 7349 7172 6877 28114																			
2024 5731 6069 7567 5386 24753																			
2025 6800 7300 8150 7800 30050																			
2026 7350 7900 8800 8450 32500																			
EARNINGS PER SHARE A																			
Mar.31 Jun.30 Sep.30 Dec.31 Full Year																			
2022 .74 .81 .85 .51 2.90																			
2023 .84 .88 .94 .52 3.17																			
2024 .91 .96 1.03 .53 3.43																			
2025 .95 1.00 1.10 .65 3.70																			
2026 1.02 1.08 1.20 .70 4.00																			
QUARTERLY DIVIDENDS PAID B = †																			
Mar.31 Jun.30 Sep.30 Dec.31 Full Year																			
2021 .385 .385 .385 .385 1.54																			
2022 .425 .425 .425 .425 1.70																			
2023 .4675 .4675 .4675 .4675 1.87																			
2024 .515 .515 .515 .515 2.06																			
(A) Diluted EPS. Excl. nonrecurring gains/ (losses): '11, (6¢); '13, (20¢); '16, 12¢; '17, 1.22¢; '18, \$1.80; '20, (83¢); '21, (74¢); '22, (80¢); '23, 43¢; '24, (6¢); disc. ops.: '13, 11¢.				EPS may not sum to full yr. due to rounding. Next egs. report due late April. (B) Div'ds paid in mid-Mar., mid-June, mid-Sept., & mid-Dec. (C) Includes intangibles. In '23: \$.85/sh. (D) In mill., adj. for stock split. (E) Rate allowed on common eq. in '22 (FPL): 9.8%-11.8%; Regu'ty Climate: Avg.															
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To subscribe call 1-800-VALUELINE																			

PORTLAND GENERAL NYSE-POR										RECENT PRICE	41.58	P/E RATIO	13.7	(Trailing: 13.2 Median: 18.0)	RELATIVE P/E RATIO	0.87	DIV'D YLD	5.1%	VALUE LINE	
TIMELINESS	2	Raised 4/4/25	High:	40.3	41.0	45.2	50.1	50.4	58.4	63.1	53.1	57.0	51.6	49.8	45.9				Target Price	Range
SAFETY	2	Raised 7/19/24	Low:	29.0	33.0	35.3	42.4	39.0	44.0	32.0	40.8	41.6	38.0	39.1	40.1				2028	2029
TECHNICAL	4	Raised 4/18/25	LEGENDS — 25.6 x Dividends p sh Relative Price Strength Options: Yes Shaded area indicates recession																	
BETA	.80	(1.00 = Market)																		
18-Month Target Price Range																				
Low-High																				
Midpoint (% to Mid)																				
\$38-\$57																				
\$48 (15%)																				
2028-30 PROJECTIONS																				
Price																				
Gain																				
Ann'l Total																				
Return																				
High																				
Low																				
75																				
55																				
11%																				
Institutional Decisions																				
to Buy																				
to Sell																				
Hld's(000)																				
106708																				
118198																				
121028																				
202024																				
240																				
241																				
166																				
192																				
Percent																				
shares																				
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21																				
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2010																				
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Update date:

4/25/2025

LT EPS Growth Rate

Institution Name

Ticker

Mean

271442

317642

CIQ(\$C6, "IQ_EST_EPS_GROWTH_5YR")

Alliant Energy Corporation	LNT	6.71%
Ameren Corporation	AEE	6.93%
American Electric Power Company, Inc.	AEP	n/a
Avista Corporation	AVA	5.98%
CMS Energy Corporation	CMS	n/a
Dominion Resources, Inc.	D	13.32%
DTE Energy Company	DTE	7.42%
Duke Energy Corporation	DUK	6.32%
Entergy Corporation	ETR	9.12%
Evergy, Inc.	EVRG	5.62%
IDACORP, Inc.	IDA	8.26%
NextEra Energy, Inc.	NEE	7.70%
NorthWestern Corporation	NWE	6.32%
OGE Energy Corporation	OGE	6.66%
Pinnacle West Capital Corporation	PNW	5.00%
Portland General Electric Company	POR	4.83%
PPL Corporation	PPL	7.37%
Southern Company	SO	6.36%
Xcel Energy Inc.	XEL	7.84%

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Quotes & News

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Add to portfolio

Alliant Energy (LNT)

(Real Time Quote from BATS)

\$60.85 USD

0.48 (0.79%)

Detailed Estimates

EPS Estimates

Earnings Date 5/8/25

Earnings ESP 3.57%

Current Quarter 0.56

EPS Last Quarter 0.70

Current Year 3.22

Last EPS Surprise 2.94%

Next Year 3.45

ABR 2.50

EPS (TTM) 3.04

P/E (F1) 19.06

*BMO = Before Market Open *AMC = After Market Close

% EPS Growth Estimates

	LNT	IND	S&P
Current Qtr (03/2025)	-9.68	-26.53	15.32
Next Qtr (06/2025)	1.75	-31.56	11.38
Current Year (12/2025)	5.92	1.30	15.53
Next Year (12/2026)	7.14	10.20	11.28
Past 5 Years	5.70	5.50	10.10
Next 5 Years	6.70	8.10	NA
PE	19.06	13.80	20.34
PEG Ratio	2.83	1.70	NA

[Learn More About Estimate Research](#)

[See Brokerage Recommendations](#)

[See Earnings Report Transcript](#)

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Price and EPS Surprise Chart

3 Months6 MonthsYTD1 Month

Interactive Chart | Fundamental Chart

Sales Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	1.13B	1.02B	4.29B	4.45B
# of Estimates	1	1	2	2
High Estimate	1.13B	1.02B	4.42B	4.55B
Low Estimate	1.13B	1.02B	4.17B	4.35B
Year ago Sales	1.03B	894.00M	3.98B	4.29B
Year over Year Growth Est.	9.22%	14.52%	7.85%	3.64%

Earnings Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	0.56	0.58	3.22	3.45
# of Estimates	3	2	6	6
Most Recent Consensus	0.58	0.61	3.22	3.44
High Estimate	0.64	0.61	3.25	3.48
Low Estimate	0.46	0.55	3.20	3.42
Year ago EPS	0.62	0.57	3.04	3.22
Year over Year Growth Est.	-9.68%	1.75%	5.92%	7.25%

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Price and EPS Surprise Chart

3 Months6 MonthsYTD1 Month

Interactive Chart | Fundamental Chart

Sales Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	1.98B	1.84B	8.30B	8.72B
# of Estimates	3	3	5	5
High Estimate	2.07B	1.96B	8.84B	9.18B
Low Estimate	1.93B	1.78B	8.10B	8.45B
Year ago Sales	1.82B	1.69B	7.62B	8.30B
Year over Year Growth Est.	9.21%	8.71%	8.94%	4.96%

Earnings Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	1.08	0.97	4.94	5.31
# of Estimates	4	4	7	6
Most Recent Consensus	1.07	0.84	4.90	5.32
High Estimate	1.09	1.05	4.98	5.34
Low Estimate	1.07	0.84	4.86	5.29
Year ago EPS	0.98	0.97	4.63	4.94
Year over Year Growth Est.	10.20%	0.00%	6.70%	7.56%

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Magnitude - Consensus Estimate Trend

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Current	1.08	0.97	4.94	5.31
7 Days Ago	1.04	0.91	4.93	5.31
30 Days Ago	1.08	0.84	4.93	5.32
60 Days Ago	1.16	0.92	4.93	5.31
90 Days Ago	1.16	0.92	4.93	5.31

Upside - Most Accurate Estimate Versus Zacks Consensus

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Most Accurate Estimate	1.08	0.97	4.93	5.32
Zacks Consensus Estimate	1.08	0.97	4.94	5.31
Earnings ESP	0.00%	0.00%	-0.12%	0.19%

Surprise - Reported Earnings History

	Quarter Ending (12/2024)	Quarter Ending (9/2024)	Quarter Ending (6/2024)	Quarter Ending (3/2024)	Average Surprise
Reported	0.77	1.87	0.97	0.98	NA
Estimate	0.79	1.91	0.93	1.09	NA
Difference	-0.02	-0.04	0.04	-0.11	-0.03
Surprise	-2.53%	-2.09%	4.30%	-10.09%	-2.60%

Quarterly Estimates By Analyst

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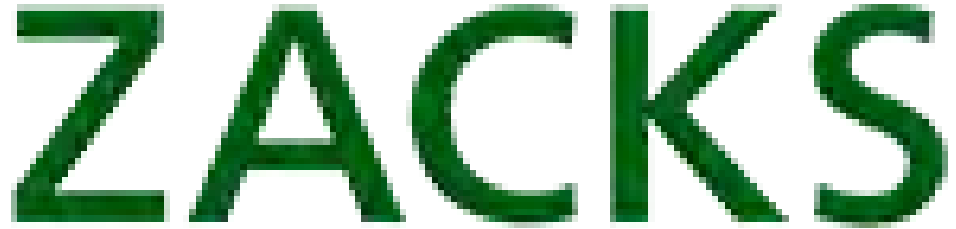
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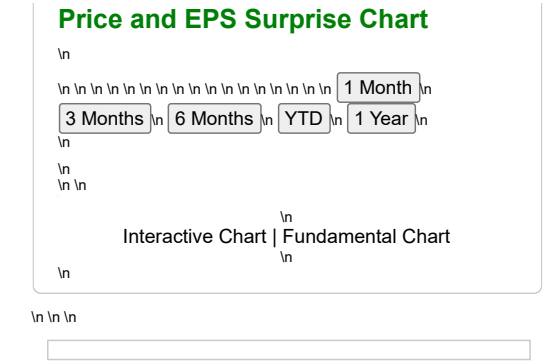
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Quotes & News

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Sales Estimates				

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	5.35B	4.94B	21.06B	21.94B
# of Estimates	3	3	5	5
High Estimate	5.69B	5.37B	22.44B	23.35B
Low Estimate	5.16B	4.69B	20.40B	21.23B
Year ago Sales	5.00B	4.58B	19.68B	21.06B
Year over Year Growth Est.	6.96%	7.87%	7.02%	4.21%

Earnings Estimates				

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	1.76	1.24	5.85	6.28
# of Estimates	5	4	10	10
Most Recent Consensus	1.36	1.11	5.85	6.24
High Estimate	3.24	1.49	5.90	6.34
Low Estimate	1.36	0.96	5.80	6.20
Year ago EPS	1.27	1.25	5.62	5.85
Year over Year Growth Est.	38.58%	-0.80%	4.09%	7.25%

Agreement - Estimate Revisions				

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
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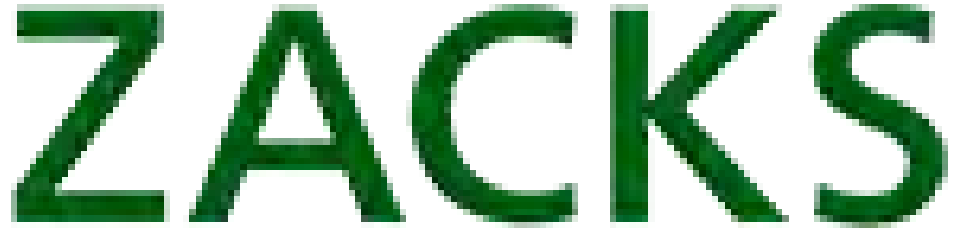
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\$40.88 USD

0.38 (40.62%)

Detailed Estimates

EPS Estimates

Earnings Date 5/7/25

Earnings ESP 8.37%

Current Quarter	1.02	Current Year	2.61
EPS Last Quarter	0.84	Next Year	2.75
Last EPS Surprise	-2.33%	EPS (TTM)	2.27
ABR	3.20	P/E (F1)	15.81

*BMO = Before Market Open *AMC = After Market Close

% EPS Growth Estimates	AVA	IND	S&P
Current Qtr (03/2025)	12.09	-26.53	15.32
Next Qtr (06/2025)	-10.34	-31.56	11.38
Current Year (12/2025)	13.97	1.30	15.53
Next Year (12/2026)	5.36	10.20	11.28
Past 5 Years	3.60	5.50	10.10
Next 5 Years	6.10	8.10	NA
PE	15.81	13.80	20.34
PEG Ratio	2.60	1.70	NA

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Price and EPS Surprise Chart

1 Month
3 Months 6 Months YTD 1 Year

Interactive Chart Fundamental Chart

Sales Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	NA	NA	2.00B	2.07B
# of Estimates	NA	NA	2	2
High Estimate	NA	NA	2.01B	2.07B
Low Estimate	NA	NA	1.99B	2.07B
Year ago Sales	609.42M	402.07M	1.94B	2.00B
Year over Year Growth Est.	NA	NA	3.07%	3.54%

Earnings Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	1.02	0.26	2.61	2.75
# of Estimates	2	1	3	3
Most Recent Consensus	NA	NA	2.62	2.77
High Estimate	1.10	0.26	2.62	2.77
Low Estimate	0.93	0.26	2.59	2.72
Year ago EPS	0.91	0.29	2.29	2.61
Year over Year Growth Est.	12.09%	-10.34%	13.97%	5.49%

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	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
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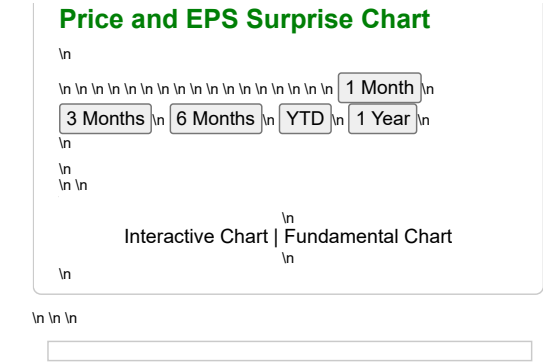
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Sales Estimates

	Current Qtr (6/2025)	Next Qtr (9/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	1.67B	1.82B	8.06B	8.38B
# of Estimates	3	3	5	5
High Estimate	1.73B	1.84B	8.45B	8.90B
Low Estimate	1.64B	1.79B	7.75B	8.00B
Year ago Sales	1.61B	1.74B	7.52B	8.06B
Year over Year Growth Est.	4.13%	4.32%	7.26%	3.94%

Earnings Estimates

	Current Qtr (6/2025)	Next Qtr (9/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	0.60	0.82	3.59	3.88
# of Estimates	4	4	8	8
Most Recent Consensus	NA	NA	3.59	3.89
High Estimate	0.70	0.94	3.62	3.90
Low Estimate	0.53	0.70	3.58	3.85
Year ago EPS	0.66	0.84	3.34	3.59
Year over Year Growth Est.	-9.09%	-2.38%	7.49%	7.90%

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	Current Qtr (6/2025)	Next Qtr (9/2025)	Current Year (12/2025)	Next Year (12/2026)
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Magnitude - Consensus Estimate Trend

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Current	0.77	0.73	3.38	3.60
7 Days Ago	0.76	0.73	3.38	3.60
30 Days Ago	0.82	0.72	3.39	3.60
60 Days Ago	0.81	0.72	3.39	3.60
90 Days Ago	0.83	0.76	3.38	3.61

Upside - Most Accurate Estimate Versus Zacks Consensus

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Most Accurate Estimate	0.78	0.75	3.39	3.58
Zacks Consensus Estimate	0.77	0.73	3.38	3.60
Earnings ESP	1.74%	3.45%	0.18%	-0.52%

Surprise - Reported Earnings History

	Quarter Ending (12/2024)	Quarter Ending (9/2024)	Quarter Ending (6/2024)	Quarter Ending (3/2024)	Average Surprise
Reported	0.58	0.98	0.55	0.55	NA
Estimate	0.54	0.92	0.58	0.51	NA
Difference	0.04	0.06	-0.03	0.04	0.03
Surprise	7.41%	6.52%	-5.17%	7.84%	4.15%

Annual Estimates By Analyst

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Price and EPS Surprise Chart

1 Month

3 Months6 MonthsYTD1 Year

Interactive Chart | Fundamental Chart

Sales Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	3.48B	3.02B	13.18B	13.81B
# of Estimates	3	3	5	5
High Estimate	3.56B	3.06B	13.97B	14.50B
Low Estimate	3.43B	2.99B	12.31B	13.11B
Year ago Sales	3.24B	2.88B	12.46B	13.18B
Year over Year Growth Est.	7.52%	5.18%	5.83%	4.72%

Earnings Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	1.98	1.76	7.24	7.77
# of Estimates	4	4	10	9
Most Recent Consensus	1.88	1.56	7.20	7.70
High Estimate	2.03	2.02	7.44	8.08
Low Estimate	1.88	1.56	7.18	7.67
Year ago EPS	1.67	1.43	6.83	7.24
Year over Year Growth Est.	18.56%	23.08%	6.00%	7.36%

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Magnitude - Consensus Estimate Trend

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Current	1.98	1.76	7.24	7.77
7 Days Ago	1.91	1.66	7.23	7.76
30 Days Ago	1.92	1.65	7.22	7.76
60 Days Ago	1.85	1.59	7.21	7.70
90 Days Ago	1.84	1.52	7.21	7.79

Upside - Most Accurate Estimate Versus Zacks Consensus

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Most Accurate Estimate	2.01	1.83	7.21	7.72
Zacks Consensus Estimate	1.98	1.76	7.24	7.77
Earnings ESP	1.64%	3.83%	-0.39%	-0.58%

Surprise - Reported Earnings History

	Quarter Ending (12/2024)	Quarter Ending (9/2024)	Quarter Ending (6/2024)	Quarter Ending (3/2024)	Average Surprise
Reported	1.51	2.22	1.43	1.67	NA
Estimate	1.46	1.87	1.20	1.71	NA
Difference	0.05	0.35	0.23	-0.04	0.15
Surprise	3.42%	18.72%	19.17%	-2.34%	9.74%

Quarterly Estimates By Analyst

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Price and EPS Surprise Chart

3 Months6 MonthsYTD1 Month

Interactive Chart | Fundamental Chart

Sales Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	8.00B	7.29B	31.72B	32.89B
# of Estimates	3	3	5	5
High Estimate	8.16B	7.50B	32.24B	33.38B
Low Estimate	7.90B	7.14B	31.13B	32.15B
Year ago Sales	7.67B	7.17B	30.36B	31.72B
Year over Year Growth Est.	4.26%	1.65%	4.48%	3.70%

Earnings Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	1.59	1.24	6.32	6.72
# of Estimates	4	3	9	8
Most Recent Consensus	1.58	NA	6.30	6.72
High Estimate	1.64	1.27	6.37	6.75
Low Estimate	1.52	1.21	6.29	6.70
Year ago EPS	1.44	1.18	5.90	6.32
Year over Year Growth Est.	10.42%	5.08%	7.12%	6.24%

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Magnitude - Consensus Estimate Trend

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Current	1.59	1.24	6.32	6.72
7 Days Ago	1.62	1.24	6.32	6.72
30 Days Ago	1.60	1.25	6.32	6.72
60 Days Ago	1.58	1.21	6.33	6.72
90 Days Ago	1.58	1.21	6.33	6.73

Upside - Most Accurate Estimate Versus Zacks Consensus

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Most Accurate Estimate	1.58	1.27	6.32	6.72
Zacks Consensus Estimate	1.59	1.24	6.32	6.72
Earnings ESP	-1.10%	2.69%	0.00%	0.00%

Surprise - Reported Earnings History

	Quarter Ending (12/2024)	Quarter Ending (9/2024)	Quarter Ending (6/2024)	Quarter Ending (3/2024)	Average Surprise
Reported	1.66	1.62	1.18	1.44	NA
Estimate	1.61	1.73	1.01	1.39	NA
Difference	0.05	-0.11	0.17	0.05	0.04
Surprise	3.11%	-6.36%	16.83%	3.60%	4.30%

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Price and EPS Surprise Chart

1 Month

3 Months

6 Months

YTD

1 Year

Interactive Chart | Fundamental Chart

Sales Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	3.01B	3.03B	12.53B	13.32B
# of Estimates	3	3	3	3
High Estimate	3.07B	3.07B	12.77B	13.45B
Low Estimate	2.97B	2.99B	12.17B	13.07B
Year ago Sales	2.79B	2.95B	11.88B	12.53B
Year over Year Growth Est.	7.59%	2.69%	5.47%	6.32%

Earnings Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	0.62	0.72	3.88	4.32
# of Estimates	4	3	8	8
Most Recent Consensus	0.61	0.73	3.86	4.38
High Estimate	0.76	0.94	3.93	4.38
Low Estimate	0.36	0.49	3.85	4.16
Year ago EPS	0.54	0.96	3.65	3.88
Year over Year Growth Est.	14.81%	-25.00%	6.30%	11.27%

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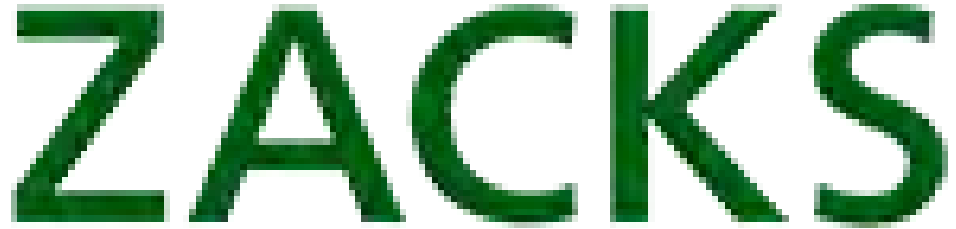
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Add to portfolio

Energy (EVRG)

(Real Time Quote from BATS)

\$67.94 USD

0.04 (0.06%)

Detailed Estimates

EPS Estimates

Earnings Date 5/8/25

Earnings ESP 5.70%

Current Quarter	0.64	Current Year	4.03
EPS Last Quarter	0.35	Next Year	4.26
Last EPS Surprise	-2.78%	EPS (TTM)	3.81
ABR	1.67	P/E (F1)	16.93

*BMO = Before Market Open *AMC = After Market Close

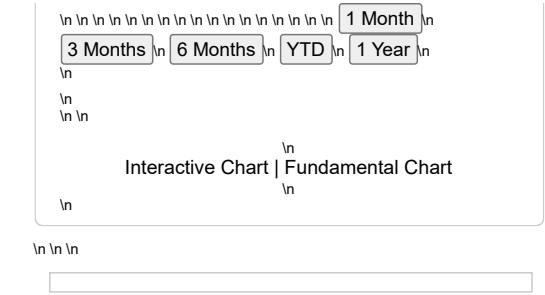
% EPS Growth Estimates	EVRG	IND	S&P
Current Qtr (03/2025)	18.52	-26.53	15.32
Next Qtr (06/2025)	5.56	-31.56	11.38
Current Year (12/2025)	5.77	1.30	15.53
Next Year (12/2026)	5.71	10.20	11.28
Past 5 Years	5.70	5.50	10.10
Next 5 Years	5.70	8.10	NA
PE	16.93	13.80	20.34
PEG Ratio	2.97	1.70	NA

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Sales Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	1.41B	1.46B	5.98B	6.19B
# of Estimates	1	1	2	2
High Estimate	1.41B	1.46B	6.04B	6.30B
Low Estimate	1.41B	1.46B	5.92B	6.08B
Year ago Sales	1.33B	1.45B	5.85B	5.98B
Year over Year Growth Est.	6.21%	0.69%	2.28%	3.46%

Earnings Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	0.64	0.95	4.03	4.26
# of Estimates	3	2	5	5
Most Recent Consensus	0.64	NA	4.02	4.25
High Estimate	0.68	0.95	4.05	4.32
Low Estimate	0.61	0.94	4.02	4.24
Year ago EPS	0.54	0.90	3.81	4.03
Year over Year Growth Est.	18.52%	5.56%	5.77%	5.76%

Agreement - Estimate Revisions

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Up Last 7 Days	0	0	0	0
Up Last 30 Days	1	1	1	1

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	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Current	0.64	0.95	4.03	4.26
7 Days Ago	0.64	0.95	4.03	4.26
30 Days Ago	0.64	0.93	4.03	4.26
60 Days Ago	0.66	0.93	4.03	4.27
90 Days Ago	0.65	0.94	4.03	4.27

Upside - Most Accurate Estimate Versus Zacks Consensus

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Most Accurate Estimate	0.68	0.95	4.05	4.32
Zacks Consensus Estimate	0.64	0.95	4.03	4.26
Earnings ESP	5.70%	0.53%	0.45%	1.31%

Surprise - Reported Earnings History

	Quarter Ending (12/2024)	Quarter Ending (9/2024)	Quarter Ending (6/2024)	Quarter Ending (3/2024)	Average Surprise
Reported	0.35	2.02	0.90	0.54	NA
Estimate	0.36	1.95	0.99	0.61	NA
Difference	-0.01	0.07	-0.09	-0.07	-0.03
Surprise	-2.78%	3.59%	-9.09%	-11.48%	-4.94%

Quarterly Estimates By Analyst

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Price and EPS Surprise Chart

3 Months6 MonthsYTD1 Month

Interactive Chart | Fundamental Chart

Sales Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	458.34M	459.06M	1.92B	2.05B
# of Estimates	2	2	3	3
High Estimate	468.73M	470.06M	1.93B	2.06B
Low Estimate	447.95M	448.05M	1.90B	2.04B
Year ago Sales	448.94M	451.04M	1.83B	1.92B
Year over Year Growth Est.	2.09%	1.78%	5.08%	6.92%

Earnings Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	1.03	1.69	5.81	6.39
# of Estimates	3	3	4	3
Most Recent Consensus	NA	1.65	5.83	6.46
High Estimate	1.05	1.84	5.86	6.46
Low Estimate	1.01	1.57	5.75	6.35
Year ago EPS	0.95	1.71	5.50	5.81
Year over Year Growth Est.	8.42%	-1.17%	5.64%	9.98%

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Magnitude - Consensus Estimate Trend

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Current	1.03	1.69	5.81	6.39
7 Days Ago	1.04	1.65	5.85	6.47
30 Days Ago	1.04	1.65	5.86	6.50
60 Days Ago	1.04	1.67	5.85	6.47
90 Days Ago	1.05	1.76	5.86	6.48

Upside - Most Accurate Estimate Versus Zacks Consensus

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Most Accurate Estimate	1.03	1.71	5.78	6.36
Zacks Consensus Estimate	1.03	1.69	5.81	6.39
Earnings ESP	-0.32%	1.09%	-0.60%	-0.55%

Surprise - Reported Earnings History

	Quarter Ending (12/2024)	Quarter Ending (9/2024)	Quarter Ending (6/2024)	Quarter Ending (3/2024)	Average Surprise
Reported	0.70	2.12	1.71	0.95	NA
Estimate	0.63	2.17	1.37	1.02	NA
Difference	0.07	-0.05	0.34	-0.07	0.07
Surprise	11.11%	-2.30%	24.82%	-6.86%	6.69%

Quarterly Estimates By Analyst

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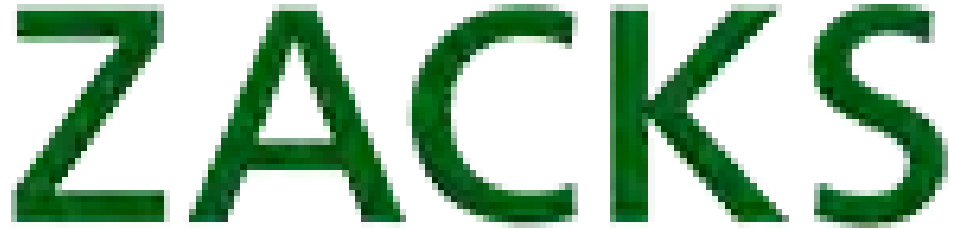
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Add to portfolio

NextEra Energy (NEE)

(Real Time Quote from BATS)

\$65.75 USD

-0.80 (-1.20%)

Detailed Estimates

EPS Estimates

Exp Earnings Date 7/23/25

Earnings ESP 0.00%

Current Quarter	0.98		
EPS Last Quarter	0.99	Current Year	3.68
Last EPS Surprise	2.06%	Next Year	3.97
ABR	1.86	EPS (TTM)	3.51
		P/E (F1)	18.05

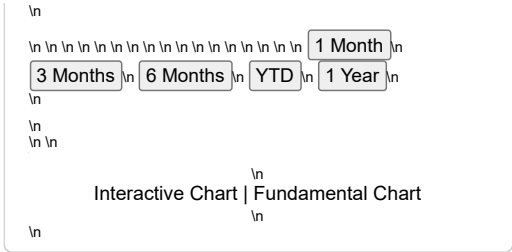
% EPS Growth Estimates	NEE	IND	S&P
Current Qtr (06/2025)	2.08	-26.53	15.32
Next Qtr (09/2025)	-2.91	-31.56	11.38
Current Year (12/2025)	7.29	1.30	15.53
Next Year (12/2026)	7.88	10.20	11.28
Past 5 Years	10.10	5.50	10.10
Next 5 Years	7.70	8.10	NA
PE	18.05	13.80	20.34
PEG Ratio	2.34	1.70	NA

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Sales Estimates

	Current Qtr (6/2025)	Next Qtr (9/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	7.29B	8.11B	29.35B	31.92B
# of Estimates	2	2	4	4
High Estimate	7.77B	8.52B	30.92B	34.72B
Low Estimate	6.80B	7.70B	28.02B	29.69B
Year ago Sales	6.07B	7.57B	24.75B	29.35B
Year over Year Growth Est.	20.08%	7.23%	18.59%	8.75%

Earnings Estimates

	Current Qtr (6/2025)	Next Qtr (9/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	0.98	1.00	3.68	3.97
# of Estimates	3	3	8	8
Most Recent Consensus	NA	NA	3.66	3.93
High Estimate	1.06	1.11	3.70	4.00
Low Estimate	0.90	0.82	3.66	3.87
Year ago EPS	0.96	1.03	3.43	3.68
Year over Year Growth Est.	2.08%	-2.91%	7.29%	7.92%

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	Current Qtr (6/2025)	Next Qtr (9/2025)	Current Year (12/2025)	Next Year (12/2026)
Up Last 7 Days	0	0	0	0

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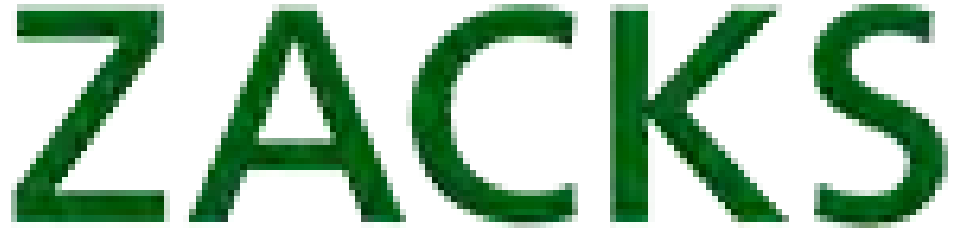
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Quote Overview

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Add to portfolio

NorthWestern (NWE)

(Real Time Quote from BATS)

\$58.17 USD

0.34 (0.58%)

Detailed Estimates

EPS Estimates

Earnings Date 4/29/25

Current Quarter 1.20

EPS Last Quarter 1.13

Last EPS Surprise 0.00%

ABR 1.67

Earnings ESP -1.67%

Current Year 3.58

Next Year 3.88

EPS (TTM) 3.40

P/E (F1) 16.33

*BMO = Before Market Open *AMC = After Market Close

% EPS Growth Estimates	NWE	IND	S&P
Current Qtr (03/2025)	10.09	-26.53	15.32
Next Qtr (06/2025)	24.53	-31.56	11.38
Current Year (12/2025)	5.29	1.30	15.53
Next Year (12/2026)	8.38	10.20	11.28
Past 5 Years	0.10	5.50	10.10
Next 5 Years	6.90	8.10	NA
PE	16.33	13.80	20.34
PEG Ratio	2.38	1.70	NA

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Price and EPS Surprise Chart

1 Month
3 Months 6 Months YTD 1 Year

Interactive Chart Fundamental Chart

Sales Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	483.70M	338.33M	1.58B	1.63B
# of Estimates	1	1	2	2
High Estimate	483.70M	338.33M	1.59B	1.64B
Low Estimate	483.70M	338.33M	1.57B	1.62B
Year ago Sales	475.30M	319.90M	1.51B	1.58B
Year over Year Growth Est.	1.77%	5.76%	4.23%	3.32%

Earnings Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	1.20	0.66	3.58	3.88
# of Estimates	2	1	4	4
Most Recent Consensus	NA	NA	3.66	3.82
High Estimate	1.22	0.66	3.66	3.94
Low Estimate	1.18	0.66	3.50	3.82
Year ago EPS	1.09	0.53	3.40	3.58
Year over Year Growth Est.	10.09%	24.53%	5.29%	8.38%

Agreement - Estimate Revisions

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
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Upside - Most Accurate Estimate Versus Zacks Consensus

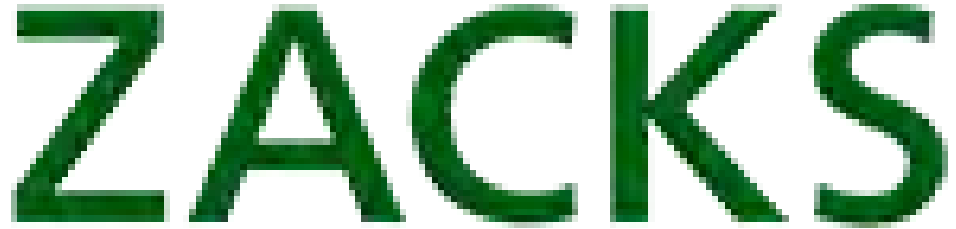
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OGE Energy (OGE)

(Real Time Quote from BATS)

\$45.06 USD

0.15 (0.33%)

Detailed Estimates

EPS Estimates

Earnings Date4/30/25

Current Quarter0.22

EPS Last Quarter0.51

Last EPS Surprise6.25%

ABR2.50

Earnings ESP-5.97%

Current Year2.27

Next Year2.42

EPS (TTM)2.20

P/E (F1)19.90

*BMO = Before Market Open *AMC = After Market Close

% EPS Growth Estimates

	OGE	IND	S&P
Current Qtr (03/2025)	144.44	-26.53	15.32
Next Qtr (06/2025)	19.61	-31.56	11.38
Current Year (12/2025)	3.65	1.30	15.53
Next Year (12/2026)	6.61	10.20	11.28
Past 5 Years	0.70	5.50	10.10
Next 5 Years	6.30	8.10	NA
PE	19.90	13.80	20.34
PEG Ratio	3.15	1.70	NA

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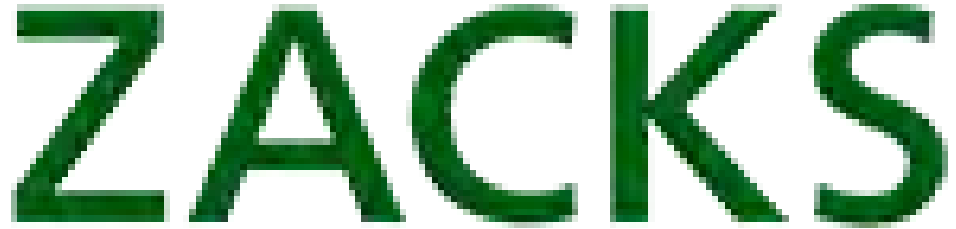
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 Pinnacle West Capital (PNW)

\n
 (Real Time Quote from BATS)

\n
 \$93.83 USD

\n
 -0.66 (-0.68%)

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 Detailed Estimates

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 EPS Estimates

Earnings Date	5/1/25	Earnings ESP	50.00%
Current Quarter	0.05	Current Year	4.51
EPS Last Quarter	-0.06	Next Year	5.15
Last EPS Surprise	60.00%	EPS (TTM)	5.22
ABR	2.14	P/E (F1)	20.93

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 *BMO = Before Market Open *AMC = After Market Close

% EPS Growth Estimates	PNW	IND	S&P
Current Qtr (03/2025)	-66.67	-26.53	15.32
Next Qtr (06/2025)	-7.95	-31.56	11.38
Current Year (12/2025)	-13.93	1.30	15.53
Next Year (12/2026)	14.19	10.20	11.28
Past 5 Years	2.10	5.50	10.10
Next 5 Years	2.10	8.10	NA
PE	20.93	13.80	20.34
PEG Ratio	9.87	1.70	NA

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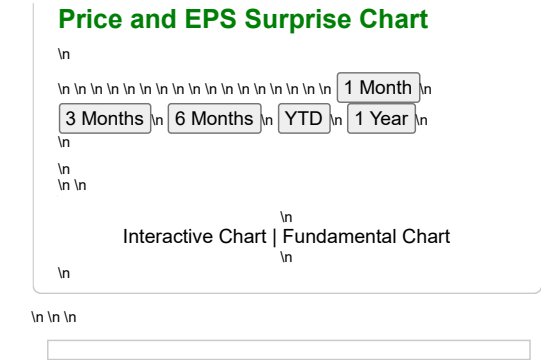
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Sales Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	921.97M	1.23B	5.08B	5.35B
# of Estimates	1	1	2	2
High Estimate	921.97M	1.23B	5.19B	5.43B
Low Estimate	921.97M	1.23B	4.96B	5.27B
Year ago Sales	951.71M	1.31B	5.12B	5.08B
Year over Year Growth Est.	-3.12%	-6.04%	-0.93%	5.37%

Earnings Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	0.05	1.62	4.51	5.15
# of Estimates	3	1	5	5
Most Recent Consensus	NA	NA	4.36	5.33
High Estimate	0.11	1.62	4.60	5.33
Low Estimate	0.00	1.62	4.36	4.92
Year ago EPS	0.15	1.76	5.24	4.51
Year over Year Growth Est.	-66.67%	-7.95%	-13.93%	14.19%

Agreement - Estimate Revisions

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
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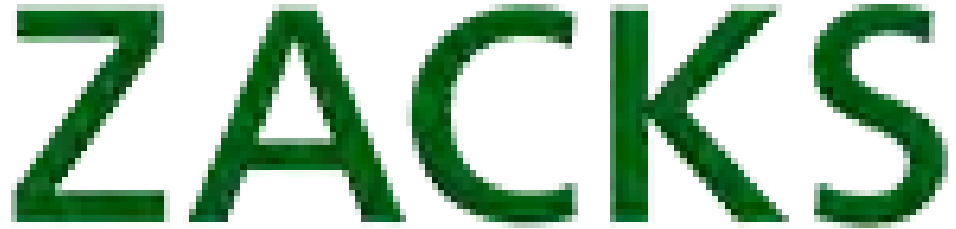
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Portland General Electric (POR)

(Real Time Quote from BATS)

\$41.60 USD

38.12%

Detailed Estimates

EPS Estimates

Exp Earnings Date 4/25/25

Earnings ESP 0.00%

Current Quarter	0.93		
EPS Last Quarter	0.34	Current Year	3.21
Last EPS Surprise	6.25%	Next Year	3.37
ABR	2.58	EPS (TTM)	3.14
		P/E (F1)	13.40

*BMO = Before Market Open *AMC = After Market Close

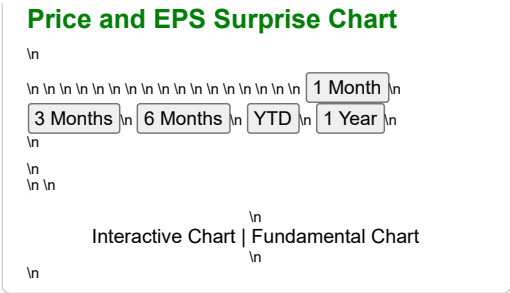
% EPS Growth Estimates	POR	IND	S&P
Current Qtr (03/2025)	-23.14	-26.53	15.32
Next Qtr (06/2025)	-7.25	-31.56	11.38
Current Year (12/2025)	2.23	1.30	15.53
Next Year (12/2026)	4.98	10.20	11.28
Past 5 Years	4.60	5.50	10.10
Next 5 Years	3.40	8.10	NA
PE	13.40	13.80	20.34
PEG Ratio	3.89	1.70	NA

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Sales Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	931.86M	767.66M	3.60B	3.72B
# of Estimates	1	1	3	3
High Estimate	931.86M	767.66M	3.72B	3.84B
Low Estimate	931.86M	767.66M	3.51B	3.61B
Year ago Sales	929.00M	758.00M	3.44B	3.60B
Year over Year Growth Est.	0.31%	1.27%	4.61%	3.40%

Earnings Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	0.93	0.64	3.21	3.37
# of Estimates	3	2	5	5
Most Recent Consensus	NA	NA	3.20	3.40
High Estimate	0.94	0.64	3.23	3.40
Low Estimate	0.92	0.63	3.19	3.30
Year ago EPS	1.21	0.69	3.14	3.21
Year over Year Growth Est.	-23.14%	-7.25%	2.23%	4.98%

Agreement - Estimate Revisions

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
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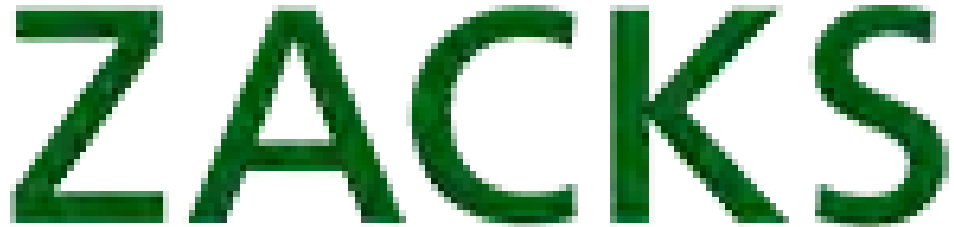
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PPL (PPL)

 (Real Time Quote from BATS)

 \$36.10 USD

(0.15 (0.41%)

Detailed Estimates

EPS Estimates

Earnings Date	4/30/25	Earnings ESP	-0.85%
Current Quarter	0.53		
EPS Last Quarter	0.34	Current Year	1.82
Last EPS Surprise	-8.11%	Next Year	1.97
ABR	1.57	EPS (TTM)	1.68
		P/E (F1)	19.95

*BMO = Before Market Open *AMC = After Market Close

% EPS Growth Estimates	PPL	IND	S&P
Current Qtr (03/2025)	-1.85	-26.53	15.32
Next Qtr (06/2025)	5.26	-31.56	11.38
Current Year (12/2025)	7.69	1.30	15.53
Next Year (12/2026)	8.24	10.20	11.28
Past 5 Years	-6.90	5.50	10.10
Next 5 Years	7.40	8.10	NA
PE	19.95	13.80	20.34
PEG Ratio	2.69	1.70	NA

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Price and EPS Surprise Chart

1 Month

3 Months

6 Months

YTD

1 Year

Interactive Chart | Fundamental Chart

Sales Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	2.38B	1.98B	8.53B	8.84B
# of Estimates	3	3	5	5
High Estimate	2.39B	2.01B	8.95B	9.34B
Low Estimate	2.38B	1.95B	7.51B	7.74B
Year ago Sales	2.30B	1.88B	8.46B	8.53B
Year over Year Growth Est.	3.40%	5.01%	0.76%	3.71%

Earnings Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	0.53	0.40	1.82	1.97
# of Estimates	5	4	6	6
Most Recent Consensus	NA	0.39	1.85	1.98
High Estimate	0.56	0.41	1.85	1.98
Low Estimate	0.44	0.39	1.80	1.95
Year ago EPS	0.54	0.38	1.69	1.82
Year over Year Growth Est.	-1.85%	5.26%	7.69%	8.24%

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Price and EPS Surprise Chart

3 Months6 MonthsYTD1 Month

Interactive Chart | Fundamental Chart

Sales Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	6.94B	6.57B	27.51B	28.41B
# of Estimates	3	3	6	6
High Estimate	7.15B	6.61B	27.83B	28.86B
Low Estimate	6.71B	6.53B	27.27B	28.16B
Year ago Sales	6.65B	6.46B	26.72B	27.51B
Year over Year Growth Est.	4.38%	1.61%	2.94%	3.29%

Earnings Estimates

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	1.18	1.09	4.30	4.57
# of Estimates	5	3	9	8
Most Recent Consensus	1.18	1.07	4.21	4.51
High Estimate	1.20	1.11	4.37	4.64
Low Estimate	1.10	1.07	4.21	4.51
Year ago EPS	1.03	1.09	4.05	4.30
Year over Year Growth Est.	14.56%	0.00%	6.17%	6.44%

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Magnitude - Consensus Estimate Trend

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Current	1.18	1.09	4.30	4.57
7 Days Ago	1.17	1.09	4.29	4.57
30 Days Ago	1.17	1.09	4.30	4.58
60 Days Ago	1.11	1.09	4.31	4.59
90 Days Ago	1.09	1.09	4.31	4.59

Upside - Most Accurate Estimate Versus Zacks Consensus

	Current Qtr (3/2025)	Next Qtr (6/2025)	Current Year (12/2025)	Next Year (12/2026)
Most Accurate Estimate	1.19	1.07	4.25	4.53
Zacks Consensus Estimate	1.18	1.09	4.30	4.57
Earnings ESP	1.47%	-1.54%	-1.06%	-0.93%

Surprise - Reported Earnings History

	Quarter Ending (12/2024)	Quarter Ending (9/2024)	Quarter Ending (6/2024)	Quarter Ending (3/2024)	Average Surprise
Reported	0.50	1.43	1.09	1.03	NA
Estimate	0.51	1.33	0.91	0.90	NA
Difference	-0.01	0.10	0.18	0.13	0.10
Surprise	-1.96%	7.52%	19.78%	14.44%	9.95%

Quarterly Estimates By Analyst

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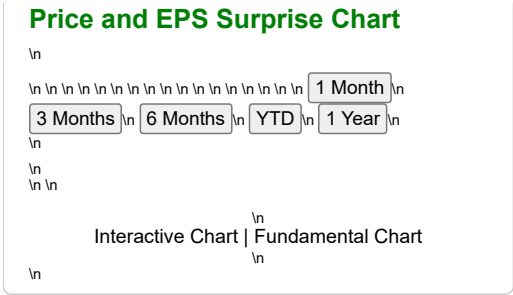
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Sales Estimates

	Current Qtr (6/2025)	Next Qtr (9/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	3.30B	3.93B	15.06B	15.89B
# of Estimates	3	3	4	5
High Estimate	3.47B	4.10B	15.52B	16.29B
Low Estimate	3.19B	3.83B	14.68B	15.39B
Year ago Sales	3.03B	3.64B	13.44B	15.06B
Year over Year Growth Est.	8.97%	7.94%	12.02%	5.50%

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Earnings Estimates

	Current Qtr (6/2025)	Next Qtr (9/2025)	Current Year (12/2025)	Next Year (12/2026)
Zacks Consensus Estimate	0.61	1.31	3.81	4.12
# of Estimates	4	4	7	7
Most Recent Consensus	0.96	0.60	3.84	4.12
High Estimate	0.64	1.35	3.84	4.17
Low Estimate	0.58	1.27	3.80	4.08
Year ago EPS	0.54	1.25	3.50	3.81
Year over Year Growth Est.	12.96%	4.80%	8.86%	8.10%

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Agreement - Estimate Revisions

	Current Qtr (6/2025)	Next Qtr (9/2025)	Current Year (12/2025)	Next Year (12/2026)
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	Current Qtr (6/2025)	Next Qtr (9/2025)	Current Year (12/2025)	Next Year (12/2026)
Current	0.61	1.31	3.81	4.12
7 Days Ago	0.61	1.31	3.81	4.13
30 Days Ago	0.63	1.28	3.82	4.14
60 Days Ago	0.61	1.30	3.82	4.14
90 Days Ago	0.54	1.34	3.82	4.15

	Current Qtr (6/2025)	Next Qtr (9/2025)	Current Year (12/2025)	Next Year (12/2026)
Most Accurate Estimate	0.62	1.31	3.80	4.11
Zacks Consensus Estimate	0.61	1.31	3.81	4.12
Earnings ESP	1.51%	-0.44%	-0.38%	-0.31%

	Quarter Ending (3/2025)	Quarter Ending (12/2024)	Quarter Ending (9/2024)	Quarter Ending (6/2024)	Average Surprise
Reported	0.84	0.81	1.25	0.54	NA
Estimate	0.93	0.87	1.29	0.55	NA
Difference	-0.09	-0.06	-0.04	-0.01	-0.05
Surprise	-9.68%	-6.90%	-3.10%	-1.82%	-5.38%

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

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Gloomier Outlook Amid Growing Uncertainty

The global economic outlook has become even gloomier over the past month as the financial market rollercoaster continued. President Trump's announcement of reciprocal tariffs on April 2 was much larger and more widely spread than financial markets had expected and was soon accompanied by a threat to replace Fed Chair Powell. The double whammy led to a significant selling of both equities and longer-term bonds. At one point, the US S&P500 equity price index was on course for the worst April in more than 90 years. However, in what now appears to be the norm, the Trump administration walked back from its threat to fire Powell and announced a 90-day pause on the imposition of reciprocal tariffs to allow trade negotiations with the affected countries—with the notable exception of China. In response, equity prices have rebounded, and longer-term yields have fallen. The net result: equity prices fell less than 2% during April while the yield on the benchmark 10-year Treasury note edged down slightly.

Vulnerable economy. As for the economy, hard economic data releases are holding up thus far, but they are backward looking and have likely been boosted (probably temporarily) by attempts to stockpile foreign produced goods ahead of the increase in tariffs. Indeed, goods imports have surged, rising more than 18% in the first three months of this year, and light weight vehicle sales surged more than 10% in March. In contrast, softer survey data have shown a vulnerable and slowing economy, with consumer and business sentiment taking large steps down and inflation expectations a large step up.

The University of Michigan consumer sentiment index has fallen for four consecutive months and is down 29% since December. Expectations have fallen for five consecutive months with the April reading tying July 2022 as the lowest level since March 1980. As expectations for activity have plummeted, inflation expectations have continued to soar. Year-ahead inflation expectations in the Michigan survey surged to 6.5% in April from 5.0% in March and 2.6% as recently as last November. The April reading was the highest since November 1981. April surveys from regional Fed banks have shown significant drops in future output expectations. Also, capital expenditure plans have slid markedly, reflecting the rapidly growing uncertainty over the course of both fiscal and trade policy. April readings show capital expenditures are expected to decline over the next six months.

Stagflation expected. The specter of stagflation (below-trend growth and rising inflation) has been reflected in significant downgrades in both the Fed's and the Blue Chip Financial Forecasts (BCFF) panel's economic outlook. In a speech earlier this month, Fed Chair Powell noted the stagflationary impact of higher tariffs: "The level of the tariff increases announced so far is significantly larger than anticipated. The same is likely to be true of the economic effects, which will include higher inflation and slower growth." In answering a special question, the BCFF consensus estimates a 58% probability of stagflation occurring within the next 12 months.

The BCFF has meaningfully altered its outlook, lowering its expectations for GDP growth while raising its expectations for PCE inflation. In this month's survey, 73% of respondents reduced their Q2 GDP forecast; 92% lowered their Q3 fore-

cast; 84% lowered their Q4 forecast; 78% lowered their Q1 2026 forecast. The consensus estimates a 47% probability that the US economy will fall into recession within the next 12 months, up from 33% last month and 24% in March. Of the forecast panel, 22% expect two consecutive quarters of declining GDP while another 22% expect at least one quarter of declining GDP this year.

In the March survey, the BCFF consensus expected real GDP to grow 2.0% q/q saar in the current quarter. Now it expects GDP to grow only 0.8% in Q2. Similarly, growth expectations for the rest of this year have been reduced. In March the consensus expectation for Q3 GDP growth was 1.9%; this month it is a near-recession 0.3%. For Q4, the expectation has been reduced to 0.8% from 1.9% in March. In accordance with the expectations of well below trend real GDP growth, the BCFF consensus is looking for a significant rise in the unemployment rate from the current 4.2% to 4.7% by the end of this year and to 4.8% by the middle of 2026.

The BCFF adjustment to its inflation outlook has been almost as dramatic as for its GDP outlook, just in the opposite direction. The consensus estimates a 67% probability of inflation accelerating over the next six months, up from 47% last month with every respondent thinking that the expected increase in tariffs will provide a significant boost to inflation. However, 63% believe that the boost to inflation would reflect a one-off increase in prices and hence be temporary. In this month's survey, 68% of panelists raised their Q2 forecast for PCE price inflation; 89% raised their Q3 forecast; and 68% raised their Q4 outlook. The BCFF consensus now expects the PCE price index to increase 3.5% q/q saar in the current quarter, up from 2.8% last month and 2.6% in March. It looks for elevated inflation to persist with the PCE price index rising 3.4% in Q3 and 3.0% in Q4.

Fed rate cuts ahead. While the Fed is seen to be challenged by subpar growth accompanied by inflation rising further above target, the BCFF consensus expects more interest rate support from the Fed in this month's survey. The BCFF consensus now expects the fed funds rate (FFR) to fall by a total of 72 basis points this year, up from 49bps last month. However, only one respondent looks for a rate cut at the May 6-7 FOMC meeting with 31% expecting the next cut in June and 66% looking for the next cut later than the June meeting.

With the Fed expected to cut the FFR more than previously anticipated and GDP growth expected to be significantly slower, the BCFF consensus looks for market interest rates to fall throughout the forecast period. Short-term market interest rates are expected to decline along with the FFR with the yield on the three-month Treasury bill anticipated to fall more than 50bps by year-end. For longer-term rates, the BCFF consensus apparently expects the sluggish economy to overwhelm persistent inflation with the yield on the benchmark 10-year Treasury note expected to fall slowly from current levels over the rest of this year.

Sandy Batten (Haver Analytics, New York, NY)

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

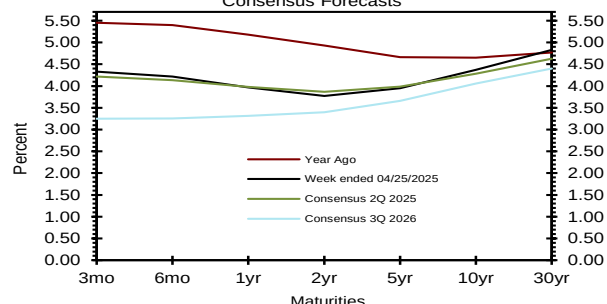
Interest Rates	History								Consensus Forecasts-Quarterly Avg.					
	-----Average For Week Ending-----				---Average For Month---				2Q	3Q	4Q	1Q	2Q	3Q
	Apr 25	Apr 18	Apr 11	Apr 4	Mar	Feb	Jan	1Q 2025	2025	2025	2025	2026	2026	2026
Federal Funds Rate	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.3	4.1	3.9	3.6	3.4	3.3
Prime Rate	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.5	7.3	7.0	6.7	6.6	6.4
SOFR	4.30	4.33	4.37	4.38	4.33	4.34	4.32	4.33	4.3	4.1	3.9	3.6	3.4	3.3
Commercial Paper, 1-mo.	4.34	4.40	4.34	4.31	4.32	4.31	4.32	4.32	4.3	4.1	3.9	3.6	3.4	3.3
Treasury bill, 3-mo.	4.33	4.33	4.33	4.31	4.34	4.33	4.34	4.34	4.2	4.0	3.8	3.6	3.4	3.2
Treasury bill, 6-mo.	4.22	4.21	4.18	4.21	4.27	4.30	4.26	4.28	4.1	4.0	3.7	3.5	3.4	3.3
Treasury bill, 1 yr.	3.97	3.98	3.95	3.97	4.06	4.19	4.18	4.14	4.0	3.8	3.7	3.5	3.4	3.3
Treasury note, 2 yr.	3.77	3.82	3.83	3.81	3.97	4.21	4.27	4.15	3.9	3.7	3.6	3.5	3.5	3.4
Treasury note, 5 yr.	3.95	3.97	3.99	3.86	4.04	4.28	4.43	4.25	4.0	3.9	3.8	3.7	3.7	3.7
Treasury note, 10 yr.	4.37	4.34	4.33	4.13	4.28	4.45	4.63	4.45	4.3	4.2	4.1	4.1	4.1	4.1
Treasury note, 30 yr.	4.83	4.78	4.74	4.51	4.60	4.68	4.85	4.71	4.6	4.5	4.5	4.4	4.4	4.4
Corporate Aaa bond	5.62	5.61	5.66	5.36	5.38	5.39	5.55	5.44	5.3	5.3	5.2	5.2	5.2	5.1
Corporate Baa bond	6.12	6.13	6.19	5.84	5.81	5.82	5.97	5.86	6.1	6.1	6.0	6.0	6.0	5.9
State & Local bonds	4.59	4.57	4.58	4.24	4.22	4.16	4.18	4.19	4.5	4.4	4.4	4.3	4.3	4.3
Home mortgage rate	6.81	6.83	6.62	6.64	6.65	6.84	6.96	6.82	6.6	6.5	6.4	6.3	6.2	6.2

Key Assumptions	History								Consensus Forecasts-Quarterly					
	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q
	2023	2023	2023	2024	2024	2024	2024	2025	2025	2025	2025	2026	2026	2026
Fed's AFE \$ Index	114.6	115.0	116.6	115.5	117.3	114.9	117.9	119.8	114.9	114.2	113.3	112.6	112.5	112.4
Real GDP	2.4	4.4	3.2	1.6	3.0	3.1	2.4	-0.3	0.8	0.3	0.8	1.4	1.8	2.0
GDP Price Index	1.9	3.2	1.5	3.0	2.5	1.9	2.3	3.7	3.4	3.2	2.9	2.6	2.3	2.3
Consumer Price Index	3.0	3.5	2.8	3.7	2.8	1.4	3.0	3.8	3.4	3.7	3.1	2.8	2.5	2.4
PCE Price Index	2.9	2.7	1.7	3.4	2.5	1.5	2.4	3.6	3.5	3.4	3.0	2.6	2.4	2.3

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).

