

Rates regime data room

Every statistic in the long-rate regime framework: source, extent, latest value, checks and chart.

Built 02 Oct 2026 08:55 · run started 2026-10-02T06:53:58Z · 86 catalog entries

CONTENTS

1. [List of tables](#)
2. [Status](#)
3. [Regime dashboard](#)
4. [Audit register](#)
5. [Cross-checks](#)
6. [Not collected, fallbacks and proxies](#)
7. [Verification pack](#)
8. [Refresh and sign-off](#)

List of tables

88 tables. Each title links to the table.

Regime dashboard

1. Votes by month (last 24 months)	6
2. Regime call episodes	7
3. Headline metrics	8

Audit register

4. Audit register	9
-------------------------	---

Cross-checks

5. Cross-checks	17
-----------------------	----

Verification pack

6. gsw_zc10y 10-year zero-coupon yield (Gurkaynak-Sack-Wright, Fed Board): checks run	19
7. gsw_zc30y 30-year zero-coupon yield (Gurkaynak-Sack-Wright, Fed Board): checks run	20
8. gsw_tips10y 10-year TIPS zero-coupon real yield (Gurkaynak-Sack-Wright, Fed Board): checks run	21
9. gsw_bkeven10 10-year breakeven inflation, zero-coupon (Gurkaynak-Sack-Wright, Fed Board): checks run	22
10. gsw_bkeven5f5 5-year, 5-year-forward breakeven inflation (Gurkaynak-Sack-Wright, Fed Board): checks run	23
11. baa10y Moody's Baa corporate yield minus 10-year Treasury: checks run	25
12. fed_funds_target_pre2008 Fed funds target rate (single target, to Dec 2008): checks run	26
13. regime_votes Regime vote count from the five headline metrics (monthly): checks run	27
14. ust2y US 2-year Treasury yield (constant maturity): checks run	28
15. ust5y US 5-year Treasury yield (constant maturity): checks run	30
16. ust10y US 10-year Treasury yield (constant maturity): checks run	31
17. ust30y US 30-year Treasury yield (constant maturity): checks run	33
18. infl_5y5y 5-year, 5-year forward inflation expectation: checks run	34
19. breakeven10y 10-year breakeven inflation (nominal minus TIPS): checks run	36
20. tips10y US 10-year TIPS real yield: checks run	37
21. tips30y US 30-year TIPS real yield: checks run	39
22. acm_tp10 10-year term premium (ACM model, daily): checks run	40
23. kw_tp10 10-year term premium (Kim-Wright model): checks run	41
24. t10y2y_fred 10-year minus 2-year Treasury spread (FRED): checks run	43
25. slope_2s10s Curve slope 10y minus 2y: checks run	44
26. slope_2s30s Curve slope 30y minus 2y: checks run	45
27. slope_5s30s Curve slope 30y minus 5y: checks run	46
28. fed_funds_eff Effective federal funds rate: checks run	47
29. fed_funds_upper Fed funds target range, upper limit: checks run	49
30. fomc_longrun_median FOMC longer-run fed funds projection (SEP median): checks run	50
31. hlw_rstar_us Natural rate of interest r^* (Holston-Laubach-Williams, US): checks run	51
32. core_pce Core PCE price index: checks run	52
33. pce_services_ex_housing PCE services excluding energy and housing price index: checks run	54
34. core_cpi Core CPI (all items less food and energy): checks run	55
35. ngdp US nominal GDP (SAAR): checks run	57
36. ngdp_yoy_minus_10y Nominal GDP growth y/y minus 10-year yield: checks run	58
37. fed_interest_bea Federal government interest payments (BEA, SAAR): checks run	59
38. fed_receipts_bea Federal government current receipts (BEA, SAAR): checks run	61
39. mts_net_interest Net interest outlays, monthly (Monthly Treasury Statement table 9): checks run	62