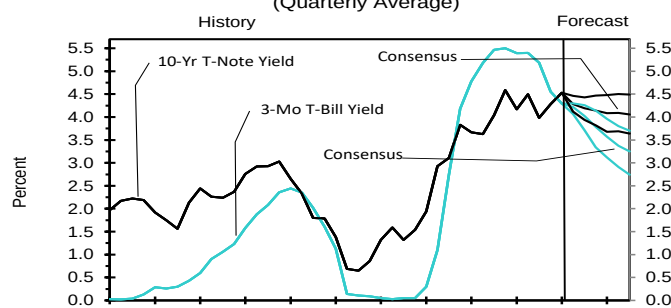
US Treasury Yield Curve

Week ended Apr 25, 2025 & Year Ago vs.
2Q 2025 & 3Q 2026
Consensus Forecasts



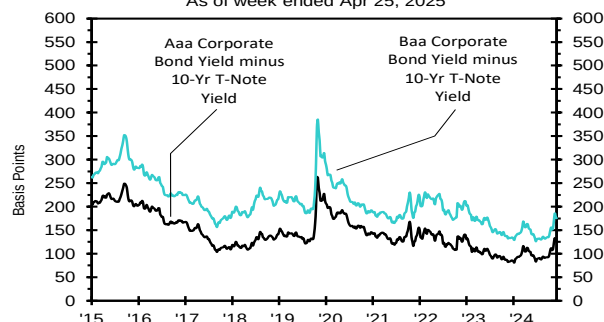
US 3-Mo T-Bills & 10-Yr T-Note Yield

(Quarterly Average)



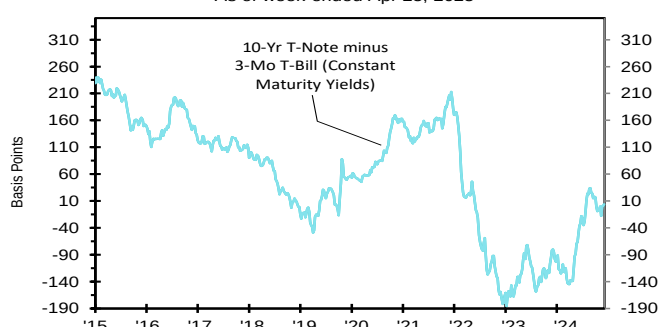
Corporate Bond Spreads

As of week ended Apr 25, 2025



US Treasury Yield Curve

As of week ended Apr 25, 2025



-----Policy Rates¹-----

	History-----			Consensus Forecasts		
	Month	Year		Months From Now:		
	Latest:	Ago:	Ago:	3	6	12
U.S.	4.38	4.38	5.38	4.24	3.95	3.44
Japan	0.50	0.50	0.05	0.55	0.61	0.73
U.K.	4.50	4.50	5.25	4.17	3.87	3.64
Switzerland	0.25	0.25	1.50	0.25	0.20	0.22
Canada	2.75	2.75	5.00	2.54	2.35	2.27
Australia	4.10	4.10	4.35	3.82	3.58	3.42
Euro area	2.40	2.65	4.50	2.02	1.76	1.80

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

	History-----			Consensus Forecasts		
	Month	Year		Months From Now:		
	Latest:	Ago:	Ago:	3	6	12
U.S.	4.29	4.27	4.67	4.26	4.23	4.25
Germany	2.47	2.73	2.58	2.55	2.52	2.59
Japan	1.35	1.55	0.93	1.36	1.36	1.36
U.K.	4.44	4.69	4.34	4.53	4.45	4.35
France	3.15	3.39	3.12	3.31	3.39	3.51
Italy	3.57	3.85	3.89	3.74	3.82	3.96
Switzerland	0.42	0.57	0.73	0.50	0.56	0.69
Canada	3.17	3.02	3.83	3.03	3.09	3.26
Australia	4.19	4.46	4.52	4.21	4.24	4.37
Spain	3.10	3.37	3.37	3.20	3.19	3.36

-----Foreign Exchange Rates³-----

	History-----			Consensus Forecasts		
	Month	Year		Months From Now:		
	Latest:	Ago:	Ago:	3	6	12
U.S.	112.77	117.54	118.11	115.5	112.9	109.8
Japan	143.75	150.26	157.62	144.4	141.9	137.9
U.K.	1.33	1.29	1.25	1.30	1.29	1.27
Switzerland	0.83	0.88	0.91	0.85	0.84	0.84
Canada	1.39	1.43	1.37	1.41	1.41	1.40
Australia	0.64	0.63	0.65	0.63	0.64	0.64
Euro	1.14	1.08	1.07	1.11	1.12	1.14

**Consensus
Policy Rates
vs. US Rate**

	Now	In 12 Mo.
Japan	-3.88	-2.72
U.K.	0.13	0.20
Switzerland	-4.13	-3.22
Canada	-1.63	-1.18
Australia	-0.28	-0.02
Euro area	-1.98	-1.65

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

	Now	In 12 Mo.
Germany	-1.82	-1.67
Japan	-2.94	-2.89
U.K.	0.15	0.10
France	-1.09	-0.74
Italy	-0.72	-0.29
Switzerland	-3.87	-3.56
Canada	-1.12	-0.99
Australia	-0.10	0.12
Spain	-1.19	-0.89

International. Financial markets have remained unsettled since the April 2 announcement of US “Liberation Day” tariffs, which reawakened global trade tensions with a broad and abrupt sweep. Though subsequent revisions—for now, only a pause—on April 9 softened the blow for most US trading partners, the administration’s attention quickly narrowed. Tariffs on Chinese goods have climbed steadily, sharpening what began as a general show of protectionism into a more targeted and intensifying bilateral trade conflict. The focus for investors has also shifted from trade volumes to deeper questions about the credibility of US financial leadership, with capital flows, demand for Treasuries, and the dollar’s role as a global safe haven at risk.

Geopolitical developments have added to the unease. In the Middle East, the collapse of the Israel-Hamas ceasefire has led to a dangerous escalation in violence, while renewed Russian offensives in Ukraine, until recently, erased hopes of near-term peace. These developments, layered on top of US trade actions, have prompted a repricing of global risk, evidenced by wider credit spreads, renewed volatility across emerging markets, and increased hedging activity in rates and currency markets.

The IMF’s April World Economic Outlook captured this darker backdrop. The Fund downgraded its global growth forecast and emphasized the uncertainty clouding the outlook, citing rising trade barriers and fragile financial conditions as key risks. Our panelists are increasingly aligned with that view. In response to a special question this month, 61% flagged significant downside risk to their forecasts over the next 12–24 months, up from 31% in March.

Recent economic data reflect creeping vulnerability. In the United States, many headline indicators have moderated: retail sales have softened, consumer sentiment has slumped, and forward-looking hiring plans have eased. Softer business sentiment readings in Europe and Japan—particularly in surveys capturing April activity—also suggest growing caution, though not sharp deterioration.

Trade-linked indicators have weakened more visibly. High-frequency estimates of US-China cargo volumes and falling freight rates on major Pacific routes point to stress, a signal echoed in South Korea’s mid-month April trade data, often a bellwether for global demand. Anecdotal reports of widespread shipment cancellations have further reinforced a sense of strain.

As global headwinds have intensified, central banks across Europe and Asia have been signaling a bias toward further easing. This reflects a convergence of factors—softer activity data, heightened uncertainty, and growing financial fragility—that has prompted a broad reassessment of the policy outlook. In this month’s survey, our panelists have also revised both policy rate and 10-year bond yield forecasts lower across the board. But while further easing is expected to cushion weakening demand, there is growing recognition that persistent trade tensions and supply chain disruptions, particularly those stemming from the US-China tariff conflict, could exert upward pressure on costs, complicating the disinflation narrative that typically supports rate cuts.

Alongside the downward revision in yields, our panelists have also marked down projections for the US dollar, despite relatively modest changes in interest rate differentials. This suggests deeper concern about the underlying foundations of the dollar’s global role. For decades, the US has relied on liquid financial markets and the dollar’s reserve status to attract capital inflows, even while running persistent current account deficits. But this dynamic may be weakening.

If foreign exporters now accumulate fewer dollars, and international investors begin to question the reliability of US policy and institutions, the capital account surplus that has long financed US deficits could begin to narrow. In turn, US borrowing costs may rise, and the structural support for the dollar may start to erode. Should the trade conflict with China deepen, these risks could become harder to ignore.

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.

Second Quarter 2025

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-----									
	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. Bond 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Local Bonds	Home Mtg. Rate					
																		B.	C.	D.	E.
J.P. Morgan Chase	4.5	H	na	na	na	na	na	3.8	3.9	4.2	4.5	na	na	na	na	na	1.0	4.4	4.8	4.6
Naroff Economics LLC	4.5	H	7.5	H	4.5	4.8	H	4.3	H	4.3	4.1	4.0	3.9	4.3	4.5	na	113.8	1.1	2.7	2.8
Scotiabank Group	4.5	H	na	4.3	na	4.3	H	na	na	3.9	4.0	4.3	4.8	na	na	na	na	0.8	3.3	3.6
Bank of America	4.4	na	na	na	na	na	na	4.0	4.1	4.3	4.7	na	na	na	na	na	na	0.9	2.7	2.0
BMO Capital Markets	4.4	7.5	H	4.3	3.9	L	4.3	H	4.2	3.9	3.7	3.9	4.2	4.7	5.5	6.3	4.6	111.4	L	0.5
Daiwa Capital Markets America	4.4	7.5	H	na	na	4.3	H	na	na	3.8	na	4.3	4.6	na	na	na	6.8	118.0	0.6	2.9
Georgia State University	4.4	7.5	H	na	na	4.2	4.0	4.0	3.9	4.0	4.3	4.5	5.3	6.0	na	6.5	na	2.2	3.8	2.9
ING	4.4	na	na	na	na	na	na	4.0	4.3	4.8	H	5.2	H	na	na	na	na	na	1.4	na
KPMG	4.4	7.5	H	4.3	4.4	4.3	H	4.2	4.1	4.1	4.0	4.2	4.5	5.1	6.5	na	6.7	na	-1.3	7.1
MacroPolicy Perspectives	4.4	7.5	H	4.4	4.4	4.3	H	4.4	H	4.4	4.4	4.4	4.6	4.9	L	5.1	L	4.4	6.9	112.4
Nomura Securities, Inc.	4.4	7.5	H	na	na	na	na	na	4.0	4.1	4.2	na	na	na	na	na	na	na	0.6	1.8
Oxford Economics	4.4	7.5	H	4.4	na	4.3	H	4.2	4.0	3.8	4.0	4.3	4.6	4.9	L	na	na	6.6	117.2	2.0
S&P Global Market Intelligence	4.4	7.5	H	4.3	na	4.2	4.0	4.0	3.9	4.0	4.3	4.6	na	na	na	6.5	na	na	0.5	6.5
The Lonski Group	4.4	7.5	H	4.3	4.3	4.3	H	4.2	4.0	3.7	4.0	4.2	4.6	5.4	6.0	4.3	6.7	112.5	2.2	2.6
The Northern Trust Company	4.4	7.5	H	4.3	4.4	4.3	H	4.2	4.0	3.8	3.9	4.3	4.7	5.3	6.0	4.4	6.8	113.5	1.3	4.3
Chmura Economics & Analytics	4.3	7.5	H	4.3	4.3	4.3	H	4.2	4.0	4.0	4.0	4.3	4.7	5.5	na	na	6.7	na	3.5	
Comerica Bank	4.3	7.5	H	4.4	na	4.3	H	4.1	3.9	3.6	3.7	L	4.0	L	5.2	5.8	na	6.3	L	na
DePrince & Assoc.	4.3	7.5	H	4.2	4.3	4.3	H	4.2	3.9	3.8	3.9	4.2	4.7	5.5	6.3	4.7	6.7	112.6	2.1	2.5
EY-Parthenon	4.3	na	na	na	4.2	na	na	na	na	na	4.2	na	na	na	na	na	na	na	0.5	3.5
Fannie Mae	4.3	7.5	H	na	na	4.3	H	4.1	3.9	3.8	4.0	4.4	4.8	na	na	na	6.8	na	0.8	3.8
Loomis, Sayles & Company	4.3	7.5	H	4.3	4.3	4.3	H	4.2	4.0	3.8	3.9	4.2	4.6	5.2	5.9	4.4	6.6	114.8	0.6	4.3
MacroFin Analytics & Rutgers Bus School	4.3	7.4	4.3	4.3	4.3	4.3	H	4.2	4.1	4.0	3.9	4.3	4.7	5.6	6.1	4.3	6.7	112.4	-0.5	2.6
Moody's Analytics	4.3	7.5	H	4.3	4.4	4.1	4.0	4.0	3.8	3.9	4.1	4.5	5.3	6.1	4.0	L	6.5	na	-0.3	4.3
NatWest Markets	4.3	7.5	H	3.2	L	4.4	4.3	H	4.3	4.3	4.5	H	4.8	H	4.7	4.7	6.3	H	7.2	
PNC Financial Services Corp.	4.3	7.5	H	4.3	na	4.2	4.0	3.8	3.8	3.9	4.2	4.7	na	6.3	na	6.6	122.3	H	-0.5	
Regions Financial Corporation	4.3	7.5	H	4.3	4.3	4.3	H	4.2	4.0	3.7	3.9	4.3	4.7	5.1	5.8	4.4	6.6	112.7	0.8	2.2
Roberts Capital Advisors	4.3	7.5	H	4.4	4.3	4.3	H	4.2	4.1	4.0	4.1	4.3	4.8	5.3	6.1	4.4	6.8	113.0	1.0	2.9
Santander Capital Markets	4.3	7.5	H	4.3	4.3	4.3	H	4.2	4.0	3.8	3.9	4.3	4.8	5.5	6.2	5.1	6.7	112.5	3.3	4.1
Societe Generale	4.3	7.5	H	4.3	na	4.2	4.1	3.9	3.7	3.9	4.3	4.6	na	na	na	na	na	na	1.7	2.1
Action Economics	4.2	7.4	4.6	H	4.2	4.2	4.1	4.0	3.9	4.1	4.3	4.7	5.4	6.1	4.3	6.8	119.8	1.5	3.3	2.9
Barclays	4.1	na	na	na	na	na	na	na	3.7	3.8	4.0	L	4.3	L	na	na	na	na	0.5	2.3
Chan Economics	4.1	7.3	4.1	4.1	4.1	4.1	3.9	3.8	3.9	4.1	4.4	5.2	6.0	4.0	L	6.4	112.3	0.2	2.5	
Economist Intelligence Unit	4.1	7.3	na	na	4.2	4.2	4.1	na	na	na	4.5	na	na	na	na	na	na	na	-5.6	L
Goldman Sachs & Co.	4.1	na	na	na	4.0	na	na	4.1	4.2	4.4	4.6	na	na	na	na	na	na	na	1.0	4.2
Via Nova Investment Mgt.	4.1	7.3	4.1	4.1	4.0	4.0	3.7	3.6	3.8	4.2	4.6	5.3	5.7	4.0	L	6.6	117.0	-2.0	3.0	3.5
Wells Fargo	4.1	7.3	4.2	4.1	3.9	3.7	L	3.5	L	3.5	L	3.7	L	4.0	L	4.5	na	2.1	2.1	2.2
TS Lombard	3.9	L	7.0	L	3.9	3.9	L	3.8	L	3.9	3.8	4.5	4.6	5.3	6.2	4.5	6.3	L	120.0	-1.2
May Consensus	4.3	7.5	4.3	4.3	4.2	4.1	4.0	3.9	4.0	4.3	4.6	5.3	6.1	4.5	6.6	114.9	0.8	3.4	3.4	3.5
Top 10 Avg.	4.4	7.5	4.4	4.4	4.3	4.2	4.1	4.1	4.2	4.5	4.8	5.5	6.3	4.7	6.8	116.9	2.4	5.0	5.0	5.1
Bottom 10 Avg.	4.1	7.4	4.1	4.2	4.1	4.0	3.8	3.7	3.8	4.1	4.5	5.1	5.8	4.2	6.5	112.5	-1.0	2.2	2.1	2.3
Standard Deviation	0.1	0.1	0.3	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.2	3.3	1.6	1.3	1.2	1.3
April Consensus	4.3	7.4	4.3	4.3	4.2	4.2	4.1	4.0	4.1	4.3	4.6	5.3	6.0	4.3	6.7	118.5	1.6	2.7	2.9	2.8
Number of Forecasts Changed From A Month Ago:																				
Down	2	1	4	3	5	13	18	23	24	14	10	6	4	3	12	16	27	6	9	9
Same	30	26	17	15	20	9	7	11	7	16	7	4	7	6	8	1	4	4	5	2
Up	5	3	4	2	7	5	3	1	3	7	16	12	10	9	7	1	6	25	22	24
Diffusion Index	54%	53%	50%	48%	53%	35%	23%	19%	19%	41%	59%	64%	64%	67%	41%	8%	22%	77%	68%	71%

MAY 1, 2025 ■ BLUE CHIP FINANCIAL FORECASTS ■ 5

Third Quarter 2025

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-----																	
	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. Bond 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Corp. Bonds	Home Local Mtg. Rate													
																		B.	C.	D.	E.							
																	Real GDP	Price Index	Cons. Price Index	PCE Price Index								
Scotiabank Group	4.5	H	na	4.3	na	4.3	H	na	na	3.8	3.9	4.2	4.6	na	na	na	na	na	0.7	2.9	1.7	L	2.1					
Bank of America	4.4		na	na	na	na	na	na	na	4.0	4.2	4.4	4.8	na	na	na	na	na	0.6	3.4	3.7		3.7					
J.P. Morgan Chase	4.4		na	na	na	na	na	na	na	3.4	3.6	4.0	4.4	na	na	na	na	na	-0.5	3.7	4.4		3.6					
KPMG	4.4	7.5	H	4.3	4.4	4.3	H	4.2	4.0	4.0	4.0	4.2	4.5	5.2	6.6	na	6.7	na	-1.9	3.9	3.6		3.6					
Nomura Securities, Inc.	4.4	7.5	H	na	na	na	na	na	na	3.8	4.0	4.2	na	na	na	na	na	na	0.2	1.8	4.0		4.0					
Oxford Economics	4.4	7.5	H	4.4	na	4.3	H	4.2	4.0	3.8	4.0	4.2	4.5	5.0	na	na	6.6	116.8	0.5	1.6	L	3.2	1.9	L				
S&P Global Market Intelligence	4.4	7.5	H	4.3	na	4.1		4.0	3.9	3.7	3.9	4.2	4.5	na	na	na	6.4	na	0.7	3.6	3.6		3.3					
Chmura Economics & Analytics	4.3	7.4		4.3	4.3	4.3	H	4.2	4.0	4.0	4.0	4.3	4.7	5.4	na	na	6.7	na	3.2	H	2.8	2.9	2.5					
Daiwa Capital Markets America	4.3	7.4		na	na	4.2	na	na	na	3.8	na	4.3	4.7	na	na	na	6.8	117.0	0.4	3.0	3.2		2.9					
Fannie Mae	4.3	7.4		na	na	4.0	3.9		3.8	3.7	4.0	4.4	4.8	na	na	na	6.6	na	-0.1	2.7	2.6		3.1					
Loomis, Sayles & Company	4.3	7.5	H	4.3	4.3	4.3	H	4.2	3.9	3.5	3.6	4.0	4.4	5.0	5.7	4.2	6.4	113.4	-1.7	3.8	3.7		3.4					
MacroPolicy Perspectives	4.3	7.5	H	4.3	4.3	4.2	4.3	H	4.3	H	4.3	4.3	4.5	4.8	L	5.1	L	4.3	112.4	1.4	4.3	4.7		4.2				
Naroff Economics LLC	4.3	7.3		4.2	4.6	H	4.2	4.2	4.1	4.0	3.9	4.2	4.4	na	na	3.9	6.3	114.1	0.6	2.9	2.9		2.7					
NatWest Markets	4.3	7.5	H	3.2	4.4	4.3	H	4.3	H	4.3	H	4.4	H	4.6	H	4.5	4.4	na	1.3	2.2	3.1		3.4					
Santander Capital Markets	4.3	7.5	H	4.3	4.3	4.2	4.1		3.9	3.8	3.9	4.2	4.7	5.4	6.2	4.9	6.6	111.5	1.0	2.7	3.0		2.9					
The Northern Trust Company	4.3	7.5	H	4.3	4.3	4.2	4.2	4.1	4.1	4.2	4.4	4.8	5.6	6.3	4.6	6.9	111.0	1.0	4.4	4.8		4.3						
PNC Financial Services Corp.	4.2	7.3		4.1	na	3.7	3.5		3.5	3.6	3.8	4.1	4.5	na	6.4	na	6.3	123.5	H	0.2	2.5	3.4		3.1				
Roberts Capital Advisors	4.2	7.3		4.2	4.2	4.1	4.1		4.1	4.0	4.1	4.3	4.8	5.3	6.1	4.4	6.8	114.0	1.4	2.8	3.2		3.0					
Action Economics	4.1	7.3		4.5	H	4.1	4.1		4.0	3.9	3.9	4.0	4.1	4.5	5.2	5.9	4.2	113.5	1.7	3.7	4.2		3.7					
Comerica Bank	4.1	7.2		4.1	na	4.0	3.8		3.6	3.3	L	3.5	L	3.9	L	4.2	L	5.2	5.9	na	6.0	L	na	-0.4	5.4	H	5.6	5.3
DePrince & Assoc.	4.1	7.2		4.0	4.1	4.1	4.0		3.7	3.6	3.7	4.2	4.6	5.4	6.3	4.7	6.4	113.5	2.2	2.5	2.8		2.6					
EY-Parthenon	4.1		na	na	na	4.1	na	na	na	na	na	4.0	na	na	na	na	na	na	-0.2	3.4	3.8		3.3					
MacroFin Analytics & Rutgers Bus School	4.1	7.3		4.2	4.2	4.1	4.1		4.1	4.0	3.9	4.2	4.7	5.5	6.1	4.2	6.6	112.2	-0.2	2.7	3.0		3.0					
Moody's Analytics	4.1	7.3		4.1	4.1	3.9	3.8		3.8	3.8	3.9	4.1	4.5	5.5	6.5	4.2	6.4	na	0.9	3.2	3.5		3.6					
Regions Financial Corporation	4.1	7.3		4.1	4.1	4.1	4.0		3.8	3.7	3.8	4.2	4.6	5.0	5.8	4.3	6.5	111.8	0.0	4.8	6.3	H	5.5	H				
The Lonski Group	4.1	7.2		4.1	4.1	4.0	3.9		3.7	3.5	3.9	3.9	L	4.2	L	5.1	5.8	4.0	6.4	111.9	1.7	2.7	3.0		3.4			
BMO Capital Markets	4.0	7.2		4.0	3.7	4.1	4.0		3.7	3.5	3.7	4.1	4.5	5.6	6.5	4.7	6.6	110.3	L	0.6	3.6	5.5		5.3				
Georgia State University	4.0	7.1		na	na	3.8	3.7		3.6	3.4	3.6	3.9	L	4.2	L	5.0	5.7	na	6.2	na	0.8	5.2	4.7		4.9			
Societe Generale	4.0	7.2		4.0	na	3.9	3.9		3.7	3.4	3.6	4.3	4.6	na	na	na	na	na	0.2	2.1	3.6		3.3					
Barclays	3.9		na	na	na	na	na		3.6	3.7	4.0	4.3	na	na	na	na	na	na	-1.5	4.2	4.4		4.3					
Chan Economics	3.9	7.0		3.9	3.9	3.9	3.9		3.7	3.6	3.7	3.9	L	4.2	L	5.0	5.8	3.8	6.2	112.1	0.8	2.3	2.6		2.4			
ING	3.9		na	na	na	na	na		3.6	4.0	4.5	4.9	H	na	na	na	na	na	-0.9	na	na		na					
Via Nova Investment Mgt.	3.8	6.9		3.8	3.8	3.7	3.7		3.5	3.4	3.5	L	3.9	L	4.3	5.0	5.4	3.7	L	6.2	116.0	0.0	2.5	3.0		2.7		
Economist Intelligence Unit	3.6	7.0		na	na	3.9	4.0		3.9	na	na	4.4	na	na	na	na	na	na	-1.2	na	4.1		na					
Goldman Sachs & Co.	3.6		na	na	na	3.9	na		na	4.0	4.2	4.4	4.6	na	na	na	na	na	0.2	3.6	3.5		3.5					
Wells Fargo	3.6	6.8		3.7	3.6	3.4	3.3		3.2	L	3.3	L	3.5	L	3.9	L	4.4	5.1	6.1	4.5	6.2	na	-1.0	2.6	2.7		2.6	
TS Lombard	3.1	L	6.2	L	3.1	L	3.2	L	3.0	L	3.1	L	3.3	3.5	4.0	4.7	H	4.8	5.5	6.4	4.7	6.5	120.0	-2.5	L	3.5	3.5	3.5
May Consensus	4.1	7.3	4.1	4.1	4.0	4.0	3.8	3.7	3.9	4.2	4.5	5.3	6.1	4.4	6.5	114.2	0.3	3.2	3.7	3.4								
Top 10 Avg.	4.4	7.5	4.3	4.3	4.3	4.2	4.1	4.1	4.2	4.4	4.8	5.6	6.5	4.7	6.8	116.2	1.6	4.3	4.9	4.5								
Bottom 10 Avg.	3.7	7.0	3.8	3.9	3.7	3.7	3.6	3.4	3.6	3.9	4.3	5.0	5.7	4.1	6.3	112.0	-1.2	2.3	2.7	2.5								
Standard Deviation	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.5	0.5	0.3	3.4	1.2	0.9	0.9	0.9								
April Consensus	4.2	7.3	4.1	4.2	4.1	4.1	4.0	4.0	4.1	4.3	4.6	5.3	6.0	4.3	6.6	117.7	1.7	2.7	2.9	2.7								
Number of Forecasts Changed From A Month Ago:																												
Down	8	7	5	5	7	13	19	25	25	17	14	6	4	4	12	16	34	2	2	1								
Same	22	18	15	11	19	11	7	9	6	16	8	5	6	4	9	0	2	6	3	3								
Up	7	5	5	4	6	3	2	1	3	4	11	11	11	10	6	2	1	27	31	31								
Diffusion Index	49%	47%	50%	48%	48%	31%	20%	16%	18%	32%	45%	61%	67%	67%	39%	11%	5%	86%	90%	93%								

Fourth Quarter 2025

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-----																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15														
	Federal	Prime	SOFR	Com.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Aaa	Baa	State &	Home														
	Funds Rate	Bank Rate	Rate	Paper 1-Mo.	Bills 3-Mo.	Bills 6-Mo.	Bills 1-Yr.	Notes 2-Yr.	Notes 5-Yr.	Notes 10-Yr.	Bond 30-Yr.	Corp. Bond	Corp. Bond	Local Bonds	Mtg. Rate		Real GDP	Price Index	Price Index	Price Index									
Scotiabank Group	4.5	H	na	4.3	na	4.2	na	na	3.6	3.9	4.3	4.8	na	na	na	na	na	0.0	2.7	3.2	2.5								
Bank of America	4.4	na	na	na	na	na	na	na	4.0	4.2	4.5	4.8	na	na	na	na	na	1.6	3.2	3.1	3.4								
NatWest Markets	4.3	7.5	H	3.2	4.4	H	4.3	H	4.3	H	4.5	H	4.7	H	4.5	4.5	6.6	H	7.5	H	6.0	H	7.4	H	na	0.8	2.8	4.8	4.7
Oxford Economics	4.3	7.4	4.3	na	4.2	4.1	3.8	3.7	3.9	4.1	4.5	5.0	na	na	6.5	116.7	0.6	0.9	L	1.9	0.8	L							
S&P Global Market Intelligence	4.3	7.4	4.3	na	4.1	4.0	3.9	3.6	3.8	4.2	4.5	na	na	na	6.3	na	1.6	2.8	2.7	2.5									
J.P. Morgan Chase	4.2	na	na	na	na	na	na	3.1	3.3	3.8	4.2	na	na	na	na	na	-0.5	2.1	2.4	2.0									
Chmura Economics & Analytics	4.1	7.3	4.1	4.1	4.2	4.0	4.0	4.0	4.0	4.3	4.6	5.3	na	na	6.4	na	2.3	2.6	2.6	2.4									
KPMG	4.1	7.3	4.0	4.1	4.0	4.1	4.0	3.9	3.9	4.1	4.4	5.0	6.5	na	6.6	na	-0.5	3.8	3.9	3.6									
Loomis, Sayles & Company	4.1	7.3	4.1	4.1	4.1	4.0	3.7	3.0	3.2	3.6	4.0	4.6	5.3	3.8	6.0	113.4	-0.8	3.0	3.2	2.8									
Nomura Securities, Inc.	4.1	7.3	na	na	na	na	na	3.6	3.9	4.2	na	na	na	na	na	na	0.5	2.5	3.4	3.2									
The Northern Trust Company	4.1	7.3	4.1	4.1	4.1	4.2	4.2	4.3	4.4	4.5	4.9	5.8	6.6	4.8	7.0	110.0	0.5	4.0	4.0	3.9									
Action Economics	4.0	7.2	4.5	H	4.0	3.9	3.8	3.7	3.8	3.9	4.0	4.3	5.1	5.8	4.1	6.5	112.7	2.0	2.8	3.1	2.8								
Daiwa Capital Markets America	4.0	7.1	na	na	4.0	na	na	3.7	na	4.3	4.7	na	na	na	6.7	116.0	0.9	2.8	3.0	2.7									
MacroFin Analytics & Rutgers Bus School	4.0	7.2	4.1	4.1	4.0	4.0	4.1	3.9	3.9	4.2	4.6	5.5	6.0	4.2	6.6	112.0	1.0	2.8	3.0	3.3									
Naroff Economics LLC	4.0	7.0	4.1	4.3	4.1	4.2	4.0	3.8	3.8	4.1	4.3	na	na	3.9	5.8	L	114.3	-1.9	L	1.9	2.6	2.6							
Roberts Capital Advisors	4.0	7.2	4.1	4.0	4.1	4.1	4.0	3.9	4.0	4.3	4.8	5.3	6.1	4.4	6.8	115.0	1.6	2.7	3.0	2.8									
Santander Capital Markets	4.0	7.2	4.1	4.0	3.9	3.9	3.8	3.8	3.9	4.1	4.6	5.4	6.2	4.7	6.4	111.0	2.1	2.4	2.0	2.1									
Barclays	3.9	na	na	na	na	na	na	3.5	3.7	4.0	4.3	na	na	na	na	na	-0.5	3.8	4.0	3.9									
Chan Economics	3.9	7.0	3.9	3.9	3.9	3.9	3.7	3.6	3.7	3.9	4.2	5.0	5.8	3.8	6.2	112.0	1.5	2.3	2.6	2.4									
Fannie Mae	3.9	7.0	na	na	3.8	3.8	3.7	3.7	4.0	4.5	4.8	na	na	na	6.4	na	1.1	3.5	3.0	3.3									
MacroPolicy Perspectives	3.9	7.1	3.9	3.9	3.8	3.7	3.7	3.7	3.7	4.0	4.2	4.2	L	4.5	L	4.0	112.4	1.0	4.2	4.3	4.1								
BMO Capital Markets	3.8	6.9	3.8	3.7	3.8	3.7	3.5	3.3	3.6	4.0	4.4	5.5	6.4	4.6	6.5	109.4	L	1.1	3.1	3.8	3.6								
Comerica Bank	3.8	7.0	3.8	na	3.7	3.6	3.4	3.2	3.4	3.9	4.1	5.2	5.9	na	5.9	na	1.4	5.0	H	4.4	4.4								
EY-Parthenon	3.8	na	na	na	3.9	na	na	na	na	4.0	na	na	na	na	na	na	0.5	3.1	3.2	3.2									
Moody's Analytics	3.8	6.9	3.7	3.7	3.5	3.6	3.7	3.8	3.9	4.1	4.5	5.6	6.5	4.2	6.3	na	1.3	2.9	3.3	2.9									
Societe Generale	3.8	7.0	3.8	na	3.8	3.7	3.5	3.3	3.6	4.3	4.6	na	na	na	na	na	2.6	H	2.1	3.2	2.9								
Via Nova Investment Mgt.	3.8	6.9	3.8	3.8	3.7	3.7	3.6	3.5	3.6	3.9	4.3	5.0	5.4	3.7	L	6.2	115.0	2.0	2.0	2.5	2.3								
DePrince & Assoc.	3.7	6.9	3.7	3.8	3.7	3.6	3.4	3.3	3.5	4.1	4.6	5.4	6.2	4.6	6.3	114.7	2.3	2.4	2.6	2.4									
PNC Financial Services Corp.	3.7	6.8	3.6	na	3.2	3.2	3.3	3.5	3.7	4.1	4.5	na	6.4	na	6.1	121.9	H	0.4	2.5	3.6	3.1								
Regions Financial Corporation	3.7	7.0	3.7	3.7	3.6	3.7	3.6	3.6	3.7	4.2	4.6	5.0	5.8	4.3	6.3	111.5	0.8	4.4	5.5	H	5.2	H							
Goldman Sachs & Co.	3.6	na	na	na	3.9	na	na	4.0	4.2	4.4	4.6	na	na	na	na	na	0.9	2.6	2.9	2.7									
The Lonski Group	3.6	6.7	3.6	3.5	3.5	3.4	3.3	3.2	3.8	3.8	4.1	5.0	5.7	4.0	6.3	111.8	1.3	2.6	1.8	1.3									
Economist Intelligence Unit	3.3	6.5	na	na	3.5	3.6	3.6	na	na	4.3	na	na	na	na	na	na	0.9	na	1.2	L	na								
ING	3.3	na	na	na	na	na	na	3.2	3.8	4.5	4.9	na	na	na	na	na	0.1	na	na	na	na								
Wells Fargo	3.1	6.3	3.2	3.1	3.2	3.2	3.2	3.3	3.4	3.8	4.4	5.0	6.0	4.4	6.0	na	-1.2	3.1	3.3	3.1									
TS Lombard	2.9	6.0	L	2.9	L	2.8	2.9	3.2	3.5	4.2	4.9	H	5.0	H	5.7	110.0	-0.5	4.0	4.0	4.0									
Georgia State University	2.8	L	6.0	L	na	na	2.7	L	2.7	L	2.4	L	2.9	L	3.5	L	3.9	L	4.6	5.3	na	5.8	L						
May Consensus	3.9	7.0	3.9	3.9	3.8	3.7	3.7	3.6	3.8	4.1	4.5	5.2	6.0	4.4	6.4	113.3	0.8	2.9	3.1	3.0									
Top 10 Avg.	4.2	7.3	4.2	4.1	4.1	4.1	4.0	4.0	4.2	4.5	4.8	5.6	6.5	4.7	6.7	115.2	2.0	3.9	4.2	4.1									
Bottom 10 Avg.	3.4	6.6	3.5	3.6	3.3	3.4	3.3	3.1	3.4	3.8	4.2	4.8	5.6	4.0	6.1	111.3	-0.5	2.1	2.1	2.1									
Standard Deviation	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.5	0.6	0.5	0.4	3.0	1.0	0.8	0.9	0.9									
April Consensus	4.0	7.1	4.0	4.0	3.9	3.9	3.9	3.9	4.0	4.3	4.5	5.2	6.0	4.3	6.5	117.1	1.7	2.5	2.7	2.6									
Number of Forecasts Changed From A Month Ago:																													
Down	16	12	9	9	13	14	18	24	24	17	13	7	6	5	12	16	31	5	4	7									
Same	15	14	10	6	13	10	9	9	8	16	12	6	5	5	8	1	5	7	5	4									
Up	6	4	6	5	6	3	1	2	2	4	8	9	10	8	7	1	1	23	27	24									
Diffusion Index	36%	37%	44%	40%	39%	30%	20%	19%	18%	32%	42%	55%	60%	58%	41%	8%	9%	76%	82%	74%									

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First Quarter 2026

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-----											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15							
	Federal	Prime	SOFR	Com.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Aaa	Baa	State &	Home							
	Funds	Bank	Rate	Paper	Bills	Bills	Bills	Notes	Notes	Notes	Bond	Corp.	Corp.	Local	Mtg.							
Rate	Rate		1-Mo.	3-Mo.	6-Mo.	1-Yr.	2-Yr.	5-Yr.	10-Yr.	30-Yr.	Bond	Bond	Bonds	Rate		Real	Price	Price	Price			
																GDP	Index	Index	Index			
Bank of America	4.4	H	na	na	na	na	na	4.1	4.3	4.6	4.9	na	na	na	na	na	1.6	2.4	2.4	2.3		
NatWest Markets	4.3	7.5	H	3.2	4.4	H	4.2	H	4.2	na	na	6.6	H	7.5	H	6.0	H	7.4	H			
Scotiabank Group	4.3	na	4.1	na	4.0	na	na	3.5	4.0	4.3	4.8	na	na	na	na	na	-0.2	L	2.4	-0.1	L	1.2
The Northern Trust Company	4.1	7.3	4.1	4.1	4.1	4.1	4.2	H	4.3	H	4.5	4.6	6.0	6.7	5.1	7.1	109.0	0.7	3.3	3.2	3.2	
Chmura Economics & Analytics	4.0	7.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.3	4.5	5.3	na	na	6.3	na	2.1	2.4	2.5	2.3		
Barclays	3.9	na	na	na	na	na	na	3.4	3.6	4.0	4.3	na	na	na	na	na	1.0	2.9	2.8	2.7		
Chan Economics	3.9	7.0	3.9	3.9	3.9	3.9	3.7	3.6	3.7	3.9	4.2	5.0	5.8	3.8	6.2	111.8	1.2	2.2	2.5	2.3		
S&P Global Market Intelligence	3.9	7.0	3.9	na	3.7	3.9	3.8	3.5	3.7	4.1	4.4	na	na	na	6.2	na	1.8	3.2	3.0	2.6		
Action Economics	3.8	7.0	4.3	H	3.8	3.9	3.7	3.6	3.7	3.7	3.8	4.2	4.9	5.6	3.9	6.4	112.7	2.0	2.5	2.7	2.5	
Daiwa Capital Markets America	3.8	6.9	na	na	3.8	na	na	3.6	na	4.2	4.6	na	na	na	6.5	115.0	1.5	2.7	2.8	2.6		
J.P. Morgan Chase	3.8	na	na	na	na	na	na	2.9	3.2	3.7	4.2	na	na	na	na	na	1.5	1.7	1.9	1.8		
MacroFin Analytics & Rutgers Bus School	3.8	6.9	3.8	3.9	3.8	3.8	3.9	3.9	3.9	4.2	4.5	5.4	6.0	4.1	6.6	111.8	1.0	2.8	3.2	3.5		
Naroff Economics LLC	3.8	6.8	3.7	4.0	3.8	3.9	3.9	3.8	3.7	4.0	4.2	na	na	3.9	5.7	114.7	0.8	1.4	2.3	2.5		
Oxford Economics	3.8	7.0	3.8	na	3.8	3.7	3.5	3.4	3.8	4.1	4.4	5.0	na	na	6.3	116.6	1.5	1.1	L	1.8	1.1	L
Roberts Capital Advisors	3.8	7.0	3.9	3.8	4.0	4.0	4.0	3.8	3.9	4.2	4.7	5.2	6.0	4.3	6.7	116.0	1.8	2.6	2.9	2.6		
Santander Capital Markets	3.8	7.0	3.8	3.8	3.7	3.8	3.8	3.8	3.9	4.1	4.6	5.5	6.3	4.6	6.3	111.0	2.3	2.8	3.0	2.8		
Societe Generale	3.8	7.0	3.8	na	3.7	3.5	3.3	3.3	3.6	4.3	4.6	na	na	na	na	na	1.8	2.1	2.6	2.3		
KPMG	3.7	6.9	3.6	3.7	3.5	3.9	3.9	3.8	3.9	4.1	4.4	5.0	6.5	na	6.6	na	0.5	2.7	3.1	2.3		
Fannie Mae	3.6	6.8	na	na	3.7	3.6	3.6	3.8	4.1	4.5	4.9	na	na	na	6.3	na	1.5	3.9	3.3	3.8		
Goldman Sachs & Co.	3.6	na	na	na	3.9	na	na	4.0	4.2	4.4	4.6	na	na	na	na	na	1.5	3.0	3.1	3.0		
Nomura Securities, Inc.	3.6	6.8	na	na	na	na	na	3.5	3.8	4.2	na	na	na	na	na	na	0.9	1.8	2.6	2.2		
Comerica Bank	3.5	6.7	3.5	na	3.4	3.4	3.2	3.1	3.3	3.8	4.1	5.1	5.8	na	5.8	na	1.0	3.2	3.4	3.3		
Moody's Analytics	3.5	6.7	3.5	3.5	3.3	3.4	3.6	3.7	3.9	4.1	4.6	5.6	6.6	4.2	6.3	na	1.5	2.5	3.1	2.5		
Via Nova Investment Mgt.	3.5	6.7	3.5	3.5	3.4	3.4	3.4	3.0	3.2	3.3	L	3.7	L	4.4	4.9	3.1	L	5.7				
BMO Capital Markets	3.4	6.5	3.4	3.3	3.4	3.4	3.2	3.1	3.5	3.8	4.3	5.3	6.3	4.4	6.3	108.9	1.6	2.9	3.4	3.2		
DePrince & Assoc.	3.4	6.6	3.4	3.4	3.4	3.4	3.1	3.0	3.4	4.0	4.5	5.3	6.1	4.5	6.1	115.0	2.3	2.3	2.6	2.4		
EY-Parthenon	3.4	na	na	na	3.8	na	na	na	na	3.9	na	na	na	na	na	na	1.0	2.2	3.0	2.4		
MacroPolicy Perspectives	3.4	6.6	3.4	3.4	3.3	3.3	3.3	3.3	3.3	4.0	4.2	4.0	L	4.3	L	4.0	6.2					
PNC Financial Services Corp.	3.4	6.5	3.3	na	3.1	3.2	3.3	3.4	3.7	4.1	4.5	na	6.3	na	6.1	121.0	H	1.6	2.5	3.6	3.0	
Regions Financial Corporation	3.4	6.8	3.5	3.5	3.5	3.5	3.4	3.4	3.6	4.2	4.6	5.0	5.7	4.3	6.2	111.3	1.0	2.6	2.6	2.6		
Economist Intelligence Unit	3.3	6.5	na	na	3.4	3.5	3.5	na	na	4.2	na	na	na	na	na	na	2.1	na	2.2	na		
The Lonski Group	3.3	6.4	3.3	3.3	3.3	3.1	3.1	3.0	3.7	3.7	4.0	4.8	5.5	3.8	6.1	111.9	1.9	2.2	1.6	1.6		
ING	3.1	na	na	na	na	na	na	3.2	3.7	4.3	4.6	na	na	na	na	na	1.2	na	na	na		
Wells Fargo	3.1	6.3	3.2	3.1	3.2	3.2	3.3	3.5	3.5	3.9	4.5	5.1	6.1	4.5	6.1	na	2.7	H	3.1	3.6	3.1	
Loomis, Sayles & Company	2.9	6.1	2.9	L	2.9	L	2.9	2.8	2.8	2.9	L	3.4	3.7	L	4.4	5.1	3.6	5.8				
TS Lombard	2.9	6.0	2.9	L	2.9	L	2.8	2.9	3.5	4.0	4.6	H	5.3	H	5.4	H	6.1	7.0	5.3	7.1		
Georgia State University	2.6	L	5.7	L	na	na	2.5	L	2.7	L	2.4	L	2.9	L	3.5	3.9	4.6	5.3	na	5.6	L	
May Consensus	3.6	6.7	3.6	3.6	3.6	3.5	3.5	3.5	3.7	4.1	4.4	5.2	6.0	4.3	6.3	112.6	1.4	2.6	2.8	2.6		
Top 10 Avg.	4.0	7.1	4.0	3.9	4.0	4.0	3.9	4.0	4.1	4.5	4.8	5.6	6.5	4.7	6.7	115.1	2.1	3.3	3.5	3.5		
Bottom 10 Avg.	3.1	6.3	3.3	3.3	3.1	3.1	3.1	3.0	3.3	3.7	4.0	4.7	5.4	3.9	5.9	110.1	0.7	1.9	1.9	1.9		
Standard Deviation	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.7	0.7	0.4	4.3	0.6	0.7	0.8	0.8		
April Consensus	3.8	7.0	3.8	3.9	3.8	3.8	3.8	3.8	4.0	4.2	4.5	5.2	6.1	4.3	6.5	116.8	1.9	2.5	2.6	2.5		
Number of Forecasts Changed From A Month Ago:																						
Down	20	15	13	11	16	16	16	24	21	19	15	10	9	7	15	17	28	11	8	10		
Same	13	13	10	7	11	9	11	9	11	11	8	4	5	4	6	1	5	8	10	6		
Up	4	2	2	2	5	2	1	1	1	6	9	8	7	7	6	0	3	15	17	18		
Diffusion Index	28%	28%	28%	28%	33%	24%	23%	16%	20%	32%	41%	45%	45%	50%	33%	3%	15%	56%	63%	62%		

Key Assumptions

[illegible]

MAY 1, 2025 ■ BLUE CHIP FINANCIAL FORECASTS ■ 9

Third Quarter 2026

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	-----Percent Per Annum -- Average For Quarter-----															Avg. For --Qtr.-- A. Fed's Adv Fgn Econ \$ Index	----- (Q-Q % Change) ----- ----- (SAAR) -----											
	-----Short-Term-----					--Intermediate-Term--					-----Long-Term-----						B. Real GDP	C. Price Index	D. Cons. Price Index	E. PCE Price Index								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15													
	Federal Funds Rate	Prime Bank Rate	SOFR Rate	Com. Paper 1-Mo.	Treas. Bills 3-Mo.	Treas. Bills 6-Mo.	Treas. Bills 1-Yr.	Treas. Notes 2-Yr.	Treas. Notes 5-Yr.	Treas. Notes 10-Yr.	Treas. Bond 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Local Bonds	Home Mtg. Rate													
	Rate	Rate																										
NatWest Markets	4.3	H	7.5	H	3.2	4.4	H	4.1	H	4.1	H	4.0	H	na	na	na	na	na	2.0	1.9	2.0	1.9						
Bank of America	3.9		na		na		na		na		na		na		na	na	na	na	1.8	2.4	2.1	2.3						
The Northern Trust Company	3.9	7.0	3.8		3.9		3.7		3.8		3.9	4.1	4.4	4.6	5.0	6.0	6.7	5.1	7.1	107.0	1.9	1.8	2.3	2.0				
Santander Capital Markets	3.8	7.0	3.8		3.8		3.8		3.9		4.0	4.0	4.2	4.6	5.5	6.4	4.7	6.4		2.6	2.4	2.6	2.4					
Scotiabank Group	3.8		na		3.6		na		na		3.5	3.9	4.3	4.9	na	na	na	na	na	1.6	2.1	2.2	2.0					
Action Economics	3.6	6.8	4.0	H	3.6		3.6		3.5		3.4	3.4	3.5	3.6	4.0	4.7	5.4	3.7	6.2	113.0	2.1	2.7	2.6	2.3				
Chmura Economics & Analytics	3.6	6.8	3.6		3.6		3.7		3.7		3.8	3.8	3.8	4.0	4.2	4.9	na	na	5.9	na	2.9	2.3	2.4	2.1				
Goldman Sachs & Co.	3.6		na		na		3.9		na		na	4.0	4.3	4.5	4.7	na	na	na	na	na	2.0	2.1	2.3	2.2				
Nomura Securities, Inc.	3.6	6.8		na	na		na		na		3.5	3.8	4.2	na	na	na	na	na	na	na	1.8	1.4	L	2.2	2.0			
Chan Economics	3.5	6.5	3.5		3.5		3.5		3.3		3.2	3.3	3.5	3.8	4.6	5.4	3.4	5.8		111.2	1.5	2.0	2.3	2.1				
Roberts Capital Advisors	3.5	6.7	3.5		3.5		3.6		3.8		3.8	3.7	3.8	4.2	4.7	5.2	5.9	4.2	6.7	116.0	2.0	2.4	2.7	2.4				
Via Nova Investment Mgt.	3.5	6.7	3.5		3.5		3.4		3.4		3.4	3.7	3.8	4.0	4.4	5.1	5.6	3.8	6.3	113.0	2.5	2.0	2.0	2.0				
Barclays	3.4		na		na		na		na		na		na		na	na	na	na	na	na	1.5	2.4	2.3	2.1				
Daiwa Capital Markets America	3.4	6.5		na	na		3.4		na		3.4	na	na	3.9	4.3	na	na	na	5.9	115.0	1.9	2.5	2.5	2.3				
Fannie Mae	3.4	6.5		na	na		3.6		3.6		3.7	3.9	4.2	4.6	4.9	na	na	na	6.2	na	2.0	2.7	2.2	2.1				
MacroFin Analytics & Rutgers Bus School	3.4	6.5	3.4		3.5		3.3		3.6		3.8	3.8	4.1	4.4	5.3	5.9	4.1	6.5		111.4	1.0	L	3.0	3.2	3.2			
PNC Financial Services Corp.	3.4	6.5	3.3		na		3.1		3.2		3.3	3.5	3.7	4.1	4.6	na	6.2	na	6.2	119.2	H	2.6	1.9	2.4	2.1			
TS Lombard	3.4	6.5	3.4		3.4		3.3		3.4	H	4.5	H	4.8	H	5.5	H	5.6	6.4	7.2	5.5	100.0	L	2.0	3.8	3.8	H	3.8	H
Economist Intelligence Unit	3.3	6.5		na	na		3.4		3.4		3.5		na	na	na	na	na	na	na	na	1.8	na	2.1		na			
Regions Financial Corporation	3.3	6.8	3.3		3.3		3.4		3.4		3.4	3.7	4.4	4.8	5.2	5.9	4.4	6.3		111.9	2.4	2.2	2.5		2.2			
S&P Global Market Intelligence	3.3	6.5	3.3		na		3.1		3.3		3.4	3.3	3.6	4.0	4.3	na	na	na	6.0	na	1.6	1.9	2.6		2.0			
Societe Generale	3.3	6.5	3.3		na		3.2		3.1		3.1	3.4	3.7	4.3	4.6	na	na	na	na	na	na	1.7	2.0	2.6		2.3		
Comerica Bank	3.1	6.2	3.1		na		3.1		3.1		2.9	3.2	3.7	3.9	5.0	5.7	na	5.8		na	1.6	2.2	2.1		2.3			
DePrince & Assoc.	3.1	6.3	3.1		3.3		3.2		3.1		2.9	2.7	3.2	3.9	4.4	5.3	6.0	4.4	5.9	115.0	2.5	2.2	2.5		2.3			
ING	3.1		na		na		na		na		3.2	3.6	4.0	4.4	na	na	na	na	na	na	2.2	na	na		na			
J.P. Morgan Chase	3.1		na		na		na		na		na	na	na	na	na	na	na	na	na	na	2.5	2.0	2.3		2.0			
KPMG	3.1	6.2	3.0		3.1		2.9		3.2		3.4	3.5	3.8	4.1	4.4	5.0	6.6	na	6.5	na	1.6	3.0	3.8	H	3.2			
Wells Fargo	3.1	6.3	3.2		3.1		3.2		3.2		3.4	3.7	3.8	4.1	4.6	5.3	6.3	4.7	6.2	na	2.5	2.0	2.3		2.0			
Moody's Analytics	3.0	6.2	3.0		3.0		2.9		3.0		3.3	3.5	3.9	4.3	4.7	5.8	6.8	4.3	6.3	na	2.0	1.7	1.8		1.7	L		
Naroff Economics LLC	3.0	6.0	3.1		3.2		3.0		3.1		3.1	3.2	3.4	3.8	4.0	na	na	3.9	5.4	115.5	3.0	H	2.2	1.9		1.9		
BMO Capital Markets	2.9	6.0	2.9		2.9		2.8		2.9		2.9	2.9	3.4	3.8	4.2	5.2	6.2	4.3	6.3	107.8	1.8		2.3	2.5		2.3		
EY-Parthenon	2.9		na		na		3.5		na		na	na	na	3.8	na	na	na	na	na	na	2.0	1.7	1.5	L	1.7	L		
Oxford Economics	2.9	6.0	2.9		na		2.9		2.9		3.0	3.1	3.6	4.0	4.4	4.7	na	na	6.1	116.0	2.6	2.3	2.1		2.9			
The Lonski Group	2.8	6.0	2.8		2.8		2.8		2.8		2.9	3.3	3.3	L	3.5	L	4.3	4.9	3.2	L	113.5	2.1	1.7	2.1		2.4		
MacroPolicy Perspectives	2.6	5.8	2.6		2.6		2.5		2.5		2.5	L	2.5	L	4.0	4.2	3.2	L	3.5	L	112.4	1.5	na	na		na		
Georgia State University	2.4	5.5	L		na		na		2.2	L	2.4	L	2.5	2.6	3.1	3.7	4.0	4.9	5.6	na	na	1.6	4.1	H	2.3		3.5	
Loomis, Sayles & Company	2.3	L	5.5	L	2.3	L	2.3		2.4	L	2.4	L	2.5	L	2.8	3.3	L	3.5	L	113.4	2.0	1.9		2.6		2.1		
May Consensus	3.3	6.4	3.3	3.3	3.2	3.3	3.3	3.4	3.7	4.1	4.4	5.1	5.9	4.3	6.2	112.4	2.0	2.3	2.4	2.3								
Top 10 Avg.	3.8	6.9	3.6	3.7	3.7	3.7	3.8	3.9	4.1	4.5	4.9	5.7	6.6	4.8	6.7	115.0	2.6	2.9	2.9	2.8								
Bottom 10 Avg.	2.8	5.9	2.9	3.0	2.7	2.8	2.8	2.9	3.2	3.6	3.9	4.5	5.3	3.8	5.7	110.0	1.5	1.8	2.0	1.9								
Standard Deviation	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.7	0.9	0.7	0.5	4.2	0.4	0.6	0.5	0.5								
April Consensus	3.6	6.7	3.5	3.6	3.4	3.5	3.5	3.7	3.9	4.1	4.5	5.2	6.1	4.2	6.3	116.2	2.0	2.2	2.4	2.2								
Number of Forecasts Changed From A Month Ago:																												
Down	19	14	12	11	14	16	16	18	16	11	9	6	7	6	9	15	12	10	8	11								
Same	15	14	11	7	15	10	10	10	10	16	9	10	7	6	13	2	13	9	16	9								
Up	3	2	2	2	3	1	2	2	3	5	11	6	7	6	5	1	9	13	10	13								
Diffusion Index	28%	30%	30%	28%	33%	22%	25%	23%	28%	41%	53%	50%	50%	50%	43%	11%	46%	55%	53%	53%								

International Interest Rate And Foreign Exchange Rate Forecasts

Blue Chip Forecasters	Fed Fund Target Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	4.13	3.88	3.88
BMO Capital Markets	4.13	3.88	3.13
ING Financial Markets	4.38	3.88	3.13
Moody's Analytics	4.37	4.17	3.59
Nomura Securities	4.38	4.38	3.63
Northern Trust	4.38	4.13	3.88
Oxford Economics	4.38	4.38	3.38
Economist Intelligence Unit	4.13	3.63	3.38
Scotiabank	4.38	4.38	3.88
TS Lombard	3.90	3.13	2.88
Wells Fargo	4.13	3.63	3.13
May Consensus	4.24	3.95	3.44
High	4.38	4.38	3.88
Low	3.90	3.13	2.88
Last Months Avg.	4.32	4.14	3.92

Blue Chip Forecasters	Policy-Rate Balance Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	0.75	0.75	1.00
BMO Capital Markets	0.50	0.50	0.50
ING Financial Markets	0.75	0.75	1.00
Moody's Analytics	0.54	0.75	0.75
Nomura Securities	0.50	0.50	0.75
Northern Trust	0.75	0.75	1.00
Oxford Economics	0.50	0.50	0.50
S&P Global Market Intelligence	--	--	--
Economist Intelligence Unit	0.50	0.50	0.50
Scotiabank	--	--	--
TS Lombard	0.25	0.35	0.50
Wells Fargo	0.50	0.75	0.75
May Consensus	0.55	0.61	0.73
High	0.75	0.75	1.00
Low	0.25	0.35	0.50
Last Months Avg.	0.58	0.72	0.92