40.	mts_receipts	Total federal receipts, monthly (MTS table 9): checks run	63
41.	mts_outlays	Total federal outlays, monthly (MTS table 9): checks run	64
42.	interest_to_receipts_bea	Federal interest payments / current receipts (BEA, quarterly): checks run	65
43.	interest_to_receipts_mts	Net interest / receipts, trailing 12 months (MTS): checks run	66
44.	deficit_pct_gdp_annual	Federal surplus (+) / deficit (-), % of GDP, annual: checks run	67
45.	debt_pct_gdp	Total public debt, % of GDP: checks run	69
46.	debt_to_penny	Total public debt outstanding (Debt to the Penny): checks run	70
47.	deficit_12m_pct_gdp	Federal deficit, trailing 12 months, % of nominal GDP (MTS / BEA): checks run	71
48.	auc10_high_yield	10-year note auction high yield (incl. reopenings, ex-TIPS): checks run	72
49.	auc10_btc	10-year note auction bid-to-cover: checks run	73
50.	auc10_indirect_share	10-year note auction indirect bidder share of accepted: checks run	74
51.	auc30_high_yield	30-year bond auction high yield (incl. reopenings, ex-TIPS): checks run	75
52.	auc30_btc	30-year bond auction bid-to-cover: checks run	76
53.	auc30_indirect_share	30-year bond auction indirect bidder share of accepted: checks run	77
54.	auc10_tail_proxy	10-year auction high yield minus same-day DGS10 (proxy tail): checks run	78
55.	auc30_tail_proxy	30-year auction high yield minus same-day DGS30 (proxy tail): checks run	79
56.	tic_foreign_total	Foreign holdings of US Treasuries, total (TIC): checks run	80
57.	tic_foreign_official	Foreign official holdings of US Treasuries (TIC): checks run	81
58.	tic_japan	Japan holdings of US Treasuries (TIC): checks run	82
59.	tic_china	China (mainland) holdings of US Treasuries (TIC): checks run	83
60.	foreign_held_debt_z1	Federal debt held by foreign and international investors (quarterly): checks run ...	85
61.	foreign_official_share	Foreign official holdings / marketable Treasury debt: checks run	86
62.	mspd_bills	Marketable Treasury bills outstanding (MSPD): checks run	87
63.	mspd Marketable	Total marketable Treasury debt outstanding (MSPD): checks run	88
64.	mspd_total_debt	Total public debt outstanding, month-end (MSPD): checks run	89
65.	bills_share	Bills share of marketable Treasury debt: checks run	90
66.	jgb10y	Japan 10-year JGB yield (MoF): checks run	91
67.	jgb30y	Japan 30-year JGB yield (MoF): checks run	92
68.	jgb10y_oecd	Japan 10-year government bond yield (OECD monthly, via FRED): checks run	94
69.	usdjpy	Japanese yen per US dollar: checks run	95
70.	acgb10y_oecd	Australia 10-year government bond yield (OECD monthly, via FRED): checks run	97
71.	bund10y_oecd	Germany 10-year government bond yield (OECD monthly, via FRED): checks run	98
72.	gilt10y_oecd	UK 10-year government bond yield (OECD monthly, via FRED): checks run	100
73.	audusd	US dollars per Australian dollar: checks run	101
74.	acgb_minus_ust10	Australia 10-year minus US 10-year (monthly averages): checks run	102
75.	pnfi	Private nonresidential fixed investment (SAAR): checks run	103
76.	info_proc_equipment	Investment in information processing equipment (SAAR): checks run	105
77.	pnfi_share_gdp	Private nonresidential investment / nominal GDP: checks run	106
78.	productivity_nfb	Nonfarm business labour productivity (output per hour): checks run	108
79.	ulc_nfb	Nonfarm business unit labour costs: checks run	109
80.	eci_total	Employment cost index, total compensation, civilian: checks run	110
81.	atl_wage_tracker	Atlanta Fed wage growth tracker (3-month moving average of median): checks run	112
82.	wti	WTI crude oil spot price: checks run	113
83.	copper	Global copper price (IMF, monthly): checks run	114
84.	ust10y_realised_vol	10-year yield realised volatility, 20-day, annualised (MOVE proxy): checks run	116
85.	hy_oas	ICE BofA US high yield option-adjusted spread: checks run	117
86.	fed_total_assets	Federal Reserve total assets (Wednesday level): checks run	119
87.	on_rrp	Overnight reverse repo usage (Fed ON RRP): checks run	120
88.	unemployment	US unemployment rate: checks run	122

Status

SERIES WITH DATA

83/86

FALLBACK 1 · NOT_COLLECTED 2 · OK 83

CROSS-CHECKS

10/10 pass

independent sources agree; 1 skipped

SIGNED OFF

78/86

verified by a person; voided if definition changes

REGIME VOTES

A1 B2 C0

2026-09-30 · call: none

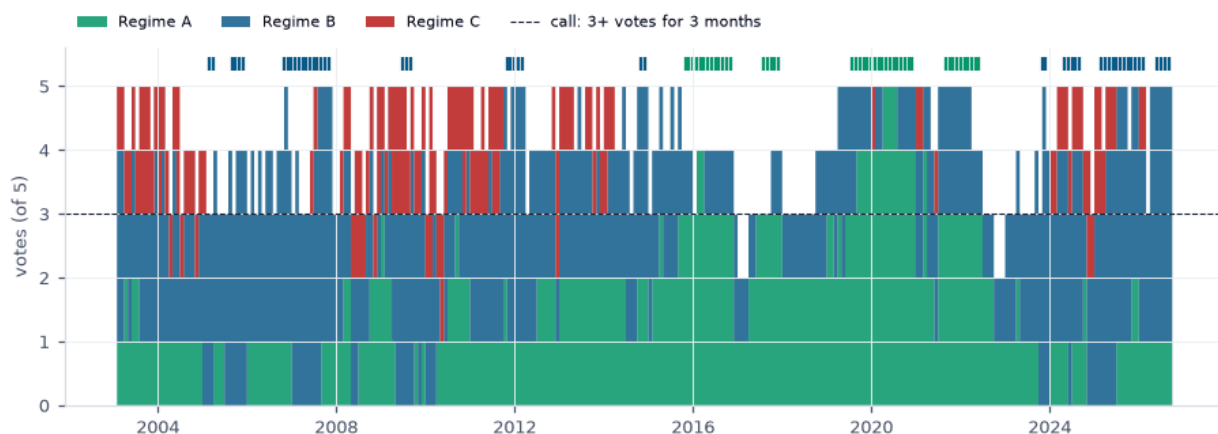
Every collected series passed its checks on this run.

FRED access mode: **api**. Exit code 2 (and a macOS notification) if any series is FAILED or STALE, or a critical cross-check fails.

Regime dashboard

Headline metrics against the indicative A/B/C bands from the framework (A = disinflation returns, B = expensive money with no crisis, C = fiscal dominance or 1970s-lite).

Regime votes (headline metrics) [regime_votes]



Derived from 5y5y, 10y TIPS, ACM term premium, policy vs 30y, interest/receipts. Ticks on top = months with a regime call.
Latest 2026-09-30: A1 B2 C0 (infl_5y5y=B, tips10y=-, acm_tp10=B, policy=-, interest=A)

Latest vote (2026-09-30): infl_5y5y=B, tips10y=-, acm_tp10=B, policy=-, interest=A. A regime is called when 3 or more of 5 headline metrics vote for it three months running. "-" means the metric sits between bands.

Votes by month (last 24 months)

Each cell shows the metric's month-end reading and the vote it cast. Votes: 5y5y, TIPS and ACM by band; TIPS also votes C if the real yield fell more than 10bp while the 10y rose more than 10bp over 3 months; policy compares the 3-month change in fed funds with the 30y; interest/receipts votes C above 20% and rising, A if falling, B if 15–20%.

Table 1. Votes by month (last 24 months)

Month	5y5y infl.	10y TIPS	ACM TP	Policy vs 30y (3m, bp)	Interest / receipts	A / B / C	Call
Sep 2026	2.36 B	2.93 – 3m: +73 vs 10y +85	0.89 B	FF +25 / 30y +73 –	21.13% A 12m: -0.14pp	1 / 2 / 0	none
Aug 2026	2.31 B	2.44 B 3m: +37 vs 10y +30	0.76 B	FF +1 / 30y +26 B	21.13% A 12m: -0.03pp	1 / 4 / 0	B
Jul 2026	2.30 B	2.47 B 3m: +53 vs 10y +35	0.84 B	FF -1 / 30y +29 B	21.13% A 12m: -0.03pp	1 / 4 / 0	B
Jun 2026	2.22 B	2.20 B 3m: +20 vs 10y +14	0.51 B	FF -1 / 30y +3 B	21.13% A 12m: -0.03pp	1 / 4 / 0	B
May 2026	2.24 B	2.07 B 3m: +35 vs 10y +48	0.66 B	FF -2 / 30y +35 B	21.10% A 12m: -0.54pp	1 / 4 / 0	B
Apr 2026	2.25 B	1.94 B 3m: +4 vs 10y +14	0.72 B	FF +0 / 30y +11 B	21.10% A 12m: -0.54pp	1 / 4 / 0	none
Mar 2026	2.06 B	2.00 B 3m: +7 vs 10y +12	0.65 B	FF +0 / 30y +4 B	21.10% A 12m: -0.54pp	1 / 4 / 0	none
Feb 2026	2.10 B	1.72 – 3m: -7 vs 10y -5	0.60 B	FF -25 / 30y -3 –	21.38% A 12m: -0.53pp	1 / 2 / 0	none
Jan 2026	2.19 B	1.90 B 3m: +9 vs 10y +15	0.77 B	FF -22 / 30y +20 C	21.38% A 12m: -0.53pp	1 / 3 / 1	B
Dec 2025	2.24 B	1.93 B 3m: +13 vs 10y +2	0.75 B	FF -45 / 30y +11 C	21.38% A 12m: -0.53pp	1 / 3 / 1	B
Nov 2025	2.17 B	1.79 B 3m: -3 vs 10y -21	0.58 B	FF -44 / 30y -25 A	21.27% A 12m: -0.77pp	2 / 3 / 0	B
Oct 2025	2.20 B	1.81 B 3m: -17 vs 10y -26	0.56 B	FF -47 / 30y -22 A	21.27% A 12m: -0.77pp	2 / 3 / 0	B
Sep 2025	2.30 B	1.80 B 3m: -15 vs 10y -8	0.61 B	FF -24 / 30y -5 –	21.27% A 12m: -0.77pp	1 / 3 / 0	B
Aug 2025	2.35 B	1.82 B 3m: -25 vs 10y -18	0.77 B	FF +0 / 30y +0 B	21.16% A 12m: -0.26pp	1 / 4 / 0	B
Jul 2025	2.32 B	1.98 B 3m: +4 vs 10y +20	0.63 B	FF +0 / 30y +23 B	21.16% A 12m: -0.26pp	1 / 4 / 0	B
Jun 2025	2.27 B	1.95 B 3m: +10 vs 10y +1	0.62 B	FF +0 / 30y +19 B	21.16% A 12m: -0.26pp	1 / 4 / 0	B
May 2025	2.29 B	2.07 B 3m: +21 vs 10y +17	0.74 B	FF +0 / 30y +41 B	21.64% C 12m: +0.44pp	0 / 4 / 1	B
Apr 2025	2.17 B	1.94 B 3m: -22 vs 10y -41	0.59 B	FF +0 / 30y -17 B	21.64% C 12m: +0.44pp	0 / 4 / 1	B
Mar 2025	2.15 B	1.85 B 3m: -39 vs 10y -35	0.37 B	FF +0 / 30y -19 B	21.64% C 12m: +0.44pp	0 / 4 / 1	B
Feb 2025	2.18 B	1.86 B 3m: -6 vs 10y +6	0.26 B	FF -25 / 30y +15 –	21.91% C 12m: +1.10pp	0 / 3 / 1	B