Blue Chip Forecasters	Official Bank Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	4.00	3.50	3.50
BMO Capital Markets	4.25	4.00	4.00
ING Financial Markets	4.25	4.00	3.50
Moody's Analytics	4.35	4.10	3.60
Nomura Securities	4.25	4.00	3.75
Northern Trust	4.25	4.00	3.50
Oxford Economics	4.35	4.10	3.60
S&P Global Market Intelligence	--	--	--
Economist Intelligence Unit	3.88	3.63	3.38
Scotiabank	4.00	3.75	3.25
TS Lombard	4.00	3.50	4.50
Wells Fargo	4.25	4.00	3.50
May Consensus	4.17	3.87	3.64
High	4.35	4.10	4.50
Low	3.88	3.50	3.25
Last Months Avg.	4.30	4.02	3.70

Blue Chip Forecasters	SNB Policy Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	0.25	0.25	--
BMO Capital Markets	0.25	0.25	0.25
ING Financial Markets	0.00	0.00	0.00
Moody's Analytics	0.25	0.25	0.25
Nomura Securities	0.00	-0.25	-0.25
Northern Trust	0.00	0.00	0.00
Oxford Economics	0.17	0.00	0.00
S&P Global Market Intelligence	--	--	--
Economist Intelligence Unit	0.33	0.28	0.25
Scotiabank	--	--	--
TS Lombard	1.00	1.00	1.25
Wells Fargo	0.25	0.25	0.25
May Consensus	0.25	0.20	0.22
High	1.00	1.00	1.25
Low	0.00	-0.25	-0.25
Last Months Avg.	0.31	0.31	0.34

Blue Chip Forecasters	O/N MMkt Financing Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	2.50	2.25	--
BMO Capital Markets	2.50	2.25	2.00
ING Financial Markets	2.50	2.25	2.25
Moody's Analytics	2.47	2.08	2.00
Nomura Securities	2.50	2.50	2.50
Northern Trust	2.50	2.25	2.25
Oxford Economics	2.75	2.75	2.75
S&P Global Market Intelligence	--	--	--
Economist Intelligence Unit	2.49	2.30	1.90
Scotiabank	2.75	2.75	2.25
TS Lombard	2.50	2.25	2.75
Wells Fargo	2.50	2.25	2.00
May Consensus	2.54	2.35	2.27
High	2.75	2.75	2.75
Low	2.47	2.08	1.90
Last Months Avg.	2.68	2.55	2.53

United States			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
4.00	4.00	--	
4.14	4.01	3.75	
4.75	4.50	4.25	
4.12	4.10	4.13	
4.20	4.15	4.20	
4.35	4.55	4.60	
4.28	4.20	4.07	
4.40	4.30	4.10	
4.15	4.25	4.25	
4.45	4.65	5.25	
4.00	3.85	3.90	
4.26	4.23	4.25	
4.75	4.65	5.25	
4.00	3.85	3.75	
4.40	4.45	4.55	

Japan			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.52	1.55	--	
1.38	1.27	1.20	
1.50	1.50	1.75	
1.33	1.45	1.50	
--	--	--	
1.30	1.35	1.40	
1.31	1.31	1.34	
--	--	--	
1.22	1.20	1.17	
--	--	--	
1.30	1.20	1.10	
1.35	1.45	1.40	
1.36	1.36	1.36	
1.52	1.55	1.75	
1.22	1.20	1.10	
1.48	1.56	1.64	

United Kingdom			
10 Yr. Gilt Yields %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
4.70	4.72	--	
4.60	4.54	4.44	
4.60	4.60	4.40	
4.45	4.42	4.36	
--	--	--	
4.50	4.45	4.40	
4.67	4.66	4.47	
--	--	--	
4.30	4.10	3.70	
--	--	--	
4.50	4.25	4.75	
4.45	4.35	4.25	
4.53	4.45	4.35	
4.70	4.72	4.75	
4.30	4.10	3.70	
4.62	4.58	4.51	

Switzerland			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
--	--	--	
--	--	--	
0.40	0.50	0.80	
0.69	0.76	0.87	
--	--	--	
0.40	0.40	0.50	
0.51	0.53	0.60	
--	--	--	
--	--	--	
--	--	--	
0.50	0.60	0.70	
--	--	--	
0.50	0.56	0.69	
0.69	0.76	0.87	
0.40	0.40	0.50	
0.58	0.67	0.74	

Canada			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
--	--	--	
2.99	2.91	2.74	
3.00	3.25	3.75	
2.84	2.98	3.36	
--	--	--	
3.30	3.25	3.20	
3.08	3.20	3.28	
--	--	--	
2.65	2.80	3.00	
3.05	3.00	3.20	
3.25	3.45	4.05	
3.10	2.95	2.80	
3.03	3.09	3.26	
3.30	3.45	4.05	
2.65	2.80	2.74	
3.09	3.15	3.32	

Fed's AFE \$ Index			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
--	--	--	
111.4	110.3	108.3	
115.5	116.2	114.9	
--	--	--	
--	--	--	
113.5	111.0	109.0	
117.2	116.8	116.6	
--	--	--	
--	--	--	
120.0	110.0	100.0	
--	--	--	
115.5	112.9	109.8	
120.0	116.8	116.6	
111.4	110.0	100.0	
119.4	119.1	115.9	

Yen per US\$			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
142.0	142.7	--	
142.5	141.0	139.3	
158.0	158.0	155.0	
149.0	146.7	141.2	
142.5	140.0	--	
142.0	139.0	137.0	
148.7	150.5	149.7	
144.2	141.8	137.2	
135.0	131.0	126.5	
140.0	135.0	130.0	
145.0	135.0	125.0	
--	--	--	
144.4	141.9	137.9	
158.0	158.0	155.0	
135.0	131.0	125.0	
149.9	149.0	145.2	

US\$ per Pound Sterling			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.43	1.43	--	
1.32	1.33	1.33	
1.31	1.29	1.29	
1.25	1.24	1.24	
1.30	1.30	--	
1.31	1.33	1.35	
1.28	1.29	1.29	
1.26	1.26	1.27	
1.23	1.22	1.21	
1.33	1.33	1.37	
1.25	1.20	1.12	
--	--	--	
1.30	1.29	1.27	
1.43	1.43	1.37	
1.23	1.20	1.12	
1.27	1.26	1.25	

CHF per US\$			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
0.81	0.82	--	
0.82	0.81	0.80	
0.91	0.85	0.85	
0.87	0.86	0.86	
0.83	0.84	--	
0.83	0.82	0.81	
0.85	0.85	0.85	
0.85	0.86	0.86	
0.88	0.86	0.84	
0.81	0.81	0.78	
0.90	0.90	0.90	
--	--	--	
0.85	0.84	0.84	
0.91	0.90	0.90	
0.81	0.81	0.78	
0.89	0.89	0.88	

C\$ per US\$			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.45	1.44	--	
1.41	1.41	1.39	
1.39	1.40	1.38	
1.46	1.47	1.46	
1.40	1.39	--	
1.39	1.37	1.35	
1.44	1.44	1.43	
1.48	1.50	1.54	
1.39	1.38	1.38	
1.38	1.38	1.36	
1.30	1.30	1.30	
--	--	--	
1.41	1.41	1.40	
1.48	1.50	1.54	
1.30	1.30	1.30	
1.45	1.46	1.46	

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International Interest Rate And Foreign Exchange Rate Forecasts

Blue Chip Forecasters	Official Cash Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	3.85	3.60	--
BMO Capital Markets	3.60	3.35	3.35
ING Financial Markets	3.85	3.60	3.35
Moody's Analytics	3.98	3.85	3.35
Nomura Securities	3.85	3.60	3.60
Northern Trust	3.60	3.60	3.60
Oxford Economics	3.97	3.73	3.35
S&P Global Market Intelligence	--	--	--
Economist Intelligence Unit	3.85	3.60	3.10
Scotiabank	--	--	--
TS Lombard	3.75	3.25	3.75
Wells Fargo	3.85	3.60	3.35
May Consensus	3.82	3.58	3.42
High	3.98	3.85	3.75
Low	3.60	3.25	3.10
Last Months Avg.	4.00	3.83	3.66

Australia			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
--	--	--	
--	--	--	
4.25	4.50	5.00	
4.31	4.22	4.10	
--	--	--	
4.10	4.00	3.90	
4.29	4.20	4.19	
--	--	--	
3.80	3.80	3.70	
--	--	--	
4.50	4.70	5.30	
--	--	--	
4.21	4.24	4.37	
4.50	4.70	5.30	
3.80	3.80	3.70	
4.38	4.42	4.55	

US\$ per A\$			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
0.62	0.61	--	
--	--	--	
--	--	--	
0.62	0.62	0.64	
0.63	0.64	0.65	
0.64	0.65	--	
0.63	0.65	0.60	
0.62	0.62	0.64	
0.64	0.64	0.64	
0.64	0.65	0.65	
0.64	0.66	0.68	
0.65	0.65	0.65	
--	--	--	
0.63	0.64	0.64	
0.65	0.66	0.68	
0.62	0.61	0.60	
0.63	0.63	0.65	

Blue Chip Forecasters	Main Refinancing Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	1.90	1.40	1.40
BMO Capital Markets	2.00	1.75	1.75
ING Financial Markets	2.00	1.75	1.75
Moody's Analytics	2.41	1.97	1.90
Nomura Securities	1.75	1.50	1.50
Northern Trust	1.90	1.90	1.90
Oxford Economics	2.36	2.15	2.15
S&P Global Market Intelligence	--	--	--
Economist Intelligence Unit	2.00	1.75	1.75
Scotiabank	1.90	1.90	1.90
TS Lombard	2.00	1.50	2.00
Wells Fargo	2.00	1.75	1.75
May Consensus	2.02	1.76	1.80
High	2.41	2.15	2.15
Low	1.75	1.40	1.40
Last Months Avg.	2.33	2.15	2.07

Euro area

US\$ per Euro			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.16	1.15	--	
1.13	1.14	1.16	
1.13	1.11	1.12	
1.10	1.11	1.13	
1.13	1.14	--	
1.12	1.14	1.16	
1.09	1.10	1.10	
1.10	1.10	1.10	
1.05	1.06	1.06	
1.14	1.14	1.18	
1.08	1.10	1.25	
--	--	--	
1.11	1.12	1.14	
1.16	1.15	1.25	
1.05	1.06	1.06	
1.06	1.06	1.06	

	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	2.83	2.93	--	--	--	--	--	--	--	--	--	--
BMO Capital Markets	2.56	2.40	2.24	--	--	--	--	--	--	--	--	--
ING Financial Markets	2.50	2.60	2.80	3.25	3.35	3.55	3.65	3.75	3.95	3.15	3.25	3.45
Moody's Analytics	2.59	2.61	2.64	3.22	3.15	3.09	3.76	3.80	3.78	3.26	3.25	3.23
Northern Trust	2.60	2.55	2.50	3.30	3.25	3.20	3.70	3.65	3.60	3.25	3.20	3.15
Oxford Economics	2.67	2.76	2.80	3.46	3.57	3.63	3.94	4.05	4.21	3.46	3.55	3.64
Economist Intelligence Unit	2.20	1.70	2.05	3.30	3.40	3.39	3.72	3.80	3.79	2.85	2.50	2.70
TS Lombard	2.65	2.85	3.45	3.30	3.60	4.20	3.65	3.85	4.45	3.20	3.40	4.00
Wells Fargo	2.35	2.25	2.20	--	--	--	--	--	--	--	--	--
May Consensus	2.55	2.52	2.59	3.31	3.39	3.51	3.74	3.82	3.96	3.20	3.19	3.36
High	2.83	2.93	3.45	3.46	3.60	4.20	3.94	4.05	4.45	3.46	3.55	4.00
Low	2.20	1.70	2.05	3.22	3.15	3.09	3.65	3.65	3.60	2.85	2.50	2.70
Last Months Avg.	2.75	2.79	2.86	3.44	3.51	3.58	3.83	3.92	4.03	3.37	3.46	3.56

	Consensus Forecasts			
	10-year Bond Yields vs U.S. Yield			
	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-2.94	-2.90	-2.87	-2.89
United Kingdom	0.15	0.27	0.22	0.10
Switzerland	-3.87	-3.76	-3.67	-3.56
Canada	-1.12	-1.23	-1.14	-0.99
Australia	-0.10	-0.05	0.00	0.12
Germany	-1.82	-1.71	-1.72	-1.67
France	-1.09	-0.95	-0.85	-0.74
Italy	-0.72	-0.52	-0.42	-0.29
Spain	-1.19	-1.06	-1.04	-0.89

	Consensus Forecasts			
	Policy Rates vs U.S. Target Rate			
	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-3.88	-3.69	-4.56	-2.72
United Kingdom	0.13	-0.08	-0.08	0.20
Switzerland	-4.13	-3.99	-3.75	-3.22
Canada	-1.63	-1.70	-1.60	-1.18
Australia	-0.28	-0.43	-0.37	-0.02
Euro area	-1.98	-2.22	-2.20	-1.65

Viewpoints:

A Sampling of Views on the Economy, Financial Markets and Government Policy
Excerpted from Recent Reports Issued by our Blue Chip Panel Members and Others

US Economic Analyst: The Trade War and the Risk of Production Disruptions

■ Our soft GDP growth forecast of 0.5% for 2025 Q4/Q4 largely reflects the negative effects of tariffs through standard channels—tariffs function like a tax hike, tighten financial conditions, and increase uncertainty for businesses. This Analyst explores other potential disruptive effects on production and employment that could arise if US producers cease to be competitive because of higher input costs, face prohibitive retaliatory tariffs, or lose access to rare earth elements.

■ The first risk arises from higher production costs. Tariff rates will rise sharply for some imported inputs, which we estimate could raise US production costs by 5-15% in some industries, a large share of their current operating surplus. This could make them less competitive with foreign producers, especially in foreign markets where US tariffs on final goods would not protect them. Some US companies might question whether it makes sense to produce at these costs if they fear that foreign competitors will undersell them or that consumers will not accept price hikes commensurate with cost increases. Trade policy volatility heightens these risks because if tariffs are reversed and prices fall, producers would likely have to absorb the tariff costs they incurred.

■ The second risk is very high foreign retaliatory tariffs. While most countries' retaliation against US exports has been restrained so far, China's 125% tariff is likely high enough to block most US exports. We estimate that tariffed US exports to China amount to 0.5% of US GDP and support over 750,000 jobs, including many in the agriculture, electronics, transportation equipment, chemicals, and machinery industries. While this capacity could be redirected to other markets or products eventually, the hit from lost exports to China could be disruptive in the short run.

■ The third risk, loss of access to some rare earth elements, is the hardest to assess because it is not yet clear how tightly China's new restrictions will limit exports to the US. But if exports were to stop at some point, US production of a range of products that use rare earths would be at risk.

■ The potential impact of these risks and how companies might react are both highly uncertain. For insight, we survey our sector analysts about how companies they cover are likely to respond. Concerningly, roughly half of them expect trade-war related production disruptions and layoffs.

■ Recent news reports indicate that both US and Chinese officials are concerned that the current very high tariff rates could have disruptive unintended consequences and would like to step back, as our forecast assumes they will. But if they don't, our analysis suggests that there would be further downside risk to our GDP forecast. To monitor these risks, we introduce trade war trackers that compare industrial production and payrolls in the best- and worst-affected industries.

The Trade War and the Risk of Production Disruptions

Our soft GDP growth forecast of 0.5% for 2025 Q4/Q4 reflects a nearly 2pp hit from higher tariffs. In past work, we have analyzed the effects of tariffs through standard channels—tariffs function like a tax hike, tighten financial conditions, and increase uncertainty for businesses, though they will likely also reduce the trade deficit somewhat. These effects are familiar to economists and fairly straightforward to reevaluate as trade policy and the effective tariff rate evolve—for example, the tax-like impact on real income and spending would scale up or down if the tariff rate rose or fell.

A more difficult question is whether the trade war could have disruptive effects on the production side of the economy, making some US companies' current activities economically unviable. And if so, could this cause layoffs that lead to further declines in demand? This question has become more serious as tariffs have reached very high rates, potentially beyond thresholds where companies or consumers can afford to just pay the tariff and behave mostly as usual. The potential non-linear effects from such short-term disruptions could be partially additive to the standard channels that we have analyzed in past research.

This Analyst explores potential disruptive effects that could arise if US producers cease to be competitive because of higher input costs, face high foreign retaliatory tariffs, or lose access to rare earth elements.

Potential Disruptions from Tariff-Driven Cost Increases

The first risk arises from tariff-driven increases in US companies' production costs. Tariff rates will rise sharply for some imported inputs, especially those that US producers source mainly from China or those hit by 25% sectoral tariffs. We estimate that this could raise production costs by 5-15% in some of the worst-affected industries.

We consider two measures of where these cost increases might create challenges for US producers. The first measure is the share of an industry's current operating surplus that would be eroded if companies had to absorb tariff-driven increases in production costs. In industries that depend heavily on tariffed inputs and have lower operating surplus, especially motor vehicle production and other industries that use industrial metals, the share can be high, though it is only above 100% in a few industries.

We consider three possible tariff scenarios: one in which the current 145% tariff on China remains in place; one in which it eventually comes down to 54%, the initial 20% plus the initial 34% "reciprocal" tariff (our baseline); and one in which the tariff rate comes down and some imported inputs are rerouted through or substituted to lower-tariff countries. We estimate that in the status quo tariff scenario, tariff costs represent more than half of operating surplus in industries accounting for 1% of total US gross output.

The second measure we use is the impact of tariffs on the competitiveness of US producers, either in the domestic market against imports from the countries where they are currently sourced, or in foreign markets. In the domestic market, some US industries—mainly those where most US imports come from China—benefit much more from the protection offered by US tariffs on final goods than they are hurt by the tariffs on their imported inputs. In foreign markets, foreign retaliatory tariffs coupled with US tariff-driven increases in input costs for US but not foreign producers substantially reduce the competitiveness of some US industries.

In some of the worst-affected industries, US companies might question whether it makes sense to produce at tariff-inflated costs if they fear that foreign competitors will undersell them or that consumers will not accept price hikes commensurate with costs increases. The combination of high tariff rates and high trade policy volatility increases this risk because if tariffs are soon reversed, prices of final goods would probably come back down and US producers would likely have to absorb the temporary production cost spike from the tariffs. A similar concern has already made some US retailers reluctant to import foreign consumer goods facing high tariff rates and risk having to absorb the cost.

Potential Disruptions from Prohibitively High Foreign Retaliatory Tariffs

The second risk is prohibitively high foreign retaliatory tariffs. We have allowed for some retaliation in our estimates of the impact of tariffs on the trade deficit, but China's 125% tariff—like the US's 145% tariff—is so high that it will likely block most direct US exports, which could have more disruptive effects for any US producers that depend heavily on the Chinese export market.

Tariffed US exports to China amount to about 0.3% of US gross output (or 0.5% of US GDP). Using the Bureau of Labor Statistics' employment requirements estimates for each industry derived from the input-output tables, we estimate that these exports support over 750,000 jobs, including many in the agriculture, computers and electronics, transportation equipment, chemicals, and machinery industries. While this capacity could be redirected to other markets or products eventually, the hit from the Chinese export market could be disruptive in the short run and create some employment risk in these industries.

Other than China, most countries' retaliation against US exports has been restrained so far. This is likely partly because many are waiting to see if the White House reverses more of its tariffs before provoking it, and partly because the tariff rates are so high—unlike in most lower-stakes recent trade conflicts—that countries have to think seriously about the macroeconomic desirability of retaliation.

Potential Disruptions from China's Rare Earth Export Restrictions

The third risk is the potential loss of access to rare earth elements following the Chinese government's imposition on April 4 of restrictions on rare earth exports, which will now require a license. It is not yet clear how tightly the government will restrict exports, but strict limits on exports to the US could disrupt production of a range of products that require rare earths where China dominates global production.

It is difficult to confidently estimate the potential impact on US output and employment both because many of the products that require rare earths account for only a fraction of the six-digit NAICS industries into which they fall and because some producers might be able to rely on their inventories of rare earths for a while or find substitute materials. We therefore consider illustrative scenarios where 10% or 25% of total production in the partially affected industries is disrupted, but even this, we estimate, could affect 200,000-500,000 jobs.

Insights from Our Sector Analysts on the Risks of US Production Disruptions and Layoffs

It is hard to know how companies will respond to the three risks above. They might continue business as usual, halt production, seek tariff exemptions, or look for alternative inputs, new export markets, or other ways to adapt. For insight, we surveyed our sector analysts about how companies they cover are likely to respond. Concerningly, roughly half of them expect trade-war related production disruptions and layoffs. The most common source of concern was potential future retaliatory tariffs, suggesting that the risks from further escalation around the paused reciprocal tariffs are serious.

Tracking Trade War Risks

Recent news reports and comments from White House officials indicate that both US and Chinese officials are concerned that the current very high tariff rates could have disruptive unintended consequences and would like to step back, as our forecast assumes they will. If they don't, our analysis above suggests that there would be further downside risk to our GDP forecast.

To monitor these risks and to quantify them in at least a very basic way, we introduce trade war trackers that compare industrial production and payrolls in the best- and worst-affected industries, as determined by our calculations. These measures are noisy and had quite different pre-trade war trends—industrial production has been falling in the industries that stand to benefit and rising in the industries likely to be hurt—but should give a sense of any impact over the remainder of the year.

We can also monitor the impact of China's rare earth export licenses by tracking US rare earth import volumes and prices from China and from the rest of the world. Prices rose sharply when China imposed export restrictions in the early 2010s, and they should give an early indication of potential shortages.

David Mericle, Elsie Peng and Jessica Rindels (Goldman Sachs)

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Special Questions:

1. a. At what FOMC meeting will the next fed funds rate (FFR) cut occur?

<u>May 2025</u>	3%	<u>Jun 2025</u>	31%	<u>Jul 2025</u>	19%	<u>Later</u>	47%	<u>The next move is more likely to be a hike</u>	0%
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b. How much will the next cut be? 25 bps 91% 50 bps 9%

c. By how much will the FFR target decline in total in 2025? 72 bps

d. What is your estimate of the long-term neutral (nominal) fed funds rate? 3.23%

2. What is the probability of a recession occurring over the next 12 months in:

<u>the US</u>	47%	<u>the euro area</u>	47%	<u>the UK</u>	47%
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3. a. What is the probability that US inflation readings turn up meaningfully again over the next 6 months??

<u>Consensus</u>	67%	<u>Top 10</u>	83%	<u>Bot 10</u>	48%	<u>Median</u>	75%
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b. Will the expected increase in tariffs provide a significant boost to US inflation?

<u>No meaningful effect on inflation</u>	0%
<u>A one-time increase in prices only</u>	63%
<u>A longer-lasting pickup in inflation</u>	37%

4. What is the probability that the US experiences stagflation during the next 12 months - that is, an extended period of rising inflation and below-trend GDP growth?

<u>Consensus</u>	58%	<u>Top 10</u>	82%	<u>Bot 10</u>	31%	<u>Median</u>	63%
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5. a. What is your estimate of the US unemployment rate in: Dec 2025 4.7% Jun 2026 4.8%

b. What is your estimate of the long-run natural unemployment rate? 4.0%

6. What is your estimate of the US potential GDP growth rate?

<u>Consensus</u>	1.9%	<u>Top 10</u>	2.2%	<u>Bot 10</u>	1.7%	<u>Median</u>	1.9%
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7. a. When will the next ECB policy rate cut occur?

<u>Jun 2025</u>	95%	<u>Jul 2025</u>	5%	<u>Sep 2025</u>	0%	<u>Later</u>	0%
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b. When will the next BoE Bank rate cut occur?

<u>May 2025</u>	68%	<u>Jun 2025</u>	32%	<u>Aug 2025</u>	0%	<u>Later</u>	0%
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c. When will the Bank of Japan next increase its uncollateralized overnight call rate?

<u>Apr 2025</u>	0%	<u>Jun 2025</u>	9%	<u>Jul 2025</u>	23%	<u>Later</u>	59%	<u>The next move is more likely to be a cut</u>	9%
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8. Given the current global economic backdrop, how is the evolving geopolitical climate - including US trade policy shifts and ongoing ceasefire negotiations in Ukraine and the Middle East - shaping your economic outlook over the next 12-24 months?

<u>Significant downside risk</u>	61%
<u>Moderate downside risk</u>	36%
<u>Neutral impact</u>	4%
<u>Moderate upside risk</u>	0%
<u>Significant upside risk</u>	0%

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Databank:

2025 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	-0.9	0.0	1.5	....	....	....	....	....	....	....	....	....
Auto & Light Truck Sales (b)	15.53	16.07	17.83	....	....	....	....	....	....	....	....	....
Personal Income (a, current \$)	0.6	0.7	0.5	....	....	....	....	....	....	....	....	....
Personal Consumption (a, current \$)	0.0	0.5	0.7	....	....	....	....	....	....	....	....	....
Consumer Credit (e)	2.1	-0.2	....	....	....	....	....	....	....	....	....	....
Consumer Sentiment (U. of Mich.)	71.7	64.7	57.0	52.2	....	....	....	....	....	....	....	....
Household Employment (c)	2234	-588	201	....	....	....	....	....	....	....	....	....
Nonfarm Payroll Employment (c)	111	117	228	....	....	....	....	....	....	....	....	....
Unemployment Rate (%)	4.0	4.1	4.2	....	....	....	....	....	....	....	....	....
Average Hourly Earnings (All, cur. \$)	35.83	35.91	36.00	....	....	....	....	....	....	....	....	....
Average Workweek (All, hrs.)	34.1	34.2	34.2	....	....	....	....	....	....	....	....	....
Industrial Production (d)	1.8	1.5	1.3	....	....	....	....	....	....	....	....	....
Capacity Utilization (%)	77.6	78.2	77.8	....	....	....	....	....	....	....	....	....
ISM Manufacturing Index (g)	50.9	50.3	49.0	....	....	....	....	....	....	....	....	....
ISM Nonmanufacturing Index (g)	52.8	53.5	50.8	....	....	....	....	....	....	....	....	....
Housing Starts (b)	1.361	1.494	1.324	....	....	....	....	....	....	....	....	....
Housing Permits (b)	1.473	1.459	1.467	....	....	....	....	....	....	....	....	....
New Home Sales (1-family, c)	654	674	724	....	....	....	....	....	....	....	....	....
Construction Expenditures (a)	-0.5	0.7	....	....	....	....	....	....	....	....	....	....
Consumer Price Index (nsa, d)	3.0	2.8	2.4	....	....	....	....	....	....	....	....	....
CPI ex. Food and Energy (nsa, d)	3.3	3.1	2.8	....	....	....	....	....	....	....	....	....
PCE Chain Price Index (d)	2.6	2.7	2.3	....	....	....	....	....	....	....	....	....
Core PCE Chain Price Index (d)	2.7	3.0	2.6	....	....	....	....	....	....	....	....	....
Producer Price Index (nsa, d)	3.7	3.2	2.7	....	....	....	....	....	....	....	....	....
Durable Goods Orders (a)	3.4	0.9	9.2	....	....	....	....	....	....	....	....	....
Leading Economic Indicators (a)	-0.2	-0.2	-0.7	....	....	....	....	....	....	....	....	....
Balance of Trade & Services (f)	-130.7	-122.7	....	....	....	....	....	....	....	....	....	....
Federal Funds Rate (%)	4.33	4.33	4.33	....	....	....	....	....	....	....	....	....
3-Mo. Treasury Bill Rate (%)	4.34	4.33	4.34	....	....	....	....	....	....	....	....	....
10-Year Treasury Note Yield (%)	4.63	4.45	4.28	....	....	....	....	....	....	....	....	....

2024 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	-0.8	0.7	0.4	0.1	0.3	-0.1	1.2	-0.2	0.8	0.6	0.6	0.8
Auto & Light Truck Sales (b)	15.03	15.67	15.68	16.03	15.83	14.99	15.83	15.14	15.80	16.12	16.66	16.87
Personal Income (a, current \$)	1.4	0.4	0.6	0.1	0.3	0.2	0.2	0.1	0.3	0.6	0.3	0.3
Personal Consumption (a, current \$)	0.1	0.5	0.7	0.3	0.5	0.3	0.6	0.2	0.7	0.4	0.6	0.9
Consumer Credit (e)	3.5	2.5	0.1	0.9	2.1	0.5	4.2	2.0	1.0	2.6	-1.3	6.4
Consumer Sentiment (U. of Mich.)	79.0	76.9	79.4	77.2	69.1	68.2	66.4	67.9	70.1	70.5	71.8	74.0
Household Employment (c)	66	-177	412	70	-331	-9	64	206	377	-346	-273	478
Nonfarm Payroll Employment (c)	119	222	246	118	193	87	88	71	240	44	261	323
Unemployment Rate (%)	3.7	3.9	3.9	3.9	4.0	4.1	4.2	4.2	4.1	4.1	4.2	4.1
Average Hourly Earnings (All, cur. \$)	34.47	34.54	34.67	34.75	34.89	35.00	35.07	35.23	35.33	35.48	35.61	35.68
Average Workweek (All, hrs.)	34.2	34.3	34.4	34.2	34.3	34.3	34.2	34.3	34.2	34.3	34.3	34.2
Industrial Production (d)	-1.2	-0.1	-0.3	-0.8	0.0	0.9	-0.5	-0.1	-0.7	-0.4	-0.9	0.5
Capacity Utilization (%)	77.2	78.1	77.8	77.7	78.1	78.2	77.6	77.9	77.5	77.1	76.8	77.6
ISM Manufacturing Index (g)	48.9	47.6	49.8	48.8	48.5	48.3	47.0	47.5	47.5	46.9	48.4	49.2
ISM Nonmanufacturing Index (g)	53.2	52.2	51.3	49.6	53.5	49.2	51.4	51.6	54.5	55.8	52.5	54.0
Housing Starts (b)	1.376	1.546	1.299	1.377	1.315	1.329	1.262	1.379	1.355	1.344	1.305	1.526
Housing Permits (b)	1.508	1.563	1.485	1.440	1.399	1.454	1.406	1.470	1.425	1.419	1.493	1.482
New Home Sales (1-family, c)	664	643	683	736	672	672	707	691	726	623	676	720
Construction Expenditures (a)	1.0	0.5	0.1	1.3	0.2	-1.1	0.0	0.9	-0.9	1.6	0.4	0.3
Consumer Price Index (nsa, d)	3.1	3.2	3.5	3.4	3.3	3.0	2.9	2.5	2.4	2.6	2.7	2.9
CPI ex. Food and Energy (nsa, d)	3.9	3.8	3.8	3.6	3.4	3.3	3.2	3.2	3.3	3.3	3.3	3.2
PCE Chain Price Index (d)	2.6	2.6	2.8	2.7	2.6	2.4	2.5	2.3	2.1	2.3	2.5	2.6
Core PCE Chain Price Index (d)	3.1	2.9	3.0	2.9	2.7	2.6	2.7	2.7	2.7	2.8	2.8	2.9
Producer Price Index (nsa, d)	1.0	1.6	2.0	2.3	2.5	2.9	2.4	2.1	2.1	2.8	2.9	3.4
Durable Goods Orders (a)	-3.8	1.2	0.8	0.2	0.1	-6.9	9.8	-0.9	-0.4	0.7	-2.0	-1.8
Leading Economic Indicators (a)	-0.5	0.1	-0.2	-0.6	-0.4	-0.2	-0.5	-0.3	-0.4	-0.3	0.3	-0.1
Balance of Trade & Services (f)	-66.9	-69.3	-68.5	-75.9	-76.6	-74.2	-79.9	-71.4	-85.0	-73.7	-78.2	-98.1
Federal Funds Rate (%)	5.33	5.33	5.33	5.33	5.33	5.33	5.33	5.33	5.13	4.83	4.64	4.48
3-Mo. Treasury Bill Rate (%)	5.45	5.44	5.47	5.44	5.46	5.51	5.43	5.30	4.92	4.72	4.62	4.39
10-Year Treasury Note Yield (%)	4.06	4.21	4.21	4.54	4.48	4.31	4.25	3.87	3.72	4.10	4.36	4.39

(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
			May 1 Construction (Mar) Challenger Employment Report (Apr) ISM Manufacturing (Apr) S&P Global Mfg PMI (Apr) Weekly Jobless Claims	2 Employment Situation (Apr) Manufacturers' Shipments, Inventories & Orders (Mar) BEA Auto Sales (Apr) BEA Truck Sales (Apr) Baker Hughes International Rig Count (Apr)
5 ISM Services PMI (Apr) S&P Global Services PMI (Apr)	6 International Trade (Mar) Public Debt (Apr) Interest on Public Debt (Apr) Kansas City Fed Labor Market Conditions Indicators (Apr) State Imports & Exports (Mar) FOMC Meeting	7 BED (Q3) Consumer Credit (Mar) Treasury Auction Allotments (Apr) Mortgage Applications EIA Crude Oil Stocks FOMC Meeting	8 Productivity & Costs (Q1) Wholesale Trade (Mar) Housing Affordability (Mar) First Time Housing Affordability (Q1) Weekly Jobless Claims	9 Kansas City Financial Stress Index (Apr)
12 Monthly Treasury Statement (Apr) Senior Loan Officer Survey (Q2)	13 CPI (Apr) Real Earnings (Apr) Cleveland Fed Median CPI (Apr) NFIB (Apr)	14 OPEC Crude Oil Spot Prices (Apr) Mortgage Applications EIA Crude Oil Stocks	15 Advance Retail Sales (Apr) Producer Prices (Apr) Transportation Services (Mar) IP & Capacity Utilization (Apr) MTIS (Mar) Philadelphia Fed Mfg Business Outlook Survey (May) Empire State Mfg Survey (May) Home Builders (May) Weekly Jobless Claims	16 New Residential Construction (Apr & Rev) MSIO Revisions Import & Export Prices (Apr) Consumer Sentiment (May, Preliminary) Business Leaders Survey (May) Survey of Professional Forecasters (Q2) TIC Data (Mar)
19 Retail E-Commerce Sales (Q1 & Rev) NABE Outlook (Q2) Dallas Fed Banking Conditions Survey (Mar) Composite Indexes (Apr)	20 Philadelphia Fed Nonmanufacturing Business Outlook Survey (May)	21 Mortgage Applications EIA Crude Oil Stocks	22 Advance Quarterly Services (Q1) Existing Home Sales (Apr) Treasury Auction Allotments (May) Chicago Fed National Activity Index (Apr) Kansas City Fed Manufacturing Survey (May) S&P Global Flash PMI (May) Weekly Jobless Claims	23 Final Building Permits (Apr) New Residential Sales (Apr & Rev) Steel Imports for Consumption (Apr, Preliminary) Kansas City Fed Services Survey (May)
26 MEMORIAL DAY ALL MARKETS CLOSED	27 Adv Durable Goods (Apr) FHFA HPI (Mar & Q1) Case Shiller HPI (Mar) H.6 Money Stock (Apr) Consumer Confidence (May) Texas Manufacturing Outlook Survey (May)	28 Richmond Fed Mfg & Service Sector Surveys (May) Texas Service Sector Outlook Survey (May) FRB Philadelphia Coincident Economic Activity Index (Apr) Mortgage Applications EIA Crude Oil Stocks	29 GDP (Q1, 2nd Estimate) Summary Key Source Data and Selected NIPA Tables (Q1, 2nd Estimate) CEO Confidence Survey (Q2) Pending Home Sales (Apr) Weekly Jobless Claims	30 Adv Trade & Inventories (Apr) Personal Income (Apr) Underlying NIPA Tables (Q1) Dallas Fed Trimmed-Mean PCE (Apr) Strike Report (May) Consumer Sentiment (May, Final) Agricultural Prices (Apr) Chicago PMI (May)
June 2 Construction (Apr) ISM Manufacturing (May) S&P Global Mfg PMI (May)	3 Manufacturers' Shipments, Inventories & Orders (Apr) JOLTS (Apr)	4 ADP Employment Report (May) ISM Services PMI (May) S&P Global Services PMI (May) CEW (Q4) BEA Auto Sales (May) BEA Truck Sales (May) Mortgage Applications EIA Crude Oil Stocks	5 International Trade (Apr) Productivity & Costs (Q1) Challenger Employment Report (May) Public Debt (May) Interest on Public Debt (May) Weekly Jobless Claims	6 Employment Situation (May) Consumer Credit (Apr) Baker Hughes International Rig Count (May)

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Blue Chip Financial Forecasts®

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And The Factors That Influence Them**

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Elections Have Consequences

What comes next? After winning the 2008 presidential election, Barack Obama commented that elections have consequences. That will likely be the case for the recent US national election that saw Donald Trump record an unexpectedly large victory in the presidential election, with the Republicans retaining control of the House and retaking control of the Senate, albeit with relatively small majorities. Financial markets are now attempting to figure out what the consequences of this political trifecta will be. On the one hand, it is widely expected that the economy will be boosted by lower taxes, less regulation and re-energized domestic energy markets. Also, there are expectations that the government will be downsized somewhat.

On the other hand, there is more uncertainty surrounding the range of policy changes that will be enacted and the fear that looser fiscal policy in an economy already growing above trend will lead to overheating and a rebound in inflation. Along with that, the prospect of meaningfully higher tariffs raises the specter of global trade conflict accompanied by higher domestic prices. And restraint on immigration could slow labor supply growth, putting upward pressure on wages and potentially on prices.

Financial markets are forward looking. So, they are already attempting to price in what the economic environment might look like in the near future. US equity markets appear to think that the new political environment will be good for businesses and profits. While a little of the initial run-up in equity prices has faded recently, the S&P500 stock price index has risen a little more than 5% since the election. The US dollar has also participated in this surge of optimism with its value against the euro rising about 4% since the election.

Market interest rates have continued to diverge. With the Fed cutting its fed funds rate (FFR) target another 25bps at the November 6-7 FOMC meeting, shorter-term market rates are continuing to follow the FFR lower. Longer-term rates have continued to edge up, likely reflecting an anticipated boost to economic growth from looser fiscal policy ahead and renewed concern over the inflation outlook. Recent inflation readings have been sticky, and market-based five-year inflation expectations have risen about 50bps since mid-September.

While the Blue Chip Financial Forecasts (BCFF) consensus inflation outlook is still relatively benign, it was increased slightly in the most recent survey all across the forecast period. Moreover, the consensus estimates a 36% probability of inflation reaccelerating over the next six months (up from 30% last month) with 63% of respondents saying that this estimate has risen since the election. None of the respondents thought it had declined. Even with higher inflation concerns, the consensus thinks that the rise in longer-term interest rates has about run its course. For example, it anticipates that the yield on the 10-year Treasury note will decline by about 30bps over the six-quarter forecast horizon but will end the period 32bps higher than expected last month.

Fed expected to slow pace of rate cuts. Both financial markets and the BCFF panel (79% of respondents) are expecting that the election results will slow the pace of FFR cuts going

forward. FFR-cut expectations had already begun to recede ahead of the election, mostly on sticky inflation news and comments from Fed officials. But the expected slowdown in rate cuts has gained momentum since the election. The FFR futures market is currently pricing in just a 56% chance of a 25bps rate cut at the December FOMC meeting, down from around 80% just a month or so ago.

Not only has the FFR futures market lowered the probability of a near-term rate cut, it has also significantly lowered rate-cut expectations for the coming year. It is now pricing in a 76% chance of one 25bps cut in the first quarter of next year and an 84% chance of just one 25bps cut in the second quarter. For all of 2025, the FFR futures market now expects only 67bps of rate cuts. At the end of October, it had looked for 90bps of cuts in 2025 and at the beginning of October, it had anticipated 140bps of cuts next year.

While the BCFF consensus has also lowered its FFR cut expectations, the reduction has not been as dramatic as that in the FFR futures market. The consensus is still fully expecting a 25bps cut at the December FOMC meeting. For 2025, the BCFF consensus now looks for 103bps of cuts versus 126bps of cuts in the November survey. Some of this decline likely reflects the outcome of the election but a meaningful part also reflects statements made by Fed Chair Powell in the middle of November that pointed to a more patient Fed ahead and were subsequently supported by remarks from other Fed officials.

Long-range outlook. This month's survey also contains the semiannual long-range forecasts—extending out to 2035. The BCFF consensus looks for 2.0% growth in real GDP in 2026-2030 and 1.9% in the 2031-35 period. Each estimate is 0.1%-point lower than the June forecast, but still in line with the CBO estimate of the economy's potential growth rate. However, GDP growth is expected to be much slower than the 2.5% experienced during the five years prior to the pandemic.

On inflation, the consensus expects the Federal Reserve to essentially achieve its 2% target with the PCE price index inflation rate (the measure that the Fed targets) expected to average 2.2% from 2026 to 2030 and to slow to 2.1% over the following five years. The expectation for 2026-2030 is slightly above the June survey (2.1%) while the 2031-2035 estimate is the same. Both are well above the 1.3% that was experienced in the five years prior to the pandemic.

Of particular interest is that even though the economy is expected to grow at around its potential rate and that inflation is expected to stabilize near the Fed's target over the ten years from 2026, these occur at markedly higher expected interest rate levels (both short- and long-term) than in the five years prior to the pandemic. The fed funds rate is expected to average 3.25% over the entire 10-year period compared with 1.10% in the five years before the pandemic. This implies a meaningfully higher neutral FFR and higher real (inflation-adjusted) interest rates over the longer term than experienced in the five years preceding the pandemic.

Sandy Batten (Haver Analytics, New York, NY)

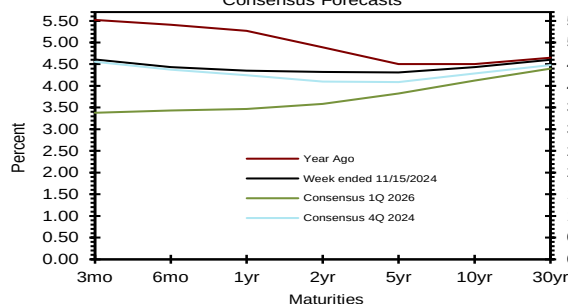
Consensus Forecasts of U.S. Interest Rates and Key Assumptions

Interest Rates	History								Consensus Forecasts-Quarterly Avg.					
	Average For Week Ending				Average For Month				4Q	1Q	2Q	3Q	4Q	1Q
	Nov 15	Nov 8	Nov 1	Oct 25	Oct	Sep	Aug	3Q 2024	2024	2025	2025	2025	2025	2026
Federal Funds Rate	4.62	4.83	4.83	4.83	4.83	5.13	5.33	5.26	4.6	4.2	3.9	3.7	3.6	3.5
Prime Rate	7.79	8.00	8.00	8.00	8.00	8.30	8.50	8.43	7.7	7.4	7.1	6.9	6.7	6.6
SOFR	4.59	4.77	4.84	4.83	4.85	5.15	5.33	5.27	4.6	4.3	4.0	3.7	3.5	3.4
Commercial Paper, 1-mo.	4.57	4.64	4.74	4.76	4.78	5.02	5.29	5.20	4.6	4.2	3.9	3.7	3.5	3.4
Treasury bill, 3-mo.	4.61	4.64	4.66	4.72	4.72	4.92	5.30	5.22	4.6	4.2	3.9	3.6	3.5	3.4
Treasury bill, 6-mo.	4.43	4.40	4.44	4.48	4.44	4.55	4.96	4.92	4.4	4.1	3.8	3.6	3.5	3.4
Treasury bill, 1 yr.	4.35	4.29	4.28	4.26	4.20	4.03	4.43	4.45	4.2	4.0	3.8	3.6	3.5	3.5
Treasury note, 2 yr.	4.32	4.22	4.15	4.06	3.97	3.62	3.97	4.03	4.1	4.0	3.8	3.7	3.6	3.6
Treasury note, 5 yr.	4.31	4.19	4.15	4.03	3.91	3.50	3.71	3.79	4.1	4.1	4.0	3.9	3.8	3.8
Treasury note, 10 yr.	4.43	4.32	4.30	4.22	4.10	3.72	3.87	3.95	4.3	4.3	4.2	4.1	4.1	4.1
Treasury note, 30 yr.	4.60	4.51	4.52	4.49	4.38	4.04	4.15	4.22	4.5	4.5	4.4	4.4	4.4	4.4
Corporate Aaa bond	5.26	5.21	5.23	5.19	5.07	4.81	4.96	5.00	5.1	5.1	5.1	5.1	5.1	5.1
Corporate Baa bond	5.69	5.65	5.68	5.64	5.52	5.31	5.48	5.50	5.9	5.9	5.9	5.9	5.9	6.0
State & Local bonds	4.09	4.14	4.14	4.13	4.05	3.99	4.05	4.08	4.3	4.3	4.3	4.3	4.3	4.2
Home mortgage rate	6.78	6.79	6.72	6.54	6.43	6.18	6.50	6.51	6.6	6.5	6.4	6.3	6.2	6.2

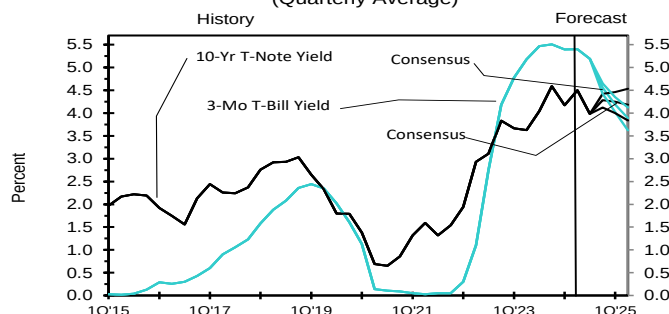
Key Assumptions	History								Consensus Forecasts-Quarterly					
	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q
	2022	2023	2023	2023	2023	2024	2024	2024	2024	2025	2025	2025	2025	2026
Fed's AFE \$ Index	119.8	115.5	114.6	115.0	116.6	115.5	117.3	114.9	116.8	117.8	117.7	116.9	116.2	116.1
Real GDP	3.4	2.8	2.4	4.4	3.2	1.6	3.0	2.8	2.1	2.0	2.0	2.0	2.0	2.0
GDP Price Index	3.7	3.6	1.9	3.2	1.5	3.0	2.5	1.8	2.2	2.3	2.2	2.2	2.3	2.3
Consumer Price Index	4.0	3.8	3.0	3.4	2.7	3.8	2.8	1.2	2.5	2.5	2.4	2.4	2.4	2.5
PCE Price Index	4.0	3.9	2.9	2.7	1.7	3.4	2.5	1.5	2.2	2.3	2.2	2.3	2.3	2.3

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).

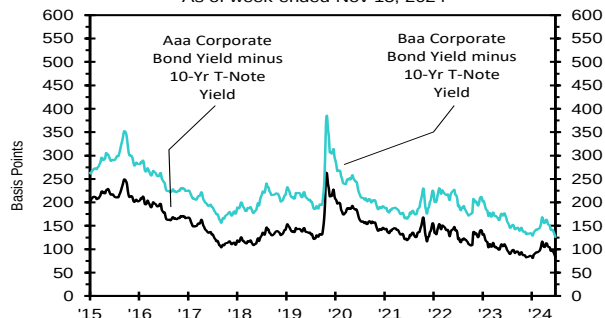
US Treasury Yield Curve
Week ended Nov 15, 2024 & Year Ago vs.
4Q 2024 & 1Q 2026
Consensus Forecasts



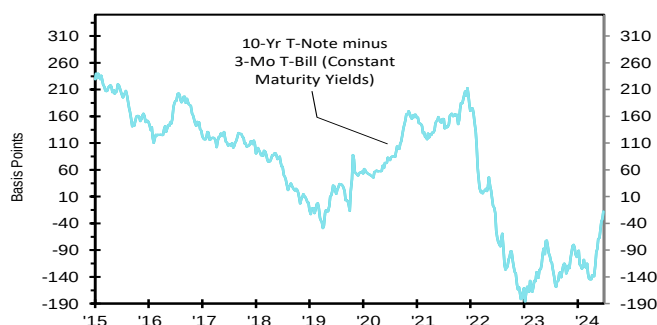
US 3-Mo T-Bills & 10-Yr T-Note Yield
(Quarterly Average)



Corporate Bond Spreads
As of week ended Nov 15, 2024



US Treasury Yield Curve
As of week ended Nov 15, 2024



-----Policy Rates¹-----

	History-----			Consensus Forecasts		
	Month	Year		Months From Now:		
	Latest:	Ago:	Ago:	3	6	12
U.S.	4.63	4.88	5.38	4.31	4.05	3.70
Japan	0.25	0.25	-0.10	0.42	0.57	0.73
U.K.	4.75	5.00	5.25	4.55	4.17	3.75
Switzerland	1.00	1.00	1.75	0.69	0.58	0.61
Canada	3.75	4.25	5.00	3.33	3.05	2.87
Australia	4.35	4.35	4.35	4.24	4.07	3.76
Euro area	3.40	3.65	4.50	2.88	2.48	2.26

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

	History-----			Consensus Forecasts		
	Month	Year		Months From Now:		
	Latest:	Ago:	Ago:	3	6	12
U.S.	4.43	4.08	4.44	4.33	4.35	4.40
Germany	2.34	2.19	2.59	2.32	2.31	2.37
Japan	1.08	0.97	0.77	1.13	1.19	1.32
U.K.	4.44	4.10	4.15	4.28	4.27	4.27
France	3.06	2.93	3.08	3.05	3.07	3.17
Italy	3.55	3.35	4.36	3.58	3.62	3.81
Switzerland	0.38	0.44	0.93	0.34	0.36	0.46
Canada	3.28	3.13	3.68	3.17	3.14	3.30
Australia	4.64	4.31	4.47	4.25	4.14	4.32
Spain	3.09	2.90	3.58	3.07	3.13	3.31

-----Foreign Exchange Rates³-----

	History-----			Consensus Forecasts		
	Month	Year		Months From Now:		
	Latest:	Ago:	Ago:	3	6	12
U.S.	119.09	115.94	116.52	95.4	95.4	93.7
Japan	154.59	149.58	149.82	151.3	149.6	146.4
U.K.	1.26	1.30	1.24	1.27	1.26	1.28
Switzerland	0.89	0.87	0.89	0.89	0.89	0.89
Canada	1.41	1.38	1.37	1.38	1.38	1.36
Australia	0.65	0.67	0.65	0.66	0.66	0.67
Euro	1.06	1.09	1.09	1.06	1.05	1.07

**Consensus
Policy Rates
vs. US Rate**

	Now	In 12 Mo.
Japan	-4.38	-2.97
U.K.	0.13	0.05
Switzerland	-3.63	-3.09
Canada	-0.88	-0.83
Australia	-0.28	0.06
Euro area	-1.23	-1.44

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

	Now	In 12 Mo.
Germany	-2.09	-2.02
Japan	-3.35	-3.08
U.K.	0.01	-0.13
France	-1.34	-1.23
Italy	-0.88	-0.59
Switzerland	-4.05	-3.94
Canada	-1.15	-1.09
Australia	0.21	-0.08
Spain	-1.34	-1.09

International. The policy implications of a new US administration have been driving financial market sentiment since the election on November 5. So far, investors have responded with a more optimistic take on the outlook for the US economy but with more pessimistic views about the rest of the world. A potential easing of US fiscal policy (e.g., via tax cuts) has also triggered a re-evaluation of Fed policy, causing US yields and the value of the dollar to climb. The reverberations for the rest of the world could, in part, be felt via a stronger US dollar particularly for those countries that hold sizeable reservoirs of USD-denominated debt. A stronger dollar raises the cost of servicing this debt, straining public and private balance sheets in vulnerable economies. But potential protectionist measures mean that trade channels will also be significant not least for economies with large US exposures and/or those that have been heavily reliant on US import demand to fuel economic growth in recent months.

These broader global concerns have been reflected in our panelists' expectations for the world economy in the year ahead. As a result of the US election outcome, 46% of our panelists have lowered their forecast for global (ex US) growth for 2025 while 32% have left that forecast unchanged. However, 21% of panelists have raised their global (ex US) growth outlook, a likely consequence perhaps of shifts in US economic policy, their potential boost to US economic growth, and some spill-over from firmer US demand into activity elsewhere.

The consensus view regarding the potential benefits for the US economy and potential losses for the rest of the world have found a big echo, so far, in the incoming data. Latest flash PMI survey data for the US, for example, showed that business activity grew at a strong and accelerating pace in November. That contrasted, however, with the message from Europe, where the flash PMIs pointed to a renewed downturn in the euro area and, to a lesser degree, in the UK. Japan's PMI data, in the meantime, additionally revealed that a downturn persisted in November for the second consecutive month, albeit not as marked as recorded in October.

Europe's worsening plight has been exacerbated of late by a number of domestic factors including political gridlock in Germany and France, and an October budget that lifted the tax burden on the UK corporate sector. Implications for monetary policy, however, are ambiguous in light of the ramifications for the Fed and the role of interest rate differentials in driving exchange rates. In response to a special question, most of our panelists, specifically 84%, do not believe that likely US policy changes will slow the pace of policy rate reductions from either the ECB or the BoE in the year ahead. That contrasts with the US where 79% of panelists believe that those policy changes will necessitate a slower pace of policy rate reductions from the Fed. As noted, these views have already found an echo via a strengthening US dollar. But our panelists' forecasts for EUR/USD have additionally seen some big reductions at the 3-, 6- and 12-month ahead horizons.

Similar global dynamics have engulfed the outlook for Japan with our panelists now expecting a weaker JPY in the year ahead compared with November. However, forecasts for the BoJ's policy rate have also been lifted a little. This likely reflects Japan's persistent CPI inflation, especially in services, which is seen as positive for the economic outlook due to its link with domestic wage growth and the sustainability of higher inflation in coming months.

Finally, in China, concerns about the economic outlook have also intensified in financial markets largely thanks to the specific trade policy intentions of a new US administration. President-elect Trump has, for example, suggested raising tariffs on Chinese imports by up to 60%. Beyond the direct damage to China's exports, that could trigger some retaliation and lead to weaker world trade growth and global supply chain disruption. These tariffs align with a broader US policy goal of further decoupling the US from China and curbing its progress in key technologies..

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.

Key Assumptions

Blue Chip Financial Forecasts Panel Members	-----Percent Per Annum -- Average For Quarter-----															Avg. For	------(Q-Q % Change)-----				
	-----Short-Term-----					-----Intermediate-Term-----					-----Long-Term-----					---Qtr---	------(SAAR)-----				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	A.	B.	C.	D.	E.	
	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		
Scotiabank Group	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.3	1.4	L 2.1	2.0	
J.P. Morgan Chase	4.8	H	na	na	na	na	na	3.9	3.8	4.1	4.4	na	na	na	na	na	2.3	2.4	2.8	2.6	
Chmura Economics & Analytics	4.7	7.8	4.7	4.6	4.6	4.4	4.3	4.1	4.1	4.3	4.5	5.1	6.7	H	na	6.6	na	0.8	L 2.4	2.7 2.4	
Comerica Bank	4.7	7.8	4.7	na	4.5	4.4	4.2	4.2	4.2	4.3	4.6	5.1	5.8	na	6.7	na	1.5	1.9	1.9	1.7	
DePrince & Assoc.	4.7	7.8	4.6	4.7	H 4.6	4.4	4.3	4.2	4.1	4.3	4.5	5.1	5.7	4.0	6.7	116.8	1.7	2.5	2.6	2.4	
Georgia State University	4.7	7.9	H	na	na	4.7	4.3	4.3	4.2	4.0	4.4	4.5	5.0	5.8	na	6.5	na	1.9	1.8	2.2 1.8	
GLC Financial Economics	4.7	7.8	4.8	4.6	4.6	4.4	4.0	3.7	3.6	4.0	4.3	5.0	5.7	4.2	6.4	115.1	1.9	2.1	2.4	2.1	
KPMG	4.7	7.8	4.7	4.6	4.7	4.5	4.2	4.0	4.0	4.2	4.5	5.0	5.8	na	6.5	na	1.5	2.1	2.5	1.8	
MacroPolicy Perspectives	4.7	7.8	4.7	4.7	H 4.7	4.4	4.3	4.2	4.1	4.4	4.5	4.9	5.6	L 4.1	6.7	118.8	2.4	2.9	2.9	2.5	
PNC Financial Services Corp.	4.7	7.8	4.7	na	4.5	4.3	4.1	4.1	4.1	4.2	4.5	na	5.6	L 4.0	6.5	116.4	1.7	2.0	1.8	L 2.1	
Roberts Capital Advisors	4.7	7.8	4.7	4.7	H 4.5	4.3	4.3	4.2	4.1	4.3	4.5	5.0	5.8	4.4	6.6	116.0	2.3	2.0	2.4	2.1	
S&P Global Market Intelligence	4.7	7.8	4.7	na	4.6	4.3	4.2	4.0	4.0	4.2	4.4	na	na	na	6.5	na	1.5	2.1	2.5	1.8	
The Lonski Group	4.7	7.8	4.6	4.7	H 4.6	4.4	4.2	4.2	4.2	4.3	4.5	5.2	5.8	4.2	6.7	118.6	2.3	2.3	2.0	2.1	
The Northern Trust Company	4.7	7.8	4.6	4.7	H 4.5	4.6	4.5	4.3	4.2	4.2	4.6	5.1	5.7	4.1	6.6	119.0	H 2.9	3.0	H 2.4	2.2	
Action Economics	4.6	7.8	5.3	H 4.5	4.5	4.4	4.2	4.2	4.2	4.3	4.5	5.1	5.8	4.3	7.3	H 114.9	2.3	2.3	2.5	2.2	
BMO Capital Markets	4.6	7.8	4.6	4.6	4.6	4.4	4.3	4.1	4.1	4.3	4.5	5.1	5.8	4.4	6.7	118.1	2.0	2.1	2.7	2.5	
Chan Economics	4.6	7.6	4.6	4.5	4.5	4.2	3.9	L 3.6	L 3.5	L 3.9	L 4.2	L 5.2	6.2	4.5	6.7	116.0	2.2	2.2	2.4	2.1	
Daiwa Capital Markets America	4.6	7.8	4.6	na	4.5	na	na	3.8	3.7	4.0	4.3	na	na	na	6.2	L 114.0	L 1.8	2.4	2.6	2.5	
EY-Parthenon	4.6	na	na	na	4.5	na	na	na	na	4.3	na	na	na	na	na	na	2.1	2.1	2.4	2.4	
Fannie Mae	4.6	7.8	na	na	4.6	4.4	4.3	4.2	4.2	4.3	4.5	na	na	na	6.7	na	2.0	2.1	2.5	1.8	
Loomis, Sayles & Company	4.6	7.8	4.6	4.6	4.6	4.4	4.3	4.0	4.2	4.2	4.4	5.0	5.8	4.2	6.6	116.7	1.5	2.5	2.8	2.5	
MacroFin Analytics & Rutgers Bus School	4.6	7.7	4.6	4.6	4.6	4.5	4.3	4.2	4.3	H 4.3	4.5	5.2	5.7	4.4	6.6	119.0	H 1.9	1.9	2.4	2.3	
Moody's Analytics	4.6	7.8	4.6	4.6	4.4	4.3	4.2	4.1	4.1	4.1	4.5	5.1	5.7	3.9	L 6.4	na	2.0	1.9	2.3	2.0	
Naroff Economics LLC	4.6	7.6	4.7	4.7	H 4.6	4.5	4.3	4.0	4.1	4.3	4.4	na	na	4.0	6.6	116.6	2.5	2.5	2.7	2.5	
Nomura Securities, Inc.	4.6	7.8	na	na	na	na	na	4.3	H 4.3	H 4.5	na	na	na	na	na	na	2.6	1.8	3.1	H 2.7	
Oxford Economics	4.6	7.8	4.6	na	4.6	4.4	4.2	4.1	4.2	4.4	4.5	4.6	L	na	na	6.7	116.7	2.5	3.0	H 2.3	2.1
Regions Financial Corporation	4.6	7.8	4.7	4.6	4.6	4.4	4.3	4.2	4.2	4.3	4.5	5.2	5.9	4.4	6.6	117.7	1.5	1.9	2.2	1.9	
Santander Capital Markets	4.6	7.8	4.7	4.6	4.6	4.4	4.3	4.2	4.2	4.3	4.5	5.1	5.7	4.1	6.7	117.8	2.3	2.5	2.9	2.3	
Societe Generale	4.6	7.8	4.7	na	4.5	4.3	4.3	4.2	4.2	4.3	4.5	na	na	na	na	na	2.1	1.8	2.6	2.3	
Swiss Re	4.6	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	2.5	na	na	na	
Via Nova Investment Mgt.	4.6	7.8	4.6	4.6	4.6	4.4	4.3	4.2	4.1	4.3	4.6	5.4	5.8	4.3	6.6	115.9	2.5	2.1	2.1	2.1	
Bank of America	4.4	na	na	na	na	na	na	4.3	H 4.3	H 4.4	4.6	na	na	na	na	na	2.0	2.2	2.5	2.3	
Barclays	4.4	na	na	na	na	na	na	4.0	4.1	4.3	4.5	na	na	na	na	na	2.0	2.5	2.8	2.5	
Economist Intelligence Unit	4.4	7.7	na	na	na	na	na	na	na	4.5	na	na	na	na	na	na	2.1	na	2.3	na	
Goldman Sachs & Co.	4.4	na	na	na	4.8	H	na	3.7	3.7	4.3	4.2	L	na	na	na	na	2.4	2.2	2.7	2.3	
ING	4.4	na	na	na	na	na	na	4.1	4.1	4.3	4.5	na	na	na	na	na	2.7	na	na	na	
Wells Fargo	4.4	7.5	4.4	4.4	4.4	4.2	4.1	4.2	4.2	4.3	4.5	5.5	H 6.5	4.9	6.8	na	2.1	2.4	2.8	2.7	
NatWest Markets	4.3	7.5	na	4.4	4.6	4.7	H 4.8	H 4.2	4.3	H 4.6	H 4.8	H 5.3	6.2	5.1	H 6.9	na	1.5	2.0	2.2	2.2	
TS Lombard	4.0	L 7.1	L 4.0	L 4.0	L 3.9	L 4.0	L 4.1	4.3	H 4.3	H 4.4	4.5	5.3	6.1	4.4	6.2	L 115.0	3.0	H 3.0	H 3.0	3.0	
December Consensus	4.6	7.7	4.6	4.6	4.6	4.4	4.2	4.1	4.1	4.3	4.5	5.1	5.9	4.3	6.6	116.8	2.1	2.2	2.5	2.2	
Top 10 Avg.	4.7	7.8	4.8	4.7	4.7	4.5	4.4	4.2	4.3	4.4	4.6	5.3	6.1	4.5	6.8	117.9	2.6	2.7	2.9	2.6	
Bottom 10 Avg.	4.4	7.6	4.5	4.5	4.4	4.3	4.1	3.9	3.9	4.1	4.4	5.0	5.7	4.1	6.4	115.7	1.5	1.8	2.1	1.9	
Standard Deviation	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.3	0.2	1.5	0.5	0.4	0.3	0.3	
November Consensus	4.6	7.8	4.7	4.6	4.5	4.3	4.1	3.8	3.8	4.0	4.3	5.0	5.8	4.2	6.4	115.3	1.9	2.1	2.4	2.1	
Number of Forecasts Changed From A Month Ago:																					
Down	5	6	5	5	2	1	1	1	3	1	1	1	3	4	2	0	6	5	9	6	
Same	28	22	18	12	15	13	8	5	5	5	7	7	5	5	2	6	14	15	10	11	
Up	5	3	3	4	14	14	19	29	27	31	26	15	14	10	24	13	19	16	18	19	
Diffusion Index	50%	45%	46%	48%	69%	73%	82%	90%	84%	91%	87%	80%	75%	66%	89%	84%	67%	65%	62%	68%	

NOVEMBER 27, 2024 ■ BLUE CHIP FINANCIAL FORECASTS ■ 5

First Quarter 2025

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. GDP Real GDP	C. GDP Price Index	D. Cons. Price Index	E. PCE Price Index										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15															
	Federal	Prime	SOFR	Com.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Aaa	Baa	State &	Home															
	Funds Rate	Bank Rate	Rate	Paper 1-Mo.	Bills 3-Mo.	Bills 6-Mo.	Bills 1-Yr.	Notes 2-Yr.	Notes 5-Yr.	Notes 10-Yr.	Bond 30-Yr.	Corp. Bond	Corp. Bond	Local Bonds	Mtg. Rate															
Scotiabank Group	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.7	2.9	H	3.4	3.1	H								
Chan Economics	4.4	H	7.4	4.4	4.3	4.3	4.0	3.7	3.4	L	3.3	L	3.7	L	4.0	L	5.0	6.0	4.3	6.5	115.9	1.9	2.0	2.2	1.9					
DePrince & Assoc.	4.4	H	7.5	H	4.4	4.4	H	4.4	4.2	4.0	4.2	4.3	4.4	4.5	5.3	6.0	4.4	6.7	117.1	1.9	2.4	2.5	2.3							
J.P. Morgan Chase	4.4	H	na	na	na	na	na	na	4.1	4.2	4.4	4.7	na	na	na	na	na	1.8	2.2	2.6	2.3	na	1.8	2.2	2.6	2.3				
MacroPolicy Perspectives	4.4	H	7.5	H	4.3	4.1	4.1	4.0	3.2	L	3.7	3.8	4.0	4.5	4.9	5.6	L	na	6.4	na	2.0	2.7	2.6	2.3						
Nomura Securities, Inc.	4.4	H	7.5	H	na	na	na	na	na	4.1	4.3	4.5	na	na	na	na	na	na	2.1	1.9	3.1	2.7	na	2.1	1.9	3.1	2.7			
Roberts Capital Advisors	4.4	H	7.5	H	4.5	4.4	H	4.2	4.2	4.1	4.2	4.4	4.6	5.1	5.9	4.5	6.7	116.0	2.3	2.1	2.4	2.3	na	2.2	na	na	na			
Swiss Re	4.4	H	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	2.2	na	na	na	na	na	2.2	na	na	na		
The Lonski Group	4.4	H	7.5	H	4.3	4.4	H	4.4	4.3	4.1	4.0	4.2	4.4	4.5	5.3	5.9	4.3	6.7	121.4	H	1.7	2.3	2.4	1.8	L					
Action Economics	4.3		7.4	4.8	H	4.2	4.2	4.1	3.9	4.0	4.1	4.3	4.4	5.0	5.7	4.2	7.2	H	117.6		2.3	2.1	2.5	1.9						
BMO Capital Markets	4.3		7.4	4.3		4.3	4.3	4.2	4.1	4.1	4.1	4.3	4.5	5.2	6.0	4.4	6.7	120.8		2.0	2.0	2.6	2.4							
Chmura Economics & Analytics	4.3		7.4	4.3		4.3	4.3	4.2	4.2	4.1	4.1	4.3	4.4	5.1	6.5	H	na	6.4	na	0.2	L	2.3	2.6	2.3						
Comerica Bank	4.3		7.5	H	4.3	na	4.2	4.1	3.9	4.1	4.2	4.4	4.8	5.3	6.0	na	6.8	na	3.0	H	2.3	2.9	2.7							
KPMG	4.3		7.5	H	4.3	4.2	4.3	4.2	4.0	3.7	3.8	4.1	4.4	4.9	5.8	na	6.3	na	1.9	2.2	2.0	2.0								
MacroFin Analytics & Rutgers Bus School	4.3		7.3	4.3	4.2	4.3	4.2	4.2	4.1	4.3	4.2	4.4	5.2	5.6	L	4.4	6.5	118.8		2.0	2.0	2.2	2.1							
Moody's Analytics	4.3		7.5	H	4.3	4.3	4.1	4.1	4.1	4.1	4.1	4.2	4.6	5.4	6.1	4.1	6.2	L	na	1.8	2.0	2.3	2.1							
Oxford Economics	4.3		7.5	H	4.3	na	4.3	4.1	4.0	3.9	4.1	4.3	4.5	4.6	L	na	na	6.7	119.4		2.4	2.8	3.2	2.9						
Regions Financial Corporation	4.3		7.5	H	4.3	4.3	4.3	4.4	H	4.1	4.0	4.2	4.4	4.7	5.4	6.1	4.5	6.7	118.6		2.0	2.2	2.4	2.2						
S&P Global Market Intelligence	4.3		7.5	H	4.3	na	4.2	4.1	4.0	3.7	3.7	4.0	4.3	na	na	na	6.2	L	na	2.0	2.2	2.0	2.0							
Santander Capital Markets	4.3		7.5	H	4.3	4.2	4.2	4.0	3.8	4.0	4.1	4.2	4.4	5.0	5.7	4.1	6.5	119.0		1.8	2.8	3.2	2.8							
Societe Generale	4.3		7.5	H	4.3	na	4.2	4.0	4.0	4.0	4.2	4.3	4.5	na	na	na	na	na	1.8	1.9	2.6	2.3								
EY-Parthenon	4.2		na	na	na	4.2	na	na	na	na	4.0	na	na	na	na	na	na	na	1.7	2.4	2.4	2.4								
Fannie Mae	4.2		7.3	na	na	4.3	4.3	4.3	H	4.3	4.3	4.4	4.6	na	na	na	6.7	na	2.2	2.2	1.9	1.9								
GLC Financial Economics	4.2		7.4	4.5	4.1	4.1	3.9	3.7	3.6	3.6	3.9	4.2	4.9	5.8	4.1	6.2	L	114.9		1.8	2.2	2.4	2.2							
PNC Financial Services Corp.	4.2		7.3	4.2	na	3.8	L	3.7	L	3.6	3.8	4.1	4.2	4.5	na	5.7	4.2	6.3	116.7		1.7	1.8	L	2.2	2.2					
The Northern Trust Company	4.2		7.3	4.1	4.2	4.1	4.1	4.1	4.2	4.3	4.4	4.7	5.2	6.0	4.4	6.7	120.0		1.4	2.3	2.6	2.4								
Via Nova Investment Mgt.	4.2		7.5	H	4.2	4.2	4.2	4.1	4.1	4.1	4.2	4.7	5.3	5.7	4.2	6.6	115.0		2.5	2.1	2.0	2.1								
Bank of America	4.1		na	na	na	na	na	na	4.0	4.2	4.3	4.5	na	na	na	na	na	na	2.5	2.4	2.6	2.4								
Barclays	4.1		na	na	na	na	na	na	4.0	4.1	4.3	4.5	na	na	na	na	na	na	2.0	2.4	2.5	2.2								
Daiwa Capital Markets America	4.1		7.3	4.1	na	4.0	na	na	3.8	3.8	3.9	4.3	na	na	na	6.2	L	113.5	L	1.7	2.3	2.3	2.2							
Economist Intelligence Unit	4.1		7.4	na	na	na	na	na	na	na	4.3	na	na	na	na	na	na	na	2.4	na	2.0	na								
ING	4.1		na	na	na	na	na	na	4.0	4.1	4.3	4.6	na	na	na	na	na	na	1.5	na	na	na	na							
Loomis, Sayles & Company	4.1		7.3	4.1	4.1	4.1	3.9	3.9	4.0	4.0	4.0	4.3	4.8	5.6	L	4.0	6.3	118.3		2.0	2.2	2.2	1.8	L						
Naroff Economics LLC	4.1		7.1	4.2	4.4	H	4.1	4.2	4.0	4.0	4.1	4.3	4.5	na	na	3.9	L	6.4	117.5		3.0	H	2.4	3.6	H	2.3				
Wells Fargo	4.1		7.3	4.2	4.1	4.1	4.0	3.9	4.0	4.1	4.2	4.4	5.4	6.4	4.8	H	6.7	na	2.4	2.8	3.2	2.5								
Georgia State University	4.0		7.1	na	na	3.9	3.8	3.7	3.8	3.9	4.2	4.5	5.1	5.9	na	6.3	na	2.6	2.1	1.7	L	2.0								
TS Lombard	4.0		7.1	4.0	L	4.0	3.9	4.0	4.3	H	4.5	H	4.7	H	4.8	H	4.9	H	5.6	H	6.5	H	4.8	H	6.6	120.0	2.5	2.5	2.5	2.5
Goldman Sachs & Co.	3.9		na	na	na	4.6	H	na	na	3.6	3.7	4.3	4.2	na	na	na	na	na	2.4	2.6	2.9	2.7								
NatWest Markets	3.8	L	7.0	L	na	3.9	L	4.1	4.2	4.3	H	4.0	4.2	4.5	4.8	5.2	6.1	4.1	6.7	na	1.0	2.0	3.3	2.5						
December Consensus	4.2	7.4	4.3	4.2	4.2	4.1	4.0	4.0	4.1	4.3	4.5	5.1	5.9	4.3	6.5	117.8	2.0	2.3	2.5	2.3										
Top 10 Avg.	4.4	7.5	4.4	4.3	4.4	4.2	4.2	4.2	4.3	4.5	4.7	5.3	6.2	4.5	6.8	119.4	2.6	2.6	3.1	2.7										
Bottom 10 Avg.	4.0	7.2	4.2	4.1	4.0	3.9	3.7	3.7	3.8	4.0	4.3	4.9	5.7	4.1	6.3	116.3	1.4	2.0	2.0	2.0										
Standard Deviation	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	2.2	0.5	0.3	0.5	0.3										
November Consensus	4.1	7.3	4.2	4.2	4.1	3.9	3.8	3.7	3.7	3.9	4.2	4.9	5.8	4.2	6.2	115.4	1.8	2.2	2.4	2.2										
Number of Forecasts Changed From A Month Ago:																														
Down	3	2	4	1	1	2	2	0	0	0	0	1	0	2	0	1	9	8	7	5										
Same	19	18	13	10	12	8	7	5	6	3	4	6	7	6	4	4	14	14	11	12										
Up	16	11	9	10	18	18	19	30	29	34	30	16	15	11	24	13	16	14	19	19										
Diffusion Index	67%	65%	60%	71%	77%	79%	80%	93%	91%	96%	94%	83%	84%	74%	93%	83%	59%	58%	66%	69%										

Second Quarter 2025

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	Percent Per Annum -- Average For Quarter															Avg. For --Qtr.-- A.	(Q-Q % Change) --(SAAR)--											
	Short-Term					Intermediate-Term					Long-Term						B.	C.	D.	E.								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15													
	Federal Funds Rate	Prime Bank Rate	SOFR Rate	Com. Paper 1-Mo.	Treas. Bills 3-Mo.	Treas. Bills 6-Mo.	Treas. Bills 1-Yr.	Treas. Notes 2-Yr.	Treas. Notes 5-Yr.	Treas. Notes 10-Yr.	Treas. Bond 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Local Bonds	Home Mtg. Rate													
	Rate	Rate																			\$ Index	GDP Index	Price Index	Price Index				
Scotiabank Group	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.9	2.1	2.5	1.9							
MacroPolicy Perspectives	4.3	H	7.5	H	4.3	3.6	L	3.6	3.5	3.1	3.4	3.6	4.0	4.5	4.9	5.6	na	6.2	na	1.5	2.2	2.1	1.8					
The Lonski Group	4.3	H	7.5	H	4.3	4.3	H	4.2	4.1	4.0	3.9	3.9	3.9	4.1	4.8	5.4	L	3.8	L	6.2	122.3	H	1.8	2.2	2.4	1.6	L	
DePrince & Assoc.	4.2		7.3		4.2	4.2		4.2	4.0	3.8	4.1	4.3	4.4	4.5	5.4	6.2	4.6	6.6	116.3	2.0	2.4	2.5	2.3					
Roberts Capital Advisors	4.2		7.2		4.2	4.2		4.2	3.9	4.1	4.1	4.1	4.2	4.4	4.6	5.1	5.9	4.5	6.7	116.0	2.3	2.2	2.5	2.4				
Chan Economics	4.1		7.1		4.1	4.0		4.0	3.7	3.4	3.1	L	3.0	L	3.4	L	3.7	4.0	6.2	115.7	1.6	2.0	2.2	1.9				
Fannie Mae	4.1		7.2		na	na	4.3	H	4.3	H	4.3	4.3	4.4	4.6	na	na	na	na	6.6	na	1.9	2.4	2.7	2.3				
J.P. Morgan Chase	4.1		na		na	na	na		na	na	3.9	4.0	4.3	4.6	na	na	na	na	na	na	2.0	2.3	2.1	1.9				
KPMG	4.1		7.3		4.1	4.0		4.0	3.9	3.7	3.5	3.6	3.9	4.2	4.8	5.8	na	6.3	na	1.7	2.5	2.8	2.4					
Nomura Securities, Inc.	4.1		7.3		na	na		na	na	na	4.1	4.3	4.6	na	na	na	na	na	na	na	1.8	1.6	L	2.3	2.2			
Oxford Economics	4.1		7.2		4.1	na		4.0	3.8	3.7	3.7	4.1	4.3	4.5	4.5	L	na	na	6.6	118.9	2.5	2.2	2.6	2.3				
S&P Global Market Intelligence	4.1		7.2		4.0	na		3.9	3.8	3.7	3.5	3.5	3.8	4.2	na	na	na	5.9	L	na	1.8	2.5	2.7	2.4				
Swiss Re	4.1		na		na	na		na	na	na	na	na	na	na	na	na	na	na	na	na	1.6	na	na	na	na			
Action Economics	4.0		7.2		4.6	H	4.0		4.0	3.8	3.6	3.7	3.9	4.1	4.3	4.9	5.5	4.0	7.0	H	118.9	2.3	2.4	2.6	2.1			
BMO Capital Markets	4.0		7.2		4.1	4.0		4.1	4.0	3.9	3.9	4.0	4.2	4.4	5.1	5.9	4.3	6.6	119.6	2.0	2.0	2.2	2.1					
Chmura Economics & Analytics	4.0		7.1		4.0	3.9		3.9	3.9	4.1	4.1	3.9	3.9	4.2	4.3	5.1	6.4	na	6.2	na	1.7	2.3	2.5	2.2				
Comerica Bank	4.0		7.2		4.1	na		3.9	3.9	3.7	3.9	4.1	4.4	4.8	5.3	6.1	na	6.7	na	3.2	H	2.7	H	3.0	H	2.8	H	
EY-Parthenon	4.0		na		na	na		3.9	na	na	na	na	3.9	na	na	na	na	na	na	na	1.8	2.0	2.4	2.1				
MacroFin Analytics & Rutgers Bus School	4.0		7.1		4.0	4.0		4.0	3.9	4.0	4.0	4.2	4.2	4.4	5.2	5.6	4.4	6.4	118.6	2.0	2.1	2.1	2.1					
Moody's Analytics	4.0		7.2		4.0	4.0		3.9	3.9	4.0	4.0	4.1	4.2	4.6	5.6	6.4	4.2	6.1	na	2.1	2.2	2.6	2.2					
Santander Capital Markets	4.0		7.2		4.1	4.0		4.0	3.8	3.7	3.8	3.9	4.0	4.3	5.0	5.8	3.9	6.3	119.0	1.8	2.5	2.5	2.1					
Societe Generale	4.0		7.2		4.0	na		3.9	3.8	3.5	3.4	3.8	4.1	4.3	na	na	na	na	na	na	1.8	1.9	2.6	2.3				
TS Lombard	4.0		7.1		4.0	4.0		3.9	4.0	4.4	H	4.8	H	4.9	H	5.0	H	5.9	H	6.7	H	5.0	6.8	120.0	2.0	2.5	2.5	2.5
Bank of America	3.9		na		na	na		na	na	4.0	4.2	4.3	4.5	na	na	na	na	na	na	na	2.3	2.4	2.8	2.4				
Barclays	3.9		na		na	na		na	na	3.9	4.0	4.3	4.5	na	na	na	na	na	na	na	2.0	2.4	2.5	2.3				
Economist Intelligence Unit	3.9		7.1		na	na		na	na	na	na	na	4.2	na	na	na	na	na	na	na	2.2	na	1.9	na				
GLC Financial Economics	3.9		7.1		3.9	3.8		3.8	3.6	3.5	3.4	3.5	3.9	4.2	4.9	5.8	4.1	6.1	114.7	1.9	2.1	2.3	2.1					
ING	3.9		na		na	na		na	na	3.9	4.3	4.8	5.1	H	na	na	na	na	na	na	1.2	na	na	na				
Regions Financial Corporation	3.9		7.1		3.9	4.0		4.0	4.1	4.0	3.9	4.1	4.4	4.7	5.4	6.2	4.5	6.7	118.8	1.7	2.3	2.4	2.1					
Wells Fargo	3.9		7.0		3.9	3.9		3.9	3.8	3.7	3.9	3.9	4.1	4.3	5.3	6.3	4.7	6.5	na	1.5	2.3	2.7	2.5					
Daiwa Capital Markets America	3.8		6.9		3.7	na		3.6	na	na	3.6	3.6	3.7	4.2	na	na	na	6.0	113.0	L	1.8	2.3	2.2	2.1				
NatWest Markets	3.8		7.0		na	3.9		4.1	4.2	4.3	4.0	4.2	4.5	4.8	5.3	6.2	5.1	H	6.9	na	1.5	1.9	2.7	2.8	H			
The Northern Trust Company	3.8		7.0		3.8	3.9		3.7	3.8	3.9	4.0	4.3	4.4	4.7	5.3	6.3	4.5	6.7	121.0	1.0	L	2.3	2.6	2.4				
Via Nova Investment Mgt.	3.8		7.0		3.8	3.7		3.8	3.7	3.8	3.8	3.8	3.9	4.4	5.0	5.4	L	3.9	6.3	114.0	2.5	2.0	2.0	2.1				
PNC Financial Services Corp.	3.7		6.8		3.7	na	L	3.3	3.4	3.5	3.9	4.1	4.4	na	5.7	4.2	6.1	116.5	1.9	1.7	2.2	2.2						
Goldman Sachs & Co.	3.6		na		na	4.3	H	na	na	3.6	3.7	4.3	4.2	na	na	na	na	na	na	na	2.4	2.6	2.7	2.7				
Loomis, Sayles & Company	3.6		6.8		3.6	L	3.6	3.4	3.6	3.9	3.9	4.0	4.3	4.8	5.6	4.0	6.2	118.3	2.0	2.3	2.6	2.1						
Naroff Economics LLC	3.4		6.4	L	3.4	L	3.8	3.7	3.8	3.9	3.9	4.0	4.2	4.5	na	na	3.9	6.1	117.0	3.2	H	2.3	2.2	2.2				
Georgia State University	3.3	L	6.5		na	na	L	3.2	L	3.0	L	3.3	3.6	4.0	4.3	5.0	5.9	na	6.2	na	2.0	2.4	1.5	L	2.3			
December Consensus	3.9	7.1	4.0	3.9	3.9	3.8	3.8	3.8	4.0	4.2	4.4	5.1	5.9	4.3	6.4	117.7	2.0	2.2	2.4	2.2								
Top 10 Avg.	4.2	7.3	4.2	4.1	4.1	4.1	4.1	4.1	4.3	4.5	4.8	5.4	6.3	4.6	6.7	119.5	2.5	2.5	2.7	2.5								
Bottom 10 Avg.	3.7	6.9	3.8	3.8	3.6	3.6	3.5	3.4	3.6	3.8	4.2	4.8	5.6	4.0	6.1	116.0	1.5	1.9	2.1	2.0								
Standard Deviation	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	2.5	0.4	0.2	0.3	0.3								
November Consensus	3.8	6.9	3.9	3.8	3.7	3.7	3.6	3.5	3.6	3.9	4.2	4.9	5.8	4.2	6.1	115.2	1.9	2.1	2.3	2.1								
Number of Forecasts Changed From A Month Ago:																	1	10	6	5	3							
Down	3	2	3	2	0	1	2	1	0	0	2	2	1	2	1													
Same	14	14	11	7	13	11	8	8	8	6	5	6	8	7	5	4						13	12	13	13			
Up	21	15	12	12	18	16	18	26	27	31	27	15	13	10	22	13						16	18	19	20			
Diffusion Index	74%	71%	67%	74%	79%	77%	79%	86%	89%	92%	87%	78%	77%	71%	88%	83%	58%	67%	69%	74%								

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Third Quarter 2025

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. GDP Price Index	D. Cons. Price Index	E. PCE Price Index		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15							
	Federal	Prime	SOFR	Com.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Treas.	Aaa	Baa	State &	Home							
	Funds Rate	Bank Rate	Rate	Paper 1-Mo.	Bills 3-Mo.	Bills 6-Mo.	Bills 1-Yr.	Notes 2-Yr.	Notes 5-Yr.	Notes 10-Yr.	Bond 30-Yr.	Corp. Bond	Corp. Bond	Local Bonds	Mtg. Rate							
Scotiabank Group	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.7	1.9	0.4	L	0.3	L
TS Lombard	4.3	H 7.4	H 4.3	H 4.3	H 4.2	4.3	4.6	H 5.0	H 5.2	H 5.3	H 5.4	H 6.1	H 7.0	H 5.3	H 7.1	H 115.0	2.5	3.0	3.0		3.0	
Fannie Mae	4.1	7.2	na	na	4.4	H 4.4	H 4.3	4.3	4.3	4.5	4.6	na	na	na	6.5	na	2.1	2.2	1.7		1.8	
MacroPolicy Perspectives	4.1	7.3	4.1	3.2	L 3.1	3.0	L 3.1	3.2	3.6	3.9	4.5	4.9	5.6	na	6.0	na	1.5	3.5	H 3.8		3.1	
Nomura Securities, Inc.	4.1	7.3	na	na	na	na	na	4.1	4.3	4.6	na	na	na	na	na	na	1.5	1.6	L 4.5	H 4.7		H
Swiss Re	4.1	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.8	na	na		na	
DePrince & Assoc.	4.0	7.1	4.0	4.1	4.0	3.8	3.7	3.9	4.2	4.3	4.5	5.5	6.3	4.6	6.5	115.9	2.1	2.2	2.3		2.1	
Bank of America	3.9	na	na	na	na	na	na	4.0	4.2	4.3	4.6	na	na	na	na	na	2.2	2.6	2.5		2.7	
Barclays	3.9	na	na	na	na	na	na	3.8	4.0	4.3	4.5	na	na	na	na	na	1.5	2.6	2.2		2.4	
J.P. Morgan Chase	3.9	na	na	na	na	na	na	3.7	3.9	4.1	4.5	na	na	na	na	na	2.3	2.4	2.7		2.5	
KPMG	3.9	7.0	3.8	3.7	3.8	3.8	3.6	3.5	3.5	3.8	4.2	4.7	5.9	na	6.2	na	1.9	2.4	1.8		1.9	
Roberts Capital Advisors	3.9	7.0	4.0	3.9	3.7	3.9	4.0	4.1	4.3	4.5	4.7	5.2	6.0	4.6	6.8	115.0	2.2	2.3	2.5		2.4	
Action Economics	3.8	6.9	4.3	H 3.7	3.7	3.6	3.3	3.5	3.7	4.0	4.1	4.7	5.4	3.9	6.9	118.6	2.3	2.1	2.6		2.1	
BMO Capital Markets	3.8	6.9	3.8	3.8	3.8	3.8	3.8	3.7	3.9	4.0	4.2	5.0	5.9	4.2	6.5	118.2	2.0	2.0	2.2		2.0	
Chan Economics	3.8	6.8	3.8	3.7	3.7	3.4	3.1	2.8	L 2.7	L 3.1	L 3.4	L 4.4	L 5.4	3.7	L 5.9	115.4	1.5	1.9	2.1		1.8	
Comerica Bank	3.8	7.0	3.8	na	3.8	3.8	3.7	3.8	4.0	4.4	4.8	5.4	6.2	na	6.6	na	3.0	H 2.8	3.0		2.8	
Moody's Analytics	3.8	7.0	3.8	3.7	3.6	3.7	3.9	3.9	4.1	4.2	4.7	5.7	6.6	4.3	6.0	na	2.3	2.2	2.4		2.2	
NatWest Markets	3.8	7.0	na	3.9	4.1	4.2	4.3	4.1	4.3	4.6	4.9	5.6	6.5	5.2	7.0	na	1.5	1.7	2.8		3.1	
Oxford Economics	3.8	7.0	3.9	na	3.8	3.6	3.5	3.5	4.0	4.3	4.4	4.5	na	na	6.6	118.4	2.6	1.7	2.2		1.9	
Regions Financial Corporation	3.8	7.0	3.9	3.9	3.8	3.9	3.9	3.8	4.0	4.5	4.8	5.5	6.3	4.6	6.6	118.4	1.8	2.4	2.2		2.3	
Santander Capital Markets	3.8	7.0	3.8	3.8	3.7	3.7	3.6	3.7	3.8	3.9	4.2	4.9	5.7	3.9	6.1	118.5	2.0	2.4	2.4		2.1	
Societe Generale	3.8	7.0	3.8	na	3.7	3.5	3.3	3.2	3.5	4.1	4.3	na	na	na	na	na	1.6	1.9	2.6		2.3	
EY-Parthenon	3.7	na	na	na	3.7	na	na	na	na	3.8	na	na	na	na	na	na	1.8	1.9	2.1		1.9	
GLC Financial Economics	3.7	6.9	3.5	3.6	3.5	3.5	3.3	3.3	3.6	3.8	4.2	4.9	5.8	4.2	6.0	114.4	2.2	2.1	2.3		2.1	
MacroFin Analytics & Rutgers Bus School	3.7	6.8	3.7	3.7	3.6	3.6	3.8	3.9	4.1	4.1	4.3	5.1	5.5	4.3	6.4	118.4	1.8	2.2	2.3		2.2	
S&P Global Market Intelligence	3.7	6.8	3.6	na	3.5	3.6	3.5	3.3	3.4	3.7	4.1	na	na	na	5.7	L na	2.0	2.3	1.8		1.9	
Economist Intelligence Unit	3.6	6.6	na	na	na	na	na	na	na	4.1	na	na	na	na	na	na	1.9	na	2.3		na	
ING	3.6	na	na	na	na	na	na	3.9	4.3	5.0	5.4	H na	na	na	na	na	1.6	na	na		na	
The Northern Trust Company	3.6	6.7	3.5	3.7	3.5	3.6	3.7	3.8	4.2	4.4	4.7	5.3	6.4	4.6	6.7	119.0	1.8	2.3	2.7		2.4	
Wells Fargo	3.6	6.8	3.7	3.6	3.7	3.7	3.7	3.8	3.8	3.9	4.2	5.1	6.1	4.5	6.3	na	0.7	L 2.4	2.7		2.6	
Chmura Economics & Analytics	3.5	6.7	3.5	3.5	3.5	3.6	3.7	3.8	3.8	4.1	4.2	4.9	6.1	na	6.0	na	2.4	2.1	2.2		2.1	
Daiwa Capital Markets America	3.5	6.6	3.5	na	3.4	na	na	3.5	3.5	3.7	4.1	na	na	na	5.9	112.5	L 1.9	2.2	2.2		2.1	
The Lonski Group	3.5	6.6	3.4	3.5	3.4	3.3	3.5	3.7	3.7	3.7	3.9	4.7	5.3	L 3.7	L 6.0	122.5	H 1.8	2.0	2.3		2.4	
Via Nova Investment Mgt.	3.5	6.8	3.5	3.5	3.4	3.5	3.4	3.7	3.7	3.8	4.3	4.9	5.3	L 3.8	6.1	113.0	2.5	2.0	2.0		2.0	
Goldman Sachs & Co.	3.4	na	na	na	4.0	na	na	3.6	3.7	4.3	4.2	na	na	na	na	na	2.4	2.2	2.5		2.4	
PNC Financial Services Corp.	3.4	6.5	3.4	na	3.2	3.2	3.2	3.3	3.7	4.0	4.4	na	5.7	4.3	5.9	116.2	2.2	1.7	2.1		2.1	
Loomis, Sayles & Company	3.3	6.5	3.3	3.3	3.3	3.3	3.4	3.7	3.7	4.0	4.3	4.8	5.6	4.0	6.1	118.3	1.8	2.4	2.2		1.9	
Georgia State University	3.1	6.3	na	na	3.0	L 3.1	3.0	L 3.1	3.5	4.0	4.3	5.2	6.0	na	6.2	na	1.6	2.5	1.8		1.8	
Naroff Economics LLC	2.9	L 5.9	L 2.9	L 3.4	3.1	3.3	3.5	3.9	4.0	4.2	4.4	na	na	3.9	5.9	116.5	2.4	2.3	2.6		2.5	
December Consensus	3.7	6.9	3.7	3.7	3.6	3.6	3.6	3.7	3.9	4.1	4.4	5.1	5.9	4.3	6.3	116.9	2.0	2.2	2.4		2.3	
Top 10 Avg.	4.0	7.1	4.0	3.9	4.0	4.0	4.0	4.1	4.3	4.6	4.9	5.5	6.4	4.6	6.7	118.7	2.5	2.7	3.0		2.9	
Bottom 10 Avg.	3.4	6.5	3.4	3.5	3.3	3.3	3.3	3.3	3.5	3.7	4.1	4.7	5.5	4.0	5.9	115.2	1.5	1.8	1.8		1.7	
Standard Deviation	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	2.5	0.4	0.4	0.6		0.6	
November Consensus	3.5	6.7	3.5	3.5	3.5	3.5	3.4	3.4	3.6	3.8	4.2	4.9	5.8	4.2	6.0	114.6	2.0	2.1	2.3		2.1	
Number of Forecasts Changed From A Month Ago:																	1	10	12	9	8	
Down	1	3	3	1	1	2	3	1	1	0	1	1	2	2	0	1						
Same	15	13	10	7	11	10	8	8	7	7	5	7	7	6	6	4						
Up	22	15	13	13	19	16	17	26	27	30	28	15	13	11	22	13						
Diffusion Index	78%	69%	69%	79%	79%	75%	75%	86%	87%	91%	90%	80%	75%	74%	89%	83%	56%	49%	57%		61%	

Fourth Quarter 2025

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	-----Percent Per Annum -- Average For Quarter-----															Avg. For --Qtr.-- Fed's Adv Fgn Econ \$ Index	----- (Q-Q % Change) ----- ----- (SAAR) -----							
	-----Short-Term-----					-----Intermediate-Term-----					-----Long-Term-----						A. Fed's Adv Fgn Econ \$ Index	B. Real GDP	C. GDP Price Index	D. Cons. Price Index	E. PCE Price Index			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15									
	Federal Funds Rate	Prime Bank Rate	SOFR Rate	Com. Paper 1-Mo.	Treas. Bills 3-Mo.	Treas. Bills 6-Mo.	Treas. Bills 1-Yr.	Treas. Notes 2-Yr.	Treas. Notes 5-Yr.	Treas. Notes 10-Yr.	Treas. Bond 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Local Bonds	Home Mtg. Rate									
	Rate	Rate																						
Scotiabank Group	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	1.8	0.8	L	1.3	L	2.0	
TS Lombard	4.3	H	7.4	H	4.3	H	4.3	H	4.2	4.3	4.6	H	5.0	H	5.4	H	5.5	H	5.6	H	6.4	H	7.3	H
Nomura Securities, Inc.	4.1		7.3		na		na		na		na		na		na		na		na		na		na	
Bank of America	3.9		na		na		na		na		na		na		na		na		na		na		na	
Barclays	3.9		na		na		na		na		na		na		na		na		na		na		na	
DePrince & Assoc.	3.9		7.0		3.9		4.0		3.9		3.7		3.6		3.8		4.2		4.3		4.4		5.5	
Fannie Mae	3.9		7.0		na		4.4	H	4.4	H	4.3		4.3		4.3		4.5		4.6		na		na	
Swiss Re	3.9		na		na		na		na		na		na		na		na		na		na		na	
Comerica Bank	3.8		7.0		3.8		na		3.8		3.8		3.8		3.8		4.0		4.4		4.7		5.4	
J.P. Morgan Chase	3.8		na		na		na		na		na		na		na		na		na		na		na	
MacroPolicy Perspectives	3.8		7.0		3.8		3.1		3.0		2.9	L	2.9		2.9		3.6		3.9		4.5		4.9	
NatWest Markets	3.8		7.0		na		3.9		4.1		4.2		4.3		4.1		4.3		4.7		5.0		5.6	
Regions Financial Corporation	3.8		7.0		3.8		3.8		3.8		3.9		3.9		3.7		4.0		4.6		4.9		5.6	
ING	3.6		na		na		na		na		na		na		na		na		na		na		na	
Oxford Economics	3.6		6.8		3.6		na		3.6		3.4		3.3		3.4		3.9		4.2		4.4		5.4	
Roberts Capital Advisors	3.6		6.7		3.7		3.6		3.5		3.7		3.8		4.1		4.3		4.5		4.7		5.2	
Wells Fargo	3.6		6.8		3.7		3.6		3.7		3.7		3.8		3.9		4.0		4.4		5.2		6.2	
Action Economics	3.5		6.7		4.1		3.5		3.5		3.3		3.3		3.5		3.8		3.9		4.6		5.2	
BMO Capital Markets	3.5		6.7		3.6		3.5		3.5		3.5		3.6		3.7		3.9		4.1		5.0		5.8	
Chan Economics	3.5		6.5		3.5		3.4		3.4		3.1		2.8	L	2.5	L	2.4	L	2.8	L	3.1	L	4.1	L
EY-Parthenon	3.5		na		na		na		na		na		na		na		na		na		na		na	
KPMG	3.5		6.6		3.4		3.3		3.4		3.5		3.5		3.3		3.6		4.0		4.3		4.8	
Moody's Analytics	3.5		6.7		3.5		3.5		3.4		3.5		3.7		3.8		4.0		4.2		4.6		5.7	
Santander Capital Markets	3.5		6.7		3.6		3.5		3.5		3.5		3.6		3.7		3.8		4.1		4.8		5.6	
Societe Generale	3.5		6.7		3.5		na		3.4		3.3		3.2		3.5		4.1		4.3		na		na	
Via Nova Investment Mgt.	3.5		6.8		3.5		3.5		3.4		3.5		3.4		3.7		3.7		3.8		4.3		4.9	
Daiwa Capital Markets America	3.4		6.5		3.4		na		3.3		na		na		3.3		3.4		3.6		4.0		na	
Economist Intelligence Unit	3.4		6.4		na		na		na		na		na		4.0		na		na		na		na	
GLC Financial Economics	3.4		6.6		3.3		3.4		3.3		3.3		3.3		3.6		3.8		4.2		4.9		5.8	
Goldman Sachs & Co.	3.4		na		na		3.9		na		na		na		3.6		3.7		4.3		4.2		na	
PNC Financial Services Corp.	3.4		6.5		3.4		na		3.2		3.2		3.2		3.6		3.9		4.4		na		5.8	
MacroFin Analytics & Rutgers Bus School	3.3		6.6		3.3		3.3		3.2		3.2		3.6		3.8		4.0		4.1		4.2		5.1	
The Northern Trust Company	3.3		6.4		3.2		3.4		3.3		3.4		3.5		3.7		4.2		4.4		4.7		5.4	
Loomis, Sayles & Company	3.2		6.4		3.2		3.2		3.2		3.3		3.3		3.5		3.5		4.0		4.3		4.8	
The Lonski Group	3.2		6.3		3.1		3.2		3.1		3.0		3.2		3.4		3.4		3.5		3.7		4.4	
Chmura Economics & Analytics	3.1		6.3		3.1		3.1		3.2		3.4		3.4		3.5		3.7		4.1		4.8		5.9	
Georgia State University	3.1		6.3		na		na		2.9	L	3.2		3.3		3.3		3.8		4.3		4.5		5.6	
S&P Global Market Intelligence	3.1		6.3		3.1		na		3.0		3.2		3.3		3.2		3.3		3.7		4.0		na	
Naroff Economics LLC	2.9	L	5.9	L	2.9	L	3.0	L	3.1		3.2		3.4		3.6		4.0		4.3		4.6		na	
December Consensus	3.6	6.7	3.5	3.5	3.5	3.5	3.5	3.6	3.8	4.1	4.4	5.1	5.9	4.3	6.2	116.2	2.0	2.3	2.4	2.3				
Top 10 Avg.	3.9	7.0	3.8	3.7	3.9	3.9	3.9	4.1	4.3	4.7	4.9	5.6	6.4	4.7	6.7	118.1	2.5	2.9	3.1	2.9				
Bottom 10 Avg.	3.2	6.3	3.2	3.2	3.1	3.2	3.2	3.2	3.4	3.6	3.9	4.7	5.5	3.9	5.8	114.2	1.5	1.8	1.9	1.9				
Standard Deviation	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.4	3.0	0.4	0.6	0.6	0.5				
November Consensus	3.3	6.5	3.4	3.3	3.3	3.3	3.3	3.4	3.6	3.8	4.2	4.9	5.8	4.2	5.9	114.2	2.1	2.1	2.3	2.1				
Number of Forecasts Changed From A Month Ago:																								
Down	2	2	3	1	2	3	2	1	0	0	1	1	0	1	0	1	15	7	9	10				
Same	14	13	10	8	11	10	11	10	10	7	6	4	8	9	6	6	12	12	13	11				
Up	22	16	13	12	18	15	15	22	23	28	25	18	14	9	22	11	12	17	15	15				
Diffusion Index	76%	73%	69%	76%	76%	71%	73%	82%	85%	90%	88%	87%	82%	71%	89%	78%	46%	64%	58%	57%				

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First Quarter 2026

Interest Rate Forecasts

Key Assumptions

Blue Chip Financial Forecasts Panel Members	-----Percent Per Annum -- Average For Quarter-----															Avg. For ---Qtr.--- A. Fed's Adv Fgn Econ \$ Index	------(Q-Q % Change)----- ------(SAAR)-----																				
	-----Short-Term-----					--Intermediate-Term--					-----Long-Term-----						B. Real GDP	C. Price Index	D. Cons. Price Index	E. PCE Price Index																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15																						
	Federal Funds Rate	Prime Bank Rate	SOFR Rate	Com. Paper 1-Mo.	Treas. Bills 3-Mo.	Treas. Bills 6-Mo.	Treas. Bills 1-Yr.	Treas. Notes 2-Yr.	Treas. Notes 5-Yr.	Treas. Notes 10-Yr.	Treas. Bond 30-Yr.	Aaa Corp. Bond	Baa Corp. Bond	State & Local Bonds	Home Mtg. Rate																						
	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H																						
TS Lombard	4.8	H	7.9	H	4.8	H	4.7	H	4.8	H	4.9	H	5.0	H	5.4	H	5.5	H	5.6	H	6.4	H	7.2	H	5.5	H	7.3	H	110.0	L	2.5	3.3	H	3.3	H	3.3	H
Bank of America	3.9		na		na		na		na		na		4.0		4.2		4.3		4.7		na		na		na		na		na		2.1	2.4	2.4	2.4	2.4	2.4	
Barclays	3.9		na		na		na		na		na		na		na		na		na		na		na		na		na		na		1.5	3.0	3.3	H	3.0	3.0	
DePrince & Assoc.	3.9		7.0		3.8		3.9		3.8		3.7		3.5		3.8		4.1		4.3		4.4		5.6		6.4		4.7		6.3	115.7	2.2	2.3	2.3	2.2	2.2	2.2	
Fannie Mae	3.9		7.0		na		na		4.3		4.3		4.2		4.2		4.3		4.5		4.6		na		na		na		6.4	na	2.3	2.7	2.6	2.2	2.2	2.2	
Nomura Securities, Inc.	3.9		7.0		na		na		na		na		3.9		4.2		4.5		na		na		na		na		na		na	na	1.7	1.9	3.1	2.7	2.7	2.7	
Swiss Re	3.9		na		na		na		na		na		na		na		na		na		na		na		na		na		na	na	2.5	na	na	na	na	na	
Comerica Bank	3.8		7.0		3.8		na		3.8		3.8		3.8		4.0		4.3		4.7		5.5		6.2		na		6.3		na	na	2.6	2.8	2.8	2.7	2.7	2.7	
J.P. Morgan Chase	3.8		na		na		na		na		na		na		na		na		na		na		na		na		na		na	na	2.0	2.5	2.9	2.6	2.6	2.6	
NatWest Markets	3.8		7.0		na		3.9		4.1		4.2		4.3		4.1		4.3		4.7		5.0		5.6		6.5		5.2		7.0	na	2.0	2.4	2.7	3.2	3.2	3.2	
ING	3.6		na		na		na		na		na		3.9		4.3		5.5	H	5.4		na		na		na		na		na	na	1.8	na	na	na	na	na	
MacroPolicy Perspectives	3.6		6.8		3.6		3.1		3.0		2.9	L	2.9		2.7		3.6		3.9		4.5		4.9		5.6		na		5.9	na	na	na	na	na	na	na	
Regions Financial Corporation	3.6		6.8		3.6		3.7		3.6		3.7		3.8		3.7		4.0		4.7		5.1		5.7		6.5		4.8		6.7	117.9	1.9	2.1	2.1	2.0	2.0	2.0	
Wells Fargo	3.6		6.8		3.7		3.6		3.7		3.7		3.8		3.9		4.1		4.4		5.3		6.3		4.7		6.3		na	na	2.8	H	2.5	2.8	2.6	2.6	
Chan Economics	3.5		6.5		3.5		3.4		3.4		3.1		2.8	L	2.5	L	2.4		2.8	L	3.1	L	4.1	L	5.1		3.4		5.6	115.0	1.5	1.9	2.1	1.8	1.8	L	
Oxford Economics	3.5		6.6		3.5		na		3.4		3.3		3.2		3.4		3.8		4.2		4.4		4.4		na		na		6.5	117.5	2.8	H	2.1	2.5	2.2	2.2	
Via Nova Investment Mgt.	3.5		6.8		3.5		3.5		3.4		3.5		3.4		3.7		3.7		3.8		4.3		4.9		5.4		3.6		6.1	112.0	2.0	2.0	2.0	L	2.0	2.0	
BMO Capital Markets	3.4		6.5		3.4		3.4		3.3		3.4		3.4		3.5		3.7		3.9		4.1		4.9		5.9		4.1		6.4	116.3	2.0	2.0	2.2	2.0	2.0	2.0	
Economist Intelligence Unit	3.4		6.5		na		na		na		na		na		na		4.2		na		na		na		na		na		na	na	2.1	na	2.5	na	na	na	
GLC Financial Economics	3.4		6.5		3.4		3.4		3.3		3.4		3.3		3.2		3.6		3.8		4.2		4.9		5.8		4.1		5.9	113.9	2.2	2.2	2.4	2.2	2.2	2.2	
Goldman Sachs & Co.	3.4		na		na		na		3.6		na		3.6		3.7		4.3		4.2		na		na		na		na		na	na	2.2	1.7	L	2.2	1.9	1.9	
KPMG	3.4		6.6		3.3		3.2		3.3		3.3		3.4		3.6		3.9		4.3		4.8		6.1		na		na		6.2	na	1.5	2.8	2.8	2.4	2.4	2.4	
PNC Financial Services Corp.	3.4		6.5		3.4		na		3.2		3.2		3.2		3.2		3.5		3.9		4.3		na		5.8		4.4		5.7	116.1	2.3	1.8	2.3	2.2	2.2	2.2	
Roberts Capital Advisors	3.4		6.5		3.5		3.4		3.4		3.6		3.7		4.1		4.3		4.5		4.7		5.2		6.0		4.6		6.8	115.0	2.2	2.3	2.5	2.4	2.4	2.4	
Action Economics	3.3		6.4		3.9		3.2		3.2		3.1		3.0		3.1		3.4		3.7		3.8		4.4		5.1		3.5		6.6	118.8	na	na	na	na	na	na	
Daiwa Capital Markets America	3.3		6.4		3.2		na		3.2		na		na		3.2		3.2		3.4		3.9		na		na		na		5.6	112.0	1.8	2.2	2.1	2.0	2.0	2.0	
Moody's Analytics	3.3		6.5		3.3		3.3		3.2		3.3		3.5		3.7		3.9		4.2		4.6		5.7		6.6		4.2		5.9	na	1.9	2.1	2.4	2.1	2.1	2.1	
Santander Capital Markets	3.3		6.5		3.4		3.3		3.3		3.3		3.4		3.5		3.6		3.7		4.0		4.7		5.6		3.7		5.8	117.0	2.4	2.5	2.7	2.4	2.4	2.4	
Societe Generale	3.3		6.5		3.3		na		3.2		3.1		3.1		3.2		3.6		4.2		4.4		na		na		na		na	na	na	1.7	1.9	2.6	2.3	2.3	2.3
EY-Parthenon	3.2		na		na		na		3.3		na		na		na		na		3.7		na		na		na		na		na	na	na	1.7	2.1	2.2	2.1	2.1	2.1
MacroFin Analytics & Rutgers Bus School	3.2		6.3		3.2		3.2		3.1		3.2		3.4		3.7		3.9		4.0		4.2		5.0		5.5		4.1		6.3	118.0	1.9	2.4	2.4	2.3	2.3	2.3	
Chmura Economics & Analytics	3.1		6.3		3.1		3.1		3.2		3.3		3.4		3.5		3.6		3.7		4.1		4.8		5.9		na		5.8	na	2.8	H	2.0	2.0	L	2.1	2.1
Georgia State University	3.1		6.3		na		na		2.9		3.2		3.5		3.7		4.1		4.5		4.7		6.0		6.9		na		6.8	na	1.4	L	2.9	3.0	2.1	2.1	
Loomis, Sayles & Company	3.1		6.3		3.1		3.1		3.1		3.2		3.3		3.5		3.5		3.9		4.2		4.7		5.5		3.9		5.9	118.3	2.0	2.2	2.3	2.0	2.0	2.0	
The Northern Trust Company	3.1		6.3		3.1		3.2		3.2		3.4		3.5		3.7		4.2		4.4		4.7		5.4		6.4		4.6		6.7	115.0	1.8	2.6	2.7	2.5	2.5	2.5	
The Lonski Group	3.0		6.1		2.9		2.9	L	3.0		3.1		3.2		3.3		3.3		3.3		3.5		4.3		5.0	L	3.3	L	5.6	123.9	H	1.8	2.2	2.4	2.6	2.6	2.6
Naroff Economics LLC	2.9		5.9		3.0		3.0		3.0		3.1		3.3		3.5		4.0		4.4		4.7		na		na		4.1		6.0	116.5	1.6	2.5	2.6	2.5	2.5	2.5	
S&P Global Market Intelligence	2.7	L	5.8	L	2.6	L	na		2.6	L	2.9	L	3.0		3.1		3.3		3.6		3.9		na		na		na		5.4	L	na	2.2	2.8	2.7	2.3	2.3	2.3
December Consensus	3.5		6.6		3.4		3.4		3.4		3.4		3.5		3.6		3.8		4.1		4.4		5.1		6.0		4.2		6.2	116.1	2.0	2.3	2.5	2.3	2.3	2.3	
Top 10 Avg.	4.0		7.0		3.8		3.7		3.8		3.9		3.9		4.1		4.3		4.7		4.9		5.6		6.5		4.7		6.7	118.0	2.5	2.8	2.9	2.8	2.8	2.8	
Bottom 10 Avg.	3.1		6.2		3.1		3.1		3.0		3.1		3.1		3.1		3.3		3.6		3.9		4.6		5.4		3.8		5.7	114.1	1.6	1.9	2.2	2.0	2.0	2.0	
Standard Deviation	0.4		0.4		0.4		0.4		0.4		0.4		0.4		0.5		0.5		0.5		0.5		0.6		0.6		0.6		0.5	3.1	0.4	0.4	0.3	0.4	0.4	0.4	
November Consensus	3.2																																				

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	4.38	4.13	3.88
BMO Capital Markets	4.38	4.13	3.63
ING Financial Markets	4.38	3.88	3.68
Moody's Analytics	4.64	4.33	3.83
Northern Trust	4.13	3.88	3.13
Oxford Economics	4.33	4.08	3.63
Economist Intelligence Unit	4.38	4.13	3.63
TS Lombard	4.00	4.00	4.25
Wells Fargo	4.13	3.88	3.63
December Consensus	4.31	4.05	3.70
High	4.64	4.33	4.25
Low	4.00	3.88	3.13
Last Months Avg.	4.29	3.98	3.56

Blue Chip Forecasters	Policy-Rate Balance Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	0.50	0.50	0.75
BMO Capital Markets	0.50	0.75	1.25
ING Financial Markets	0.50	0.75	1.00
Moody's Analytics	0.25	0.44	0.67
Nomura Securities	--	--	--
Northern Trust	0.50	0.50	0.75
Oxford Economics	0.50	0.75	0.75
S&P Global Market Intelligence	--	--	--
Economist Intelligence Unit	0.25	0.33	0.33
Scotiabank	--	--	--
TS Lombard	0.25	0.35	0.35
Wells Fargo	0.50	0.75	0.75
December Consensus	0.42	0.57	0.73
High	0.50	0.75	1.25
Low	0.25	0.33	0.33
Last Months Avg.	0.35	0.51	0.68

Blue Chip Forecasters	Official Bank Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	4.50	4.00	3.50
BMO Capital Markets	4.50	4.25	4.00
ING Financial Markets	4.25	3.75	3.25
Moody's Analytics	4.85	4.60	4.10
Nomura Securities	--	--	--
Northern Trust	4.50	4.25	3.75
Oxford Economics	4.60	4.35	3.85
S&P Global Market Intelligence	--	--	--
Economist Intelligence Unit	4.75	4.25	3.50
Scotiabank	4.25	3.75	3.25
TS Lombard	4.75	4.25	4.25
Wells Fargo	4.50	4.25	4.00
December Consensus	4.55	4.17	3.75
High	4.85	4.60	4.25
Low	4.25	3.75	3.25
Last Months Avg.	4.62	4.20	3.67

Blue Chip Forecasters	SNB Policy Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	0.25	0.00	0.00
BMO Capital Markets	1.00	1.00	1.00
ING Financial Markets	0.50	0.50	0.50
Moody's Analytics	0.75	0.50	0.50
Nomura Securities	--	--	--
Northern Trust	0.50	0.25	0.25
Oxford Economics	0.75	0.75	0.75
S&P Global Market Intelligence	--	--	--
Economist Intelligence Unit	1.00	0.75	0.75
Scotiabank	--	--	--
TS Lombard	1.00	1.00	1.25
Wells Fargo	0.50	0.50	0.50
December Consensus	0.69	0.58	0.61
High	1.00	1.00	1.25
Low	0.25	0.00	0.00
Last Months Avg.	0.83	0.75	0.78