Month	5y5y infl.	10y TIPS	ACM TP	Policy vs 30y (3m, bp)	Interest / receipts	A / B / C	Call
Jan 2025	2.30 B	2.16 B 3m: +21 vs 10y +30	0.49 B	FF -50 / 30y +36 C	21.91% C 12m: +1.10pp	0 / 3 / 2	none
Dec 2024	2.30 B	2.24 B 3m: +61 vs 10y +77	0.48 B	FF -50 / 30y +64 C	21.91% C 12m: +1.10pp	0 / 3 / 2	none
Nov 2024	2.19 B	1.92 B 3m: +16 vs 10y +27	0.08 -	FF -75 / 30y +16 -	22.04% C 12m: +2.13pp	0 / 2 / 1	none
Oct 2024	2.28 B	1.95 B 3m: +10 vs 10y +19	0.16 -	FF -50 / 30y +12 C	22.04% C 12m: +2.13pp	0 / 2 / 2	none

Regime call episodes

285 months since Jan 2003: A called 45, B 52, C 0, no call 188. Full monthly history with every input and vote: [register/regime_votes.csv](#).

Table 2. Regime call episodes

Call	From	To	Months
B	May 2026	Aug 2026	4
B	Feb 2025	Jan 2026	12
B	Apr 2024	Aug 2024	5
B	Oct 2023	Nov 2023	2
A	Aug 2021	May 2022	10
A	Jul 2019	Nov 2020	17
A	Jul 2017	Nov 2017	5
A	Oct 2015	Oct 2016	13
B	Oct 2014	Nov 2014	2
B	Oct 2011	Feb 2012	5
B	Jun 2009	Aug 2009	3
B	Oct 2006	Oct 2007	13
B	Aug 2005	Nov 2005	4
B	Feb 2005	Mar 2005	2