Blue Chip Forecasters	O/N MMkt Financing Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	3.00	2.75	2.50
BMO Capital Markets	3.25	2.75	2.50
ING Financial Markets	3.25	3.00	3.00
Moody's Analytics	4.00	3.69	3.08
Nomura Securities	--	--	--
Northern Trust	3.00	2.75	2.50
Oxford Economics	3.00	2.50	2.25
S&P Global Market Intelligence	--	--	--
Economist Intelligence Unit	3.75	3.50	3.50
Scotiabank	--	--	--
TS Lombard	3.75	3.75	4.00
Wells Fargo	3.00	2.75	2.50
December Consensus	3.33	3.05	2.87
High	4.00	3.75	4.00
Low	3.00	2.50	2.25
Last Months Avg.	3.48	3.09	3.00

United States			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.10	4.25	4.25	
4.28	4.16	3.92	
4.25	4.75	5.50	
4.15	4.18	4.22	
4.40	4.40	4.40	
4.33	4.31	4.24	
4.28	4.04	3.63	
4.75	5.00	5.50	
4.20	4.05	3.90	
4.33	4.35	4.40	
4.75	5.00	5.50	
4.15	4.04	3.63	
4.04	4.04	4.06	

Japan			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.10	1.15	1.25	
1.07	1.09	1.14	
1.25	1.25	1.75	
1.06	1.19	1.35	
--	--	--	
1.10	1.20	1.30	
1.25	1.34	1.47	
--	--	--	
1.10	1.10	1.10	
--	--	--	
1.00	1.10	1.25	
1.20	1.30	1.25	
1.13	1.19	1.32	
1.25	1.34	1.75	
1.00	1.09	1.10	
1.02	1.13	1.21	

United Kingdom			
10 Yr. Gilt Yields %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
4.50	4.55	4.55	
4.41	4.35	4.22	
4.10	4.00	4.25	
4.50	4.49	4.46	
--	--	--	
4.20	4.10	4.00	
4.45	4.39	4.29	
--	--	--	
3.90	3.90	3.80	
--	--	--	
4.25	4.50	4.75	
4.25	4.15	4.10	
4.28	4.27	4.27	
4.50	4.55	4.75	
3.90	3.90	3.80	
4.00	3.96	3.90	

Switzerland			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
--	--	--	
--	--	--	
0.40	0.50	0.70	
0.56	0.60	0.69	
--	--	--	
0.20	0.10	0.10	
0.55	0.65	0.86	
--	--	--	
-0.10	-0.10	-0.10	
--	--	--	
0.40	0.40	0.50	
--	--	--	
0.34	0.36	0.46	
0.56	0.65	0.86	
-0.10	-0.10	-0.10	
0.42	0.49	0.61	

Canada			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
--	--	--	
3.16	3.04	2.84	
3.00	3.25	4.00	
3.27	3.33	3.54	
--	--	--	
3.50	3.50	3.50	
3.36	3.32	3.40	
--	--	--	
2.74	2.24	1.98	
--	--	--	
3.25	3.50	4.25	
3.05	2.95	2.90	
3.17	3.14	3.30	
3.50	3.50	4.25	
2.74	2.24	1.98	
3.11	3.11	3.27	

Fed's AFE \$ Index			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
--	--	--	
120.8	119.6	117.1	
112.7	112.5	111.8	
--	--	--	
119.0	121.0	116.0	
119.4	118.9	117.9	
--	--	--	
--	--	--	
118.0	118.0	115.7	
120.8	121.0	117.9	
112.7	112.5	111.8	
92.8	92.1	91.3	

Yen per US\$			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
158.0	155.0	149.0	
151.0	150.0	146.0	
155.0	157.0	160.0	
149.0	146.8	142.1	
150.0	145.0	140.0	
156.0	150.0	145.0	
156.9	155.8	152.6	
148.4	143.1	132.9	
150.0	153.0	158.0	
145.0	145.0	140.0	
145.0	145.0	145.0	
--	--	--	
151.3	149.6	146.4	
158.0	157.0	160.0	
145.0	143.1	132.9	
144.3	142.3	137.6	

US\$ per Pound Sterling			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.27	1.28	1.30	
1.25	1.26	1.27	
1.25	1.25	1.24	
1.25	1.24	1.26	
1.29	1.28	1.28	
1.25	1.23	1.27	
1.26	1.26	1.27	
1.29	1.30	1.30	
1.32	1.27	1.28	
1.29	1.29	1.31	
1.30	1.25	1.25	
--	--	--	
1.27	1.26	1.28	
1.32	1.30	1.31	
1.25	1.23	1.24	
1.31	1.30	1.31	

CHF per US\$			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
0.88	0.88	0.90	
0.87	0.86	0.85	
0.89	0.88	0.88	
0.87	0.86	0.84	
0.91	0.95	0.95	
0.90	0.91	0.88	
0.90	0.90	0.90	
0.88	0.89	0.89	
0.91	0.89	0.88	
0.91	0.91	0.89	
0.90	0.90	0.90	
--	--	--	
0.89	0.89	0.89	
0.91	0.95	0.95	
0.87	0.86	0.84	
0.87	0.87	0.86	

C\$ per US\$			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.42	1.43	1.43	
1.39	1.38	1.35	
1.37	1.37	1.38	
1.35	1.34	1.31	
1.39	1.40	1.40	
1.41	1.37	1.35	
1.40	1.39	1.38	
1.41	1.42	1.41	
1.39	1.38	1.30	
1.34	1.32	1.30	
1.35	1.35	1.35	
--	--	--	
1.38	1.38	1.36	
1.42	1.43	1.43	
1.34	1.32	1.30	
1.37	1.36	1.33	

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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	4.10	3.60
BMO Capital Markets	4.10	3.85	3.60
ING Financial Markets	4.10	3.85	3.35
Moody's Analytics	4.35	4.18	3.77
Nomura Securities	--	--	--
Northern Trust	4.10	3.85	3.60
Oxford Economics	4.35	4.23	3.73
S&P Global Market Intelligence	--	--	--
Economist Intelligence Unit	4.35	4.35	4.00
Scotiabank	--	--	--
TS Lombard	4.35	4.35	4.55
Wells Fargo	4.10	3.85	3.60
December Consensus	4.24	4.07	3.76
High	4.35	4.35	4.55
Low	4.10	3.85	3.35
Last Months Avg.	4.32	4.15	3.84

Australia			
10 Yr. Gov't Bond Yield %			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
--	--	--	
--	--	--	
4.20	4.25	4.75	
4.20	4.15	4.11	
--	--	--	
4.40	4.30	4.20	
4.31	4.21	4.18	
--	--	--	
3.90	3.70	3.40	
--	--	--	
4.50	4.25	5.25	
--	--	--	
4.25	4.14	4.32	
4.50	4.30	5.25	
3.90	3.70	3.40	
4.18	4.08	4.20	

US\$ per A\$			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
0.63	0.63	0.63	
0.64	0.64	0.65	
0.65	0.64	0.63	
0.67	0.69	0.73	
0.66	0.65	0.67	
0.65	0.65	0.67	
0.67	0.67	0.69	
0.66	0.66	0.67	
0.70	0.69	0.68	
0.70	0.70	0.72	
0.65	0.65	0.65	
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0.66	0.66	0.67	
0.70	0.70	0.73	
0.63	0.63	0.63	
0.68	0.69	0.70	

Blue Chip Forecasters	Main Refinancing Rate		
	In 3 Mo.	In 6 Mo.	In 12 Mo.
Barclays	2.65	2.15	1.65
BMO Capital Markets	3.15	2.90	2.40
ING Financial Markets	2.25	1.75	1.75
Moody's Analytics	3.43	2.98	2.40
Nomura Securities	--	--	--
Northern Trust	2.90	2.40	2.15
Oxford Economics	2.89	2.36	1.90
S&P Global Market Intelligence	--	--	--
Economist Intelligence Unit	3.15	2.65	3.15
Scotiabank	2.65	2.40	2.15
TS Lombard	3.25	3.00	3.00
Wells Fargo	2.50	2.25	2.00
December Consensus	2.88	2.48	2.26
High	3.43	3.00	3.15
Low	2.25	1.75	1.65
Last Months Avg.	3.07	2.63	2.34

Euro area

US\$ per Euro			
In 3 Mo.	In 6 Mo.	In 12 Mo.	
1.04	1.04	1.04	
1.01	1.02	1.05	
1.04	1.04	1.02	
1.08	1.10	1.13	
1.05	1.03	1.03	
1.05	1.02	1.09	
1.05	1.05	1.06	
1.08	1.08	1.09	
1.09	1.03	1.03	
1.11	1.11	1.15	
1.10	1.05	1.05	
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1.06	1.05	1.07	
1.11	1.11	1.15	
1.01	1.02	1.02	
1.10	1.10	1.11	

	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	2.20	2.15	2.00	--	--	--	--	--	--	--	--	--
BMO Capital Markets	2.32	2.27	2.16	--	--	--	--	--	--	--	--	--
ING Financial Markets	2.30	2.40	2.70	3.00	3.10	3.40	3.60	3.70	4.00	3.05	3.15	3.45
Moody's Analytics	2.39	2.38	2.38	3.04	2.94	2.83	3.69	3.65	3.65	3.22	3.16	3.09
Northern Trust	2.30	2.20	2.20	3.00	2.90	2.90	3.50	3.40	3.40	3.00	2.90	2.90
Oxford Economics	2.41	2.43	2.45	3.24	3.33	3.33	3.71	3.78	3.90	3.16	3.21	3.27
Economist Intelligence Unit	2.50	2.40	2.40	3.00	2.90	2.80	3.50	3.50	3.50	3.00	3.10	3.40
TS Lombard	2.25	2.50	3.00	3.00	3.25	3.75	3.45	3.70	4.40	3.00	3.25	3.75
Wells Fargo	2.20	2.10	2.05	--	--	--	--	--	--	--	--	--
December Consensus	2.32	2.31	2.37	3.05	3.07	3.17	3.58	3.62	3.81	3.07	3.13	3.31
High	2.50	2.50	3.00	3.24	3.33	3.75	3.71	3.78	4.40	3.22	3.25	3.75
Low	2.20	2.10	2.00	3.00	2.90	2.80	3.45	3.40	3.40	3.00	2.90	2.90
Last Months Avg.	2.27	2.27	2.30	2.98	3.00	3.07	3.53	3.59	3.78	3.02	3.08	3.25

	Consensus Forecasts			
	10-year Bond Yields vs U.S. Yield			
	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-3.35	-3.20	-3.16	-3.08
United Kingdom	0.01	-0.04	-0.08	-0.13
Switzerland	-4.05	-3.99	-3.99	-3.94
Canada	-1.15	-1.16	-1.21	-1.09
Australia	0.21	-0.08	-0.21	-0.08
Germany	-2.09	-2.01	-2.03	-2.02
France	-1.34	-1.28	-1.28	-1.23
Italy	-0.88	-0.75	-0.73	-0.59
Spain	-1.34	-1.26	-1.22	-1.09

	Consensus Forecasts			
	Policy Rates vs U.S. Target Rate			
	Current	In 3 Mo.	In 6 Mo.	In 12 Mo.
Japan	-4.38	-3.89	-4.62	-2.97
United Kingdom	0.13	0.24	0.12	0.05
Switzerland	-3.63	-3.61	-3.47	-3.09
Canada	-0.88	-0.97	-1.00	-0.83
Australia	-0.28	-0.07	0.02	0.06
Euro area	-1.23	-1.42	-1.56	-1.44

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Special Questions:

1. What is your estimate of the long-term neutral fed funds rate?

<u>Consensus</u>	3.08%	<u>Top 10</u>	3.48%	<u>Bot 10</u>	2.69%	<u>Median</u>	3.13%
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2. a. Will the US presidential election outcome slow the pace of FFR reductions going forward? Yes 79% No 21%
- b. Will it slow the pace at which the ECB lowers its policy interest rate going forward? Yes 16% No 84%
- c. Will it slow the pace at which the BoE lowers its policy interest rate going forward? Yes 16% No 84%
- d. Will it slow the pace of BoJ rate increases going forward? Yes 16% No 84%

3. Has the US election outcome changed your forecast of global (ex US) economic growth for 2025?

<u>Yes, it has lowered my forecast</u>	46%	<u>Yes, it has raised my forecast</u>	21%	<u>No change</u>	32%
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4. a. What is the probability of a recession occurring in the US over the next 12 months?

<u>Consensus</u>	27%	<u>Top 10</u>	37%	<u>Bot 10</u>	18%	<u>Median</u>	25%
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b. Has it changed since the US election? Yes, increased 23% Yes, decreased 23% No change 53%

5. a. What is the probability that US inflation readings will turn up meaningfully over the next 6 months?

<u>Consensus</u>	36%	<u>Top 10</u>	55%	<u>Bot 10</u>	21%	<u>Median</u>	32%
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b. Has it changed since the US election? Yes, increased 63% Yes, decreased 0% No change 37%

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

Overseas Consequences of the U.S. Election: How will U.S. trading partners react to trade risks?

In sport, play is limited by time or innings. Lineups are set, rules are fixed and boundaries are defined. Winners are determined objectively. Commerce and politics operate differently. Players come and go, the rules are changeable and the clock never stops. It is much harder to identify victors in these arenas. The lineup in Washington will be changing next year. Other players around the globe will be challenged to adapt their tactics to the new roster, and the new rules they will try to enforce. Following is a look at how selected countries and regions may fare under a second Trump administration.

Europe. The European continent is extremely vulnerable to Trump's agenda, owing to close commercial and national security linkages with the United States. The most immediate economic worry will be tariffs, as the incoming president seeks to close the €155 billion trade deficit with the eurozone; he has threatened a blanket 10% to 20% levy on all imports. Germany, Italy and Ireland are among the most vulnerable due to their high export volumes to America. Germany's struggling auto sector will be top of the list.

The implications for the U.K. economy will also be significant. America is Britain's most important bilateral trade, security and defense partner. Industries like pharmaceuticals, medical goods, automotive and liquor would be particularly exposed to new U.S. tariffs. Trump's trade agenda, if implemented to the fullest, will likely deliver a hit of anywhere between 0.6% to 1.1% to real gross domestic product (GDP) across the European continent, according to Goldman Sachs.

The trade deficit is not the only elephant in the room. European nations will come under increased pressure to decouple from China. The incoming president could impose counter-measures against European digital services taxes and states that have implemented the Organization for Economic Co-operation and Development's global minimum tax, as it is seen to disadvantage American corporations.

The President-elect also wants all the European states to meet the defense spending targets required of North Atlantic Treaty Organization (NATO), threatening withdrawal of U.S. troops and weapons. Out of the 32 NATO allies, seven European states are unlikely to meet the 2% of GDP spending target in 2024, including Italy and Spain.

Asia Pacific. China is bracing for an unstable and unpredictable path ahead, at a time when its economy is struggling to return to pre-pandemic levels of growth. During Trump's first term in office, goods from China faced tariffs of as much as 25%. Proposed tariffs as high as 60% on Chinese imports, along with more technology controls, would decimate Chinese trade with the U.S. Escalating trade disputes will significantly hurt corporate confidence and capital expenditures. Seven years of trade tensions have allowed mainland businesses to diversify, and America has also reduced its dependence on Chinese products. However, shrinking external and weak domestic demand will further exacerbate deflationary pressures.

The looming trade war could set in motion the steady decline of China's decades-old manufacturing and export growth model. Global supply chains will come under scrutiny as the Trump administration will also likely target Chinese goods being re-routed to the United States through other markets. Beijing could retaliate by targeting U.S. farm products, blacklisting American corporations and restricting access to essential materials like rare earth metals. However, in order to offset tariff costs, Chinese policymakers will have to weaken the renminbi, increase export tax rebates and implement more stimulus. An unprecedented scale of currency depreciation will be required to mitigate the higher levies. According to Morgan Stanley, factoring in tariffs already in place since 2018, the renminbi would need to fall by 50% against the dollar to keep U.S. import prices stable.

The Australian economy will not be immune from repercussions from the U.S. election, as it shares close commercial ties with both China and the United States. About 97% of Australian imports into the U.S. are currently tariff-free, thanks to a free trade deal signed in 2004. Beyond the shock of potential new tariffs, Australia could be collateral damage of a renewed U.S.-China trade war. Weaker demand for Chinese goods would diminish demand for Australian input commodities like iron ore. If all of Trump's policies are implemented, Australia's economic growth would be between 0.8% and 1.5% lower than it would otherwise have been, according to an analysis by KPMG.

North America. Few nations are as closely tied with the U.S. as Canada and Mexico, with supply chains deeply integrated and continental trade flows exceeding a trillion dollars annually. Trump's promise of universal 10% tariffs raises worries across this network.

Canada exports 75% of its goods to the U.S., with energy, autos and other heavy manufacturing industries among the top export products. These industries rely on its southern neighbor for raw inputs and as a market for finished products. Any retaliatory tariffs from Canada are only going to compound the pain of these businesses, in the form of higher input costs. Increased American oil production and weaker demand from China would weigh on the Canadian energy industry.

The Trump administration could spell even bigger trouble for Mexico, not only because of the large trade surplus it runs with the U.S. The President-elect has warned to implement "whatever tariffs are required — 100%, 200%, 1,000%" to prevent imports of Chinese cars via Mexico and a blanket 25% tariff on all Mexican goods due to the flow of migrants through the country.

His administration is also likely to insist on modifications to the United States-Mexico-Canada Agreement, the deal he inked during his first term, when it comes up for review in 2026.

As much as the President-elect would like to believe that the U.S. will emerge a winner from trade disputes, past trade conflicts have not worked to any nation's benefit. Losing the least may have to count as a win.

Vaibhav Tandon (Northern Trust)

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Long-Range Survey:

The table below contains the results of our twice-annual long-range CONSENSUS survey. There are also Top 10 and Bottom 10 averages for each variable. Shown are consensus estimates for the years 2026 through 2030 and averages for the five-year periods 2026-2030 and 2031-2035. Apply these projections cautiously. Few if any economic, demographic and political forces can be evaluated accurately over such long time spans.

		----- Average For The Year -----					Five-Year Averages	
		2026	2027	2028	2029	2030	2026-2030	2031-2035
1. Federal Funds Rate	CONSENSUS	3.4	3.3	3.3	3.2	3.2	3.3	3.2
	Top 10 Average	3.7	3.7	3.6	3.7	3.7	3.7	3.6
	Bottom 10 Average	3.0	2.9	2.9	2.9	2.8	2.9	2.9
2. Prime Rate	CONSENSUS	6.5	6.4	6.4	6.4	6.3	6.4	6.3
	Top 10 Average	6.8	6.8	6.7	6.8	6.7	6.7	6.7
	Bottom 10 Average	6.2	6.1	6.1	6.0	5.9	6.1	5.9
3. SOFR	CONSENSUS	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	Top 10 Average	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	Bottom 10 Average	3.1	3.0	3.0	2.9	2.9	3.0	2.9
4. Commercial Paper, 1-Mo	CONSENSUS	3.4	3.4	3.4	3.4	3.3	3.4	3.3
	Top 10 Average	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	Bottom 10 Average	3.2	3.1	3.1	3.0	3.0	3.1	3.0
5. Treasury Bill Yield, 3-Mo	CONSENSUS	3.3	3.3	3.2	3.2	3.2	3.3	3.2
	Top 10 Average	3.6	3.6	3.5	3.6	3.6	3.6	3.5
	Bottom 10 Average	3.1	3.0	2.9	2.9	2.8	2.9	2.8
6. Treasury Bill Yield, 6-Mo	CONSENSUS	3.4	3.3	3.3	3.2	3.2	3.3	3.2
	Top 10 Average	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	Bottom 10 Average	3.1	3.0	3.0	2.9	2.8	3.0	2.9
7. Treasury Bill Yield, 1-Yr	CONSENSUS	3.4	3.4	3.3	3.3	3.3	3.3	3.3
	Top 10 Average	3.7	3.7	3.6	3.6	3.6	3.6	3.6
	Bottom 10 Average	3.2	3.1	3.0	3.0	2.9	3.0	2.9
8. Treasury Note Yield, 2-Yr	CONSENSUS	3.6	3.6	3.5	3.5	3.5	3.5	3.5
	Top 10 Average	3.9	3.9	3.9	3.9	3.9	3.9	3.9
	Bottom 10 Average	3.3	3.2	3.1	3.1	3.0	3.1	3.0
9. Treasury Note Yield, 5-Yr	CONSENSUS	3.8	3.8	3.8	3.8	3.7	3.8	3.8
	Top 10 Average	4.2	4.3	4.3	4.3	4.3	4.3	4.3
	Bottom 10 Average	3.4	3.4	3.3	3.3	3.2	3.3	3.2
10. Treasury Note Yield, 10-Yr	CONSENSUS	4.0	4.1	4.0	4.0	3.9	4.0	4.0
	Top 10 Average	4.5	4.6	4.5	4.5	4.5	4.5	4.5
	Bottom 10 Average	3.6	3.5	3.4	3.4	3.3	3.5	3.4
11. Treasury Bond Yield, 30-Yr	CONSENSUS	4.3	4.4	4.3	4.3	4.2	4.3	4.2
	Top 10 Average	4.7	4.8	4.8	4.8	4.8	4.8	4.7
	Bottom 10 Average	3.9	3.9	3.8	3.8	3.7	3.8	3.8
12. Corporate Aaa Bond Yield	CONSENSUS	5.1	5.2	5.2	5.1	5.1	5.2	5.1
	Top 10 Average	5.5	5.7	5.6	5.6	5.6	5.6	5.5
	Bottom 10 Average	4.8	4.8	4.7	4.7	4.6	4.7	4.6
13. Corporate Baa Bond Yield	CONSENSUS	6.0	6.1	6.0	6.0	6.0	6.0	5.9
	Top 10 Average	6.4	6.6	6.5	6.5	6.4	6.5	6.4
	Bottom 10 Average	5.7	5.7	5.6	5.6	5.5	5.6	5.5
14. State & Local Bonds Yield	CONSENSUS	4.1	4.3	4.2	4.2	4.3	4.2	4.1
	Top 10 Average	4.5	4.6	4.6	4.6	4.6	4.6	4.6
	Bottom 10 Average	3.8	3.9	3.9	3.9	3.9	3.9	3.6
15. Home Mortgage Rate	CONSENSUS	6.2	6.1	6.0	6.0	5.9	6.0	5.9
	Top 10 Average	6.6	6.6	6.5	6.4	6.4	6.5	6.4
	Bottom 10 Average	5.7	5.7	5.6	5.5	5.4	5.6	5.4
A. Fed's AFE Nominal \$ Index	CONSENSUS	115.5	115.0	114.5	113.9	113.2	114.4	112.6
	Top 10 Average	117.0	116.3	115.8	115.3	114.8	115.8	114.6
	Bottom 10 Average	113.9	113.6	113.1	112.5	111.8	113.0	110.9
		----- Year-Over-Year, % Change -----					Five-Year Averages	
		2026	2027	2028	2029	2030	2026-2030	2031-2035
B. Real GDP	CONSENSUS	1.9	2.0	2.0	2.0	2.0	2.0	1.9
	Top 10 Average	2.2	2.3	2.3	2.2	2.2	2.2	2.2
	Bottom 10 Average	1.7	1.7	1.8	1.7	1.7	1.7	1.7
C. GDP Chained Price Index	CONSENSUS	2.2	2.2	2.2	2.2	2.2	2.2	2.1
	Top 10 Average	2.4	2.3	2.3	2.3	2.3	2.3	2.3
	Bottom 10 Average	2.1	2.0	2.0	2.0	2.0	2.0	2.0
D. Consumer Price Index	CONSENSUS	2.4	2.3	2.2	2.2	2.2	2.2	2.2
	Top 10 Average	2.6	2.5	2.4	2.5	2.4	2.5	2.4
	Bottom 10 Average	2.1	2.0	2.0	2.0	2.0	2.0	2.0
E. PCE Price Index	CONSENSUS	2.2	2.2	2.1	2.1	2.1	2.2	2.1
	Top 10 Average	2.5	2.3	2.3	2.3	2.3	2.3	2.3
	Bottom 10 Average	2.0	2.0	1.9	2.0	2.0	2.0	2.0

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Databank:

2024 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	-1.1	0.7	0.5	-0.2	0.2	-0.3	1.2	-0.1	0.8	0.4	....	....
Auto & Light Truck Sales (b)	15.00	15.68	15.73	16.07	15.89	15.03	15.85	15.33	15.77	16.04	....	....
Personal Income (a, current \$)	1.4	0.4	0.6	0.4	0.5	0.3	0.3	0.2	0.3	....	....	....
Personal Consumption (a, current \$)	0.1	0.5	0.7	0.3	0.5	0.3	0.6	0.3	0.5	....	....	....
Consumer Credit (e)	3.7	2.6	-0.6	0.4	2.3	0.8	6.5	1.8	1.4	....	....	....
Consumer Sentiment (U. of Mich.)	79.0	76.9	79.4	77.2	69.1	68.2	66.4	67.9	70.1	70.5	71.8	....
Household Employment (c)	-31	-184	498	25	-408	116	67	168	430	-368	....	....
Nonfarm Payroll Employment (c)	256	236	310	108	216	118	144	78	223	12	....	....
Unemployment Rate (%)	3.7	3.9	3.8	3.9	4.0	4.1	4.3	4.2	4.1	4.1	....	....
Average Hourly Earnings (All, cur. \$)	34.51	34.56	34.69	34.75	34.88	34.99	35.07	35.22	35.33	35.46	....	....
Average Workweek (All, hrs.)	34.2	34.3	34.4	34.3	34.3	34.3	34.2	34.3	34.3	34.3	....	....
Industrial Production (d)	-1.2	-0.1	-0.3	-0.8	0.0	0.9	-0.5	0.0	-0.7	-0.3	....	....
Capacity Utilization (%)	77.2	78.1	77.8	77.7	78.1	78.2	77.6	77.9	77.4	77.1	....	....
ISM Manufacturing Index (g)	49.1	47.8	50.3	49.2	48.7	48.5	46.8	47.2	47.2	46.5	....	....
ISM Nonmanufacturing Index (g)	53.4	52.6	51.4	49.4	53.8	48.8	51.4	51.5	54.9	56.0	....	....
Housing Starts (b)	1.376	1.546	1.299	1.377	1.315	1.329	1.262	1.379	1.353	1.311	....	....
Housing Permits (b)	1.508	1.563	1.485	1.440	1.399	1.454	1.406	1.470	1.425	1.419	....	....
New Home Sales (1-family, c)	664	643	683	736	672	672	707	690	738	610	....	....
Construction Expenditures (a)	1.0	0.5	0.1	1.3	0.2	-1.1	0.0	0.1	0.1	....	....	....
Consumer Price Index (nsa, d)	3.1	3.2	3.5	3.4	3.3	3.0	2.9	2.5	2.4	2.6	....	....
CPI ex. Food and Energy (nsa, d)	3.9	3.8	3.8	3.6	3.4	3.3	3.2	3.2	3.3	3.3	....	....
PCE Chain Price Index (d)	2.6	2.6	2.8	2.7	2.6	2.4	2.5	2.3	2.1	....	....	....
Core PCE Chain Price Index (d)	3.1	2.9	3.0	2.9	2.7	2.6	2.7	2.7	2.7	....	....	....
Producer Price Index (nsa, d)	1.0	1.6	2.0	2.3	2.5	2.9	2.4	2.0	1.9	2.4	....	....
Durable Goods Orders (a)	-3.8	1.2	0.8	0.2	0.1	-6.9	9.8	-0.9	-0.7	....	....	....
Leading Economic Indicators (a)	-0.5	0.0	-0.2	-0.7	-0.4	-0.3	-0.5	-0.3	-0.3	-0.4	....	....
Balance of Trade & Services (f)	-66.4	-68.9	-68.0	-74.9	-75.3	-73.0	-78.9	-70.8	-84.4	....	....	....
Federal Funds Rate (%)	5.33	5.33	5.33	5.33	5.33	5.33	5.33	5.33	5.13	4.83	....	....
3-Mo. Treasury Bill Rate (%)	5.45	5.44	5.47	5.44	5.46	5.51	5.43	5.30	4.92	4.72	....	....
10-Year Treasury Note Yield (%)	4.06	4.21	4.21	4.54	4.48	4.31	4.25	3.87	3.72	4.10	....	....

2023 Historical Data

Monthly Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Retail and Food Service Sales (a)	4.1	-1.1	-1.1	0.7	0.4	0.3	0.3	0.8	0.8	-0.4	0.3	0.4
Auto & Light Truck Sales (b)	15.16	14.92	15.15	15.92	15.39	15.89	15.80	15.37	15.69	15.34	15.46	15.92
Personal Income (a, current \$)	0.6	0.6	0.5	0.4	0.5	0.3	0.2	0.4	0.4	0.3	0.4	0.4
Personal Consumption (a, current \$)	1.9	0.3	-0.1	0.7	0.2	0.4	0.6	0.3	0.6	0.2	0.4	0.7
Consumer Credit (e)	4.5	2.9	4.7	3.3	1.3	5.8	3.1	-4.3	2.3	2.0	4.1	1.6
Consumer Sentiment (U. of Mich.)	64.9	66.9	62.0	63.7	59.0	64.2	71.5	69.4	67.8	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)	482	287	146	278	303	240	184	210	246	165	182	290
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. \$)	33.07	33.15	33.31	33.44	33.54	33.70	33.84	33.91	34.01	34.10	34.23	34.34
Average Workweek (All, hrs.)	34.6	34.5	34.4	34.3	34.4	34.4	34.3	34.4	34.4	34.3	34.4	34.4
Industrial Production (d)	1.5	0.9	0.1	0.3	0.0	-0.4	0.0	-0.1	-0.2	-0.8	-0.2	0.8
Capacity Utilization (%)	79.8	79.6	79.4	79.6	79.2	78.6	79.0	78.9	78.9	78.3	78.4	78.1
ISM Manufacturing Index (g)	47.4	47.7	46.5	47.0	46.6	46.4	46.5	47.6	48.6	46.9	46.6	47.1
ISM Nonmanufacturing Index (g)	54.7	55.0	51.2	52.3	51.0	53.6	52.8	54.1	53.4	51.9	52.5	50.5
Housing Starts (b)	1.361	1.404	1.342	1.368	1.583	1.415	1.473	1.305	1.363	1.365	1.510	1.568
Housing Permits (b)	1.443	1.620	1.493	1.470	1.532	1.493	1.501	1.578	1.515	1.534	1.508	1.530
New Home Sales (1-family, c)	639	625	644	687	741	666	700	652	694	673	611	654
Construction Expenditures (a)	0.5	0.7	1.0	1.3	1.1	0.6	0.2	1.0	0.4	0.8	0.9	0.5
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	4.5	4.0	3.3	3.4	3.4	3.4	3.0	2.7	2.7
Core PCE Chain Price Index (d)	4.9	4.9	4.8	4.8	4.7	4.4	4.3	3.8	3.7	3.4	3.2	3.0
Producer Price Index (nsa, d)	5.7	4.7	2.7	2.3	1.1	0.3	1.1	1.9	1.8	1.1	0.8	1.1
Durable Goods Orders (a)	0.8	-2.3	2.3	2.2	0.2	2.6	-3.1	-0.2	2.0	-4.1	7.7	-4.4
Leading Economic Indicators (a)	-0.5	-0.6	-1.2	-0.7	-0.7	-0.7	-0.3	-0.4	-0.8	-0.9	-0.5	-0.2
Balance of Trade & Services (f)	-70.0	-70.5	-60.3	-72.8	-66.1	-64.8	-64.6	-59.6	-62.2	-64.3	-64.8	-64.9
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.

16 ■ BLUE CHIP FINANCIAL FORECASTS ■ NOVEMBER 27, 2024

Calendar of Upcoming Economic Data Releases

Monday	Tuesday	Wednesday	Thursday	Friday
November 25 Chicago Fed National Activity Index (Oct) Texas Manufacturing Outlook Survey (Nov)	26 Final Building Permits (Oct) FHFA & Case-Shiller HPI (Sep) New Residential Sales (Oct) Consumer Confidence (Nov) H.6 Money Stock (Oct) Philly Fed Nonmfg Bus (Nov) Richmond Fed Mfg & Service Sector Surveys (Nov) Texas Service Sector (Nov) Steel Imports (Oct)	27 GDP & Corp Profits (Q3,2 nd Est) Adv Durable Goods (Oct) Adv Trade & Inventories (Oct) Personal Income (Oct) Slctd NIPA Tables (Q3,2 nd Est) Dallas Fed Trim Mean PCE(Oct) Pending Home Sales (Oct) Mortgage Applications EIA Crude Oil Stocks Weekly Jobless Claims	28 THANKSGIVING DAY ALL MARKETS CLOSED	29 Underlying NIPA Tables (Q3, 2 nd Estimate) Strike Report (Nov) Agricultural Prices (Oct)
December 2 Construction (Oct) ISM Manufacturing (Nov) S&P Global Mfg PMI (Nov) NABE Outlook (Q4)	3 JOLTS (Oct)	4 ADP Employment Report (Nov) ISM Services PMI (Nov) S&P Global Services PMI (Nov) Manufacturers' Shipments, Inventories & Orders (Oct) BEA Auto & Truck Sales (Nov) Mortgage Applications EIA Crude Oil Stocks	5 International Trade (Oct) Challenger Employment Report (Nov) Public Debt (Nov) Interest on public debt (Nov) Weekly Jobless Claims	6 Employment Situation (Nov) Consumer Sentiment (Dec, Preliminary) Consumer Credit (Oct) Baker Hughes International Rig Count (Nov)
9 Wholesale Trade (Oct) Treasury Auction Allotments (Nov)	10 Productivity & Costs (Q3) QFR (Q3) Manpower Survey (Q1) NFIB (Nov) Kansas City Fed Labor Market Conditions Indicators (Nov)	11 CPI & Real Earnings (Nov) Transportation Services (Oct) Cleveland Fed Median CPI (Nov) Monthly Treasury (Nov) Kansas City Fin Stress (Nov) OPEC Crude Oil Spot Prices (Nov) Mortgage Applications EIA Crude Oil Stocks	12 Producer Prices (Nov) QSS (Q3) Financial Accounts (Q3) Weekly Jobless Claims	13 Import & Export Prices (Nov) Housing Affordability (Oct)
16 Empire State Mfg Survey (Dec)	17 Advance Retail Sales (Nov) IP & Capacity Utilization (Nov) MTIS (Oct) ECEC (Q3) Business Leaders Survey (Dec) Home Builders (Dec) FOMC Meeting	18 New Residential Construction (Nov) International Transactions (Q3) FOMC Meeting Mortgage Applications EIA Crude Oil Stocks	19 GDP (Q3, 3rd Estimate) Existing Home Sales (Nov) S&P Global Flash PMIs (Dec) Philadelphia Fed Mfg Business Outlook Survey (Dec) Kansas City Fed Manufacturing Survey (Dec) TIC Data (Oct) Composite Indexes (Nov) Weekly Jobless Claims	20 Dallas Fed Trimmed-Mean PCE (Nov) Personal Income (Nov) Underlying NIPA Tables (Q3, 3 rd Estimate) Consumer Sentiment (Dec,Final) Livingston Survey (Dec)
23 Treasury Auction (Dec) Chicago Fed National Activity Index (Nov) Steel Imports for Consumption (Nov, Preliminary)	24 Adv Durable Goods (Nov) New Residential Sales (Nov) H.6 Money Stock (Nov) Final Building Permits (Nov) Philadelphia Fed Nonmfg Bus Outlook Survey (Dec) Richmond Fed Mfg & Service Sector Surveys (Dec)	25 CHRISTMAS DAY ALL MARKETS CLOSED	26 Weekly Jobless Claims Mortgage Applications EIA Crude Oil Stocks	27 Advance Trade & Inventories (Nov) International Investment Position (Q3)
30 Dallas Fed Banking Conditions Survey (Dec) Texas Manufacturing Outlook Survey (Dec) CEW (Q2) Pending Home Sales (Nov)	31 FHFA HPI (Oct) Case-Shiller HPI (Oct) Agricultural Prices (Nov) Texas Service Sector Outlook Survey (Dec) Consumer Confidence (Dec) FRB Philadelphia Coincident Economic Activity Index (Nov)	January 1 NEW YEAR'S DAY ALL MARKETS CLOSED	2 Construction (Nov) Challenger Employment Report (Dec) Weekly Jobless Claims Mortgage Applications EIA Crude Oil Stocks	3 ISM Manufacturing (Dec) S&P Global Mfg PMI (Dec) Strike Report (Dec)

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Scotiabank Group, Toronto, Canada

S&P Global Market Intelligence, St. Louis, MO

TS Lombard, London, UK

Wells Fargo, Charlotte, NC

[PROTECTED DATA BEGINS...

Docket No. EL25-
Bulkley Workpapers – Risk Premium
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Docket No. EL25-
Bulkley Workpapers – Small Size Adjustment
is CONFIDENTIAL
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Docket No. EL25-
Bulkley Workpapers – Trading Volume Analysis
is CONFIDENTIAL
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Bulkley Workpapers – Institutional Ownership Analysis
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Bulkley Workpapers – Adjustment Clauses
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Docket No. EL25-
Bulkley Workpapers – Capital Structure Analysis
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Docket	Date	Federal Funds Rate	30-Day Avg of 30-Year Treasury Bond Yield
D-EL18-021	5/14/2019	2.38%	2.83%
Current	4/30/2025	4.33%	4.53%
Change		1.95%	1.71%

Core
Inflation
Rate

1.97%

2.81%

0.84%

FRED Graph Observations
Federal Reserve Economic Data
Link: <https://fred.stlouisfed.org>
Help: <https://fredhelp.stlouisfed.org>
Economic Research Division
Federal Reserve Bank of St. Louis

EFFR Effective Federal Funds Rate, Percent, Daily, Not Seasonally Adjusted

Frequency: Daily

observation_date	EFFR	
2019-05-14	2.38	2.38%
2019-05-15	2.40	2.40%
2019-05-16	2.39	2.39%
2019-05-17	2.39	2.39%
2019-05-20	2.39	2.39%
2019-05-21	2.39	2.39%
2019-05-22	2.38	2.38%
2019-05-23	2.38	2.38%
2019-05-24	2.38	2.38%
2019-05-27		0.00%
2019-05-28	2.39	2.39%
2019-05-29	2.39	2.39%
2019-05-30	2.39	2.39%
2019-05-31	2.40	2.40%
2019-06-03	2.38	2.38%
2019-06-04	2.38	2.38%
2019-06-05	2.38	2.38%
2019-06-06	2.37	2.37%
2019-06-07	2.37	2.37%
2019-06-10	2.37	2.37%
2019-06-11	2.37	2.37%
2019-06-12	2.37	2.37%
2019-06-13	2.37	2.37%
2019-06-14	2.36	2.36%
2019-06-17	2.38	2.38%
2019-06-18	2.37	2.37%
2019-06-19	2.37	2.37%
2019-06-20	2.37	2.37%
2019-06-21	2.38	2.38%
2019-06-24	2.38	2.38%
2019-06-25	2.38	2.38%
2019-06-26	2.38	2.38%
2019-06-27	2.38	2.38%
2019-06-28	2.40	2.40%
2019-07-01	2.39	2.39%
2019-07-02	2.40	2.40%
2019-07-03	2.41	2.41%
2019-07-04		0.00%
2019-07-05	2.42	2.42%
2019-07-08	2.41	2.41%
2019-07-09	2.41	2.41%
2019-07-10	2.41	2.41%
2019-07-11	2.40	2.40%
2019-07-12	2.38	2.38%
2019-07-15	2.40	2.40%
2019-07-16	2.41	2.41%
2019-07-17	2.41	2.41%
2019-07-18	2.41	2.41%
2019-07-19	2.41	2.41%
2019-07-22	2.40	2.40%
2019-07-23	2.40	2.40%
2019-07-24	2.40	2.40%
2019-07-25	2.40	2.40%
2019-07-26	2.40	2.40%
2019-07-29	2.40	2.40%
2019-07-30	2.39	2.39%
2019-07-31	2.40	2.40%
2019-08-01	2.14	2.14%
2019-08-02	2.14	2.14%
2019-08-05	2.13	2.13%
2019-08-06	2.13	2.13%
2019-08-07	2.12	2.12%
2019-08-08	2.12	2.12%
2019-08-09	2.12	2.12%
2019-08-12	2.12	2.12%
2019-08-13	2.12	2.12%
2019-08-14	2.12	2.12%
2019-08-15	2.13	2.13%
2019-08-16	2.13	2.13%
2019-08-19	2.13	2.13%
2019-08-20	2.13	2.13%
2019-08-21	2.12	2.12%
2019-08-22	2.12	2.12%
2019-08-23	2.12	2.12%
2019-08-26	2.12	2.12%
2019-08-27	2.12	2.12%
2019-08-28	2.12	2.12%
2019-08-29	2.12	2.12%
2019-08-30	2.13	2.13%
2019-09-02		0.00%
2019-09-03	2.13	2.13%
2019-09-04	2.13	2.13%

2019-09-05	2.13	2.13%
2019-09-06	2.12	2.12%
2019-09-09	2.13	2.13%
2019-09-10	2.13	2.13%
2019-09-11	2.13	2.13%
2019-09-12	2.13	2.13%
2019-09-13	2.14	2.14%
2019-09-16	2.25	2.25%
2019-09-17	2.30	2.30%
2019-09-18	2.25	2.25%
2019-09-19	1.90	1.90%
2019-09-20	1.90	1.90%
2019-09-23	1.90	1.90%
2019-09-24	1.90	1.90%
2019-09-25	1.90	1.90%
2019-09-26	1.85	1.85%
2019-09-27	1.83	1.83%
2019-09-30	1.90	1.90%
2019-10-01	1.88	1.88%
2019-10-02	1.85	1.85%
2019-10-03	1.83	1.83%
2019-10-04	1.82	1.82%
2019-10-07	1.82	1.82%
2019-10-08	1.82	1.82%
2019-10-09	1.82	1.82%
2019-10-10	1.82	1.82%
2019-10-11	1.82	1.82%
2019-10-14		0.00%
2019-10-15	1.90	1.90%
2019-10-16	1.90	1.90%
2019-10-17	1.85	1.85%
2019-10-18	1.85	1.85%
2019-10-21	1.85	1.85%
2019-10-22	1.85	1.85%
2019-10-23	1.85	1.85%
2019-10-24	1.85	1.85%
2019-10-25	1.83	1.83%
2019-10-28	1.83	1.83%
2019-10-29	1.82	1.82%
2019-10-30	1.82	1.82%
2019-10-31	1.58	1.58%
2019-11-01	1.57	1.57%
2019-11-04	1.56	1.56%
2019-11-05	1.56	1.56%
2019-11-06	1.55	1.55%
2019-11-07	1.55	1.55%
2019-11-08	1.55	1.55%
2019-11-11		0.00%
2019-11-12	1.55	1.55%
2019-11-13	1.55	1.55%
2019-11-14	1.55	1.55%
2019-11-15	1.55	1.55%
2019-11-18	1.55	1.55%
2019-11-19	1.55	1.55%
2019-11-20	1.55	1.55%
2019-11-21	1.55	1.55%
2019-11-22	1.55	1.55%
2019-11-25	1.55	1.55%
2019-11-26	1.55	1.55%
2019-11-27	1.55	1.55%
2019-11-28		0.00%
2019-11-29	1.56	1.56%
2019-12-02	1.56	1.56%
2019-12-03	1.55	1.55%
2019-12-04	1.55	1.55%
2019-12-05	1.55	1.55%
2019-12-06	1.55	1.55%
2019-12-09	1.55	1.55%
2019-12-10	1.55	1.55%
2019-12-11	1.55	1.55%
2019-12-12	1.55	1.55%
2019-12-13	1.55	1.55%
2019-12-16	1.56	1.56%
2019-12-17	1.55	1.55%
2019-12-18	1.55	1.55%
2019-12-19	1.55	1.55%
2019-12-20	1.55	1.55%
2019-12-23	1.55	1.55%
2019-12-24	1.55	1.55%
2019-12-25		0.00%
2019-12-26	1.55	1.55%
2019-12-27	1.55	1.55%
2019-12-30	1.55	1.55%
2019-12-31	1.55	1.55%
2020-01-01		0.00%
2020-01-02	1.55	1.55%
2020-01-03	1.55	1.55%
2020-01-06	1.55	1.55%
2020-01-07	1.55	1.55%
2020-01-08	1.55	1.55%
2020-01-09	1.55	1.55%
2020-01-10	1.54	1.54%
2020-01-13	1.54	1.54%

2020-01-14	1.54	1.54%
2020-01-15	1.54	1.54%
2020-01-16	1.54	1.54%
2020-01-17	1.55	1.55%
2020-01-20		0.00%
2020-01-21	1.55	1.55%
2020-01-22	1.55	1.55%
2020-01-23	1.55	1.55%
2020-01-24	1.55	1.55%
2020-01-27	1.55	1.55%
2020-01-28	1.55	1.55%
2020-01-29	1.55	1.55%
2020-01-30	1.60	1.60%
2020-01-31	1.59	1.59%
2020-02-03	1.59	1.59%
2020-02-04	1.59	1.59%
2020-02-05	1.59	1.59%
2020-02-06	1.59	1.59%
2020-02-07	1.58	1.58%
2020-02-10	1.58	1.58%
2020-02-11	1.58	1.58%
2020-02-12	1.58	1.58%
2020-02-13	1.58	1.58%
2020-02-14	1.58	1.58%
2020-02-17		0.00%
2020-02-18	1.59	1.59%
2020-02-19	1.59	1.59%
2020-02-20	1.59	1.59%
2020-02-21	1.58	1.58%
2020-02-24	1.58	1.58%
2020-02-25	1.58	1.58%
2020-02-26	1.58	1.58%
2020-02-27	1.58	1.58%
2020-02-28	1.58	1.58%
2020-03-02	1.59	1.59%
2020-03-03	1.59	1.59%
2020-03-04	1.09	1.09%
2020-03-05	1.09	1.09%
2020-03-06	1.09	1.09%
2020-03-09	1.09	1.09%
2020-03-10	1.09	1.09%
2020-03-11	1.09	1.09%
2020-03-12	1.10	1.10%
2020-03-13	1.10	1.10%
2020-03-16	0.25	0.25%
2020-03-17	0.25	0.25%
2020-03-18	0.25	0.25%
2020-03-19	0.20	0.20%
2020-03-20	0.15	0.15%
2020-03-23	0.15	0.15%
2020-03-24	0.12	0.12%
2020-03-25	0.10	0.10%
2020-03-26	0.10	0.10%
2020-03-27	0.10	0.10%
2020-03-30	0.09	0.09%
2020-03-31	0.08	0.08%
2020-04-01	0.06	0.06%
2020-04-02	0.05	0.05%
2020-04-03	0.05	0.05%
2020-04-06	0.05	0.05%
2020-04-07	0.05	0.05%
2020-04-08	0.05	0.05%
2020-04-09	0.05	0.05%
2020-04-10	0.05	0.05%
2020-04-13	0.05	0.05%
2020-04-14	0.05	0.05%
2020-04-15	0.05	0.05%
2020-04-16	0.05	0.05%
2020-04-17	0.05	0.05%
2020-04-20	0.05	0.05%
2020-04-21	0.05	0.05%
2020-04-22	0.05	0.05%
2020-04-23	0.04	0.04%
2020-04-24	0.05	0.05%
2020-04-27	0.04	0.04%
2020-04-28	0.04	0.04%
2020-04-29	0.04	0.04%
2020-04-30	0.05	0.05%
2020-05-01	0.05	0.05%
2020-05-04	0.05	0.05%
2020-05-05	0.05	0.05%
2020-05-06	0.05	0.05%
2020-05-07	0.05	0.05%
2020-05-08	0.05	0.05%
2020-05-11	0.05	0.05%
2020-05-12	0.05	0.05%
2020-05-13	0.05	0.05%
2020-05-14	0.05	0.05%
2020-05-15	0.05	0.05%
2020-05-18	0.05	0.05%
2020-05-19	0.05	0.05%
2020-05-20	0.05	0.05%
2020-05-21	0.05	0.05%

2020-05-22	0.05	0.05%
2020-05-25		0.00%
2020-05-26	0.05	0.05%
2020-05-27	0.05	0.05%
2020-05-28	0.05	0.05%
2020-05-29	0.05	0.05%
2020-06-01	0.05	0.05%
2020-06-02	0.06	0.06%
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2024-02-27	5.33	5.33%
2024-02-28	5.33	5.33%
2024-02-29	5.33	5.33%
2024-03-01	5.33	5.33%
2024-03-04	5.33	5.33%
2024-03-05	5.33	5.33%
2024-03-06	5.33	5.33%
2024-03-07	5.33	5.33%
2024-03-08	5.33	5.33%
2024-03-11	5.33	5.33%
2024-03-12	5.33	5.33%
2024-03-13	5.33	5.33%
2024-03-14	5.33	5.33%
2024-03-15	5.33	5.33%
2024-03-18	5.33	5.33%
2024-03-19	5.33	5.33%
2024-03-20	5.33	5.33%
2024-03-21	5.33	5.33%
2024-03-22	5.33	5.33%
2024-03-25	5.33	5.33%
2024-03-26	5.33	5.33%
2024-03-27	5.33	5.33%
2024-03-28	5.33	5.33%
2024-03-29	5.33	5.33%
2024-04-01	5.33	5.33%
2024-04-02	5.33	5.33%
2024-04-03	5.33	5.33%
2024-04-04	5.33	5.33%
2024-04-05	5.33	5.33%
2024-04-08	5.33	5.33%
2024-04-09	5.33	5.33%
2024-04-10	5.33	5.33%
2024-04-11	5.33	5.33%
2024-04-12	5.33	5.33%
2024-04-15	5.33	5.33%
2024-04-16	5.33	5.33%
2024-04-17	5.33	5.33%
2024-04-18	5.33	5.33%
2024-04-19	5.33	5.33%
2024-04-22	5.33	5.33%
2024-04-23	5.33	5.33%

2024-04-24	5.33	5.33%
2024-04-25	5.33	5.33%
2024-04-26	5.33	5.33%
2024-04-29	5.33	5.33%
2024-04-30	5.33	5.33%
2024-05-01	5.33	5.33%
2024-05-02	5.33	5.33%
2024-05-03	5.33	5.33%
2024-05-06	5.33	5.33%
2024-05-07	5.33	5.33%
2024-05-08	5.33	5.33%
2024-05-09	5.33	5.33%
2024-05-10	5.33	5.33%
2024-05-13	5.33	5.33%
2024-05-14	5.33	5.33%
2024-05-15	5.33	5.33%
2024-05-16	5.33	5.33%
2024-05-17	5.33	5.33%
2024-05-20	5.33	5.33%
2024-05-21	5.33	5.33%
2024-05-22	5.33	5.33%
2024-05-23	5.33	5.33%
2024-05-24	5.33	5.33%
2024-05-27		0.00%
2024-05-28	5.33	5.33%
2024-05-29	5.33	5.33%
2024-05-30	5.33	5.33%
2024-05-31	5.33	5.33%
2024-06-03	5.33	5.33%
2024-06-04	5.33	5.33%
2024-06-05	5.33	5.33%
2024-06-06	5.33	5.33%
2024-06-07	5.33	5.33%
2024-06-10	5.33	5.33%
2024-06-11	5.33	5.33%
2024-06-12	5.33	5.33%
2024-06-13	5.33	5.33%
2024-06-14	5.33	5.33%
2024-06-17	5.33	5.33%
2024-06-18	5.33	5.33%
2024-06-19		0.00%
2024-06-20	5.33	5.33%
2024-06-21	5.33	5.33%
2024-06-24	5.33	5.33%
2024-06-25	5.33	5.33%
2024-06-26	5.33	5.33%
2024-06-27	5.33	5.33%
2024-06-28	5.33	5.33%
2024-07-01	5.33	5.33%
2024-07-02	5.33	5.33%
2024-07-03	5.33	5.33%
2024-07-04		0.00%
2024-07-05	5.33	5.33%
2024-07-08	5.33	5.33%
2024-07-09	5.33	5.33%
2024-07-10	5.33	5.33%
2024-07-11	5.33	5.33%
2024-07-12	5.33	5.33%
2024-07-15	5.33	5.33%
2024-07-16	5.33	5.33%
2024-07-17	5.33	5.33%
2024-07-18	5.33	5.33%
2024-07-19	5.33	5.33%
2024-07-22	5.33	5.33%
2024-07-23	5.33	5.33%
2024-07-24	5.33	5.33%
2024-07-25	5.33	5.33%
2024-07-26	5.33	5.33%
2024-07-29	5.33	5.33%
2024-07-30	5.33	5.33%
2024-07-31	5.33	5.33%
2024-08-01	5.33	5.33%
2024-08-02	5.33	5.33%
2024-08-05	5.33	5.33%
2024-08-06	5.33	5.33%
2024-08-07	5.33	5.33%
2024-08-08	5.33	5.33%
2024-08-09	5.33	5.33%
2024-08-12	5.33	5.33%
2024-08-13	5.33	5.33%
2024-08-14	5.33	5.33%
2024-08-15	5.33	5.33%
2024-08-16	5.33	5.33%
2024-08-19	5.33	5.33%
2024-08-20	5.33	5.33%
2024-08-21	5.33	5.33%
2024-08-22	5.33	5.33%
2024-08-23	5.33	5.33%
2024-08-26	5.33	5.33%
2024-08-27	5.33	5.33%
2024-08-28	5.33	5.33%
2024-08-29	5.33	5.33%
2024-08-30	5.33	5.33%

2024-09-02		0.00%
2024-09-03	5.33	5.33%
2024-09-04	5.33	5.33%
2024-09-05	5.33	5.33%
2024-09-06	5.33	5.33%
2024-09-09	5.33	5.33%
2024-09-10	5.33	5.33%
2024-09-11	5.33	5.33%
2024-09-12	5.33	5.33%
2024-09-13	5.33	5.33%
2024-09-16	5.33	5.33%
2024-09-17	5.33	5.33%
2024-09-18	5.33	5.33%
2024-09-19	4.83	4.83%
2024-09-20	4.83	4.83%
2024-09-23	4.83	4.83%
2024-09-24	4.83	4.83%
2024-09-25	4.83	4.83%
2024-09-26	4.83	4.83%
2024-09-27	4.83	4.83%
2024-09-30	4.83	4.83%
2024-10-01	4.83	4.83%
2024-10-02	4.83	4.83%
2024-10-03	4.83	4.83%
2024-10-04	4.83	4.83%
2024-10-07	4.83	4.83%
2024-10-08	4.83	4.83%
2024-10-09	4.83	4.83%
2024-10-10	4.83	4.83%
2024-10-11	4.83	4.83%
2024-10-14		0.00%
2024-10-15	4.83	4.83%
2024-10-16	4.83	4.83%
2024-10-17	4.83	4.83%
2024-10-18	4.83	4.83%
2024-10-21	4.83	4.83%
2024-10-22	4.83	4.83%
2024-10-23	4.83	4.83%
2024-10-24	4.83	4.83%
2024-10-25	4.83	4.83%
2024-10-28	4.83	4.83%
2024-10-29	4.83	4.83%
2024-10-30	4.83	4.83%
2024-10-31	4.83	4.83%
2024-11-01	4.83	4.83%
2024-11-04	4.83	4.83%
2024-11-05	4.83	4.83%
2024-11-06	4.83	4.83%
2024-11-07	4.83	4.83%
2024-11-08	4.58	4.58%
2024-11-11		0.00%
2024-11-12	4.58	4.58%
2024-11-13	4.58	4.58%
2024-11-14	4.58	4.58%
2024-11-15	4.58	4.58%
2024-11-18	4.58	4.58%
2024-11-19	4.58	4.58%
2024-11-20	4.58	4.58%
2024-11-21	4.58	4.58%
2024-11-22	4.58	4.58%
2024-11-25	4.58	4.58%
2024-11-26	4.58	4.58%
2024-11-27	4.58	4.58%
2024-11-28		0.00%
2024-11-29	4.58	4.58%
2024-12-02	4.58	4.58%
2024-12-03	4.58	4.58%
2024-12-04	4.58	4.58%
2024-12-05	4.58	4.58%
2024-12-06	4.58	4.58%
2024-12-09	4.58	4.58%
2024-12-10	4.58	4.58%
2024-12-11	4.58	4.58%
2024-12-12	4.58	4.58%
2024-12-13	4.58	4.58%
2024-12-16	4.58	4.58%
2024-12-17	4.58	4.58%
2024-12-18	4.58	4.58%
2024-12-19	4.33	4.33%
2024-12-20	4.33	4.33%
2024-12-23	4.33	4.33%
2024-12-24	4.33	4.33%
2024-12-25		0.00%
2024-12-26	4.33	4.33%
2024-12-27	4.33	4.33%
2024-12-30	4.33	4.33%
2024-12-31	4.33	4.33%
2025-01-01		0.00%
2025-01-02	4.33	4.33%
2025-01-03	4.33	4.33%
2025-01-06	4.33	4.33%
2025-01-07	4.33	4.33%
2025-01-08	4.33	4.33%

2025-01-09	4.33	4.33%
2025-01-10	4.33	4.33%
2025-01-13	4.33	4.33%
2025-01-14	4.33	4.33%
2025-01-15	4.33	4.33%
2025-01-16	4.33	4.33%
2025-01-17	4.33	4.33%
2025-01-20		0.00%
2025-01-21	4.33	4.33%
2025-01-22	4.33	4.33%
2025-01-23	4.33	4.33%
2025-01-24	4.33	4.33%
2025-01-27	4.33	4.33%
2025-01-28	4.33	4.33%
2025-01-29	4.33	4.33%
2025-01-30	4.33	4.33%
2025-01-31	4.33	4.33%
2025-02-03	4.33	4.33%
2025-02-04	4.33	4.33%
2025-02-05	4.33	4.33%
2025-02-06	4.33	4.33%
2025-02-07	4.33	4.33%
2025-02-10	4.33	4.33%
2025-02-11	4.33	4.33%
2025-02-12	4.33	4.33%
2025-02-13	4.33	4.33%
2025-02-14	4.33	4.33%
2025-02-17		0.00%
2025-02-18	4.33	4.33%
2025-02-19	4.33	4.33%
2025-02-20	4.33	4.33%
2025-02-21	4.33	4.33%
2025-02-24	4.33	4.33%
2025-02-25	4.33	4.33%
2025-02-26	4.33	4.33%
2025-02-27	4.33	4.33%
2025-02-28	4.33	4.33%
2025-03-03	4.33	4.33%
2025-03-04	4.33	4.33%
2025-03-05	4.33	4.33%
2025-03-06	4.33	4.33%
2025-03-07	4.33	4.33%
2025-03-10	4.33	4.33%
2025-03-11	4.33	4.33%
2025-03-12	4.33	4.33%
2025-03-13	4.33	4.33%
2025-03-14	4.33	4.33%
2025-03-17	4.33	4.33%
2025-03-18	4.33	4.33%
2025-03-19	4.33	4.33%
2025-03-20	4.33	4.33%
2025-03-21	4.33	4.33%
2025-03-24	4.33	4.33%
2025-03-25	4.33	4.33%
2025-03-26	4.33	4.33%
2025-03-27	4.33	4.33%
2025-03-28	4.33	4.33%
2025-03-31	4.33	4.33%
2025-04-01	4.33	4.33%
2025-04-02	4.33	4.33%
2025-04-03	4.33	4.33%
2025-04-04	4.33	4.33%
2025-04-07	4.33	4.33%
2025-04-08	4.33	4.33%
2025-04-09	4.33	4.33%
2025-04-10	4.33	4.33%
2025-04-11	4.33	4.33%
2025-04-14	4.33	4.33%
2025-04-15	4.33	4.33%
2025-04-16	4.33	4.33%
2025-04-17	4.33	4.33%
2025-04-18	4.33	4.33%
2025-04-21	4.33	4.33%
2025-04-22	4.33	4.33%
2025-04-23	4.33	4.33%
2025-04-24	4.33	4.33%
2025-04-25	4.33	4.33%
2025-04-28	4.33	4.33%
2025-04-29	4.33	4.33%
2025-04-30	4.33	4.33%

FRED Graph Observations
Federal Reserve Economic Data
Link: <https://fred.stlouisfed.org>
Help: <https://fredhelp.stlouisfed.org>
Economic Research Division
Federal Reserve Bank of St. Louis

DGS30 Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity, Quoted on an Investment Basis, Percent, Daily, Not Seasonally Adjusted

Frequency: Daily

observation	date	DGS30	
	2019-04-03	2.93	2.93%
	2019-04-04	2.92	2.92%
	2019-04-05	2.91	2.91%
	2019-04-08	2.93	2.93%
	2019-04-09	2.92	2.92%
	2019-04-10	2.90	2.90%
	2019-04-11	2.94	2.94%
	2019-04-12	2.97	2.97%
	2019-04-15	2.96	2.96%
	2019-04-16	2.99	2.99%
	2019-04-17	2.99	2.99%
	2019-04-18	2.96	2.96%
	2019-04-19		0.00%
	2019-04-22	2.99	2.99%
	2019-04-23	2.98	2.98%
	2019-04-24	2.94	2.94%
	2019-04-25	2.94	2.94%
	2019-04-26	2.92	2.92%
	2019-04-29	2.96	2.96%
	2019-04-30	2.93	2.93%
	2019-05-01	2.92	2.92%
	2019-05-02	2.94	2.94%
	2019-05-03	2.93	2.93%
	2019-05-06	2.91	2.91%
	2019-05-07	2.86	2.86%
	2019-05-08	2.89	2.89%
	2019-05-09	2.87	2.87%
	2019-05-10	2.89	2.89%
	2019-05-13	2.83	2.83%
	2019-05-14	2.86	2.86%
	2019-05-15	2.82	2.82%
	2019-05-16	2.84	2.84%
	2019-05-17	2.82	2.82%
	2019-05-20	2.83	2.83%
	2019-05-21	2.84	2.84%
	2019-05-22	2.82	2.82%
	2019-05-23	2.75	2.75%
	2019-05-24	2.75	2.75%
	2019-05-27		0.00%
	2019-05-28	2.70	2.70%
	2019-05-29	2.69	2.69%
	2019-05-30	2.65	2.65%
	2019-05-31	2.58	2.58%
	2019-06-03	2.53	2.53%
	2019-06-04	2.60	2.60%
	2019-06-05	2.63	2.63%
	2019-06-06	2.62	2.62%
	2019-06-07	2.57	2.57%
	2019-06-10	2.62	2.62%
	2019-06-11	2.62	2.62%
	2019-06-12	2.62	2.62%
	2019-06-13	2.61	2.61%
	2019-06-14	2.59	2.59%
	2019-06-17	2.58	2.58%
	2019-06-18	2.55	2.55%
	2019-06-19	2.54	2.54%
	2019-06-20	2.53	2.53%
	2019-06-21	2.59	2.59%
	2019-06-24	2.55	2.55%
	2019-06-25	2.53	2.53%
	2019-06-26	2.57	2.57%
	2019-06-27	2.52	2.52%
	2019-06-28	2.52	2.52%
	2019-07-01	2.55	2.55%
	2019-07-02	2.51	2.51%
	2019-07-03	2.47	2.47%
	2019-07-04		0.00%
	2019-07-05	2.54	2.54%
	2019-07-08	2.53	2.53%
	2019-07-09	2.54	2.54%
	2019-07-10	2.57	2.57%
	2019-07-11	2.65	2.65%
	2019-07-12	2.64	2.64%
	2019-07-15	2.61	2.61%
	2019-07-16	2.63	2.63%
	2019-07-17	2.57	2.57%
	2019-07-18	2.56	2.56%
	2019-07-19	2.57	2.57%
	2019-07-22	2.58	2.58%
	2019-07-23	2.61	2.61%
	2019-07-24	2.58	2.58%
	2019-07-25	2.60	2.60%
	2019-07-26	2.59	2.59%
	2019-07-29	2.59	2.59%

2019-07-30	2.58	2.58%
2019-07-31	2.53	2.53%
2019-08-01	2.44	2.44%
2019-08-02	2.39	2.39%
2019-08-05	2.30	2.30%
2019-08-06	2.25	2.25%
2019-08-07	2.22	2.22%
2019-08-08	2.25	2.25%
2019-08-09	2.26	2.26%
2019-08-12	2.14	2.14%
2019-08-13	2.15	2.15%
2019-08-14	2.03	2.03%
2019-08-15	1.98	1.98%
2019-08-16	2.01	2.01%
2019-08-19	2.08	2.08%
2019-08-20	2.04	2.04%
2019-08-21	2.07	2.07%
2019-08-22	2.11	2.11%
2019-08-23	2.02	2.02%
2019-08-26	2.04	2.04%
2019-08-27	1.97	1.97%
2019-08-28	1.94	1.94%
2019-08-29	1.97	1.97%
2019-08-30	1.96	1.96%
2019-09-02		0.00%
2019-09-03	1.95	1.95%
2019-09-04	1.97	1.97%
2019-09-05	2.06	2.06%
2019-09-06	2.02	2.02%
2019-09-09	2.11	2.11%
2019-09-10	2.19	2.19%
2019-09-11	2.22	2.22%
2019-09-12	2.22	2.22%
2019-09-13	2.37	2.37%
2019-09-16	2.31	2.31%
2019-09-17	2.27	2.27%
2019-09-18	2.25	2.25%
2019-09-19	2.22	2.22%
2019-09-20	2.17	2.17%
2019-09-23	2.16	2.16%
2019-09-24	2.09	2.09%
2019-09-25	2.18	2.18%
2019-09-26	2.15	2.15%
2019-09-27	2.13	2.13%
2019-09-30	2.12	2.12%
2019-10-01	2.11	2.11%
2019-10-02	2.09	2.09%
2019-10-03	2.04	2.04%
2019-10-04	2.01	2.01%
2019-10-07	2.05	2.05%
2019-10-08	2.04	2.04%
2019-10-09	2.08	2.08%
2019-10-10	2.16	2.16%
2019-10-11	2.22	2.22%
2019-10-14		0.00%
2019-10-15	2.23	2.23%
2019-10-16	2.23	2.23%
2019-10-17	2.24	2.24%
2019-10-18	2.25	2.25%
2019-10-21	2.28	2.28%
2019-10-22	2.26	2.26%
2019-10-23	2.25	2.25%
2019-10-24	2.26	2.26%
2019-10-25	2.29	2.29%
2019-10-28	2.34	2.34%
2019-10-29	2.33	2.33%
2019-10-30	2.26	2.26%
2019-10-31	2.17	2.17%
2019-11-01	2.21	2.21%
2019-11-04	2.27	2.27%
2019-11-05	2.34	2.34%
2019-11-06	2.30	2.30%
2019-11-07	2.40	2.40%
2019-11-08	2.43	2.43%
2019-11-11		0.00%
2019-11-12	2.39	2.39%
2019-11-13	2.36	2.36%
2019-11-14	2.31	2.31%
2019-11-15	2.31	2.31%
2019-11-18	2.30	2.30%
2019-11-19	2.26	2.26%
2019-11-20	2.20	2.20%
2019-11-21	2.24	2.24%
2019-11-22	2.22	2.22%
2019-11-25	2.21	2.21%
2019-11-26	2.18	2.18%
2019-11-27	2.19	2.19%
2019-11-28		0.00%
2019-11-29	2.21	2.21%
2019-12-02	2.28	2.28%
2019-12-03	2.17	2.17%
2019-12-04	2.22	2.22%
2019-12-05	2.24	2.24%

2019-12-06	2.29	2.29%
2019-12-09	2.27	2.27%
2019-12-10	2.26	2.26%
2019-12-11	2.23	2.23%
2019-12-12	2.32	2.32%
2019-12-13	2.26	2.26%
2019-12-16	2.30	2.30%
2019-12-17	2.31	2.31%
2019-12-18	2.35	2.35%
2019-12-19	2.35	2.35%
2019-12-20	2.34	2.34%
2019-12-23	2.35	2.35%
2019-12-24	2.33	2.33%
2019-12-25		0.00%
2019-12-26	2.33	2.33%
2019-12-27	2.32	2.32%
2019-12-30	2.34	2.34%
2019-12-31	2.39	2.39%
2020-01-01		0.00%
2020-01-02	2.33	2.33%
2020-01-03	2.26	2.26%
2020-01-06	2.28	2.28%
2020-01-07	2.31	2.31%
2020-01-08	2.35	2.35%
2020-01-09	2.38	2.38%
2020-01-10	2.28	2.28%
2020-01-13	2.30	2.30%
2020-01-14	2.27	2.27%
2020-01-15	2.23	2.23%
2020-01-16	2.26	2.26%
2020-01-17	2.29	2.29%
2020-01-20		0.00%
2020-01-21	2.23	2.23%
2020-01-22	2.22	2.22%
2020-01-23	2.18	2.18%
2020-01-24	2.14	2.14%
2020-01-27	2.05	2.05%
2020-01-28	2.10	2.10%
2020-01-29	2.05	2.05%
2020-01-30	2.04	2.04%
2020-01-31	1.99	1.99%
2020-02-03	2.01	2.01%
2020-02-04	2.08	2.08%
2020-02-05	2.14	2.14%
2020-02-06	2.11	2.11%
2020-02-07	2.05	2.05%
2020-02-10	2.03	2.03%
2020-02-11	2.05	2.05%
2020-02-12	2.09	2.09%
2020-02-13	2.07	2.07%
2020-02-14	2.04	2.04%
2020-02-17		0.00%
2020-02-18	2.00	2.00%
2020-02-19	2.01	2.01%
2020-02-20	1.97	1.97%
2020-02-21	1.90	1.90%
2020-02-24	1.84	1.84%
2020-02-25	1.80	1.80%
2020-02-26	1.81	1.81%
2020-02-27	1.79	1.79%
2020-02-28	1.65	1.65%
2020-03-02	1.66	1.66%
2020-03-03	1.64	1.64%
2020-03-04	1.67	1.67%
2020-03-05	1.56	1.56%
2020-03-06	1.25	1.25%
2020-03-09	0.99	0.99%
2020-03-10	1.28	1.28%
2020-03-11	1.30	1.30%
2020-03-12	1.49	1.49%
2020-03-13	1.56	1.56%
2020-03-16	1.34	1.34%
2020-03-17	1.63	1.63%
2020-03-18	1.77	1.77%
2020-03-19	1.78	1.78%
2020-03-20	1.55	1.55%
2020-03-23	1.33	1.33%
2020-03-24	1.39	1.39%
2020-03-25	1.45	1.45%
2020-03-26	1.42	1.42%
2020-03-27	1.29	1.29%
2020-03-30	1.31	1.31%
2020-03-31	1.35	1.35%
2020-04-01	1.27	1.27%
2020-04-02	1.26	1.26%
2020-04-03	1.24	1.24%
2020-04-06	1.27	1.27%
2020-04-07	1.32	1.32%
2020-04-08	1.37	1.37%
2020-04-09	1.35	1.35%
2020-04-10		0.00%
2020-04-13	1.39	1.39%
2020-04-14	1.41	1.41%

2020-04-15	1.27	1.27%
2020-04-16	1.21	1.21%
2020-04-17	1.27	1.27%
2020-04-20	1.23	1.23%
2020-04-21	1.17	1.17%
2020-04-22	1.22	1.22%
2020-04-23	1.18	1.18%
2020-04-24	1.17	1.17%
2020-04-27	1.25	1.25%
2020-04-28	1.20	1.20%
2020-04-29	1.24	1.24%
2020-04-30	1.28	1.28%
2020-05-01	1.27	1.27%
2020-05-04	1.29	1.29%
2020-05-05	1.32	1.32%
2020-05-06	1.41	1.41%
2020-05-07	1.31	1.31%
2020-05-08	1.39	1.39%
2020-05-11	1.43	1.43%
2020-05-12	1.38	1.38%
2020-05-13	1.35	1.35%
2020-05-14	1.30	1.30%
2020-05-15	1.32	1.32%
2020-05-18	1.44	1.44%
2020-05-19	1.43	1.43%
2020-05-20	1.40	1.40%
2020-05-21	1.40	1.40%
2020-05-22	1.37	1.37%
2020-05-25		0.00%
2020-05-26	1.43	1.43%
2020-05-27	1.44	1.44%
2020-05-28	1.47	1.47%
2020-05-29	1.41	1.41%
2020-06-01	1.46	1.46%
2020-06-02	1.48	1.48%
2020-06-03	1.56	1.56%
2020-06-04	1.61	1.61%
2020-06-05	1.68	1.68%
2020-06-08	1.65	1.65%
2020-06-09	1.59	1.59%
2020-06-10	1.53	1.53%
2020-06-11	1.41	1.41%
2020-06-12	1.45	1.45%
2020-06-15	1.45	1.45%
2020-06-16	1.54	1.54%
2020-06-17	1.52	1.52%
2020-06-18	1.47	1.47%
2020-06-19	1.47	1.47%
2020-06-22	1.46	1.46%
2020-06-23	1.49	1.49%
2020-06-24	1.44	1.44%
2020-06-25	1.43	1.43%
2020-06-26	1.37	1.37%
2020-06-29	1.39	1.39%
2020-06-30	1.41	1.41%
2020-07-01	1.43	1.43%
2020-07-02	1.43	1.43%
2020-07-03		0.00%
2020-07-06	1.45	1.45%
2020-07-07	1.38	1.38%
2020-07-08	1.39	1.39%
2020-07-09	1.32	1.32%
2020-07-10	1.33	1.33%
2020-07-13	1.33	1.33%
2020-07-14	1.30	1.30%
2020-07-15	1.33	1.33%
2020-07-16	1.31	1.31%
2020-07-17	1.33	1.33%
2020-07-20	1.32	1.32%
2020-07-21	1.31	1.31%
2020-07-22	1.29	1.29%
2020-07-23	1.24	1.24%
2020-07-24	1.23	1.23%
2020-07-27	1.25	1.25%
2020-07-28	1.22	1.22%
2020-07-29	1.24	1.24%
2020-07-30	1.20	1.20%
2020-07-31	1.20	1.20%
2020-08-03	1.23	1.23%
2020-08-04	1.19	1.19%
2020-08-05	1.22	1.22%
2020-08-06	1.20	1.20%
2020-08-07	1.23	1.23%
2020-08-10	1.25	1.25%
2020-08-11	1.32	1.32%
2020-08-12	1.37	1.37%
2020-08-13	1.42	1.42%
2020-08-14	1.45	1.45%
2020-08-17	1.43	1.43%
2020-08-18	1.40	1.40%
2020-08-19	1.42	1.42%
2020-08-20	1.38	1.38%
2020-08-21	1.35	1.35%

2020-08-24	1.35	1.35%
2020-08-25	1.39	1.39%
2020-08-26	1.41	1.41%
2020-08-27	1.50	1.50%
2020-08-28	1.52	1.52%
2020-08-31	1.49	1.49%
2020-09-01	1.43	1.43%
2020-09-02	1.38	1.38%
2020-09-03	1.34	1.34%
2020-09-04	1.46	1.46%
2020-09-07		0.00%
2020-09-08	1.43	1.43%
2020-09-09	1.45	1.45%
2020-09-10	1.43	1.43%
2020-09-11	1.42	1.42%
2020-09-14	1.42	1.42%
2020-09-15	1.43	1.43%
2020-09-16	1.45	1.45%
2020-09-17	1.43	1.43%
2020-09-18	1.45	1.45%
2020-09-21	1.43	1.43%
2020-09-22	1.42	1.42%
2020-09-23	1.42	1.42%
2020-09-24	1.40	1.40%
2020-09-25	1.40	1.40%
2020-09-28	1.42	1.42%
2020-09-29	1.41	1.41%
2020-09-30	1.46	1.46%
2020-10-01	1.45	1.45%
2020-10-02	1.48	1.48%
2020-10-05	1.57	1.57%
2020-10-06	1.56	1.56%
2020-10-07	1.60	1.60%
2020-10-08	1.57	1.57%
2020-10-09	1.58	1.58%
2020-10-12		0.00%
2020-10-13	1.52	1.52%
2020-10-14	1.50	1.50%
2020-10-15	1.52	1.52%
2020-10-16	1.52	1.52%
2020-10-19	1.55	1.55%
2020-10-20	1.60	1.60%
2020-10-21	1.62	1.62%
2020-10-22	1.67	1.67%
2020-10-23	1.64	1.64%
2020-10-26	1.59	1.59%
2020-10-27	1.57	1.57%
2020-10-28	1.56	1.56%
2020-10-29	1.62	1.62%
2020-10-30	1.65	1.65%
2020-11-02	1.63	1.63%
2020-11-03	1.66	1.66%
2020-11-04	1.55	1.55%
2020-11-05	1.54	1.54%
2020-11-06	1.60	1.60%
2020-11-09	1.73	1.73%
2020-11-10	1.75	1.75%
2020-11-11		0.00%
2020-11-12	1.64	1.64%
2020-11-13	1.65	1.65%
2020-11-16	1.66	1.66%
2020-11-17	1.62	1.62%
2020-11-18	1.62	1.62%
2020-11-19	1.58	1.58%
2020-11-20	1.53	1.53%
2020-11-23	1.56	1.56%
2020-11-24	1.60	1.60%
2020-11-25	1.62	1.62%
2020-11-26		0.00%
2020-11-27	1.57	1.57%
2020-11-30	1.58	1.58%
2020-12-01	1.66	1.66%
2020-12-02	1.70	1.70%
2020-12-03	1.67	1.67%
2020-12-04	1.73	1.73%
2020-12-07	1.69	1.69%
2020-12-08	1.67	1.67%
2020-12-09	1.69	1.69%
2020-12-10	1.65	1.65%
2020-12-11	1.63	1.63%
2020-12-14	1.63	1.63%
2020-12-15	1.65	1.65%
2020-12-16	1.66	1.66%
2020-12-17	1.68	1.68%
2020-12-18	1.70	1.70%
2020-12-21	1.68	1.68%
2020-12-22	1.65	1.65%
2020-12-23	1.70	1.70%
2020-12-24	1.66	1.66%
2020-12-25		0.00%
2020-12-28	1.67	1.67%
2020-12-29	1.67	1.67%
2020-12-30	1.66	1.66%

2020-12-31	1.65	1.65%
2021-01-01		0.00%
2021-01-04	1.66	1.66%
2021-01-05	1.70	1.70%
2021-01-06	1.81	1.81%
2021-01-07	1.85	1.85%
2021-01-08	1.87	1.87%
2021-01-11	1.88	1.88%
2021-01-12	1.88	1.88%
2021-01-13	1.82	1.82%
2021-01-14	1.88	1.88%
2021-01-15	1.85	1.85%
2021-01-18		0.00%
2021-01-19	1.84	1.84%
2021-01-20	1.84	1.84%
2021-01-21	1.87	1.87%
2021-01-22	1.85	1.85%
2021-01-25	1.80	1.80%
2021-01-26	1.80	1.80%
2021-01-27	1.79	1.79%
2021-01-28	1.81	1.81%
2021-01-29	1.87	1.87%
2021-02-01	1.84	1.84%
2021-02-02	1.87	1.87%
2021-02-03	1.92	1.92%
2021-02-04	1.93	1.93%
2021-02-05	1.97	1.97%
2021-02-08	1.96	1.96%
2021-02-09	1.95	1.95%
2021-02-10	1.92	1.92%
2021-02-11	1.94	1.94%
2021-02-12	2.01	2.01%
2021-02-15		0.00%
2021-02-16	2.08	2.08%
2021-02-17	2.06	2.06%
2021-02-18	2.08	2.08%
2021-02-19	2.14	2.14%
2021-02-22	2.19	2.19%
2021-02-23	2.21	2.21%
2021-02-24	2.24	2.24%
2021-02-25	2.33	2.33%
2021-02-26	2.17	2.17%
2021-03-01	2.23	2.23%
2021-03-02	2.21	2.21%
2021-03-03	2.25	2.25%
2021-03-04	2.30	2.30%
2021-03-05	2.28	2.28%
2021-03-08	2.31	2.31%
2021-03-09	2.26	2.26%
2021-03-10	2.24	2.24%
2021-03-11	2.29	2.29%
2021-03-12	2.40	2.40%
2021-03-15	2.37	2.37%
2021-03-16	2.38	2.38%
2021-03-17	2.42	2.42%
2021-03-18	2.45	2.45%
2021-03-19	2.45	2.45%
2021-03-22	2.38	2.38%
2021-03-23	2.34	2.34%
2021-03-24	2.31	2.31%
2021-03-25	2.34	2.34%
2021-03-26	2.37	2.37%
2021-03-29	2.43	2.43%
2021-03-30	2.38	2.38%
2021-03-31	2.41	2.41%
2021-04-01	2.34	2.34%
2021-04-02	2.35	2.35%
2021-04-05	2.36	2.36%
2021-04-06	2.32	2.32%
2021-04-07	2.35	2.35%
2021-04-08	2.32	2.32%
2021-04-09	2.34	2.34%
2021-04-12	2.34	2.34%
2021-04-13	2.32	2.32%
2021-04-14	2.32	2.32%
2021-04-15	2.23	2.23%
2021-04-16	2.26	2.26%
2021-04-19	2.29	2.29%
2021-04-20	2.27	2.27%
2021-04-21	2.26	2.26%
2021-04-22	2.24	2.24%
2021-04-23	2.25	2.25%
2021-04-26	2.24	2.24%
2021-04-27	2.29	2.29%
2021-04-28	2.29	2.29%
2021-04-29	2.31	2.31%
2021-04-30	2.30	2.30%
2021-05-03	2.30	2.30%
2021-05-04	2.27	2.27%
2021-05-05	2.25	2.25%
2021-05-06	2.24	2.24%
2021-05-07	2.28	2.28%
2021-05-10	2.32	2.32%

2021-05-11	2.35	2.35%
2021-05-12	2.40	2.40%
2021-05-13	2.39	2.39%
2021-05-14	2.35	2.35%
2021-05-17	2.36	2.36%
2021-05-18	2.37	2.37%
2021-05-19	2.38	2.38%
2021-05-20	2.34	2.34%
2021-05-21	2.33	2.33%
2021-05-24	2.31	2.31%
2021-05-25	2.26	2.26%
2021-05-26	2.27	2.27%
2021-05-27	2.29	2.29%
2021-05-28	2.26	2.26%
2021-05-31		0.00%
2021-06-01	2.30	2.30%
2021-06-02	2.28	2.28%
2021-06-03	2.30	2.30%
2021-06-04	2.24	2.24%
2021-06-07	2.25	2.25%
2021-06-08	2.21	2.21%
2021-06-09	2.17	2.17%
2021-06-10	2.15	2.15%
2021-06-11	2.15	2.15%
2021-06-14	2.19	2.19%
2021-06-15	2.20	2.20%
2021-06-16	2.20	2.20%
2021-06-17	2.11	2.11%
2021-06-18	2.01	2.01%
2021-06-21	2.11	2.11%
2021-06-22	2.10	2.10%
2021-06-23	2.11	2.11%
2021-06-24	2.10	2.10%
2021-06-25	2.16	2.16%
2021-06-28	2.10	2.10%
2021-06-29	2.10	2.10%
2021-06-30	2.06	2.06%
2021-07-01	2.07	2.07%
2021-07-02	2.05	2.05%
2021-07-05		0.00%
2021-07-06	2.00	2.00%
2021-07-07	1.94	1.94%
2021-07-08	1.91	1.91%
2021-07-09	1.99	1.99%
2021-07-12	2.00	2.00%
2021-07-13	2.04	2.04%
2021-07-14	1.98	1.98%
2021-07-15	1.92	1.92%
2021-07-16	1.93	1.93%
2021-07-19	1.81	1.81%
2021-07-20	1.88	1.88%
2021-07-21	1.94	1.94%
2021-07-22	1.90	1.90%
2021-07-23	1.92	1.92%
2021-07-26	1.93	1.93%
2021-07-27	1.89	1.89%
2021-07-28	1.90	1.90%
2021-07-29	1.91	1.91%
2021-07-30	1.89	1.89%
2021-08-02	1.86	1.86%
2021-08-03	1.85	1.85%
2021-08-04	1.83	1.83%
2021-08-05	1.86	1.86%
2021-08-06	1.94	1.94%
2021-08-09	1.96	1.96%
2021-08-10	1.99	1.99%
2021-08-11	1.99	1.99%
2021-08-12	2.03	2.03%
2021-08-13	1.94	1.94%
2021-08-16	1.92	1.92%
2021-08-17	1.92	1.92%
2021-08-18	1.91	1.91%
2021-08-19	1.88	1.88%
2021-08-20	1.87	1.87%
2021-08-23	1.87	1.87%
2021-08-24	1.91	1.91%
2021-08-25	1.96	1.96%
2021-08-26	1.94	1.94%
2021-08-27	1.91	1.91%
2021-08-30	1.90	1.90%
2021-08-31	1.92	1.92%
2021-09-01	1.92	1.92%
2021-09-02	1.90	1.90%
2021-09-03	1.94	1.94%
2021-09-06		0.00%
2021-09-07	1.99	1.99%
2021-09-08	1.95	1.95%
2021-09-09	1.90	1.90%
2021-09-10	1.94	1.94%
2021-09-13	1.91	1.91%
2021-09-14	1.85	1.85%
2021-09-15	1.87	1.87%
2021-09-16	1.88	1.88%

2021-09-17	1.91	1.91%
2021-09-20	1.85	1.85%
2021-09-21	1.86	1.86%
2021-09-22	1.84	1.84%
2021-09-23	1.92	1.92%
2021-09-24	1.99	1.99%
2021-09-27	1.99	1.99%
2021-09-28	2.07	2.07%
2021-09-29	2.09	2.09%
2021-09-30	2.08	2.08%
2021-10-01	2.04	2.04%
2021-10-04	2.05	2.05%
2021-10-05	2.10	2.10%
2021-10-06	2.08	2.08%
2021-10-07	2.13	2.13%
2021-10-08	2.16	2.16%
2021-10-11		0.00%
2021-10-12	2.10	2.10%
2021-10-13	2.05	2.05%
2021-10-14	2.02	2.02%
2021-10-15	2.05	2.05%
2021-10-18	2.01	2.01%
2021-10-19	2.09	2.09%
2021-10-20	2.12	2.12%
2021-10-21	2.13	2.13%
2021-10-22	2.08	2.08%
2021-10-25	2.09	2.09%
2021-10-26	2.05	2.05%
2021-10-27	1.95	1.95%
2021-10-28	1.96	1.96%
2021-10-29	1.93	1.93%
2021-11-01	1.98	1.98%
2021-11-02	1.96	1.96%
2021-11-03	2.00	2.00%
2021-11-04	1.96	1.96%
2021-11-05	1.87	1.87%
2021-11-08	1.89	1.89%
2021-11-09	1.83	1.83%
2021-11-10	1.92	1.92%
2021-11-11		0.00%
2021-11-12	1.95	1.95%
2021-11-15	2.01	2.01%
2021-11-16	2.02	2.02%
2021-11-17	2.00	2.00%
2021-11-18	1.97	1.97%
2021-11-19	1.91	1.91%
2021-11-22	1.98	1.98%
2021-11-23	2.02	2.02%
2021-11-24	1.96	1.96%
2021-11-25		0.00%
2021-11-26	1.83	1.83%
2021-11-29	1.87	1.87%
2021-11-30	1.78	1.78%
2021-12-01	1.77	1.77%
2021-12-02	1.76	1.76%
2021-12-03	1.69	1.69%
2021-12-06	1.75	1.75%
2021-12-07	1.80	1.80%
2021-12-08	1.87	1.87%
2021-12-09	1.87	1.87%
2021-12-10	1.88	1.88%
2021-12-13	1.81	1.81%
2021-12-14	1.82	1.82%
2021-12-15	1.86	1.86%
2021-12-16	1.87	1.87%
2021-12-17	1.82	1.82%
2021-12-20	1.85	1.85%
2021-12-21	1.89	1.89%
2021-12-22	1.86	1.86%
2021-12-23	1.91	1.91%
2021-12-24		0.00%
2021-12-27	1.88	1.88%
2021-12-28	1.90	1.90%
2021-12-29	1.96	1.96%
2021-12-30	1.93	1.93%
2021-12-31	1.90	1.90%
2022-01-03	2.01	2.01%
2022-01-04	2.07	2.07%
2022-01-05	2.09	2.09%
2022-01-06	2.09	2.09%
2022-01-07	2.11	2.11%
2022-01-10	2.11	2.11%
2022-01-11	2.08	2.08%
2022-01-12	2.08	2.08%
2022-01-13	2.05	2.05%
2022-01-14	2.12	2.12%
2022-01-17		0.00%
2022-01-18	2.18	2.18%
2022-01-19	2.14	2.14%
2022-01-20	2.14	2.14%
2022-01-21	2.07	2.07%
2022-01-24	2.10	2.10%
2022-01-25	2.12	2.12%

2022-01-26	2.16	2.16%
2022-01-27	2.09	2.09%
2022-01-28	2.07	2.07%
2022-01-31	2.11	2.11%
2022-02-01	2.12	2.12%
2022-02-02	2.11	2.11%
2022-02-03	2.14	2.14%
2022-02-04	2.23	2.23%
2022-02-07	2.22	2.22%
2022-02-08	2.25	2.25%
2022-02-09	2.25	2.25%
2022-02-10	2.30	2.30%
2022-02-11	2.24	2.24%
2022-02-14	2.29	2.29%
2022-02-15	2.37	2.37%
2022-02-16	2.34	2.34%
2022-02-17	2.31	2.31%
2022-02-18	2.24	2.24%
2022-02-21		0.00%
2022-02-22	2.24	2.24%
2022-02-23	2.29	2.29%
2022-02-24	2.28	2.28%
2022-02-25	2.29	2.29%
2022-02-28	2.17	2.17%
2022-03-01	2.11	2.11%
2022-03-02	2.24	2.24%
2022-03-03	2.24	2.24%
2022-03-04	2.16	2.16%
2022-03-07	2.19	2.19%
2022-03-08	2.24	2.24%
2022-03-09	2.29	2.29%
2022-03-10	2.38	2.38%
2022-03-11	2.36	2.36%
2022-03-14	2.47	2.47%
2022-03-15	2.49	2.49%
2022-03-16	2.46	2.46%
2022-03-17	2.50	2.50%
2022-03-18	2.42	2.42%
2022-03-21	2.55	2.55%
2022-03-22	2.60	2.60%
2022-03-23	2.52	2.52%
2022-03-24	2.51	2.51%
2022-03-25	2.60	2.60%
2022-03-28	2.57	2.57%
2022-03-29	2.53	2.53%
2022-03-30	2.48	2.48%
2022-03-31	2.44	2.44%
2022-04-01	2.44	2.44%
2022-04-04	2.48	2.48%
2022-04-05	2.57	2.57%
2022-04-06	2.63	2.63%
2022-04-07	2.69	2.69%
2022-04-08	2.76	2.76%
2022-04-11	2.84	2.84%
2022-04-12	2.82	2.82%
2022-04-13	2.81	2.81%
2022-04-14	2.92	2.92%
2022-04-15		0.00%
2022-04-18	2.95	2.95%
2022-04-19	3.01	3.01%
2022-04-20	2.90	2.90%
2022-04-21	2.94	2.94%
2022-04-22	2.95	2.95%
2022-04-25	2.88	2.88%
2022-04-26	2.86	2.86%
2022-04-27	2.91	2.91%
2022-04-28	2.92	2.92%
2022-04-29	2.96	2.96%
2022-05-02	3.07	3.07%
2022-05-03	3.03	3.03%
2022-05-04	3.01	3.01%
2022-05-05	3.15	3.15%
2022-05-06	3.23	3.23%
2022-05-09	3.19	3.19%
2022-05-10	3.12	3.12%
2022-05-11	3.05	3.05%
2022-05-12	3.00	3.00%
2022-05-13	3.10	3.10%
2022-05-16	3.09	3.09%
2022-05-17	3.17	3.17%
2022-05-18	3.07	3.07%
2022-05-19	3.05	3.05%
2022-05-20	2.99	2.99%
2022-05-23	3.08	3.08%
2022-05-24	2.98	2.98%
2022-05-25	2.97	2.97%
2022-05-26	2.99	2.99%
2022-05-27	2.97	2.97%
2022-05-30		0.00%
2022-05-31	3.07	3.07%
2022-06-01	3.09	3.09%
2022-06-02	3.09	3.09%
2022-06-03	3.11	3.11%

2022-06-06	3.19	3.19%
2022-06-07	3.13	3.13%
2022-06-08	3.18	3.18%
2022-06-09	3.18	3.18%
2022-06-10	3.20	3.20%
2022-06-13	3.42	3.42%
2022-06-14	3.45	3.45%
2022-06-15	3.39	3.39%
2022-06-16	3.35	3.35%
2022-06-17	3.30	3.30%
2022-06-20		0.00%
2022-06-21	3.39	3.39%
2022-06-22	3.25	3.25%
2022-06-23	3.21	3.21%
2022-06-24	3.26	3.26%
2022-06-27	3.31	3.31%
2022-06-28	3.30	3.30%
2022-06-29	3.22	3.22%
2022-06-30	3.14	3.14%
2022-07-01	3.11	3.11%
2022-07-04		0.00%
2022-07-05	3.05	3.05%
2022-07-06	3.14	3.14%
2022-07-07	3.20	3.20%
2022-07-08	3.27	3.27%
2022-07-11	3.18	3.18%
2022-07-12	3.13	3.13%
2022-07-13	3.08	3.08%
2022-07-14	3.11	3.11%
2022-07-15	3.10	3.10%
2022-07-18	3.14	3.14%
2022-07-19	3.17	3.17%
2022-07-20	3.17	3.17%
2022-07-21	3.08	3.08%
2022-07-22	3.00	3.00%
2022-07-25	3.04	3.04%
2022-07-26	3.03	3.03%
2022-07-27	3.03	3.03%
2022-07-28	3.02	3.02%
2022-07-29	3.00	3.00%
2022-08-01	2.92	2.92%
2022-08-02	3.00	3.00%
2022-08-03	2.96	2.96%
2022-08-04	2.97	2.97%
2022-08-05	3.06	3.06%
2022-08-08	3.00	3.00%
2022-08-09	3.01	3.01%
2022-08-10	3.04	3.04%
2022-08-11	3.15	3.15%
2022-08-12	3.12	3.12%
2022-08-15	3.10	3.10%
2022-08-16	3.11	3.11%
2022-08-17	3.15	3.15%
2022-08-18	3.14	3.14%
2022-08-19	3.22	3.22%
2022-08-22	3.24	3.24%
2022-08-23	3.26	3.26%
2022-08-24	3.32	3.32%
2022-08-25	3.25	3.25%
2022-08-26	3.21	3.21%
2022-08-29	3.25	3.25%
2022-08-30	3.23	3.23%
2022-08-31	3.27	3.27%
2022-09-01	3.37	3.37%
2022-09-02	3.35	3.35%
2022-09-05		0.00%
2022-09-06	3.49	3.49%
2022-09-07	3.42	3.42%
2022-09-08	3.45	3.45%
2022-09-09	3.47	3.47%
2022-09-12	3.53	3.53%
2022-09-13	3.51	3.51%
2022-09-14	3.47	3.47%
2022-09-15	3.48	3.48%
2022-09-16	3.52	3.52%
2022-09-19	3.52	3.52%
2022-09-20	3.59	3.59%
2022-09-21	3.50	3.50%
2022-09-22	3.65	3.65%
2022-09-23	3.61	3.61%
2022-09-26	3.72	3.72%
2022-09-27	3.87	3.87%
2022-09-28	3.70	3.70%
2022-09-29	3.71	3.71%
2022-09-30	3.79	3.79%
2022-10-03	3.73	3.73%
2022-10-04	3.70	3.70%
2022-10-05	3.78	3.78%
2022-10-06	3.81	3.81%
2022-10-07	3.86	3.86%
2022-10-10		0.00%
2022-10-11	3.92	3.92%
2022-10-12	3.90	3.90%

2022-10-13	3.97	3.97%
2022-10-14	3.99	3.99%
2022-10-17	4.04	4.04%
2022-10-18	4.04	4.04%
2022-10-19	4.15	4.15%
2022-10-20	4.24	4.24%
2022-10-21	4.33	4.33%
2022-10-24	4.40	4.40%
2022-10-25	4.26	4.26%
2022-10-26	4.19	4.19%
2022-10-27	4.12	4.12%
2022-10-28	4.15	4.15%
2022-10-31	4.22	4.22%
2022-11-01	4.14	4.14%
2022-11-02	4.15	4.15%
2022-11-03	4.18	4.18%
2022-11-04	4.27	4.27%
2022-11-07	4.34	4.34%
2022-11-08	4.28	4.28%
2022-11-09	4.31	4.31%
2022-11-10	4.03	4.03%
2022-11-11		0.00%
2022-11-14	4.07	4.07%
2022-11-15	3.98	3.98%
2022-11-16	3.85	3.85%
2022-11-17	3.89	3.89%
2022-11-18	3.92	3.92%
2022-11-21	3.91	3.91%
2022-11-22	3.83	3.83%
2022-11-23	3.74	3.74%
2022-11-24		0.00%
2022-11-25	3.74	3.74%
2022-11-28	3.74	3.74%
2022-11-29	3.81	3.81%
2022-11-30	3.80	3.80%
2022-12-01	3.64	3.64%
2022-12-02	3.56	3.56%
2022-12-05	3.62	3.62%
2022-12-06	3.52	3.52%
2022-12-07	3.42	3.42%
2022-12-08	3.44	3.44%
2022-12-09	3.56	3.56%
2022-12-12	3.57	3.57%
2022-12-13	3.53	3.53%
2022-12-14	3.52	3.52%
2022-12-15	3.48	3.48%
2022-12-16	3.53	3.53%
2022-12-19	3.62	3.62%
2022-12-20	3.74	3.74%
2022-12-21	3.74	3.74%
2022-12-22	3.73	3.73%
2022-12-23	3.82	3.82%
2022-12-26		0.00%
2022-12-27	3.93	3.93%
2022-12-28	3.98	3.98%
2022-12-29	3.92	3.92%
2022-12-30	3.97	3.97%
2023-01-02		0.00%
2023-01-03	3.88	3.88%
2023-01-04	3.81	3.81%
2023-01-05	3.78	3.78%
2023-01-06	3.67	3.67%
2023-01-09	3.66	3.66%
2023-01-10	3.74	3.74%
2023-01-11	3.67	3.67%
2023-01-12	3.56	3.56%
2023-01-13	3.61	3.61%
2023-01-16		0.00%
2023-01-17	3.64	3.64%
2023-01-18	3.54	3.54%
2023-01-19	3.57	3.57%
2023-01-20	3.66	3.66%
2023-01-23	3.69	3.69%
2023-01-24	3.62	3.62%
2023-01-25	3.62	3.62%
2023-01-26	3.62	3.62%
2023-01-27	3.64	3.64%
2023-01-30	3.66	3.66%
2023-01-31	3.65	3.65%
2023-02-01	3.55	3.55%
2023-02-02	3.55	3.55%
2023-02-03	3.63	3.63%
2023-02-06	3.67	3.67%
2023-02-07	3.72	3.72%
2023-02-08	3.70	3.70%
2023-02-09	3.75	3.75%
2023-02-10	3.83	3.83%
2023-02-13	3.79	3.79%
2023-02-14	3.81	3.81%
2023-02-15	3.85	3.85%
2023-02-16	3.92	3.92%
2023-02-17	3.88	3.88%
2023-02-20		0.00%

2023-02-21	3.98	3.98%
2023-02-22	3.94	3.94%
2023-02-23	3.88	3.88%
2023-02-24	3.93	3.93%
2023-02-27	3.93	3.93%
2023-02-28	3.93	3.93%
2023-03-01	3.97	3.97%
2023-03-02	4.03	4.03%
2023-03-03	3.90	3.90%
2023-03-06	3.92	3.92%
2023-03-07	3.88	3.88%
2023-03-08	3.88	3.88%
2023-03-09	3.88	3.88%
2023-03-10	3.70	3.70%
2023-03-13	3.70	3.70%
2023-03-14	3.77	3.77%
2023-03-15	3.70	3.70%
2023-03-16	3.71	3.71%
2023-03-17	3.60	3.60%
2023-03-20	3.65	3.65%
2023-03-21	3.73	3.73%
2023-03-22	3.68	3.68%
2023-03-23	3.66	3.66%
2023-03-24	3.64	3.64%
2023-03-27	3.77	3.77%
2023-03-28	3.77	3.77%
2023-03-29	3.78	3.78%
2023-03-30	3.74	3.74%
2023-03-31	3.67	3.67%
2023-04-03	3.64	3.64%
2023-04-04	3.60	3.60%
2023-04-05	3.56	3.56%
2023-04-06	3.54	3.54%
2023-04-07	3.61	3.61%
2023-04-10	3.62	3.62%
2023-04-11	3.62	3.62%
2023-04-12	3.64	3.64%
2023-04-13	3.69	3.69%
2023-04-14	3.74	3.74%
2023-04-17	3.81	3.81%
2023-04-18	3.79	3.79%
2023-04-19	3.79	3.79%
2023-04-20	3.75	3.75%
2023-04-21	3.78	3.78%
2023-04-24	3.73	3.73%
2023-04-25	3.65	3.65%
2023-04-26	3.70	3.70%
2023-04-27	3.76	3.76%
2023-04-28	3.67	3.67%
2023-05-01	3.84	3.84%
2023-05-02	3.72	3.72%
2023-05-03	3.70	3.70%
2023-05-04	3.73	3.73%
2023-05-05	3.76	3.76%
2023-05-08	3.84	3.84%
2023-05-09	3.85	3.85%
2023-05-10	3.80	3.80%
2023-05-11	3.73	3.73%
2023-05-12	3.78	3.78%
2023-05-15	3.84	3.84%
2023-05-16	3.87	3.87%
2023-05-17	3.88	3.88%
2023-05-18	3.91	3.91%
2023-05-19	3.95	3.95%
2023-05-22	3.97	3.97%
2023-05-23	3.96	3.96%
2023-05-24	3.97	3.97%
2023-05-25	4.01	4.01%
2023-05-26	3.96	3.96%
2023-05-29		0.00%
2023-05-30	3.90	3.90%
2023-05-31	3.85	3.85%
2023-06-01	3.84	3.84%
2023-06-02	3.88	3.88%
2023-06-05	3.89	3.89%
2023-06-06	3.87	3.87%
2023-06-07	3.95	3.95%
2023-06-08	3.89	3.89%
2023-06-09	3.89	3.89%
2023-06-12	3.87	3.87%
2023-06-13	3.94	3.94%
2023-06-14	3.90	3.90%
2023-06-15	3.85	3.85%
2023-06-16	3.86	3.86%
2023-06-19		0.00%
2023-06-20	3.83	3.83%
2023-06-21	3.81	3.81%
2023-06-22	3.88	3.88%
2023-06-23	3.82	3.82%
2023-06-26	3.83	3.83%
2023-06-27	3.84	3.84%
2023-06-28	3.81	3.81%
2023-06-29	3.92	3.92%

2023-06-30	3.85	3.85%
2023-07-03	3.87	3.87%
2023-07-04		0.00%
2023-07-05	3.95	3.95%
2023-07-06	4.01	4.01%
2023-07-07	4.05	4.05%
2023-07-10	4.05	4.05%
2023-07-11	4.03	4.03%
2023-07-12	3.96	3.96%
2023-07-13	3.90	3.90%
2023-07-14	3.93	3.93%
2023-07-17	3.94	3.94%
2023-07-18	3.91	3.91%
2023-07-19	3.84	3.84%
2023-07-20	3.91	3.91%
2023-07-21	3.91	3.91%
2023-07-24	3.92	3.92%
2023-07-25	3.95	3.95%
2023-07-26	3.94	3.94%
2023-07-27	4.06	4.06%
2023-07-28	4.03	4.03%
2023-07-31	4.02	4.02%
2023-08-01	4.11	4.11%
2023-08-02	4.17	4.17%
2023-08-03	4.32	4.32%
2023-08-04	4.21	4.21%
2023-08-07	4.27	4.27%
2023-08-08	4.20	4.20%
2023-08-09	4.18	4.18%
2023-08-10	4.24	4.24%
2023-08-11	4.27	4.27%
2023-08-14	4.29	4.29%
2023-08-15	4.32	4.32%
2023-08-16	4.38	4.38%
2023-08-17	4.41	4.41%
2023-08-18	4.38	4.38%
2023-08-21	4.45	4.45%
2023-08-22	4.42	4.42%
2023-08-23	4.27	4.27%
2023-08-24	4.30	4.30%
2023-08-25	4.30	4.30%
2023-08-28	4.29	4.29%
2023-08-29	4.23	4.23%
2023-08-30	4.23	4.23%
2023-08-31	4.20	4.20%
2023-09-01	4.29	4.29%
2023-09-04		0.00%
2023-09-05	4.38	4.38%
2023-09-06	4.37	4.37%
2023-09-07	4.36	4.36%
2023-09-08	4.33	4.33%
2023-09-11	4.37	4.37%
2023-09-12	4.35	4.35%
2023-09-13	4.34	4.34%
2023-09-14	4.39	4.39%
2023-09-15	4.42	4.42%
2023-09-18	4.40	4.40%
2023-09-19	4.43	4.43%
2023-09-20	4.40	4.40%
2023-09-21	4.56	4.56%
2023-09-22	4.53	4.53%
2023-09-25	4.67	4.67%
2023-09-26	4.70	4.70%
2023-09-27	4.73	4.73%
2023-09-28	4.71	4.71%
2023-09-29	4.73	4.73%
2023-10-02	4.81	4.81%
2023-10-03	4.95	4.95%
2023-10-04	4.87	4.87%
2023-10-05	4.89	4.89%
2023-10-06	4.95	4.95%
2023-10-09		0.00%
2023-10-10	4.85	4.85%
2023-10-11	4.73	4.73%
2023-10-12	4.86	4.86%
2023-10-13	4.78	4.78%
2023-10-16	4.87	4.87%
2023-10-17	4.94	4.94%
2023-10-18	5.00	5.00%
2023-10-19	5.11	5.11%
2023-10-20	5.09	5.09%
2023-10-23	5.01	5.01%
2023-10-24	4.96	4.96%
2023-10-25	5.09	5.09%
2023-10-26	5.01	5.01%
2023-10-27	5.03	5.03%
2023-10-30	5.04	5.04%
2023-10-31	5.04	5.04%
2023-11-01	4.96	4.96%
2023-11-02	4.82	4.82%
2023-11-03	4.77	4.77%
2023-11-06	4.84	4.84%
2023-11-07	4.75	4.75%

2023-11-08	4.64	4.64%
2023-11-09	4.77	4.77%
2023-11-10	4.73	4.73%
2023-11-13	4.75	4.75%
2023-11-14	4.61	4.61%
2023-11-15	4.68	4.68%
2023-11-16	4.63	4.63%
2023-11-17	4.59	4.59%
2023-11-20	4.57	4.57%
2023-11-21	4.57	4.57%
2023-11-22	4.55	4.55%
2023-11-23		0.00%
2023-11-24	4.60	4.60%
2023-11-27	4.53	4.53%
2023-11-28	4.52	4.52%
2023-11-29	4.44	4.44%
2023-11-30	4.54	4.54%
2023-12-01	4.40	4.40%
2023-12-04	4.43	4.43%
2023-12-05	4.30	4.30%
2023-12-06	4.22	4.22%
2023-12-07	4.25	4.25%
2023-12-08	4.31	4.31%
2023-12-11	4.32	4.32%
2023-12-12	4.30	4.30%
2023-12-13	4.19	4.19%
2023-12-14	4.03	4.03%
2023-12-15	4.00	4.00%
2023-12-18	4.05	4.05%
2023-12-19	4.03	4.03%
2023-12-20	3.98	3.98%
2023-12-21	4.03	4.03%
2023-12-22	4.05	4.05%
2023-12-25		0.00%
2023-12-26	4.04	4.04%
2023-12-27	3.95	3.95%
2023-12-28	3.98	3.98%
2023-12-29	4.03	4.03%
2024-01-01		0.00%
2024-01-02	4.08	4.08%
2024-01-03	4.05	4.05%
2024-01-04	4.13	4.13%
2024-01-05	4.21	4.21%
2024-01-08	4.17	4.17%
2024-01-09	4.18	4.18%
2024-01-10	4.20	4.20%
2024-01-11	4.18	4.18%
2024-01-12	4.20	4.20%
2024-01-15		0.00%
2024-01-16	4.30	4.30%
2024-01-17	4.31	4.31%
2024-01-18	4.37	4.37%
2024-01-19	4.36	4.36%
2024-01-22	4.32	4.32%
2024-01-23	4.38	4.38%
2024-01-24	4.41	4.41%
2024-01-25	4.38	4.38%
2024-01-26	4.38	4.38%
2024-01-29	4.31	4.31%
2024-01-30	4.28	4.28%
2024-01-31	4.22	4.22%
2024-02-01	4.10	4.10%
2024-02-02	4.22	4.22%
2024-02-05	4.35	4.35%
2024-02-06	4.29	4.29%
2024-02-07	4.31	4.31%
2024-02-08	4.36	4.36%
2024-02-09	4.37	4.37%
2024-02-12	4.37	4.37%
2024-02-13	4.46	4.46%
2024-02-14	4.45	4.45%
2024-02-15	4.42	4.42%
2024-02-16	4.45	4.45%
2024-02-19		0.00%
2024-02-20	4.44	4.44%
2024-02-21	4.49	4.49%
2024-02-22	4.47	4.47%
2024-02-23	4.37	4.37%
2024-02-26	4.40	4.40%
2024-02-27	4.44	4.44%
2024-02-28	4.40	4.40%
2024-02-29	4.38	4.38%
2024-03-01	4.33	4.33%
2024-03-04	4.36	4.36%
2024-03-05	4.27	4.27%
2024-03-06	4.24	4.24%
2024-03-07	4.25	4.25%
2024-03-08	4.26	4.26%
2024-03-11	4.26	4.26%
2024-03-12	4.31	4.31%
2024-03-13	4.35	4.35%
2024-03-14	4.44	4.44%
2024-03-15	4.43	4.43%

2024-03-18	4.46	4.46%
2024-03-19	4.44	4.44%
2024-03-20	4.45	4.45%
2024-03-21	4.44	4.44%
2024-03-22	4.39	4.39%
2024-03-25	4.42	4.42%
2024-03-26	4.40	4.40%
2024-03-27	4.36	4.36%
2024-03-28	4.34	4.34%
2024-03-29		0.00%
2024-04-01	4.47	4.47%
2024-04-02	4.51	4.51%
2024-04-03	4.51	4.51%
2024-04-04	4.47	4.47%
2024-04-05	4.54	4.54%
2024-04-08	4.55	4.55%
2024-04-09	4.50	4.50%
2024-04-10	4.64	4.64%
2024-04-11	4.65	4.65%
2024-04-12	4.61	4.61%
2024-04-15	4.74	4.74%
2024-04-16	4.77	4.77%
2024-04-17	4.71	4.71%
2024-04-18	4.74	4.74%
2024-04-19	4.72	4.72%
2024-04-22	4.72	4.72%
2024-04-23	4.73	4.73%
2024-04-24	4.78	4.78%
2024-04-25	4.82	4.82%
2024-04-26	4.78	4.78%
2024-04-29	4.75	4.75%
2024-04-30	4.79	4.79%
2024-05-01	4.74	4.74%
2024-05-02	4.72	4.72%
2024-05-03	4.66	4.66%
2024-05-06	4.64	4.64%
2024-05-07	4.61	4.61%
2024-05-08	4.64	4.64%
2024-05-09	4.60	4.60%
2024-05-10	4.64	4.64%
2024-05-13	4.63	4.63%
2024-05-14	4.59	4.59%
2024-05-15	4.52	4.52%
2024-05-16	4.52	4.52%
2024-05-17	4.56	4.56%
2024-05-20	4.58	4.58%
2024-05-21	4.55	4.55%
2024-05-22	4.55	4.55%
2024-05-23	4.58	4.58%
2024-05-24	4.57	4.57%
2024-05-27		0.00%
2024-05-28	4.66	4.66%
2024-05-29	4.74	4.74%
2024-05-30	4.69	4.69%
2024-05-31	4.65	4.65%
2024-06-03	4.55	4.55%
2024-06-04	4.48	4.48%
2024-06-05	4.44	4.44%
2024-06-06	4.43	4.43%
2024-06-07	4.55	4.55%
2024-06-10	4.59	4.59%
2024-06-11	4.53	4.53%
2024-06-12	4.47	4.47%
2024-06-13	4.40	4.40%
2024-06-14	4.34	4.34%
2024-06-17	4.40	4.40%
2024-06-18	4.36	4.36%
2024-06-19		0.00%
2024-06-20	4.39	4.39%
2024-06-21	4.39	4.39%
2024-06-24	4.38	4.38%
2024-06-25	4.36	4.36%
2024-06-26	4.45	4.45%
2024-06-27	4.43	4.43%
2024-06-28	4.51	4.51%
2024-07-01	4.64	4.64%
2024-07-02	4.60	4.60%
2024-07-03	4.53	4.53%
2024-07-04		0.00%
2024-07-05	4.47	4.47%
2024-07-08	4.46	4.46%
2024-07-09	4.49	4.49%
2024-07-10	4.47	4.47%
2024-07-11	4.41	4.41%
2024-07-12	4.39	4.39%
2024-07-15	4.46	4.46%
2024-07-16	4.38	4.38%
2024-07-17	4.37	4.37%
2024-07-18	4.41	4.41%
2024-07-19	4.45	4.45%
2024-07-22	4.48	4.48%
2024-07-23	4.48	4.48%
2024-07-24	4.54	4.54%