Headline metrics

Table 3. Headline metrics

Metric	As of	Latest	Band	Bands (framework)
US 10-year Treasury yield (constant maturity) ust10y	2026-09-30	5.29 percent	B	A: 0 to 4 · B: 4.25 to 5.75 · C: 6 to 20
US 30-year Treasury yield (constant maturity) ust30y	2026-09-30	5.64 percent		
5-year, 5-year forward inflation expectation infl_5y5y	2026-10-01	2.36 percent	B	A: -2 to 2 · B: 2 to 2.6 · C: 2.75 to 6
US 10-year TIPS real yield tips10y	2026-09-30	2.93 percent	between bands	A: -3 to 1.25 · B: 1.75 to 2.75
10-year term premium (ACM model, daily) acm_tp10	2026-09-30	0.8876 percent	B	A: -3 to 0 · B: 0.25 to 1 · C: 1.25 to 6
Curve slope 30y minus 2y slope_2s30s	2026-09-30	76 bp		
Core PCE price index core_pce	2026-08-01	3.008 % YoY	between bands	A: -5 to 2.25 · B: 2.25 to 3 · C: 3.25 to 15
Federal interest payments / current receipts (BEA, quarterly) interest_to_receipts_bea	2026-04-01	21.13 percent	C	B: 15 to 20 · C: 20 to 60
Federal deficit, trailing 12 months, % of nominal GDP (MTS / BEA) deficit_12m_pct_gdp	2026-08-01	-5.428 percent of GDP	B	A: -4 to 10 · B: -6 to -4 · C: -35 to -6.5
10-year auction high yield minus same-day DGS10 (proxy tail) auc10_tail_proxy	2026-09-09	0.4 bp		
Japan 10-year JGB yield (MoF) jgb10y	2026-10-01	3.092 percent		
10-year yield realised volatility, 20-day, annualised (MOVE proxy) ust10y_realised_vol	2026-09-30	82.16 bp per year		

Audit register

One row per series. Full columns (checksums, staleness, check counts, revisions) are in register/audit_register.csv and .parquet.

Table 4. Audit register

Series	Source	Method	Extent	Obs	Latest	Status
baa10y Moody's Baa corporate yield minus 10-year Treasury	Federal Reserve Bank of St. Louis (FRED) BAA10Y	FRED API daily	1986-01-02 to 2026-09-30	10,187	1.47	OK UNVERIFIED
fed_funds_target_pre2008 Fed funds target rate (single target, to Dec 2008)	Federal Reserve Bank of St. Louis (FRED) DFEDTAR	FRED API daily	1982-09-27 to 2008-12-15	9,577	1	OK UNVERIFIED
gsw_bkeven10 10-year breakeven inflation, zero-coupon (Gurkaynak-Sack-Wright, Fed Board)	Federal Reserve Board BKEVEN10	CSV download daily	1999-01-04 to 2026-09-25	6,928	2.321	OK UNVERIFIED
gsw_bkeven5f5 5-year, 5-year-forward breakeven inflation (Gurkaynak-Sack-Wright, Fed Board)	Federal Reserve Board BKEVEN5F05	CSV download daily	1999-01-04 to 2026-09-25	6,928	2.294	OK UNVERIFIED
gsw_tips10y 10-year TIPS zero-coupon real yield (Gurkaynak-Sack-Wright, Fed Board)	Federal Reserve Board TIPSY10	CSV download daily	1999-01-04 to 2026-09-25	6,928	2.841	OK UNVERIFIED
gsw_zc10y 10-year zero-coupon yield (Gurkaynak-Sack-Wright, Fed Board)	Federal Reserve Board SVENY10	CSV download daily	1971-08-16 to 2026-09-25	13,749	5.162	OK SIGNED OFF
gsw_zc30y 30-year zero-coupon yield (Gurkaynak-Sack-Wright, Fed Board)	Federal Reserve Board SVENY30	CSV download daily	1985-11-25 to 2026-09-25	10,195	5.512	OK SIGNED OFF
regime_votes Regime vote count from the five headline metrics (monthly)	Data room (derived) rows 2, 3, 4, 6, 9 rules	Derived monthly	2003-01-31 to 2026-09-30	285	A1 B2 C0 (call: none)	OK SIGNED OFF
ust10y US 10-year Treasury yield (constant maturity)	Federal Reserve Bank of St. Louis (FRED) DGS10	FRED API daily	1962-01-02 to 2026-09-30	16,172	5.29	OK SIGNED OFF
ust2y US 2-year Treasury yield (constant maturity)	Federal Reserve Bank of St. Louis (FRED) DGS2	FRED API daily	1976-06-01 to 2026-09-30	12,580	4.88	OK SIGNED OFF

Series	Source	Method	Extent	Obs	Latest	Status
ust30y US 30-year Treasury yield (constant maturity)	Federal Reserve Bank of St. Louis (FRED) DGS30	FRED API daily	1977-02-15 to 2026-09-30	12,402	5.64	OK SIGNED OFF
ust5y US 5-year Treasury yield (constant maturity)	Federal Reserve Bank of St. Louis (FRED) DGS5	FRED API daily	1962-01-02 to 2026-09-30	16,172	5.09	OK SIGNED OFF
breakeven10y 10-year breakeven inflation (nominal minus TIPS)	Federal Reserve Bank of St. Louis (FRED) T10YIE	FRED API daily	2003-01-02 to 2026-10-01	5,942	2.36	OK SIGNED OFF
infl_5y5y 5-year, 5-year forward inflation expectation	Federal Reserve Bank of St. Louis (FRED) T5YIFR	FRED API daily	2003-01-02 to 2026-10-01	5,942	2.36	OK SIGNED OFF
tips10y US 10-year TIPS real yield	Federal Reserve Bank of St. Louis (FRED) DFII10	FRED API daily	2003-01-02 to 2026-09-30	5,941	2.93	OK SIGNED OFF
tips30y US 30-year TIPS real yield	Federal Reserve Bank of St. Louis (FRED) DFII30	FRED API daily	2010-02-22 to 2026-09-30	4,156	3.33	OK SIGNED OFF
acm_tp10 10-year term premium (ACM model, daily)	Federal Reserve Bank of New York ACMP10	XLS download daily	1961-06-14 to 2026-09-30	16,289	0.8876	OK SIGNED OFF
kw_tp10 10-year term premium (Kim-Wright model)	Federal Reserve Bank of St. Louis (FRED) THREEFYTP10	FRED API daily	1990-01-02 to 2026-09-25	9,170	1.02	OK SIGNED OFF
slope_2s10s Curve slope 10y minus 2y	Data room (derived) ust10y - ust2y	Derived daily	1976-06-01 to 2026-09-30	12,580	41	OK SIGNED OFF
slope_2s30s Curve slope 30y minus 2y	Data room (derived) ust30y - ust2y	Derived daily	1977-02-15 to 2026-09-30	12,402	76	OK SIGNED OFF
slope_5s30s Curve slope 30y minus 5y	Data room (derived) ust30y - ust5y	Derived daily	1977-02-15 to 2026-09-30	12,402	55	OK SIGNED OFF
t10y2y_fred 10-year minus 2-year Treasury spread (FRED)	Federal Reserve Bank of St. Louis (FRED) T10Y2Y	FRED API daily	1976-06-01 to 2026-10-01	12,581	0.46	OK SIGNED OFF
fed_funds_eff Effective federal funds rate	Federal Reserve Bank of St. Louis (FRED) DFF	FRED API daily	1954-07-01 to 2026-09-30	26,390	3.88	OK SIGNED OFF
fed_funds_upper Fed funds target range, upper limit	Federal Reserve Bank of St. Louis (FRED) DFEDTARU	FRED API daily	2008-12-16 to 2026-10-01	6,499	4	OK SIGNED OFF

Series	Source	Method	Extent	Obs	Latest	Status
fomc_longrun_med ian FOMC longer-run fed funds projection (SEP median)	Federal Reserve Bank of St. Louis (FRED) FEDTARMDLR	FRED API per event	2012-01-25 to 2026-09-16	59	3.2	OK SIGNED OFF
hlw_rstar_us Natural rate of interest r* (Holston- Laubach-Williams, US)	Federal Reserve Bank of New York HLW Estimates: Natural Rate (r*) US	XLSX download quarterly	1961-01-01 to 2026-04-01	262	1.009	OK SIGNED OFF
core_cpi Core CPI (all items less food and energy)	Federal Reserve Bank of St. Louis (FRED) CPILFESL	FRED API monthly	1957-01-01 to 2026-08-01	835	337.8	OK SIGNED OFF
core_pce Core PCE price index	Federal Reserve Bank of St. Louis (FRED) PCEPILFE	FRED API monthly	1959-01-01 to 2026-08-01	812	130.5	OK SIGNED OFF
pce_services_ex_ housing PCE services excluding energy and housing price index	Federal Reserve Bank of St. Louis (FRED) IA001260M	FRED API monthly	1959-01-01 to 2026-08-01	812	134.7	OK SIGNED OFF
ngdp US nominal GDP (SAAR)	Federal Reserve Bank of St. Louis (FRED) GDP	FRED API quarterly	1947-01-01 to 2026-04-01	318	3.256e+ 04	OK SIGNED OFF
ngdp_yoy_minus_1 0y Nominal GDP growth y/y minus 10-year yield	Data room (derived) yoy(ngdp) - ust10y (quarter average)	Derived quarterly	1962-01-01 to 2026-04-01	258	1.888	OK SIGNED OFF
fed_interest_bea Federal government interest payments (BEA, SAAR)	Federal Reserve Bank of St. Louis (FRED) A091RC1Q027SBEA	FRED API quarterly	1947-01-01 to 2026-04-01	318	1,280	OK SIGNED OFF
fed_receipts_bea Federal government current receipts (BEA, SAAR)	Federal Reserve Bank of St. Louis (FRED) FGRECPT	FRED API quarterly	1947-01-01 to 2026-04-01	318	6,056	OK SIGNED OFF
interest_to_rece ipts_bea Federal interest payments / current receipts (BEA, quarterly)	Data room (derived) fed_interest_bea / fed_receipts_bea	Derived quarterly	1947-01-01 to 2026-04-01	318	21.13	OK SIGNED OFF
interest_to_rece ipts_mts Net interest / receipts, trailing 12 months (MTS)	Data room (derived) sum12(mts_net_inter est) / sum12(mts_receipts)	Derived monthly	2016-02-01 to 2026-08-01	127	19.56	OK SIGNED OFF