2024-07-25	4.50	4.50%
2024-07-26	4.45	4.45%
2024-07-29	4.42	4.42%
2024-07-30	4.40	4.40%
2024-07-31	4.35	4.35%
2024-08-01	4.27	4.27%
2024-08-02	4.11	4.11%
2024-08-05	4.06	4.06%
2024-08-06	4.18	4.18%
2024-08-07	4.26	4.26%
2024-08-08	4.28	4.28%
2024-08-09	4.23	4.23%
2024-08-12	4.19	4.19%
2024-08-13	4.16	4.16%
2024-08-14	4.12	4.12%
2024-08-15	4.18	4.18%
2024-08-16	4.15	4.15%
2024-08-19	4.11	4.11%
2024-08-20	4.07	4.07%
2024-08-21	4.06	4.06%
2024-08-22	4.13	4.13%
2024-08-23	4.10	4.10%
2024-08-26	4.11	4.11%
2024-08-27	4.13	4.13%
2024-08-28	4.13	4.13%
2024-08-29	4.15	4.15%
2024-08-30	4.20	4.20%
2024-09-02		0.00%
2024-09-03	4.13	4.13%
2024-09-04	4.06	4.06%
2024-09-05	4.02	4.02%
2024-09-06	4.03	4.03%
2024-09-09	4.00	4.00%
2024-09-10	3.97	3.97%
2024-09-11	3.96	3.96%
2024-09-12	4.00	4.00%
2024-09-13	3.98	3.98%
2024-09-16	3.94	3.94%
2024-09-17	3.96	3.96%
2024-09-18	4.03	4.03%
2024-09-19	4.06	4.06%
2024-09-20	4.07	4.07%
2024-09-23	4.09	4.09%
2024-09-24	4.09	4.09%
2024-09-25	4.14	4.14%
2024-09-26	4.12	4.12%
2024-09-27	4.10	4.10%
2024-09-30	4.14	4.14%
2024-10-01	4.08	4.08%
2024-10-02	4.14	4.14%
2024-10-03	4.18	4.18%
2024-10-04	4.26	4.26%
2024-10-07	4.30	4.30%
2024-10-08	4.32	4.32%
2024-10-09	4.34	4.34%
2024-10-10	4.38	4.38%
2024-10-11	4.39	4.39%
2024-10-14		0.00%
2024-10-15	4.32	4.32%
2024-10-16	4.30	4.30%
2024-10-17	4.39	4.39%
2024-10-18	4.38	4.38%
2024-10-21	4.49	4.49%
2024-10-22	4.49	4.49%
2024-10-23	4.51	4.51%
2024-10-24	4.47	4.47%
2024-10-25	4.51	4.51%
2024-10-28	4.53	4.53%
2024-10-29	4.52	4.52%
2024-10-30	4.49	4.49%
2024-10-31	4.47	4.47%
2024-11-01	4.57	4.57%
2024-11-04	4.50	4.50%
2024-11-05	4.44	4.44%
2024-11-06	4.60	4.60%
2024-11-07	4.52	4.52%
2024-11-08	4.47	4.47%
2024-11-11		0.00%
2024-11-12	4.58	4.58%
2024-11-13	4.63	4.63%
2024-11-14	4.58	4.58%
2024-11-15	4.60	4.60%
2024-11-18	4.61	4.61%
2024-11-19	4.57	4.57%
2024-11-20	4.59	4.59%
2024-11-21	4.61	4.61%
2024-11-22	4.60	4.60%
2024-11-25	4.45	4.45%
2024-11-26	4.48	4.48%
2024-11-27	4.44	4.44%
2024-11-28		0.00%
2024-11-29	4.36	4.36%
2024-12-02	4.36	4.36%

2024-12-03	4.40	4.40%
2024-12-04	4.35	4.35%
2024-12-05	4.33	4.33%
2024-12-06	4.34	4.34%
2024-12-09	4.39	4.39%
2024-12-10	4.41	4.41%
2024-12-11	4.48	4.48%
2024-12-12	4.55	4.55%
2024-12-13	4.61	4.61%
2024-12-16	4.60	4.60%
2024-12-17	4.59	4.59%
2024-12-18	4.65	4.65%
2024-12-19	4.74	4.74%
2024-12-20	4.72	4.72%
2024-12-23	4.78	4.78%
2024-12-24	4.76	4.76%
2024-12-25		0.00%
2024-12-26	4.76	4.76%
2024-12-27	4.82	4.82%
2024-12-30	4.77	4.77%
2024-12-31	4.78	4.78%
2025-01-01		0.00%
2025-01-02	4.79	4.79%
2025-01-03	4.82	4.82%
2025-01-06	4.85	4.85%
2025-01-07	4.91	4.91%
2025-01-08	4.91	4.91%
2025-01-09	4.92	4.92%
2025-01-10	4.96	4.96%
2025-01-13	4.97	4.97%
2025-01-14	4.98	4.98%
2025-01-15	4.88	4.88%
2025-01-16	4.84	4.84%
2025-01-17	4.84	4.84%
2025-01-20		0.00%
2025-01-21	4.80	4.80%
2025-01-22	4.82	4.82%
2025-01-23	4.87	4.87%
2025-01-24	4.85	4.85%
2025-01-27	4.76	4.76%
2025-01-28	4.78	4.78%
2025-01-29	4.79	4.79%
2025-01-30	4.76	4.76%
2025-01-31	4.83	4.83%
2025-02-03	4.77	4.77%
2025-02-04	4.75	4.75%
2025-02-05	4.64	4.64%
2025-02-06	4.65	4.65%
2025-02-07	4.69	4.69%
2025-02-10	4.71	4.71%
2025-02-11	4.75	4.75%
2025-02-12	4.83	4.83%
2025-02-13	4.72	4.72%
2025-02-14	4.69	4.69%
2025-02-17		0.00%
2025-02-18	4.77	4.77%
2025-02-19	4.76	4.76%
2025-02-20	4.74	4.74%
2025-02-21	4.67	4.67%
2025-02-24	4.66	4.66%
2025-02-25	4.55	4.55%
2025-02-26	4.51	4.51%
2025-02-27	4.56	4.56%
2025-02-28	4.51	4.51%
2025-03-03	4.45	4.45%
2025-03-04	4.53	4.53%
2025-03-05	4.57	4.57%
2025-03-06	4.58	4.58%
2025-03-07	4.62	4.62%
2025-03-10	4.54	4.54%
2025-03-11	4.59	4.59%
2025-03-12	4.63	4.63%
2025-03-13	4.59	4.59%
2025-03-14	4.62	4.62%
2025-03-17	4.60	4.60%
2025-03-18	4.58	4.58%
2025-03-19	4.56	4.56%
2025-03-20	4.55	4.55%
2025-03-21	4.59	4.59%
2025-03-24	4.66	4.66%
2025-03-25	4.65	4.65%
2025-03-26	4.69	4.69%
2025-03-27	4.73	4.73%
2025-03-28	4.64	4.64%
2025-03-31	4.59	4.59%
2025-04-01	4.52	4.52%
2025-04-02	4.54	4.54%
2025-04-03	4.49	4.49%
2025-04-04	4.41	4.41%
2025-04-07	4.58	4.58%
2025-04-08	4.71	4.71%
2025-04-09	4.72	4.72%
2025-04-10	4.86	4.86%

2025-04-11	4.85	4.85%
2025-04-14	4.80	4.80%
2025-04-15	4.79	4.79%
2025-04-16	4.74	4.74%
2025-04-17	4.80	4.80%
2025-04-18		0.00%
2025-04-21	4.91	4.91%
2025-04-22	4.88	4.88%
2025-04-23	4.83	4.83%
2025-04-24	4.77	4.77%
2025-04-25	4.74	4.74%
2025-04-28	4.69	4.69%
2025-04-29	4.64	4.64%
2025-04-30	4.66	4.66%

Series ID:	CUSR0000SA0L1E
Seasonally Adjusted	
Series Title:	All items less food and energy in U.S. city average, all
Area:	U.S. city average
Item:	All items less food and energy
Base Period:	1982-84=100
Years:	2006 to 2023

[illegible]

Date	Month	Year	CPI	YOY % Change
Jan-06	1	2006	203.2	
Feb-06	2	2006	203.6	
Mar-06	3	2006	204.3	
Apr-06	4	2006	204.8	
May-06	5	2006	205.4	
Jun-06	6	2006	205.9	
Jul-06	7	2006	206.3	
Aug-06	8	2006	206.8	
Sep-06	9	2006	207.2	
Oct-06	10	2006	207.6	
Nov-06	11	2006	207.8	
Dec-06	12	2006	208.1	
Jan-07	1	2007	208.6	2.66%
Feb-07	2	2007	209.135	2.72%
Mar-07	3	2007	209.418	2.51%
Apr-07	4	2007	209.747	2.42%
May-07	5	2007	210.058	2.27%
Jun-07	6	2007	210.392	2.18%
Jul-07	7	2007	210.773	2.17%
Aug-07	8	2007	211.119	2.09%
Sep-07	9	2007	211.554	2.10%
Oct-07	10	2007	212.077	2.16%
Nov-07	11	2007	212.66	2.34%
Dec-07	12	2007	213.168	2.44%
Jan-08	1	2008	213.771	2.48%
Feb-08	2	2008	213.939	2.30%
Mar-08	3	2008	214.42	2.39%
Apr-08	4	2008	214.56	2.29%
May-08	5	2008	214.936	2.32%
Jun-08	6	2008	215.424	2.39%
Jul-08	7	2008	215.965	2.46%
Aug-08	8	2008	216.393	2.50%
Sep-08	9	2008	216.713	2.44%
Oct-08	10	2008	216.788	2.22%
Nov-08	11	2008	216.947	2.02%
Dec-08	12	2008	216.925	1.76%
Jan-09	1	2009	217.346	1.67%
Feb-09	2	2009	217.792	1.80%
Mar-09	3	2009	218.253	1.79%
Apr-09	4	2009	218.706	1.93%
May-09	5	2009	218.904	1.85%
Jun-09	6	2009	219.112	1.71%
Jul-09	7	2009	219.263	1.53%
Aug-09	8	2009	219.496	1.43%
Sep-09	9	2009	219.92	1.48%
Oct-09	10	2009	220.501	1.71%
Nov-09	11	2009	220.666	1.71%
Dec-09	12	2009	220.881	1.82%
Jan-10	1	2010	220.633	1.51%
Feb-10	2	2010	220.731	1.35%
Mar-10	3	2010	220.783	1.16%
Apr-10	4	2010	220.822	0.97%
May-10	5	2010	220.962	0.94%
Jun-10	6	2010	221.194	0.95%
Jul-10	7	2010	221.363	0.96%
Aug-10	8	2010	221.509	0.92%
Sep-10	9	2010	221.711	0.81%
Oct-10	10	2010	221.83	0.60%
Nov-10	11	2010	222.149	0.67%
Dec-10	12	2010	222.343	0.66%
Jan-11	1	2011	222.803	0.98%
Feb-11	2	2011	223.213	1.12%
Mar-11	3	2011	223.454	1.21%
Apr-11	4	2011	223.727	1.32%
May-11	5	2011	224.175	1.45%
Jun-11	6	2011	224.697	1.58%
Jul-11	7	2011	225.218	1.74%
Aug-11	8	2011	225.862	1.97%
Sep-11	9	2011	226.118	1.99%
Oct-11	10	2011	226.506	2.11%
Nov-11	11	2011	226.899	2.14%
Dec-11	12	2011	227.405	2.28%
Jan-12	1	2012	227.877	2.28%
Feb-12	2	2012	228.034	2.16%
Mar-12	3	2012	228.478	2.25%
Apr-12	4	2012	228.905	2.31%
May-12	5	2012	229.224	2.25%
Jun-12	6	2012	229.623	2.19%
Jul-12	7	2012	229.97	2.11%
Aug-12	8	2012	230.233	1.94%
Sep-12	9	2012	230.659	2.01%
Oct-12	10	2012	231.024	1.99%
Nov-12	11	2012	231.33	1.95%
Dec-12	12	2012	231.725	1.90%
Jan-13	1	2013	232.229	1.91%
Feb-13	2	2013	232.569	1.99%
Mar-13	3	2013	232.794	1.89%
Apr-13	4	2013	232.832	1.72%
May-13	5	2013	232.996	1.65%
Jun-13	6	2013	233.35	1.62%
Jul-13	7	2013	233.88	1.70%
Aug-13	8	2013	234.336	1.78%
Sep-13	9	2013	234.7	1.75%
Oct-13	10	2013	234.921	1.69%
Nov-13	11	2013	235.359	1.74%
Dec-13	12	2013	235.759	1.74%
Jan-14	1	2014	235.961	1.61%
Feb-14	2	2014	236.185	1.55%
Mar-14	3	2014	236.625	1.65%
Apr-14	4	2014	237.072	1.82%
May-14	5	2014	237.529	1.95%
Jun-14	6	2014	237.837	1.92%
Jul-14	7	2014	238.195	1.84%
Aug-14	8	2014	238.405	1.74%

Date	Month	Year	CPI	YOY % Change
Sep-14	9	2014	238.786	1.74%
Oct-14	10	2014	239.191	1.82%
Nov-14	11	2014	239.458	1.74%
Dec-14	12	2014	239.584	1.62%
Jan-15	1	2015	239.811	1.63%
Feb-15	2	2015	240.172	1.69%
Mar-15	3	2015	240.755	1.75%
Apr-15	4	2015	241.346	1.80%
May-15	5	2015	241.688	1.75%
Jun-15	6	2015	242.064	1.78%
Jul-15	7	2015	242.565	1.83%
Aug-15	8	2015	242.817	1.85%
Sep-15	9	2015	243.316	1.90%
Oct-15	10	2015	243.768	1.91%
Nov-15	11	2015	244.241	2.00%
Dec-15	12	2015	244.547	2.07%
Jan-16	1	2016	244.955	2.15%
Feb-16	2	2016	245.51	2.22%
Mar-16	3	2016	245.913	2.14%
Apr-16	4	2016	246.551	2.16%
May-16	5	2016	247.137	2.25%
Jun-16	6	2016	247.54	2.26%
Jul-16	7	2016	247.829	2.17%
Aug-16	8	2016	248.423	2.31%
Sep-16	9	2016	248.842	2.27%
Oct-16	10	2016	249.142	2.20%
Nov-16	11	2016	249.481	2.15%
Dec-16	12	2016	249.92	2.20%
Jan-17	1	2017	250.467	2.25%
Feb-17	2	2017	250.998	2.24%
Mar-17	3	2017	250.944	2.05%
Apr-17	4	2017	251.227	1.90%
May-17	5	2017	251.43	1.74%
Jun-17	6	2017	251.746	1.70%
Jul-17	7	2017	251.985	1.68%
Aug-17	8	2017	252.535	1.66%
Sep-17	9	2017	252.812	1.60%
Oct-17	10	2017	253.526	1.76%
Nov-17	11	2017	253.816	1.74%
Dec-17	12	2017	254.344	1.77%
Jan-18	1	2018	255.204	1.89%
Feb-18	2	2018	255.711	1.88%
Mar-18	3	2018	256.271	2.12%
Apr-18	4	2018	256.63	2.15%
May-18	5	2018	257.145	2.27%
Jun-18	6	2018	257.399	2.25%
Jul-18	7	2018	257.699	2.27%
Aug-18	8	2018	257.891	2.12%
Sep-18	9	2018	258.368	2.20%
Oct-18	10	2018	258.917	2.13%
Nov-18	11	2018	259.439	2.22%
Dec-18	12	2018	260.063	2.25%
Jan-19	1	2019	260.766	2.18%
Feb-19	2	2019	261.186	2.14%
Mar-19	3	2019	261.567	2.07%
Apr-19	4	2019	261.997	2.09%
May-19	5	2019	262.217	1.97%
Jun-19	6	2019	262.739	2.07%
Jul-19	7	2019	263.28	2.17%
Aug-19	8	2019	263.877	2.32%
Sep-19	9	2019	264.388	2.33%
Oct-19	10	2019	264.97	2.34%
Nov-19	11	2019	265.548	2.35%
Dec-19	12	2019	266.02	2.29%
Jan-20	1	2020	266.716	2.28%
Feb-20	2	2020	267.37	2.37%
Mar-20	3	2020	267.054	2.10%
Apr-20	4	2020	265.746	1.43%
May-20	5	2020	265.412	1.22%
Jun-20	6	2020	265.849	1.18%
Jul-20	7	2020	267.389	1.56%
Aug-20	8	2020	268.422	1.72%
Sep-20	9	2020	268.933	1.72%
Oct-20	10	2020	269.306	1.64%
Nov-20	11	2020	269.981	1.67%
Dec-20	12	2020	270.341	1.62%
Jan-21	1	2021	270.416	1.39%
Feb-21	2	2021	270.776	1.27%
Mar-21	3	2021	271.453	1.65%
Apr-21	4	2021	273.626	2.97%
May-21	5	2021	275.457	3.78%
Jun-21	6	2021	277.608	4.42%
Jul-21	7	2021	278.639	4.21%
Aug-21	8	2021	279.021	3.95%
Sep-21	9	2021	279.727	4.01%
Oct-21	10	2021	281.649	4.58%
Nov-21	11	2021	283.411	4.97%
Dec-21	12	2021	285.221	5.50%

CPI for All Urban Consumers (CPI-U)
Original Data Value

Series Id: CUSR0000SA0L1E
Seasonally Adjusted
Series Title: All items less food and energy in U.S. city average, all urban consumers, seasonally adjusted
Area: U.S. city average
Item: All items less food and energy
Base Period: 1982-84=100
Years: 2006 to 2025

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	HALF1	HALF2
	1	2	3	4	5	6	7	8	9	10	11	12		
2006	203.2	203.6	204.3	204.8	205.4	205.9	206.3	206.8	207.2	207.6	207.8	208.1		
2007	208.6	209.135	209.418	209.747	210.058	210.392	210.773	211.119	211.554	212.077	212.66	213.168		
2008	213.771	213.939	214.42	214.56	214.936	215.424	215.965	216.393	216.713	216.788	216.947	216.925		
2009	217.346	217.792	218.253	218.706	218.904	219.112	219.263	219.496	219.92	220.501	220.666	220.881		
2010	220.633	220.731	220.783	220.822	220.962	221.194	221.363	221.509	221.711	221.83	222.149	222.343		
2011	222.803	223.213	223.454	223.727	224.175	224.697	225.218	225.862	226.118	226.506	226.899	227.405		
2012	227.877	228.034	228.478	228.905	229.224	229.623	229.97	230.233	230.659	231.024	231.33	231.725		
2013	232.229	232.569	232.794	232.832	232.996	233.35	233.88	234.336	234.7	234.921	235.359	235.759		
2014	235.961	236.185	236.625	237.072	237.529	237.837	238.195	238.405	238.786	239.191	239.458	239.584		
2015	239.811	240.172	240.755	241.346	241.688	242.064	242.565	242.817	243.316	243.768	244.241	244.547		
2016	244.955	245.51	245.913	246.551	247.137	247.54	247.829	248.423	248.842	249.142	249.481	249.92		
2017	250.467	250.998	250.944	251.227	251.43	251.746	251.985	252.535	252.812	253.526	253.816	254.344		
2018	255.204	255.711	256.271	256.63	257.145	257.399	257.699	257.891	258.368	258.917	259.439	260.063		
2019	260.766	261.186	261.567	261.997	262.217	262.739	263.28	263.877	264.388	264.97	265.548	266.02		
2020	266.716	267.37	267.054	265.746	265.412	265.849	267.389	268.422	268.933	269.306	269.981	270.341		
2021	270.416	270.776	271.453	273.626	275.457	277.608	278.639	279.021	279.727	281.649	283.411	285.221		
2022	286.799	288.256	289.044	290.474	292.039	294.009	295.08	296.582	298.281	299.381	300.316	301.433		
2023	302.685	304.097	305.123	306.49	307.623	308.291	308.959	309.646	310.616	311.433	312.373	313.23		
2024	314.389	315.555	316.762	317.596	318.053	318.343	318.933	319.839	320.835	321.688	322.619	323.296		
2025	324.739	325.475	325.659											

Job Openings and Labor Turnover Survey
Original Data Value

Series Id: JTS0000000000000000UOR
Seasonally adjusted
Industry: Total nonfarm
State/Region: Total US
Area: All areas
Data Element: Unemployed persons per job opening ratio
Size Class: All size classes
Rate/Level: Rate
Years: 2006 to 2025

Date	Month	Year	CPI - Less Food & Energy	YOY % Change
Jan-06	1	2006	203.2	
Feb-06	2	2006	203.6	
Mar-06	3	2006	204.3	
Apr-06	4	2006	204.8	
May-06	5	2006	205.4	
Jun-06	6	2006	205.9	
Jul-06	7	2006	206.3	
Aug-06	8	2006	206.8	
Sep-06	9	2006	207.2	
Oct-06	10	2006	207.6	
Nov-06	11	2006	207.8	
Dec-06	12	2006	208.1	
Jan-07	1	2007	208.6	2.66%
Feb-07	2	2007	209.135	2.72%
Mar-07	3	2007	209.418	2.51%
Apr-07	4	2007	209.747	2.42%
May-07	5	2007	210.058	2.27%
Jun-07	6	2007	210.392	2.18%
Jul-07	7	2007	210.773	2.17%
Aug-07	8	2007	211.119	2.09%
Sep-07	9	2007	211.554	2.10%
Oct-07	10	2007	212.077	2.16%
Nov-07	11	2007	212.66	2.34%
Dec-07	12	2007	213.168	2.44%
Jan-08	1	2008	213.771	2.48%
Feb-08	2	2008	213.939	2.30%
Mar-08	3	2008	214.42	2.39%
Apr-08	4	2008	214.56	2.29%
May-08	5	2008	214.936	2.32%
Jun-08	6	2008	215.424	2.39%
Jul-08	7	2008	215.965	2.46%
Aug-08	8	2008	216.393	2.50%
Sep-08	9	2008	216.713	2.44%
Oct-08	10	2008	216.788	2.22%
Nov-08	11	2008	216.947	2.02%
Dec-08	12	2008	216.925	1.76%
Jan-09	1	2009	217.346	1.67%
Feb-09	2	2009	217.792	1.80%
Mar-09	3	2009	218.253	1.79%
Apr-09	4	2009	218.706	1.93%
May-09	5	2009	218.904	1.85%
Jun-09	6	2009	219.112	1.71%
Jul-09	7	2009	219.263	1.53%
Aug-09	8	2009	219.496	1.43%
Sep-09	9	2009	219.92	1.48%
Oct-09	10	2009	220.501	1.71%
Nov-09	11	2009	220.666	1.71%
Dec-09	12	2009	220.881	1.82%
Jan-10	1	2010	220.633	1.51%
Feb-10	2	2010	220.731	1.35%
Mar-10	3	2010	220.783	1.16%
Apr-10	4	2010	220.822	0.97%
May-10	5	2010	220.962	0.94%
Jun-10	6	2010	221.194	0.95%

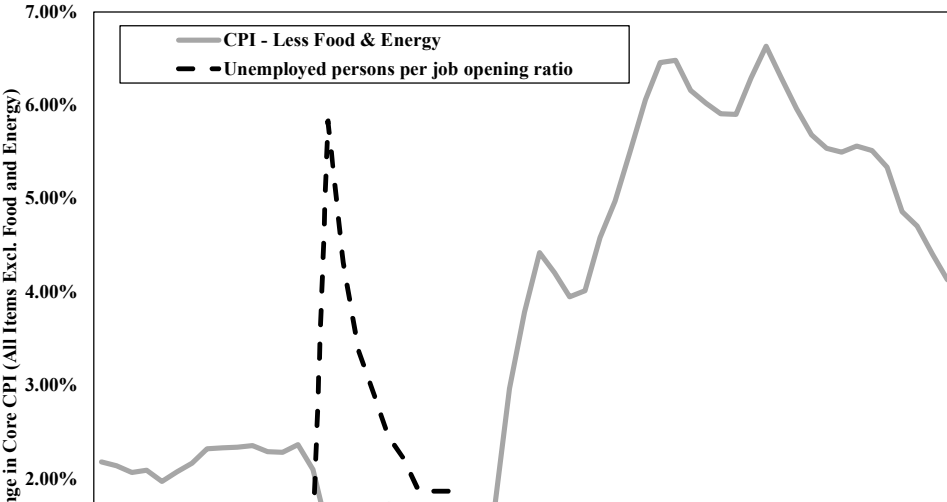
Date	Month	Year	CPI - Less Food & Energy	YOY % Change
Jul-10	7	2010	221.363	0.96%
Aug-10	8	2010	221.509	0.92%
Sep-10	9	2010	221.711	0.81%
Oct-10	10	2010	221.83	0.60%
Nov-10	11	2010	222.149	0.67%
Dec-10	12	2010	222.343	0.66%
Jan-11	1	2011	222.803	0.98%
Feb-11	2	2011	223.213	1.12%
Mar-11	3	2011	223.454	1.21%
Apr-11	4	2011	223.727	1.32%
May-11	5	2011	224.175	1.45%
Jun-11	6	2011	224.697	1.58%
Jul-11	7	2011	225.218	1.74%
Aug-11	8	2011	225.862	1.97%
Sep-11	9	2011	226.118	1.99%
Oct-11	10	2011	226.506	2.11%
Nov-11	11	2011	226.899	2.14%
Dec-11	12	2011	227.405	2.28%
Jan-12	1	2012	227.877	2.28%
Feb-12	2	2012	228.034	2.16%
Mar-12	3	2012	228.478	2.25%
Apr-12	4	2012	228.905	2.31%
May-12	5	2012	229.224	2.25%
Jun-12	6	2012	229.623	2.19%
Jul-12	7	2012	229.97	2.11%
Aug-12	8	2012	230.233	1.94%
Sep-12	9	2012	230.659	2.01%
Oct-12	10	2012	231.024	1.99%
Nov-12	11	2012	231.33	1.95%
Dec-12	12	2012	231.725	1.90%
Jan-13	1	2013	232.229	1.91%
Feb-13	2	2013	232.569	1.99%
Mar-13	3	2013	232.794	1.89%
Apr-13	4	2013	232.832	1.72%
May-13	5	2013	232.996	1.65%
Jun-13	6	2013	233.35	1.62%
Jul-13	7	2013	233.88	1.70%
Aug-13	8	2013	234.336	1.78%
Sep-13	9	2013	234.7	1.75%
Oct-13	10	2013	234.921	1.69%
Nov-13	11	2013	235.359	1.74%
Dec-13	12	2013	235.759	1.74%
Jan-14	1	2014	235.961	1.61%
Feb-14	2	2014	236.185	1.55%
Mar-14	3	2014	236.625	1.65%
Apr-14	4	2014	237.072	1.82%
May-14	5	2014	237.529	1.95%
Jun-14	6	2014	237.837	1.92%
Jul-14	7	2014	238.195	1.84%
Aug-14	8	2014	238.405	1.74%
Sep-14	9	2014	238.786	1.74%
Oct-14	10	2014	239.191	1.82%
Nov-14	11	2014	239.458	1.74%
Dec-14	12	2014	239.584	1.62%

Date	Month	Year	CPI - Less Food & Energy	YOY % Change
Jan-15	1	2015	239.811	1.63%
Feb-15	2	2015	240.172	1.69%
Mar-15	3	2015	240.755	1.75%
Apr-15	4	2015	241.346	1.80%
May-15	5	2015	241.688	1.75%
Jun-15	6	2015	242.064	1.78%
Jul-15	7	2015	242.565	1.83%
Aug-15	8	2015	242.817	1.85%
Sep-15	9	2015	243.316	1.90%
Oct-15	10	2015	243.768	1.91%
Nov-15	11	2015	244.241	2.00%
Dec-15	12	2015	244.547	2.07%
Jan-16	1	2016	244.955	2.15%
Feb-16	2	2016	245.51	2.22%
Mar-16	3	2016	245.913	2.14%
Apr-16	4	2016	246.551	2.16%
May-16	5	2016	247.137	2.25%
Jun-16	6	2016	247.54	2.26%
Jul-16	7	2016	247.829	2.17%
Aug-16	8	2016	248.423	2.31%
Sep-16	9	2016	248.842	2.27%
Oct-16	10	2016	249.142	2.20%
Nov-16	11	2016	249.481	2.15%
Dec-16	12	2016	249.92	2.20%
Jan-17	1	2017	250.467	2.25%
Feb-17	2	2017	250.998	2.24%
Mar-17	3	2017	250.944	2.05%
Apr-17	4	2017	251.227	1.90%
May-17	5	2017	251.43	1.74%
Jun-17	6	2017	251.746	1.70%
Jul-17	7	2017	251.985	1.68%
Aug-17	8	2017	252.535	1.66%
Sep-17	9	2017	252.812	1.60%
Oct-17	10	2017	253.526	1.76%
Nov-17	11	2017	253.816	1.74%
Dec-17	12	2017	254.344	1.77%
Jan-18	1	2018	255.204	1.89%
Feb-18	2	2018	255.711	1.88%
Mar-18	3	2018	256.271	2.12%
Apr-18	4	2018	256.63	2.15%
May-18	5	2018	257.145	2.27%
Jun-18	6	2018	257.399	2.25%
Jul-18	7	2018	257.699	2.27%
Aug-18	8	2018	257.891	2.12%
Sep-18	9	2018	258.368	2.20%
Oct-18	10	2018	258.917	2.13%
Nov-18	11	2018	259.439	2.22%
Dec-18	12	2018	260.063	2.25%
Jan-19	1	2019	260.766	2.18%
Feb-19	2	2019	261.186	2.14%
Mar-19	3	2019	261.567	2.07%
Apr-19	4	2019	261.997	2.09%
May-19	5	2019	262.217	1.97%
Jun-19	6	2019	262.739	2.07%

Date	Month	Year	CPI - Less	
			Food & Energy	YOY % Change
Jul-19	7	2019	263.28	2.17%
Aug-19	8	2019	263.877	2.32%
Sep-19	9	2019	264.388	2.33%
Oct-19	10	2019	264.97	2.34%
Nov-19	11	2019	265.548	2.35%
Dec-19	12	2019	266.02	2.29%
Jan-20	1	2020	266.716	2.28%
Feb-20	2	2020	267.37	2.37%
Mar-20	3	2020	267.054	2.10%
Apr-20	4	2020	265.746	1.43%
May-20	5	2020	265.412	1.22%
Jun-20	6	2020	265.849	1.18%
Jul-20	7	2020	267.389	1.56%
Aug-20	8	2020	268.422	1.72%
Sep-20	9	2020	268.933	1.72%
Oct-20	10	2020	269.306	1.64%
Nov-20	11	2020	269.981	1.67%
Dec-20	12	2020	270.341	1.62%
Jan-21	1	2021	270.416	1.39%
Feb-21	2	2021	270.776	1.27%
Mar-21	3	2021	271.453	1.65%
Apr-21	4	2021	273.626	2.97%
May-21	5	2021	275.457	3.78%
Jun-21	6	2021	277.608	4.42%
Jul-21	7	2021	278.639	4.21%
Aug-21	8	2021	279.021	3.95%
Sep-21	9	2021	279.727	4.01%
Oct-21	10	2021	281.649	4.58%
Nov-21	11	2021	283.411	4.97%
Dec-21	12	2021	285.221	5.50%

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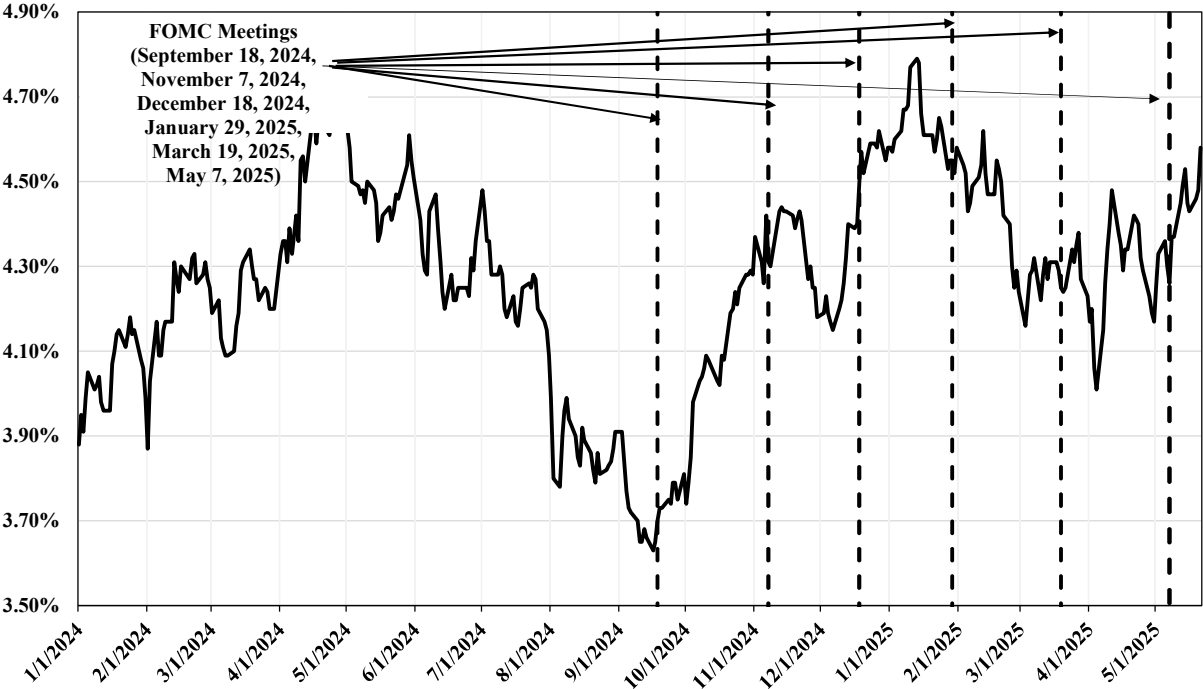
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10y US T-Note
YIELD

1/1/2021	0.93	0.93%
1/4/2021	0.93	0.93%
1/5/2021	0.96	0.96%
1/6/2021	1.04	1.04%
1/7/2021	1.08	1.08%
1/8/2021	1.13	1.13%
1/11/2021	1.15	1.15%
1/12/2021	1.15	1.15%
1/13/2021	1.10	1.10%
1/14/2021	1.15	1.15%
1/15/2021	1.11	1.11%
1/18/2021	1.11	1.11%
1/19/2021	1.10	1.10%
1/20/2021	1.10	1.10%
1/21/2021	1.12	1.12%
1/22/2021	1.10	1.10%
1/25/2021	1.05	1.05%
1/26/2021	1.05	1.05%
1/27/2021	1.04	1.04%
1/28/2021	1.07	1.07%
1/29/2021	1.11	1.11%
2/1/2021	1.09	1.09%
2/2/2021	1.12	1.12%
2/3/2021	1.15	1.15%
2/4/2021	1.15	1.15%
2/5/2021	1.19	1.19%
2/8/2021	1.19	1.19%
2/9/2021	1.18	1.18%
2/10/2021	1.15	1.15%
2/11/2021	1.16	1.16%
2/12/2021	1.20	1.20%
2/15/2021	1.20	1.20%
2/16/2021	1.30	1.30%
2/17/2021	1.29	1.29%
2/18/2021	1.29	1.29%
2/19/2021	1.34	1.34%
2/22/2021	1.37	1.37%
2/23/2021	1.37	1.37%
2/24/2021	1.38	1.38%
2/25/2021	1.54	1.54%
2/26/2021	1.44	1.44%
3/1/2021	1.45	1.45%
3/2/2021	1.42	1.42%
3/3/2021	1.47	1.47%
3/4/2021	1.54	1.54%
3/5/2021	1.56	1.56%
3/8/2021	1.59	1.59%
3/9/2021	1.55	1.55%
3/10/2021	1.53	1.53%
3/11/2021	1.54	1.54%



Date	Y-Axis	Date	Y-Axis
12/18/2024	0%	3/19/2025	0%
12/18/2024	6%	3/19/2025	6%
9/18/2024	0%	5/7/2025	0%
9/18/2024	6%	5/7/2025	6%
11/7/2024	0%		
11/7/2024	6%		
1/29/2025	0%		
1/29/2025	6%		

3/12/2021	1.64	1.64%
3/15/2021	1.62	1.62%
3/16/2021	1.62	1.62%
3/17/2021	1.63	1.63%
3/18/2021	1.71	1.71%
3/19/2021	1.74	1.74%
3/22/2021	1.69	1.69%
3/23/2021	1.63	1.63%
3/24/2021	1.62	1.62%
3/25/2021	1.63	1.63%
3/26/2021	1.67	1.67%
3/29/2021	1.73	1.73%
3/30/2021	1.73	1.73%
3/31/2021	1.74	1.74%
4/1/2021	1.69	1.69%
4/2/2021	1.72	1.72%
4/5/2021	1.73	1.73%
4/6/2021	1.67	1.67%
4/7/2021	1.68	1.68%
4/8/2021	1.64	1.64%
4/9/2021	1.67	1.67%
4/12/2021	1.69	1.69%
4/13/2021	1.64	1.64%
4/14/2021	1.64	1.64%
4/15/2021	1.56	1.56%
4/16/2021	1.59	1.59%
4/19/2021	1.61	1.61%
4/20/2021	1.58	1.58%
4/21/2021	1.57	1.57%
4/22/2021	1.57	1.57%
4/23/2021	1.58	1.58%
4/26/2021	1.58	1.58%
4/27/2021	1.63	1.63%
4/28/2021	1.63	1.63%
4/29/2021	1.65	1.65%
4/30/2021	1.65	1.65%
5/3/2021	1.63	1.63%
5/4/2021	1.61	1.61%
5/5/2021	1.59	1.59%
5/6/2021	1.58	1.58%
5/7/2021	1.60	1.60%
5/10/2021	1.63	1.63%
5/11/2021	1.64	1.64%
5/12/2021	1.69	1.69%
5/13/2021	1.66	1.66%
5/14/2021	1.63	1.63%
5/17/2021	1.64	1.64%
5/18/2021	1.64	1.64%
5/19/2021	1.68	1.68%
5/20/2021	1.63	1.63%
5/21/2021	1.63	1.63%
5/24/2021	1.61	1.61%
5/25/2021	1.56	1.56%

5/26/2021	1.58	1.58%
5/27/2021	1.61	1.61%
5/28/2021	1.58	1.58%
5/31/2021	1.58	1.58%
6/1/2021	1.62	1.62%
6/2/2021	1.59	1.59%
6/3/2021	1.63	1.63%
6/4/2021	1.56	1.56%
6/7/2021	1.57	1.57%
6/8/2021	1.53	1.53%
6/9/2021	1.50	1.50%
6/10/2021	1.45	1.45%
6/11/2021	1.47	1.47%
6/14/2021	1.51	1.51%
6/15/2021	1.51	1.51%
6/16/2021	1.57	1.57%
6/17/2021	1.52	1.52%
6/18/2021	1.45	1.45%
6/21/2021	1.50	1.50%
6/22/2021	1.48	1.48%
6/23/2021	1.50	1.50%
6/24/2021	1.49	1.49%
6/25/2021	1.54	1.54%
6/28/2021	1.49	1.49%
6/29/2021	1.49	1.49%
6/30/2021	1.45	1.45%
7/1/2021	1.48	1.48%
7/2/2021	1.44	1.44%
7/5/2021	1.44	1.44%
7/6/2021	1.37	1.37%
7/7/2021	1.33	1.33%
7/8/2021	1.30	1.30%
7/9/2021	1.37	1.37%
7/12/2021	1.38	1.38%
7/13/2021	1.42	1.42%
7/14/2021	1.37	1.37%
7/15/2021	1.31	1.31%
7/16/2021	1.31	1.31%
7/19/2021	1.19	1.19%
7/20/2021	1.23	1.23%
7/21/2021	1.30	1.30%
7/22/2021	1.27	1.27%
7/23/2021	1.30	1.30%
7/26/2021	1.29	1.29%
7/27/2021	1.25	1.25%
7/28/2021	1.26	1.26%
7/29/2021	1.28	1.28%
7/30/2021	1.24	1.24%
8/2/2021	1.20	1.20%
8/3/2021	1.19	1.19%
8/4/2021	1.19	1.19%
8/5/2021	1.23	1.23%
8/6/2021	1.31	1.31%

8/9/2021	1.33	1.33%
8/10/2021	1.36	1.36%
8/11/2021	1.35	1.35%
8/12/2021	1.36	1.36%
8/13/2021	1.29	1.29%
8/16/2021	1.26	1.26%
8/17/2021	1.26	1.26%
8/18/2021	1.27	1.27%
8/19/2021	1.24	1.24%
8/20/2021	1.26	1.26%
8/23/2021	1.25	1.25%
8/24/2021	1.29	1.29%
8/25/2021	1.35	1.35%
8/26/2021	1.34	1.34%
8/27/2021	1.31	1.31%
8/30/2021	1.29	1.29%
8/31/2021	1.30	1.30%
9/1/2021	1.31	1.31%
9/2/2021	1.29	1.29%
9/3/2021	1.33	1.33%
9/6/2021	1.33	1.33%
9/7/2021	1.38	1.38%
9/8/2021	1.35	1.35%
9/9/2021	1.30	1.30%
9/10/2021	1.35	1.35%
9/13/2021	1.33	1.33%
9/14/2021	1.28	1.28%
9/15/2021	1.31	1.31%
9/16/2021	1.34	1.34%
9/17/2021	1.37	1.37%
9/20/2021	1.31	1.31%
9/21/2021	1.33	1.33%
9/22/2021	1.32	1.32%
9/23/2021	1.41	1.41%
9/24/2021	1.47	1.47%
9/27/2021	1.48	1.48%
9/28/2021	1.54	1.54%
9/29/2021	1.55	1.55%
9/30/2021	1.52	1.52%
10/1/2021	1.48	1.48%
10/4/2021	1.49	1.49%
10/5/2021	1.54	1.54%
10/6/2021	1.53	1.53%
10/7/2021	1.58	1.58%
10/8/2021	1.61	1.61%
10/11/2021	1.61	1.61%
10/12/2021	1.59	1.59%
10/13/2021	1.56	1.56%
10/14/2021	1.52	1.52%
10/15/2021	1.59	1.59%
10/18/2021	1.59	1.59%
10/19/2021	1.65	1.65%
10/20/2021	1.65	1.65%

10/21/2021	1.68	1.68%
10/22/2021	1.66	1.66%
10/25/2021	1.64	1.64%
10/26/2021	1.63	1.63%
10/27/2021	1.54	1.54%
10/28/2021	1.57	1.57%
10/29/2021	1.55	1.55%
11/1/2021	1.58	1.58%
11/2/2021	1.56	1.56%
11/3/2021	1.60	1.60%
11/4/2021	1.53	1.53%
11/5/2021	1.45	1.45%
11/8/2021	1.51	1.51%
11/9/2021	1.46	1.46%
11/10/2021	1.56	1.56%
11/12/2021	1.58	1.58%
11/15/2021	1.63	1.63%
11/16/2021	1.63	1.63%
11/17/2021	1.60	1.60%
11/18/2021	1.59	1.59%
11/19/2021	1.54	1.54%
11/22/2021	1.63	1.63%
11/23/2021	1.67	1.67%
11/24/2021	1.64	1.64%
11/25/2021	1.64	1.64%
11/26/2021	1.48	1.48%
11/29/2021	1.52	1.52%
11/30/2021	1.43	1.43%
12/1/2021	1.43	1.43%
12/2/2021	1.44	1.44%
12/3/2021	1.35	1.35%
12/6/2021	1.43	1.43%
12/7/2021	1.48	1.48%
12/8/2021	1.52	1.52%
12/9/2021	1.49	1.49%
12/10/2021	1.48	1.48%
12/13/2021	1.42	1.42%
12/14/2021	1.44	1.44%
12/15/2021	1.47	1.47%
12/16/2021	1.44	1.44%
12/17/2021	1.41	1.41%
12/20/2021	1.43	1.43%
12/21/2021	1.48	1.48%
12/22/2021	1.46	1.46%
12/23/2021	1.50	1.50%
12/27/2021	1.48	1.48%
12/28/2021	1.49	1.49%
12/29/2021	1.55	1.55%
12/30/2021	1.52	1.52%
12/31/2021	1.52	1.52%
1/3/2022	1.63	1.63%
1/4/2022	1.66	1.66%
1/5/2022	1.71	1.71%

1/6/2022	1.73	1.73%
1/7/2022	1.76	1.76%
1/10/2022	1.78	1.78%
1/11/2022	1.75	1.75%
1/12/2022	1.74	1.74%
1/13/2022	1.70	1.70%
1/14/2022	1.78	1.78%
1/17/2022	1.78	1.78%
1/18/2022	1.87	1.87%
1/19/2022	1.83	1.83%
1/20/2022	1.83	1.83%
1/21/2022	1.75	1.75%
1/24/2022	1.75	1.75%
1/25/2022	1.78	1.78%
1/26/2022	1.85	1.85%
1/27/2022	1.81	1.81%
1/28/2022	1.78	1.78%
1/31/2022	1.79	1.79%
2/1/2022	1.81	1.81%
2/2/2022	1.78	1.78%
2/3/2022	1.82	1.82%
2/4/2022	1.93	1.93%
2/7/2022	1.92	1.92%
2/8/2022	1.96	1.96%
2/9/2022	1.94	1.94%
2/10/2022	2.03	2.03%
2/11/2022	1.92	1.92%
2/14/2022	1.98	1.98%
2/15/2022	2.05	2.05%
2/16/2022	2.03	2.03%
2/17/2022	1.97	1.97%
2/18/2022	1.92	1.92%
2/21/2022	1.92	1.92%
2/22/2022	1.94	1.94%
2/23/2022	1.99	1.99%
2/24/2022	1.96	1.96%
2/25/2022	1.97	1.97%
2/28/2022	1.83	1.83%
3/1/2022	1.72	1.72%
3/2/2022	1.86	1.86%
3/3/2022	1.86	1.86%
3/4/2022	1.74	1.74%
3/7/2022	1.78	1.78%
3/8/2022	1.86	1.86%
3/9/2022	1.94	1.94%
3/10/2022	1.98	1.98%
3/11/2022	2.00	2.00%
3/14/2022	2.14	2.14%
3/15/2022	2.15	2.15%
3/16/2022	2.19	2.19%
3/17/2022	2.20	2.20%
3/18/2022	2.14	2.14%
3/21/2022	2.32	2.32%

3/22/2022	2.38	2.38%	
3/23/2022	2.32	2.32%	
3/24/2022	2.34	2.34%	
3/25/2022	2.48	2.48%	
3/28/2022	2.46	2.46%	
3/29/2022	2.41	2.41%	
3/30/2022	2.35	2.35%	
3/31/2022	2.32	2.32%	
4/1/2022	2.39	2.39%	
4/4/2022	2.42	2.42%	
4/5/2022	2.54	2.54%	
4/6/2022	2.61	2.61%	
4/7/2022	2.66	2.66%	
4/8/2022	2.72	2.72%	
4/11/2022	2.79	2.79%	
4/12/2022	2.72	2.72%	
4/13/2022	2.70	2.70%	
4/14/2022	2.83	2.83%	
4/15/2022	2.83	2.83%	
4/18/2022	2.85	2.85%	
4/19/2022	2.93	2.93%	
4/20/2022	2.85	2.85%	
4/21/2022	2.90	2.90%	
4/22/2022	2.90	2.90%	
4/25/2022	2.81	2.81%	
4/26/2022	2.77	2.77%	
4/27/2022	2.82	2.82%	
4/28/2022	2.85	2.85%	
4/29/2022	2.89	2.89%	1.42%
5/2/2022	2.99	2.99%	
5/3/2022	2.97	2.97%	
5/4/2022	2.93	2.93%	
5/5/2022	3.05	3.05%	
5/6/2022	3.12	3.12%	
5/9/2022	3.05	3.05%	
5/10/2022	2.99	2.99%	
5/11/2022	2.91	2.91%	
5/12/2022	2.84	2.84%	
5/13/2022	2.93	2.93%	
5/16/2022	2.88	2.88%	
5/17/2022	2.98	2.98%	
5/18/2022	2.88	2.88%	
5/19/2022	2.84	2.84%	
5/20/2022	2.78	2.78%	
5/23/2022	2.86	2.86%	
5/24/2022	2.76	2.76%	
5/25/2022	2.75	2.75%	
5/26/2022	2.75	2.75%	
5/27/2022	2.74	2.74%	
5/30/2022	2.74	2.74%	
5/31/2022	2.85	2.85%	
6/1/2022	2.94	2.94%	
6/2/2022	2.92	2.92%	

6/3/2022	2.96	2.96%	
6/6/2022	3.04	3.04%	
6/7/2022	2.98	2.98%	
6/8/2022	3.03	3.03%	
6/9/2022	3.04	3.04%	
6/10/2022	3.15	3.15%	
6/13/2022	3.43	3.43%	
6/14/2022	3.49	3.49%	2.02%
6/15/2022	3.33	3.33%	
6/16/2022	3.28	3.28%	
6/17/2022	3.25	3.25%	
6/20/2022	3.25	3.25%	
6/21/2022	3.31	3.31%	
6/22/2022	3.16	3.16%	
6/23/2022	3.09	3.09%	
6/24/2022	3.13	3.13%	
6/27/2022	3.20	3.20%	
6/28/2022	3.20	3.20%	
6/29/2022	3.10	3.10%	
6/30/2022	2.98	2.98%	
7/1/2022	2.88	2.88%	
7/4/2022	2.88	2.88%	
7/5/2022	2.82	2.82%	
7/6/2022	2.93	2.93%	
7/7/2022	3.01	3.01%	
7/8/2022	3.09	3.09%	
7/11/2022	2.99	2.99%	
7/12/2022	2.96	2.96%	
7/13/2022	2.91	2.91%	
7/14/2022	2.96	2.96%	
7/15/2022	2.93	2.93%	
7/18/2022	2.96	2.96%	
7/19/2022	3.01	3.01%	
7/20/2022	3.04	3.04%	
7/21/2022	2.91	2.91%	
7/22/2022	2.77	2.77%	
7/25/2022	2.81	2.81%	
7/26/2022	2.81	2.81%	
7/27/2022	2.78	2.78%	
7/28/2022	2.68	2.68%	
7/29/2022	2.67	2.67%	
8/1/2022	2.60	2.60%	
8/2/2022	2.75	2.75%	
8/3/2022	2.73	2.73%	
8/4/2022	2.68	2.68%	
8/5/2022	2.83	2.83%	
8/8/2022	2.77	2.77%	
8/9/2022	2.80	2.80%	
8/10/2022	2.78	2.78%	
8/11/2022	2.87	2.87%	
8/12/2022	2.84	2.84%	
8/15/2022	2.79	2.79%	
8/16/2022	2.82	2.82%	

8/17/2022	2.89	2.89%
8/18/2022	2.88	2.88%
8/19/2022	2.98	2.98%
8/22/2022	3.03	3.03%
8/23/2022	3.05	3.05%
8/24/2022	3.11	3.11%
8/25/2022	3.03	3.03%
8/26/2022	3.04	3.04%
8/29/2022	3.12	3.12%
8/30/2022	3.11	3.11%
8/31/2022	3.15	3.15%
9/1/2022	3.26	3.26%
9/2/2022	3.20	3.20%
9/5/2022	3.20	3.20%
9/6/2022	3.33	3.33%
9/7/2022	3.27	3.27%
9/8/2022	3.29	3.29%
9/9/2022	3.33	3.33%
9/12/2022	3.37	3.37%
9/13/2022	3.42	3.42%
9/14/2022	3.41	3.41%
9/15/2022	3.45	3.45%
9/16/2022	3.45	3.45%
9/19/2022	3.49	3.49%
9/20/2022	3.57	3.57%
9/21/2022	3.51	3.51%
9/22/2022	3.70	3.70%
9/23/2022	3.69	3.69%
9/26/2022	3.88	3.88%
9/27/2022	3.97	3.97%
9/28/2022	3.72	3.72%
9/29/2022	3.76	3.76%
9/30/2022	3.83	3.83%
10/3/2022	3.67	3.67%
10/4/2022	3.62	3.62%
10/5/2022	3.76	3.76%
10/6/2022	3.83	3.83%
10/7/2022	3.89	3.89%
10/10/2022	3.89	3.89%
10/11/2022	3.93	3.93%
10/12/2022	3.91	3.91%
10/13/2022	3.97	3.97%
10/14/2022	4.00	4.00%
10/17/2022	4.02	4.02%
10/18/2022	4.01	4.01%
10/19/2022	4.14	4.14%
10/20/2022	4.24	4.24%
10/21/2022	4.21	4.21%
10/24/2022	4.25	4.25%
10/25/2022	4.10	4.10%
10/26/2022	4.04	4.04%
10/27/2022	3.96	3.96%
10/28/2022	4.02	4.02%

10/31/2022	4.10	4.10%
11/1/2022	4.07	4.07%
11/2/2022	4.10	4.10%
11/3/2022	4.14	4.14%
11/4/2022	4.17	4.17%
11/7/2022	4.22	4.22%
11/8/2022	4.14	4.14%
11/9/2022	4.12	4.12%
11/10/2022	3.82	3.82%
11/14/2022	3.88	3.88%
11/15/2022	3.80	3.80%
11/16/2022	3.67	3.67%
11/17/2022	3.77	3.77%
11/18/2022	3.82	3.82%
11/21/2022	3.83	3.83%
11/22/2022	3.76	3.76%
11/23/2022	3.71	3.71%
11/24/2022	3.71	3.71%
11/25/2022	3.68	3.68%
11/28/2022	3.69	3.69%
11/29/2022	3.75	3.75%
11/30/2022	3.68	3.68%
12/1/2022	3.53	3.53%
12/2/2022	3.51	3.51%
12/5/2022	3.60	3.60%
12/6/2022	3.51	3.51%
12/7/2022	3.42	3.42%
12/8/2022	3.48	3.48%
12/9/2022	3.57	3.57%
12/12/2022	3.61	3.61%
12/13/2022	3.51	3.51%
12/14/2022	3.49	3.49%
12/15/2022	3.44	3.44%
12/16/2022	3.48	3.48%
12/19/2022	3.57	3.57%
12/20/2022	3.69	3.69%
12/21/2022	3.68	3.68%
12/22/2022	3.67	3.67%
12/23/2022	3.75	3.75%
12/26/2022	3.75	3.75%
12/27/2022	3.84	3.84%
12/28/2022	3.88	3.88%
12/29/2022	3.83	3.83%
12/30/2022	3.88	3.88%
1/2/2023	3.88	3.88%
1/3/2023	3.79	3.79%
1/4/2023	3.69	3.69%
1/5/2023	3.71	3.71%
1/6/2023	3.55	3.55%
1/9/2023	3.53	3.53%
1/10/2023	3.61	3.61%
1/11/2023	3.54	3.54%
1/12/2023	3.43	3.43%

1/13/2023	3.49	3.49%
1/16/2023	3.49	3.49%
1/17/2023	3.53	3.53%
1/18/2023	3.37	3.37%
1/19/2023	3.39	3.39%
1/20/2023	3.48	3.48%
1/23/2023	3.52	3.52%
1/24/2023	3.46	3.46%
1/25/2023	3.46	3.46%
1/26/2023	3.49	3.49%
1/27/2023	3.52	3.52%
1/30/2023	3.55	3.55%
1/31/2023	3.52	3.52%
2/1/2023	3.39	3.39%
2/2/2023	3.40	3.40%
2/3/2023	3.53	3.53%
2/6/2023	3.63	3.63%
2/7/2023	3.67	3.67%
2/8/2023	3.63	3.63%
2/9/2023	3.67	3.67%
2/10/2023	3.74	3.74%
2/13/2023	3.72	3.72%
2/14/2023	3.77	3.77%
2/15/2023	3.81	3.81%
2/16/2023	3.86	3.86%
2/17/2023	3.82	3.82%
2/20/2023	3.82	3.82%
2/21/2023	3.95	3.95%
2/22/2023	3.93	3.93%
2/23/2023	3.88	3.88%
2/24/2023	3.95	3.95%
2/27/2023	3.92	3.92%
2/28/2023	3.92	3.92%
3/1/2023	4.01	4.01%
3/2/2023	4.08	4.08%
3/3/2023	3.97	3.97%
3/6/2023	3.98	3.98%
3/7/2023	3.97	3.97%
3/8/2023	3.98	3.98%
3/9/2023	3.93	3.93%
3/10/2023	3.70	3.70%
3/13/2023	3.55	3.55%
3/14/2023	3.64	3.64%
3/15/2023	3.51	3.51%
3/16/2023	3.56	3.56%
3/17/2023	3.39	3.39%
3/20/2023	3.47	3.47%
3/21/2023	3.59	3.59%
3/22/2023	3.48	3.48%
3/23/2023	3.38	3.38%
3/24/2023	3.38	3.38%
3/27/2023	3.53	3.53%
3/28/2023	3.55	3.55%