Series	Source	Method	Extent	Obs	Latest	Status
mts_net_interest Net interest outlays, monthly (Monthly Treasury Statement table 9)	US Treasury, Bureau of the Fiscal Service mts_table_9: Net Interest	JSON API monthly	2015-03-31 to 2026-08-31	138	85.61	OK SIGNED OFF
mts_outlays Total federal outlays, monthly (MTS table 9)	US Treasury, Bureau of the Fiscal Service mts_table_9: Total (outlays)	JSON API monthly	2015-03-31 to 2026-08-31	138	526.8	OK SIGNED OFF
mts_receipts Total federal receipts, monthly (MTS table 9)	US Treasury, Bureau of the Fiscal Service mts_table_9: Total (receipts)	JSON API monthly	2015-03-31 to 2026-08-31	138	360	OK SIGNED OFF
debt_pct_gdp Total public debt, % of GDP	Federal Reserve Bank of St. Louis (FRED) GFDEGDQ188S	FRED API quarterly	1966-01-01 to 2026-01-01	241	122.6	OK SIGNED OFF
debt_to_penny Total public debt outstanding (Debt to the Penny)	US Treasury, Bureau of the Fiscal Service debt_to_penny: tot_pub_debt_out_amt	JSON API daily	1993-04-01 to 2026-09-30	8,404	4.017e+04	OK SIGNED OFF
deficit_12m_pct_gdp Federal deficit, trailing 12 months, % of nominal GDP (MTS / BEA)	Data room (derived) sum12(mts_receipts - mts_outlays) / ngdp	Derived monthly	2016-02-01 to 2026-08-01	127	-5.428	OK SIGNED OFF
deficit_pct_gdp_annual Federal surplus (+) / deficit (-), % of GDP, annual	Federal Reserve Bank of St. Louis (FRED) FYFSGDA188S	FRED API annual	1929-01-01 to 2025-01-01	97	-5.769	OK SIGNED OFF
auc10_btc 10-year note auction bid-to-cover	US Treasury, TreasuryDirect securities/search/bidToCoverRatio (10-Year Note)	JSON API per event	1999-11-10 to 2026-09-09	277	2.71	OK SIGNED OFF
auc10_high_yield 10-year note auction high yield (incl. reopenings, ex-TIPS)	US Treasury, TreasuryDirect securities/search/highYield (10-Year Note)	JSON API per event	1998-02-11 to 2026-09-09	284	4.834	OK SIGNED OFF
auc10_indirect_share 10-year note auction indirect bidder share of accepted	US Treasury, TreasuryDirect securities/search/indirectBidderAccepted / competitiveAccepted (10-Year Note)	JSON API per event	2008-05-07 to 2026-09-09	223	79.18	OK SIGNED OFF

Series	Source	Method	Extent	Obs	Latest	Status
auc10_tail_proxy PROXY 10-year auction high yield minus same-day DGS10 (proxy tail)	Data room (derived) auc10_high_yield - ust10y (auction date)	Derived per event	1998-02-11 to 2026-09-09	284	0.4	OK SIGNED OFF
auc30_btc 30-year bond auction bid-to-cover	US Treasury, TreasuryDirect securities/search bidToCoverRatio (30-Year Bond)	JSON API per event	2000-02-10 to 2026-09-10	225	2.61	OK SIGNED OFF
auc30_high_yield 30-year bond auction high yield (incl. reopenings, ex-TIPS)	US Treasury, TreasuryDirect securities/search highYield (30-Year Bond)	JSON API per event	1998-02-12 to 2026-09-10	230	5.308	OK SIGNED OFF
auc30_indirect_share 30-year bond auction indirect bidder share of accepted	US Treasury, TreasuryDirect securities/search indirectBidderAccepted / competitiveAccepted (30-Year Bond)	JSON API per event	2008-05-08 to 2026-09-10	214	79.48	OK SIGNED OFF
auc30_tail_proxy PROXY 30-year auction high yield minus same-day DGS30 (proxy tail)	Data room (derived) auc30_high_yield - ust30y (auction date)	Derived per event	1998-02-12 to 2026-09-10	230	-6.2	OK SIGNED OFF
foreign_held_debt_z1 Federal debt held by foreign and international investors (quarterly)	Federal Reserve Bank of St. Louis (FRED) FDHBFIN	FRED API quarterly	1970-01-01 to 2026-01-01	225	9,355	OK SIGNED OFF
foreign_official_share Foreign official holdings / marketable Treasury debt	Data room (derived) tic_foreign_official / mspd Marketable	Derived monthly	2001-01-01 to 2026-07-01	307	12	OK SIGNED OFF
tic_china China (mainland) holdings of US Treasuries (TIC)	US Treasury, Treasury International Capital slt_table5 + mfhhis01: China, Mainland	TXT parse monthly	2000-03-01 to 2026-07-01	317	618	OK SIGNED OFF
tic_foreign_official Foreign official holdings of US Treasuries (TIC)	US Treasury, Treasury International Capital slt_table5 + mfhhis01: Foreign Official	TXT parse monthly	2000-03-01 to 2026-07-01	317	3,773	OK SIGNED OFF