3/29/2023	3.57	3.57%
3/30/2023	3.55	3.55%
3/31/2023	3.48	3.48%
4/3/2023	3.43	3.43%
4/4/2023	3.35	3.35%
4/5/2023	3.30	3.30%
4/6/2023	3.30	3.30%
4/7/2023	3.39	3.39%
4/10/2023	3.41	3.41%
4/11/2023	3.43	3.43%
4/12/2023	3.41	3.41%
4/13/2023	3.45	3.45%
4/14/2023	3.52	3.52%
4/17/2023	3.60	3.60%
4/18/2023	3.58	3.58%
4/19/2023	3.60	3.60%
4/20/2023	3.54	3.54%
4/21/2023	3.57	3.57%
4/24/2023	3.52	3.52%
4/25/2023	3.40	3.40%
4/26/2023	3.43	3.43%
4/27/2023	3.53	3.53%
4/28/2023	3.44	3.44%
5/1/2023	3.59	3.59%
5/2/2023	3.44	3.44%
5/3/2023	3.38	3.38%
5/4/2023	3.37	3.37%
5/5/2023	3.44	3.44%
5/8/2023	3.52	3.52%
5/9/2023	3.53	3.53%
5/10/2023	3.43	3.43%
5/11/2023	3.39	3.39%
5/12/2023	3.46	3.46%
5/15/2023	3.50	3.50%
5/16/2023	3.54	3.54%
5/17/2023	3.57	3.57%
5/18/2023	3.65	3.65%
5/19/2023	3.70	3.70%
5/22/2023	3.72	3.72%
5/23/2023	3.70	3.70%
5/24/2023	3.73	3.73%
5/25/2023	3.83	3.83%
5/26/2023	3.80	3.80%
5/29/2023	3.80	3.80%
5/30/2023	3.69	3.69%
5/31/2023	3.64	3.64%
6/1/2023	3.61	3.61%
6/2/2023	3.69	3.69%
6/5/2023	3.69	3.69%
6/6/2023	3.70	3.70%
6/7/2023	3.79	3.79%
6/8/2023	3.73	3.73%
6/9/2023	3.75	3.75%

6/12/2023	3.73	3.73%
6/13/2023	3.84	3.84%
6/14/2023	3.83	3.83%
6/15/2023	3.72	3.72%
6/16/2023	3.77	3.77%
6/19/2023	3.77	3.77%
6/20/2023	3.74	3.74%
6/21/2023	3.72	3.72%
6/22/2023	3.80	3.80%
6/23/2023	3.74	3.74%
6/26/2023	3.72	3.72%
6/27/2023	3.77	3.77%
6/28/2023	3.71	3.71%
6/29/2023	3.85	3.85%
6/30/2023	3.81	3.81%
7/3/2023	3.86	3.86%
7/4/2023	3.86	3.86%
7/5/2023	3.95	3.95%
7/6/2023	4.05	4.05%
7/7/2023	4.06	4.06%
7/10/2023	4.01	4.01%
7/11/2023	3.99	3.99%
7/12/2023	3.86	3.86%
7/13/2023	3.76	3.76%
7/14/2023	3.83	3.83%
7/17/2023	3.81	3.81%
7/18/2023	3.80	3.80%
7/19/2023	3.75	3.75%
7/20/2023	3.85	3.85%
7/21/2023	3.84	3.84%
7/24/2023	3.86	3.86%
7/25/2023	3.91	3.91%
7/26/2023	3.86	3.86%
7/27/2023	4.01	4.01%
7/28/2023	3.96	3.96%
7/31/2023	3.97	3.97%
8/1/2023	4.05	4.05%
8/2/2023	4.08	4.08%
8/3/2023	4.20	4.20%
8/4/2023	4.05	4.05%
8/7/2023	4.09	4.09%
8/8/2023	4.02	4.02%
8/9/2023	4.00	4.00%
8/10/2023	4.09	4.09%
8/11/2023	4.16	4.16%
8/14/2023	4.19	4.19%
8/15/2023	4.21	4.21%
8/16/2023	4.28	4.28%
8/17/2023	4.30	4.30%
8/18/2023	4.26	4.26%
8/21/2023	4.34	4.34%
8/22/2023	4.34	4.34%
8/23/2023	4.19	4.19%

8/24/2023	4.23	4.23%
8/25/2023	4.25	4.25%
8/28/2023	4.20	4.20%
8/29/2023	4.12	4.12%
8/30/2023	4.12	4.12%
8/31/2023	4.09	4.09%
9/1/2023	4.18	4.18%
9/4/2023	4.18	4.18%
9/5/2023	4.27	4.27%
9/6/2023	4.30	4.30%
9/7/2023	4.27	4.27%
9/8/2023	4.26	4.26%
9/11/2023	4.29	4.29%
9/12/2023	4.27	4.27%
9/13/2023	4.25	4.25%
9/14/2023	4.29	4.29%
9/15/2023	4.33	4.33%
9/18/2023	4.32	4.32%
9/19/2023	4.37	4.37%
9/20/2023	4.35	4.35%
9/21/2023	4.49	4.49%
9/22/2023	4.44	4.44%
9/25/2023	4.55	4.55%
9/26/2023	4.56	4.56%
9/27/2023	4.61	4.61%
9/28/2023	4.59	4.59%
9/29/2023	4.59	4.59%
10/2/2023	4.69	4.69%
10/3/2023	4.81	4.81%
10/4/2023	4.73	4.73%
10/5/2023	4.72	4.72%
10/6/2023	4.78	4.78%
10/10/2023	4.66	4.66%
10/11/2023	4.58	4.58%
10/12/2023	4.70	4.70%
10/13/2023	4.63	4.63%
10/16/2023	4.71	4.71%
10/17/2023	4.83	4.83%
10/18/2023	4.91	4.91%
10/19/2023	4.98	4.98%
10/20/2023	4.93	4.93%
10/23/2023	4.86	4.86%
10/24/2023	4.83	4.83%
10/25/2023	4.95	4.95%
10/26/2023	4.86	4.86%
10/27/2023	4.84	4.84%
10/30/2023	4.88	4.88%
10/31/2023	4.88	4.88%
11/1/2023	4.77	4.77%
11/2/2023	4.67	4.67%
11/3/2023	4.57	4.57%
11/6/2023	4.67	4.67%
11/7/2023	4.58	4.58%

11/8/2023	4.49	4.49%
11/9/2023	4.62	4.62%
11/10/2023	4.61	4.61%
11/13/2023	4.63	4.63%
11/14/2023	4.44	4.44%
11/15/2023	4.53	4.53%
11/16/2023	4.45	4.45%
11/17/2023	4.44	4.44%
11/20/2023	4.42	4.42%
11/21/2023	4.41	4.41%
11/22/2023	4.42	4.42%
11/23/2023	4.42	4.42%
11/24/2023	4.47	4.47%
11/27/2023	4.39	4.39%
11/28/2023	4.34	4.34%
11/29/2023	4.27	4.27%
11/30/2023	4.37	4.37%
12/1/2023	4.22	4.22%
12/4/2023	4.28	4.28%
12/5/2023	4.18	4.18%
12/6/2023	4.12	4.12%
12/7/2023	4.14	4.14%
12/8/2023	4.23	4.23%
12/11/2023	4.23	4.23%
12/12/2023	4.20	4.20%
12/13/2023	4.04	4.04%
12/14/2023	3.92	3.92%
12/15/2023	3.91	3.91%
12/18/2023	3.95	3.95%
12/19/2023	3.93	3.93%
12/20/2023	3.86	3.86%
12/21/2023	3.89	3.89%
12/22/2023	3.90	3.90%
12/25/2023	3.90	3.90%
12/26/2023	3.89	3.89%
12/27/2023	3.79	3.79%
12/28/2023	3.84	3.84%
12/29/2023	3.88	3.88%
1/1/2024	3.88	3.88%
1/2/2024	3.95	3.95%
1/3/2024	3.91	3.91%
1/4/2024	3.99	3.99%
1/5/2024	4.05	4.05%
1/8/2024	4.01	4.01%
1/9/2024	4.02	4.02%
1/10/2024	4.04	4.04%
1/11/2024	3.98	3.98%
1/12/2024	3.96	3.96%
1/15/2024	3.96	3.96%
1/16/2024	4.07	4.07%
1/17/2024	4.10	4.10%
1/18/2024	4.14	4.14%
1/19/2024	4.15	4.15%

1/22/2024	4.11	4.11%
1/23/2024	4.14	4.14%
1/24/2024	4.18	4.18%
1/25/2024	4.14	4.14%
1/26/2024	4.15	4.15%
1/29/2024	4.08	4.08%
1/30/2024	4.06	4.06%
1/31/2024	3.99	3.99%
2/1/2024	3.87	3.87%
2/2/2024	4.03	4.03%
2/5/2024	4.17	4.17%
2/6/2024	4.09	4.09%
2/7/2024	4.09	4.09%
2/8/2024	4.15	4.15%
2/9/2024	4.17	4.17%
2/12/2024	4.17	4.17%
2/13/2024	4.31	4.31%
2/14/2024	4.27	4.27%
2/15/2024	4.24	4.24%
2/16/2024	4.30	4.30%
2/20/2024	4.27	4.27%
2/21/2024	4.32	4.32%
2/22/2024	4.33	4.33%
2/23/2024	4.26	4.26%
2/26/2024	4.28	4.28%
2/27/2024	4.31	4.31%
2/28/2024	4.27	4.27%
2/29/2024	4.25	4.25%
3/1/2024	4.19	4.19%
3/4/2024	4.22	4.22%
3/5/2024	4.13	4.13%
3/6/2024	4.11	4.11%
3/7/2024	4.09	4.09%
3/8/2024	4.09	4.09%
3/11/2024	4.10	4.10%
3/12/2024	4.16	4.16%
3/13/2024	4.19	4.19%
3/14/2024	4.29	4.29%
3/15/2024	4.31	4.31%
3/18/2024	4.34	4.34%
3/19/2024	4.30	4.30%
3/20/2024	4.27	4.27%
3/21/2024	4.27	4.27%
3/22/2024	4.22	4.22%
3/25/2024	4.25	4.25%
3/26/2024	4.24	4.24%
3/27/2024	4.20	4.20%
3/28/2024	4.20	4.20%
3/29/2024	4.20	4.20%
4/1/2024	4.33	4.33%
4/2/2024	4.36	4.36%
4/3/2024	4.36	4.36%
4/4/2024	4.31	4.31%

4/5/2024	4.39	4.39%
4/6/2024	4.33	4.33%
4/8/2024	4.42	4.42%
4/9/2024	4.36	4.36%
4/10/2024	4.55	4.55%
4/11/2024	4.56	4.56%
4/12/2024	4.50	4.50%
4/15/2024	4.63	4.63%
4/16/2024	4.67	4.67%
4/17/2024	4.59	4.59%
4/18/2024	4.64	4.64%
4/19/2024	4.62	4.62%
4/22/2024	4.62	4.62%
4/23/2024	4.61	4.61%
4/24/2024	4.65	4.65%
4/25/2024	4.70	4.70%
4/26/2024	4.67	4.67%
4/29/2024	4.63	4.63%
4/30/2024	4.69	4.69%
5/1/2024	4.63	4.63%
5/2/2024	4.58	4.58%
5/3/2024	4.50	4.50%
5/6/2024	4.49	4.49%
5/7/2024	4.47	4.47%
5/8/2024	4.48	4.48%
5/9/2024	4.45	4.45%
5/10/2024	4.50	4.50%
5/13/2024	4.48	4.48%
5/14/2024	4.45	4.45%
5/15/2024	4.36	4.36%
5/16/2024	4.38	4.38%
5/17/2024	4.42	4.42%
5/20/2024	4.44	4.44%
5/21/2024	4.41	4.41%
5/22/2024	4.43	4.43%
5/23/2024	4.47	4.47%
5/24/2024	4.46	4.46%
5/28/2024	4.54	4.54%
5/29/2024	4.61	4.61%
5/30/2024	4.55	4.55%
5/31/2024	4.51	4.51%
6/3/2024	4.41	4.41%
6/4/2024	4.33	4.33%
6/5/2024	4.29	4.29%
6/6/2024	4.28	4.28%
6/7/2024	4.43	4.43%
6/10/2024	4.47	4.47%
6/11/2024	4.39	4.39%
6/12/2024	4.31	4.31%
6/13/2024	4.24	4.24%
6/14/2024	4.20	4.20%
6/17/2024	4.28	4.28%
6/18/2024	4.22	4.22%

6/19/2024	4.22	4.22%
6/20/2024	4.25	4.25%
6/21/2024	4.25	4.25%
6/24/2024	4.25	4.25%
6/25/2024	4.23	4.23%
6/26/2024	4.32	4.32%
6/27/2024	4.29	4.29%
6/28/2024	4.36	4.36%
7/1/2024	4.48	4.48%
7/2/2024	4.43	4.43%
7/3/2024	4.36	4.36%
7/4/2024	4.36	4.36%
7/5/2024	4.28	4.28%
7/8/2024	4.28	4.28%
7/9/2024	4.30	4.30%
7/10/2024	4.28	4.28%
7/11/2024	4.20	4.20%
7/12/2024	4.18	4.18%
7/15/2024	4.23	4.23%
7/16/2024	4.17	4.17%
7/17/2024	4.16	4.16%
7/18/2024	4.20	4.20%
7/19/2024	4.25	4.25%
7/22/2024	4.26	4.26%
7/23/2024	4.25	4.25%
7/24/2024	4.28	4.28%
7/25/2024	4.27	4.27%
7/26/2024	4.20	4.20%
7/29/2024	4.17	4.17%
7/30/2024	4.15	4.15%
7/31/2024	4.09	4.09%
8/1/2024	3.99	3.99%
8/2/2024	3.80	3.80%
8/5/2024	3.78	3.78%
8/6/2024	3.90	3.90%
8/7/2024	3.96	3.96%
8/8/2024	3.99	3.99%
8/9/2024	3.94	3.94%
8/12/2024	3.90	3.90%
8/13/2024	3.85	3.85%
8/14/2024	3.83	3.83%
8/15/2024	3.92	3.92%
8/16/2024	3.89	3.89%
8/19/2024	3.86	3.86%
8/20/2024	3.82	3.82%
8/21/2024	3.79	3.79%
8/22/2024	3.86	3.86%
8/23/2024	3.81	3.81%
8/26/2024	3.82	3.82%
8/27/2024	3.83	3.83%
8/28/2024	3.84	3.84%
8/29/2024	3.87	3.87%
8/30/2024	3.91	3.91%

9/2/2024	3.91	3.91%
9/3/2024	3.84	3.84%
9/4/2024	3.77	3.77%
9/5/2024	3.73	3.73%
9/6/2024	3.72	3.72%
9/9/2024	3.70	3.70%
9/10/2024	3.65	3.65%
9/11/2024	3.65	3.65%
9/12/2024	3.68	3.68%
9/13/2024	3.66	3.66%
9/16/2024	3.63	3.63%
9/17/2024	3.65	3.65%
9/18/2024	3.70	3.70%
9/19/2024	3.73	3.73%
9/20/2024	3.73	3.73%
9/23/2024	3.75	3.75%
9/24/2024	3.74	3.74%
9/25/2024	3.79	3.79%
9/26/2024	3.79	3.79%
9/27/2024	3.75	3.75%
9/30/2024	3.81	3.81%
10/1/2024	3.74	3.74%
10/2/2024	3.79	3.79%
10/3/2024	3.85	3.85%
10/4/2024	3.98	3.98%
10/7/2024	4.03	4.03%
10/8/2024	4.04	4.04%
10/9/2024	4.06	4.06%
10/10/2024	4.09	4.09%
10/11/2024	4.08	4.08%
10/15/2024	4.03	4.03%
10/16/2024	4.02	4.02%
10/17/2024	4.09	4.09%
10/18/2024	4.08	4.08%
10/21/2024	4.19	4.19%
10/22/2024	4.20	4.20%
10/23/2024	4.24	4.24%
10/24/2024	4.21	4.21%
10/25/2024	4.25	4.25%
10/28/2024	4.28	4.28%
10/29/2024	4.28	4.28%
10/30/2024	4.29	4.29%
10/31/2024	4.28	4.28%
11/1/2024	4.37	4.37%
11/4/2024	4.31	4.31%
11/5/2024	4.26	4.26%
11/6/2024	4.42	4.42%
11/7/2024	4.31	4.31%
11/8/2024	4.30	4.30%
11/12/2024	4.43	4.43%
11/13/2024	4.44	4.44%
11/14/2024	4.43	4.43%
11/15/2024	4.43	4.43%

11/18/2024	4.42	4.42%
11/19/2024	4.39	4.39%
11/20/2024	4.41	4.41%
11/21/2024	4.43	4.43%
11/22/2024	4.41	4.41%
11/25/2024	4.27	4.27%
11/26/2024	4.30	4.30%
11/27/2024	4.25	4.25%
11/28/2024	4.25	4.25%
11/29/2024	4.18	4.18%
12/2/2024	4.19	4.19%
12/3/2024	4.23	4.23%
12/4/2024	4.19	4.19%
12/5/2024	4.17	4.17%
12/6/2024	4.15	4.15%
12/9/2024	4.20	4.20%
12/10/2024	4.22	4.22%
12/11/2024	4.26	4.26%
12/12/2024	4.32	4.32%
12/13/2024	4.40	4.40%
12/16/2024	4.39	4.39%
12/17/2024	4.40	4.40%
12/18/2024	4.50	4.50%
12/19/2024	4.57	4.57%
12/20/2024	4.52	4.52%
12/23/2024	4.59	4.59%
12/24/2024	4.59	4.59%
12/25/2024	4.59	4.59%
12/26/2024	4.58	4.58%
12/27/2024	4.62	4.62%
12/30/2024	4.55	4.55%
12/31/2024	4.58	4.58%
1/1/2025	4.58	4.58%
1/2/2025	4.57	4.57%
1/3/2025	4.60	4.60%
1/6/2025	4.62	4.62%
1/7/2025	4.67	4.67%
1/8/2025	4.67	4.67%
1/9/2025	4.68	4.68%
1/10/2025	4.77	4.77%
1/13/2025	4.79	4.79%
1/14/2025	4.78	4.78%
1/15/2025	4.66	4.66%
1/16/2025	4.61	4.61%
1/17/2025	4.61	4.61%
1/20/2025	4.61	4.61%
1/21/2025	4.57	4.57%
1/22/2025	4.60	4.60%
1/23/2025	4.65	4.65%
1/24/2025	4.63	4.63%
1/27/2025	4.53	4.53%
1/28/2025	4.55	4.55%
1/29/2025	4.55	4.55%

1/30/2025	4.52	4.52%
1/31/2025	4.58	4.58%
2/3/2025	4.54	4.54%
2/4/2025	4.52	4.52%
2/5/2025	4.43	4.43%
2/6/2025	4.45	4.45%
2/7/2025	4.49	4.49%
2/10/2025	4.51	4.51%
2/11/2025	4.54	4.54%
2/12/2025	4.62	4.62%
2/13/2025	4.52	4.52%
2/14/2025	4.47	4.47%
2/17/2025	4.47	4.47%
2/18/2025	4.55	4.55%
2/19/2025	4.53	4.53%
2/20/2025	4.50	4.50%
2/21/2025	4.42	4.42%
2/24/2025	4.40	4.40%
2/25/2025	4.30	4.30%
2/26/2025	4.25	4.25%
2/27/2025	4.29	4.29%
2/28/2025	4.24	4.24%
3/3/2025	4.16	4.16%
3/4/2025	4.22	4.22%
3/5/2025	4.28	4.28%
3/6/2025	4.29	4.29%
3/7/2025	4.32	4.32%
3/10/2025	4.22	4.22%
3/11/2025	4.28	4.28%
3/12/2025	4.32	4.32%
3/13/2025	4.27	4.27%
3/14/2025	4.31	4.31%
3/17/2025	4.31	4.31%
3/18/2025	4.29	4.29%
3/19/2025	4.25	4.25%
3/20/2025	4.24	4.24%
3/21/2025	4.25	4.25%
3/24/2025	4.34	4.34%
3/25/2025	4.31	4.31%
3/26/2025	4.35	4.35%
3/27/2025	4.38	4.38%
3/28/2025	4.27	4.27%
3/31/2025	4.23	4.23%
4/1/2025	4.17	4.17%
4/2/2025	4.20	4.20%
4/3/2025	4.06	4.06%
4/4/2025	4.01	4.01%
4/7/2025	4.15	4.15%
4/8/2025	4.26	4.26%
4/9/2025	4.34	4.34%
4/10/2025	4.40	4.40%
4/11/2025	4.48	4.48%
4/14/2025	4.38	4.38%

4/15/2025	4.35	4.35%
4/16/2025	4.29	4.29%
4/17/2025	4.34	4.34%
4/18/2025	4.34	4.34%
4/21/2025	4.42	4.42%
4/22/2025	4.41	4.41%
4/23/2025	4.40	4.40%
4/24/2025	4.32	4.32%
4/25/2025	4.29	4.29%
4/28/2025	4.23	4.23%
4/29/2025	4.19	4.19%
4/30/2025	4.17	4.17%
5/1/2025	4.25	4.25%
5/2/2025	4.33	4.33%
5/5/2025	4.36	4.36%
5/6/2025	4.30	4.30%
5/7/2025	4.26	4.26%
5/8/2025	4.37	4.37%
5/9/2025	4.37	4.37%
5/12/2025	4.45	4.45%
5/13/2025	4.49	4.49%
5/14/2025	4.53	4.53%
5/15/2025	4.45	4.45%
5/16/2025	4.43	4.43%
5/19/2025	4.46	4.46%
5/20/2025	4.48	4.48%
5/21/2025	4.58	4.58%

Start Date 1/1/2015
End Date 4/30/2025

Dates	VIX Index #NAME? PX_LAST
	19.2
1/2/2015	17.79
1/5/2015	19.92
1/6/2015	21.12
1/7/2015	19.31
1/8/2015	17.01
1/9/2015	17.55
1/12/2015	19.6
1/13/2015	20.56
1/14/2015	21.48
1/15/2015	22.39
1/16/2015	20.95
1/19/2015	20.95
1/20/2015	19.89
1/21/2015	18.85
1/22/2015	16.4
1/23/2015	16.66
1/26/2015	15.52
1/27/2015	17.22
1/28/2015	20.44
1/29/2015	18.76
1/30/2015	20.97
2/2/2015	19.43
2/3/2015	17.33
2/4/2015	18.33
2/5/2015	16.85
2/6/2015	17.29
2/9/2015	18.55
2/10/2015	17.23
2/11/2015	16.96
2/12/2015	15.34
2/13/2015	14.69
2/16/2015	14.69
2/17/2015	15.8
2/18/2015	15.45
2/19/2015	15.29
2/20/2015	14.3
2/23/2015	14.56
2/24/2015	13.69
2/25/2015	13.84
2/26/2015	13.91
2/27/2015	13.34
3/2/2015	13.04
3/3/2015	13.86
3/4/2015	14.23
3/5/2015	14.04
3/6/2015	15.2
3/9/2015	15.06
3/10/2015	16.69
3/11/2015	16.87
3/12/2015	15.42
3/13/2015	16
3/16/2015	15.61
3/17/2015	15.66
3/18/2015	13.97
3/19/2015	14.07
3/20/2015	13.02
3/23/2015	13.41
3/24/2015	13.62
3/25/2015	15.44
3/26/2015	15.8
3/27/2015	15.07
3/30/2015	14.51
3/31/2015	15.29
4/1/2015	15.11
4/2/2015	14.67
4/3/2015	14.67
4/6/2015	14.74
4/7/2015	14.78
4/8/2015	13.98
4/9/2015	13.09
4/10/2015	12.58
4/13/2015	13.94
4/14/2015	13.67
4/15/2015	12.84
4/16/2015	12.6
4/17/2015	13.89
4/20/2015	13.3
4/21/2015	13.25
4/22/2015	12.71
4/23/2015	12.48
4/24/2015	12.29
4/27/2015	13.12
4/28/2015	12.41
4/29/2015	13.39
4/30/2015	14.55
5/1/2015	12.7

5/4/2015	12.85
5/5/2015	14.31
5/6/2015	15.15
5/7/2015	15.13
5/8/2015	12.86
5/11/2015	13.85
5/12/2015	13.86
5/13/2015	13.76
5/14/2015	12.74
5/15/2015	12.38
5/18/2015	12.73
5/19/2015	12.85
5/20/2015	12.88
5/21/2015	12.11
5/22/2015	12.13
5/25/2015	12.13
5/26/2015	14.06
5/27/2015	13.27
5/28/2015	13.31
5/29/2015	13.84
6/1/2015	13.97
6/2/2015	14.24
6/3/2015	13.66
6/4/2015	14.71
6/5/2015	14.21
6/8/2015	15.29
6/9/2015	14.47
6/10/2015	13.22
6/11/2015	12.85
6/12/2015	13.78
6/15/2015	15.39
6/16/2015	14.81
6/17/2015	14.5
6/18/2015	13.19
6/19/2015	13.96
6/22/2015	12.74
6/23/2015	12.11
6/24/2015	13.26
6/25/2015	14.01
6/26/2015	14.02
6/29/2015	18.85
6/30/2015	18.23
7/1/2015	16.09
7/2/2015	16.79
7/3/2015	16.79
7/6/2015	17.01
7/7/2015	16.09
7/8/2015	19.66
7/9/2015	19.97
7/10/2015	16.83
7/13/2015	13.9
7/14/2015	13.37
7/15/2015	13.23
7/16/2015	12.11
7/17/2015	11.95
7/20/2015	12.25
7/21/2015	12.22
7/22/2015	12.12
7/23/2015	12.64
7/24/2015	13.74
7/27/2015	15.6
7/28/2015	13.44
7/29/2015	12.5
7/30/2015	12.13
7/31/2015	12.12
8/3/2015	12.56
8/4/2015	13
8/5/2015	12.51
8/6/2015	13.77
8/7/2015	13.39
8/10/2015	12.23
8/11/2015	13.71
8/12/2015	13.61
8/13/2015	13.49
8/14/2015	12.83
8/17/2015	13.02
8/18/2015	13.79
8/19/2015	15.25
8/20/2015	19.14
8/21/2015	28.03
8/24/2015	40.74
8/25/2015	36.02
8/26/2015	30.32
8/27/2015	26.1
8/28/2015	26.05
8/31/2015	28.43
9/1/2015	31.4
9/2/2015	26.09
9/3/2015	25.61
9/4/2015	27.8
9/7/2015	27.8
9/8/2015	24.9
9/9/2015	26.23

9/10/2015	24.37
9/11/2015	23.2
9/14/2015	24.25
9/15/2015	22.54
9/16/2015	21.35
9/17/2015	21.14
9/18/2015	22.28
9/21/2015	20.14
9/22/2015	22.44
9/23/2015	22.13
9/24/2015	23.47
9/25/2015	23.62
9/28/2015	27.63
9/29/2015	26.83
9/30/2015	24.5
10/1/2015	22.55
10/2/2015	20.94
10/5/2015	19.54
10/6/2015	19.4
10/7/2015	18.4
10/8/2015	17.42
10/9/2015	17.08
10/12/2015	16.17
10/13/2015	17.67
10/14/2015	18.03
10/15/2015	16.05
10/16/2015	15.05
10/19/2015	14.98
10/20/2015	15.75
10/21/2015	16.7
10/22/2015	14.45
10/23/2015	14.46
10/26/2015	15.29
10/27/2015	15.43
10/28/2015	14.33
10/29/2015	14.61
10/30/2015	15.07
11/2/2015	14.15
11/3/2015	14.54
11/4/2015	15.51
11/5/2015	15.05
11/6/2015	14.33
11/9/2015	16.52
11/10/2015	15.29
11/11/2015	16.06
11/12/2015	18.37
11/13/2015	20.08
11/16/2015	18.16
11/17/2015	18.84
11/18/2015	16.85
11/19/2015	16.99
11/20/2015	15.47
11/23/2015	15.62
11/24/2015	15.93
11/25/2015	15.19
11/26/2015	15.19
11/27/2015	15.12
11/30/2015	16.13
12/1/2015	14.67
12/2/2015	15.91
12/3/2015	18.11
12/4/2015	14.81
12/7/2015	15.84
12/8/2015	17.6
12/9/2015	19.61
12/10/2015	19.34
12/11/2015	24.39
12/14/2015	22.73
12/15/2015	20.95
12/16/2015	17.86
12/17/2015	18.94
12/18/2015	20.7
12/21/2015	18.7
12/22/2015	16.6
12/23/2015	15.57
12/24/2015	15.74
12/25/2015	15.74
12/28/2015	16.91
12/29/2015	16.08
12/30/2015	17.29
12/31/2015	18.21
1/1/2016	18.21
1/4/2016	20.7
1/5/2016	19.34
1/6/2016	20.59
1/7/2016	24.99
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1/11/2016	24.3
1/12/2016	22.47
1/13/2016	25.22
1/14/2016	23.95
1/15/2016	27.02
1/18/2016	27.02

1/19/2016	26.05
1/20/2016	27.59
1/21/2016	26.69
1/22/2016	22.34
1/25/2016	24.15
1/26/2016	22.5
1/27/2016	23.11
1/28/2016	22.42
1/29/2016	20.2
2/1/2016	19.98
2/2/2016	21.98
2/3/2016	21.65
2/4/2016	21.84
2/5/2016	23.38
2/8/2016	26
2/9/2016	26.54
2/10/2016	26.29
2/11/2016	28.14
2/12/2016	25.4
2/15/2016	25.4
2/16/2016	24.11
2/17/2016	22.31
2/18/2016	21.64
2/19/2016	20.53
2/22/2016	19.38
2/23/2016	20.98
2/24/2016	20.72
2/25/2016	19.11
2/26/2016	19.81
2/29/2016	20.55
3/1/2016	17.7
3/2/2016	17.09
3/3/2016	16.7
3/4/2016	16.86
3/7/2016	17.35
3/8/2016	18.67
3/9/2016	18.34
3/10/2016	18.05
3/11/2016	16.5
3/14/2016	16.92
3/15/2016	16.84
3/16/2016	14.99
3/17/2016	14.44
3/18/2016	14.02
3/21/2016	13.79
3/22/2016	14.17
3/23/2016	14.94
3/24/2016	14.74
3/25/2016	14.74
3/28/2016	15.24
3/29/2016	13.82
3/30/2016	13.56
3/31/2016	13.95
4/1/2016	13.1
4/4/2016	14.12
4/5/2016	15.42
4/6/2016	14.09
4/7/2016	16.16
4/8/2016	15.36
4/11/2016	16.26
4/12/2016	14.85
4/13/2016	13.84
4/14/2016	13.72
4/15/2016	13.62
4/18/2016	13.35
4/19/2016	13.24
4/20/2016	13.28
4/21/2016	13.95
4/22/2016	13.22
4/25/2016	14.08
4/26/2016	13.96
4/27/2016	13.77
4/28/2016	15.22
4/29/2016	15.7
5/2/2016	14.68
5/3/2016	15.6
5/4/2016	16.05
5/5/2016	15.91
5/6/2016	14.72
5/9/2016	14.57
5/10/2016	13.63
5/11/2016	14.69
5/12/2016	14.41
5/13/2016	15.04
5/16/2016	14.68
5/17/2016	15.57
5/18/2016	15.95
5/19/2016	16.33
5/20/2016	15.2
5/23/2016	15.82
5/24/2016	14.42
5/25/2016	13.9
5/26/2016	13.43

5/27/2016	13.12
5/30/2016	13.12
5/31/2016	14.19
6/1/2016	14.2
6/2/2016	13.63
6/3/2016	13.47
6/6/2016	13.65
6/7/2016	14.05
6/8/2016	14.08
6/9/2016	14.64
6/10/2016	17.03
6/13/2016	20.97
6/14/2016	20.5
6/15/2016	20.14
6/16/2016	19.37
6/17/2016	19.41
6/20/2016	18.37
6/21/2016	18.48
6/22/2016	21.17
6/23/2016	17.25
6/24/2016	25.76
6/27/2016	23.85
6/28/2016	18.75
6/29/2016	16.64
6/30/2016	15.63
7/1/2016	14.77
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7/5/2016	15.58
7/6/2016	14.96
7/7/2016	14.76
7/8/2016	13.2
7/11/2016	13.54
7/12/2016	13.55
7/13/2016	13.04
7/14/2016	12.82
7/15/2016	12.67
7/18/2016	12.44
7/19/2016	11.97
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7/22/2016	12.02
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7/27/2016	12.83
7/28/2016	12.72
7/29/2016	11.87
8/1/2016	12.44
8/2/2016	13.37
8/3/2016	12.86
8/4/2016	12.42
8/5/2016	11.39
8/8/2016	11.5
8/9/2016	11.66
8/10/2016	12.05
8/11/2016	11.68
8/12/2016	11.55
8/15/2016	11.81
8/16/2016	12.64
8/17/2016	12.19
8/18/2016	11.43
8/19/2016	11.34
8/22/2016	12.27
8/23/2016	12.38
8/24/2016	13.45
8/25/2016	13.63
8/26/2016	13.65
8/29/2016	12.94
8/30/2016	13.12
8/31/2016	13.42
9/1/2016	13.48
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9/5/2016	11.98
9/6/2016	12.02
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9/9/2016	17.5
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9/13/2016	17.85
9/14/2016	18.14
9/15/2016	16.3
9/16/2016	15.37
9/19/2016	15.53
9/20/2016	15.92
9/21/2016	13.3
9/22/2016	12.02
9/23/2016	12.29
9/26/2016	14.5
9/27/2016	13.1
9/28/2016	12.39
9/29/2016	14.02
9/30/2016	13.29
10/3/2016	13.57
10/4/2016	13.63

10/5/2016	12.99
10/6/2016	12.84
10/7/2016	13.48
10/10/2016	13.38
10/11/2016	15.36
10/12/2016	15.91
10/13/2016	16.69
10/14/2016	16.12
10/17/2016	16.21
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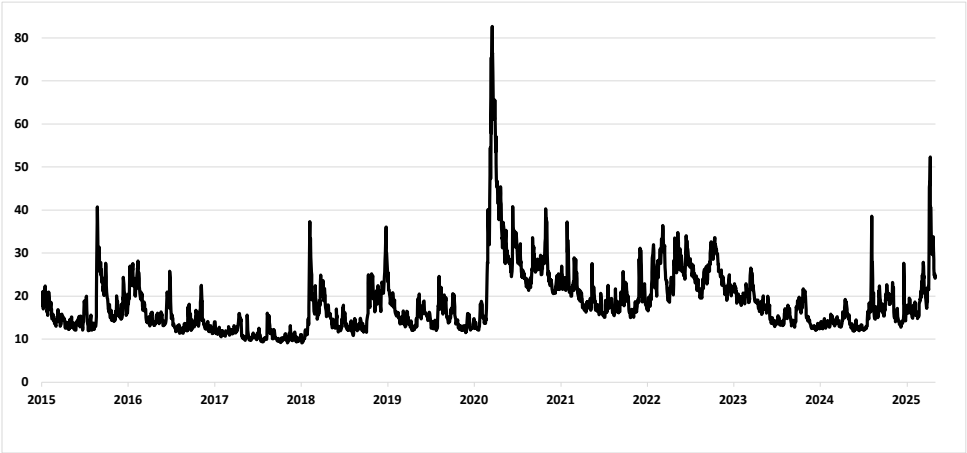
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Start Date 1/1/2015
End Date 4/30/2025

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1/12/2023	18.83
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1/20/2023	19.85
1/23/2023	19.81
1/24/2023	19.2
1/25/2023	19.08
1/26/2023	18.73
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2/3/2023	18.33
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2/8/2023	19.63
2/9/2023	20.71
2/10/2023	20.53
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7/30/2024	17.69
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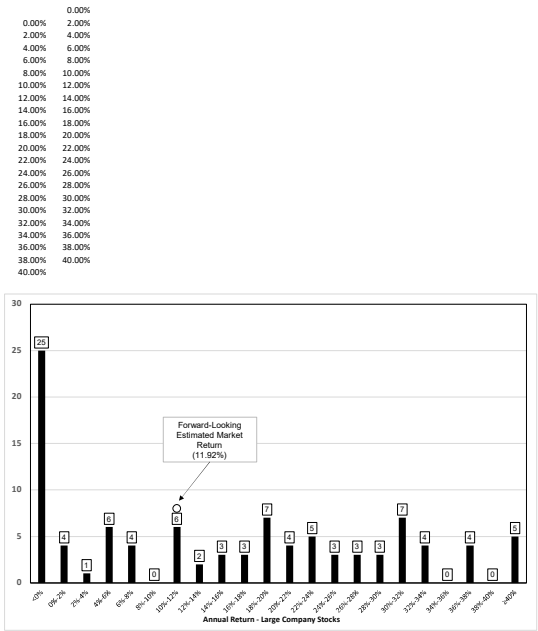
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4/17/2025	29.65
4/21/2025	33.82
4/22/2025	30.57
4/23/2025	28.45
4/24/2025	26.47
4/25/2025	24.84

4/28/2025	25.15
4/29/2025	24.17
4/30/2025	24.70

Historical equity market returns

Large Co Stock	
Total Return	
Table A-1	
1926	11.62%
1927	37.49%
1928	43.61%
1929	-8.42%
1930	-24.90%
1931	-43.34%
1932	-8.19%
1933	53.99%
1934	-1.44%
1935	47.67%
1936	33.92%
1937	-35.03%
1938	31.12%
1939	0.41%
1940	-9.78%
1941	-11.59%
1942	20.34%
1943	25.90%
1944	19.75%
1945	36.44%
1946	-8.07%
1947	5.71%
1948	5.50%
1949	18.79%
1950	31.71%
1951	24.02%
1952	18.37%
1953	-0.99%
1954	52.62%
1955	31.56%
1956	6.56%
1957	-10.78%
1958	43.36%
1959	11.96%
1960	0.47%
1961	26.89%
1962	-8.73%
1963	22.80%
1964	16.48%
1965	12.45%
1966	-10.06%
1967	23.98%
1968	11.00%
1969	-8.50%
1970	4.01%
1971	14.31%
1972	18.98%
1973	-14.66%
1974	-26.47%
1975	37.20%
1976	23.84%
1977	-7.18%
1978	6.56%
1979	18.44%
1980	32.50%
1981	-4.92%
1982	21.55%
1983	22.56%
1984	6.27%
1985	31.73%
1986	18.67%
1987	5.25%
1988	16.61%
1989	31.69%
1990	-3.11%
1991	30.47%
1992	7.62%
1993	10.08%
1994	1.32%
1995	37.58%
1996	22.96%
1997	33.36%
1998	28.58%
1999	21.04%
2000	-9.10%
2001	-11.89%
2002	-22.10%
2003	28.68%
2004	10.88%
2005	4.91%
2006	15.79%
2007	5.49%
2008	-37.00%
2009	26.46%
2010	15.06%
2011	2.11%
2012	16.00%
2013	32.39%
2014	13.69%
2015	1.38%
2016	11.96%
2017	21.83%
2018	-4.38%
2019	31.49%
2020	18.40%
2021	28.70%
2022	-18.11%
2023	26.29%
2024	25.02%
Arithmetic average	12.30%



SNL			
	^S&P 500		
	TOTALRETURN		
1/2/2020	100.00	Date	Total Return
1/3/2020	99.30	12/31/2020	117.400633
1/6/2020	99.66	12/31/2021	151.100974
1/7/2020	99.39	12/30/2022	123.735281
1/8/2020	99.88	12/29/2023	156.26235
1/9/2020	100.57	12/31/2024	195.358753
1/10/2020	100.28		Return
1/13/2020	100.98		28.71%
1/14/2020	100.84		-18.11%
1/15/2020	101.03		26.29%
1/16/2020	101.88		25.02%
1/17/2020	102.27		
1/21/2020	102.00		
1/22/2020	102.04		
1/23/2020	102.16		
1/24/2020	101.24		
1/27/2020	99.65		
1/28/2020	100.65		
1/29/2020	100.57		
1/30/2020	100.90		
1/31/2020	99.12		
2/3/2020	99.84		
2/4/2020	101.33		
2/5/2020	102.48		
2/6/2020	102.83		
2/7/2020	102.30		
2/10/2020	103.06		
2/11/2020	103.24		
2/12/2020	103.91		
2/13/2020	103.78		
2/14/2020	103.99		
2/18/2020	103.69		
2/19/2020	104.19		
2/20/2020	103.80		
2/21/2020	102.71		
2/24/2020	99.28		
2/25/2020	96.28		
2/26/2020	95.92		
2/27/2020	91.70		
2/28/2020	90.96		
3/2/2020	95.15		
3/3/2020	92.48		
3/4/2020	96.38		
3/5/2020	93.14		
3/6/2020	91.55		
3/9/2020	84.60		
3/10/2020	88.79		
3/11/2020	84.45		
3/12/2020	76.44		
3/13/2020	83.56		
3/16/2020	73.55		
3/17/2020	77.96		
3/18/2020	73.92		
3/19/2020	74.28		
3/20/2020	71.07		
3/23/2020	68.99		
3/24/2020	75.47		
3/25/2020	76.34		
3/26/2020	81.11		
3/27/2020	78.37		
3/30/2020	81.01		
3/31/2020	79.72		
4/1/2020	76.21		
4/2/2020	77.96		
4/3/2020	76.79		
4/6/2020	82.19		
4/7/2020	82.06		
4/8/2020	84.87		
4/9/2020	86.11		
4/13/2020	85.25		
4/14/2020	87.86		
4/15/2020	85.93		
4/16/2020	86.43		
4/17/2020	88.75		
4/20/2020	87.17		
4/21/2020	84.49		
4/22/2020	86.43		
4/23/2020	86.39		
4/24/2020	87.60		
4/27/2020	88.89		
4/28/2020	88.42		
4/29/2020	90.78		
4/30/2020	89.94		
5/1/2020	87.43		
5/4/2020	87.80		
5/5/2020	88.60		
5/6/2020	87.98		
5/7/2020	89.03		
5/8/2020	90.55		
5/11/2020	90.56		
5/12/2020	88.72		
5/13/2020	87.18		
5/14/2020	88.20		
5/15/2020	88.55		
5/18/2020	91.25		
5/19/2020	90.41		

5/20/2020	91.93
5/21/2020	91.22
5/22/2020	91.45
5/26/2020	92.57
5/27/2020	93.95
5/28/2020	93.76
5/29/2020	94.23
6/1/2020	94.59
6/2/2020	95.37
6/3/2020	96.68
6/4/2020	96.37
6/5/2020	98.90
6/8/2020	100.09
6/9/2020	99.32
6/10/2020	98.79
6/11/2020	92.98
6/12/2020	94.22
6/15/2020	95.01
6/16/2020	96.81
6/17/2020	96.46
6/18/2020	96.52
6/19/2020	96.00
6/22/2020	96.62
6/23/2020	97.04
6/24/2020	94.53
6/25/2020	95.57
6/26/2020	93.26
6/29/2020	94.64
6/30/2020	96.10
7/1/2020	96.59
7/2/2020	97.05
7/6/2020	98.59
7/7/2020	97.52
7/8/2020	98.29
7/9/2020	97.76
7/10/2020	98.78
7/13/2020	97.86
7/14/2020	99.18
7/15/2020	100.09
7/16/2020	99.75
7/17/2020	100.04
7/20/2020	100.88
7/21/2020	101.05
7/22/2020	101.63
7/23/2020	100.39
7/24/2020	99.77
7/27/2020	100.51
7/28/2020	99.86
7/29/2020	101.10
7/30/2020	100.74
7/31/2020	101.52
8/3/2020	102.25
8/4/2020	102.62
8/5/2020	103.28
8/6/2020	103.96
8/7/2020	104.05
8/10/2020	104.33
8/11/2020	103.50
8/12/2020	104.97
8/13/2020	104.78
8/14/2020	104.77
8/17/2020	105.05
8/18/2020	105.31
8/19/2020	104.86
8/20/2020	105.20
8/21/2020	105.57
8/24/2020	106.64
8/25/2020	107.03
8/26/2020	108.12
8/27/2020	108.30
8/28/2020	109.05
8/31/2020	108.82
9/1/2020	109.64
9/2/2020	111.34
9/3/2020	107.45
9/4/2020	106.57
9/8/2020	103.62
9/9/2020	105.71
9/10/2020	103.86
9/11/2020	103.92
9/14/2020	105.27
9/15/2020	105.83
9/16/2020	105.34
9/17/2020	104.46
9/18/2020	103.29
9/21/2020	102.10
9/22/2020	103.17
9/23/2020	100.73
9/24/2020	101.04
9/25/2020	102.66
9/28/2020	104.31
9/29/2020	103.82
9/30/2020	104.68
10/1/2020	105.25
10/2/2020	104.24
10/5/2020	106.13
10/6/2020	104.65
10/7/2020	106.47
10/8/2020	107.35

10/9/2020	108.30
10/12/2020	110.08
10/13/2020	109.38
10/14/2020	108.67
10/15/2020	108.51
10/16/2020	108.52
10/19/2020	106.75
10/20/2020	107.26
10/21/2020	107.03
10/22/2020	107.59
10/23/2020	107.97
10/26/2020	105.96
10/27/2020	105.64
10/28/2020	101.91
10/29/2020	103.14
10/30/2020	101.90
11/2/2020	103.16
11/3/2020	104.99
11/4/2020	107.31
11/5/2020	109.42
11/6/2020	109.40
11/9/2020	110.69
11/10/2020	110.55
11/11/2020	111.40
11/12/2020	110.31
11/13/2020	111.82
11/16/2020	113.13
11/17/2020	112.60
11/18/2020	111.32
11/19/2020	111.76
11/20/2020	111.01
11/23/2020	111.64
11/24/2020	113.45
11/25/2020	113.28
11/27/2020	113.56
11/30/2020	113.05
12/1/2020	114.33
12/2/2020	114.55
12/3/2020	114.50
12/4/2020	115.52
12/7/2020	115.29
12/8/2020	115.62
12/9/2020	114.70
12/10/2020	114.56
12/11/2020	114.42
12/14/2020	113.94
12/15/2020	115.42
12/16/2020	115.62
12/17/2020	116.29
12/18/2020	115.89
12/21/2020	115.44
12/22/2020	115.21
12/23/2020	115.30
12/24/2020	115.72
12/28/2020	116.73
12/29/2020	116.47
12/30/2020	116.64
12/31/2020	117.40
1/4/2021	115.67
1/5/2021	116.51
1/6/2021	117.17
1/7/2021	118.94
1/8/2021	119.61
1/11/2021	118.82
1/12/2021	118.87
1/13/2021	119.15
1/14/2021	118.71
1/15/2021	117.86
1/19/2021	118.82
1/20/2021	120.48
1/21/2021	120.53
1/22/2021	120.17
1/25/2021	120.60
1/26/2021	120.42
1/27/2021	117.33
1/28/2021	118.49
1/29/2021	116.22
2/1/2021	118.08
2/2/2021	119.72
2/3/2021	119.84
2/4/2021	121.16
2/5/2021	121.64
2/8/2021	122.54
2/9/2021	122.43
2/10/2021	122.39
2/11/2021	122.62
2/12/2021	123.20
2/16/2021	123.15
2/17/2021	123.13
2/18/2021	122.59
2/19/2021	122.37
2/22/2021	121.43
2/23/2021	121.59
2/24/2021	122.97
2/25/2021	119.98
2/26/2021	119.42
3/1/2021	122.26
3/2/2021	121.28
3/3/2021	119.70

3/4/2021	118.11
3/5/2021	120.42
3/8/2021	119.78
3/9/2021	121.48
3/10/2021	122.22
3/11/2021	123.50
3/12/2021	123.66
3/15/2021	124.47
3/16/2021	124.27
3/17/2021	124.63
3/18/2021	122.80
3/19/2021	122.74
3/22/2021	123.60
3/23/2021	122.66
3/24/2021	121.99
3/25/2021	122.64
3/26/2021	124.68
3/29/2021	124.57
3/30/2021	124.19
3/31/2021	124.65
4/1/2021	126.12
4/5/2021	127.96
4/6/2021	127.84
4/7/2021	128.03
4/8/2021	128.60
4/9/2021	129.60
4/12/2021	129.58
4/13/2021	130.00
4/14/2021	129.49
4/15/2021	130.93
4/16/2021	131.40
4/19/2021	130.70
4/20/2021	129.82
4/21/2021	131.02
4/22/2021	128.83
4/23/2021	131.25
4/26/2021	131.49
4/27/2021	131.46
4/28/2021	131.35
4/29/2021	132.24
4/30/2021	131.30
5/3/2021	131.66
5/4/2021	130.78
5/5/2021	130.88
5/6/2021	131.97
5/7/2021	132.96
5/10/2021	131.58
5/11/2021	130.44
5/12/2021	127.66
5/13/2021	129.23
5/14/2021	131.17
5/17/2021	130.84
5/18/2021	129.74
5/19/2021	129.38
5/20/2021	130.76
5/21/2021	130.66
5/24/2021	131.97
5/25/2021	131.69
5/26/2021	131.94
5/27/2021	132.10
5/28/2021	132.22
6/1/2021	132.16
6/2/2021	132.36
6/3/2021	131.90
6/4/2021	133.07
6/7/2021	132.97
6/8/2021	132.99
6/9/2021	132.76
6/10/2021	133.38
6/11/2021	133.64
6/14/2021	133.92
6/15/2021	133.66
6/16/2021	132.94
6/17/2021	132.88
6/18/2021	131.15
6/21/2021	132.99
6/22/2021	133.67
6/23/2021	133.52
6/24/2021	134.31
6/25/2021	134.76
6/28/2021	135.07
6/29/2021	135.12
6/30/2021	135.31
7/1/2021	136.02
7/2/2021	137.06
7/6/2021	136.79
7/7/2021	137.25
7/8/2021	136.10
7/9/2021	137.64
7/12/2021	138.11
7/13/2021	137.63
7/14/2021	137.80
7/15/2021	137.36
7/16/2021	136.32
7/19/2021	134.16
7/20/2021	136.20
7/21/2021	137.32
7/22/2021	137.61
7/23/2021	139.01

7/26/2021	139.34
7/27/2021	138.69
7/28/2021	138.66
7/29/2021	139.26
7/30/2021	138.52
8/2/2021	138.27
8/3/2021	139.40
8/4/2021	138.76
8/5/2021	139.60
8/6/2021	139.85
8/9/2021	139.73
8/10/2021	139.87
8/11/2021	140.22
8/12/2021	140.67
8/13/2021	140.90
8/16/2021	141.27
8/17/2021	140.28
8/18/2021	138.80
8/19/2021	138.99
8/20/2021	140.13
8/23/2021	141.33
8/24/2021	141.54
8/25/2021	141.86
8/26/2021	141.04
8/27/2021	142.29
8/30/2021	142.91
8/31/2021	142.73
9/1/2021	142.79
9/2/2021	143.21
9/3/2021	143.17
9/7/2021	142.69
9/8/2021	142.51
9/9/2021	141.86
9/10/2021	140.77
9/13/2021	141.09
9/14/2021	140.32
9/15/2021	141.51
9/16/2021	141.30
9/17/2021	140.01
9/20/2021	137.63
9/21/2021	137.53
9/22/2021	136.84
9/23/2021	140.53
9/24/2021	140.73
9/27/2021	140.35
9/28/2021	137.50
9/29/2021	137.72
9/30/2021	136.09
10/1/2021	137.66
10/4/2021	135.88
10/5/2021	137.32
10/6/2021	137.89
10/7/2021	139.06
10/8/2021	138.80
10/11/2021	137.85
10/12/2021	137.51
10/13/2021	137.93
10/14/2021	140.30
10/15/2021	141.35
10/18/2021	141.83
10/19/2021	142.88
10/20/2021	143.40
10/21/2021	143.84
10/22/2021	143.69
10/25/2021	144.37
10/26/2021	144.64
10/27/2021	143.91
10/28/2021	145.33
10/29/2021	145.63
11/1/2021	145.89
11/2/2021	146.43
11/3/2021	147.38
11/4/2021	148.01
11/5/2021	148.58
11/8/2021	148.71
11/9/2021	148.20
11/10/2021	147.02
11/11/2021	147.10
11/12/2021	148.17
11/15/2021	148.18
11/16/2021	148.76
11/17/2021	148.40
11/18/2021	148.92
11/19/2021	148.71
11/22/2021	148.75
11/23/2021	148.50
11/24/2021	148.85
11/26/2021	145.47
11/29/2021	147.40
11/30/2021	144.62
12/1/2021	142.92
12/2/2021	144.97
12/3/2021	143.76
12/6/2021	145.45
12/7/2021	148.46
12/8/2021	148.92
12/9/2021	147.87
12/10/2021	148.28
12/13/2021	147.92

12/14/2021	146.84
12/15/2021	149.24
12/16/2021	147.94
12/17/2021	146.43
12/20/2021	144.76
12/21/2021	147.35
12/22/2021	148.86
12/23/2021	149.79
12/27/2021	151.87
12/28/2021	151.72
12/29/2021	151.93
12/30/2021	151.49
12/31/2021	151.10
1/3/2022	152.06
1/4/2022	151.98
1/5/2022	149.06
1/6/2022	148.91
1/7/2022	148.33
1/10/2022	148.12
1/11/2022	149.48
1/12/2022	149.90
1/13/2022	147.78
1/14/2022	147.91
1/18/2022	145.19
1/19/2022	143.78
1/20/2022	142.21
1/21/2022	139.52
1/24/2022	139.91
1/25/2022	138.20
1/26/2022	138.00
1/27/2022	137.27
1/28/2022	140.62
1/31/2022	143.28
2/1/2022	144.27
2/2/2022	145.63
2/3/2022	142.08
2/4/2022	142.84
2/7/2022	142.31
2/8/2022	143.51
2/9/2022	145.61
2/10/2022	142.99
2/11/2022	140.28
2/14/2022	139.76
2/15/2022	141.98
2/16/2022	142.12
2/17/2022	139.13
2/18/2022	138.15
2/22/2022	136.75
2/23/2022	134.23
2/24/2022	136.25
2/25/2022	139.32
2/28/2022	138.99
3/1/2022	136.84
3/2/2022	139.40
3/3/2022	138.69
3/4/2022	137.59
3/7/2022	133.54
3/8/2022	132.57
3/9/2022	136.00
3/10/2022	135.43
3/11/2022	133.68
3/14/2022	132.72
3/15/2022	135.56
3/16/2022	138.60
3/17/2022	140.32
3/18/2022	141.96
3/21/2022	141.90
3/22/2022	143.51
3/23/2022	141.75
3/24/2022	143.80
3/25/2022	144.53
3/28/2022	145.56
3/29/2022	147.35
3/30/2022	146.43
3/31/2022	144.15
4/1/2022	144.64
4/4/2022	145.82
4/5/2022	144.01
4/6/2022	142.61
4/7/2022	143.23
4/8/2022	142.86
4/11/2022	140.45
4/12/2022	139.97
4/13/2022	141.56
4/14/2022	139.84
4/18/2022	139.81
4/19/2022	142.06
4/20/2022	141.98
4/21/2022	139.89
4/22/2022	136.01
4/25/2022	136.79
4/26/2022	132.98
4/27/2022	133.22
4/28/2022	136.53
4/29/2022	131.58
5/2/2022	132.33
5/3/2022	132.97
5/4/2022	136.94
5/5/2022	132.07

5/6/2022	131.34
5/9/2022	127.15
5/10/2022	127.46
5/11/2022	125.37
5/12/2022	125.25
5/13/2022	128.25
5/16/2022	127.75
5/17/2022	130.34
5/18/2022	125.10
5/19/2022	124.39
5/20/2022	124.41
5/23/2022	126.73
5/24/2022	125.70
5/25/2022	126.89
5/26/2022	129.42
5/27/2022	132.64
5/31/2022	131.82
6/1/2022	130.85
6/2/2022	133.28
6/3/2022	131.12
6/6/2022	131.53
6/7/2022	132.78
6/8/2022	131.36
6/9/2022	128.24
6/10/2022	124.51
6/13/2022	119.69
6/14/2022	119.28
6/15/2022	121.02
6/16/2022	117.10
6/17/2022	117.36
6/21/2022	120.24
6/22/2022	120.08
6/23/2022	121.23
6/24/2022	124.94
6/27/2022	124.57
6/28/2022	122.06
6/29/2022	121.99
6/30/2022	120.94
7/1/2022	122.22
7/5/2022	122.44
7/6/2022	122.88
7/7/2022	124.73
7/8/2022	124.64
7/11/2022	123.20
7/12/2022	122.06
7/13/2022	121.52
7/14/2022	121.17
7/15/2022	123.50
7/18/2022	122.47
7/19/2022	125.86
7/20/2022	126.60
7/21/2022	127.86
7/22/2022	126.67
7/25/2022	125.83
7/26/2022	125.37
7/27/2022	128.65
7/28/2022	130.23
7/29/2022	132.09
8/1/2022	131.72
8/2/2022	130.84
8/3/2022	132.89
8/4/2022	132.80
8/5/2022	132.60
8/8/2022	132.44
8/9/2022	131.89
8/10/2022	134.70
8/11/2022	134.64
8/12/2022	136.99
8/15/2022	137.54
8/16/2022	137.80
8/17/2022	136.83
8/18/2022	137.16
8/19/2022	135.40
8/22/2022	132.51
8/23/2022	132.22
8/24/2022	132.61
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[PROTECTED DATA BEGINS...

Docket No. EL25-
Bulkley Workpapers – Figure 14 – Customer Concentration Analysis
is CONFIDENTIAL
in its Entirety

...PROTECTED DATA ENDS]