Series	Source	Method	Extent	Obs	Latest	Status
tic_foreign_total Foreign holdings of US Treasuries, total (TIC)	US Treasury, Treasury International Capital slt_table5 + mfhhis01: Grand Total	TXT parse monthly	2000-03-01 to 2026-07-01	317	9,248	OK SIGNED OFF
tic_japan Japan holdings of US Treasuries (TIC)	US Treasury, Treasury International Capital slt_table5 + mfhhis01: Japan	TXT parse monthly	2000-03-01 to 2026-07-01	317	1,104	OK SIGNED OFF
bills_share Bills share of marketable Treasury debt	Data room (derived) mspd_bills / mspd Marketable	Derived monthly	2001-01-31 to 2026-08-31	308	22.77	OK SIGNED OFF
mspd_bills Marketable Treasury bills outstanding (MSPD)	US Treasury, Bureau of the Fiscal Service mspd_table_1: Marketable / Bills	JSON API monthly	2001-01-31 to 2026-08-31	308	7,248	OK SIGNED OFF
mspd Marketable Total marketable Treasury debt outstanding (MSPD)	US Treasury, Bureau of the Fiscal Service mspd_table_1: Total Marketable	JSON API monthly	2001-01-31 to 2026-08-31	308	3.183e+04	OK SIGNED OFF
mspd_total_debt Total public debt outstanding, month-end (MSPD)	US Treasury, Bureau of the Fiscal Service mspd_table_1: Total Public Debt Outstanding	JSON API monthly	2001-03-31 to 2026-08-31	306	4.018e+04	OK SIGNED OFF
jgb10y Japan 10-year JGB yield (MoF)	Ministry of Finance, Japan jgbcme 10Y	CSV download daily	1986-07-05 to 2026-10-01	9,949	3.092	OK SIGNED OFF
jgb10y_oecd Japan 10-year government bond yield (OECD monthly, via FRED)	Federal Reserve Bank of St. Louis (FRED) IRLTLT01JPM156N	FRED API monthly	1989-01-01 to 2026-08-01	452	2.94	OK SIGNED OFF
jgb30y Japan 30-year JGB yield (MoF)	Ministry of Finance, Japan jgbcme 30Y	CSV download daily	1999-09-02 to 2026-10-01	6,633	4.122	OK SIGNED OFF
usdjpy Japanese yen per US dollar	Federal Reserve Bank of St. Louis (FRED) DEXJPUS	FRED API daily	1971-01-04 to 2026-09-25	13,970	157.2	OK SIGNED OFF
acgb10y_oecd Australia 10-year government bond yield (OECD monthly, via FRED)	Federal Reserve Bank of St. Louis (FRED) IRLTLT01AUM156N	FRED API monthly	1969-07-01 to 2026-08-01	686	5.015	OK SIGNED OFF
acgb10y_rba Australia 10-year government bond yield (RBA F2, daily)	Reserve Bank of Australia F2: FCMYGBAG10D	CSV download daily				FALLBACK UNVERIFIED

Series	Source	Method	Extent	Obs	Latest	Status
acgb_minus_ust10 Australia 10-year minus US 10-year (monthly averages)	Data room (derived) acgb10y_oecd - monthly mean(ust10y)	Derived monthly	1969-07-01 to 2026-08-01	686	33.07	OK SIGNED OFF
audusd US dollars per Australian dollar	Federal Reserve Bank of St. Louis (FRED) DEXUSAL	FRED API daily	1971-01-04 to 2026-09-25	13,969	0.7033	OK SIGNED OFF
bund10y_oecd Germany 10-year government bond yield (OECD monthly, via FRED)	Federal Reserve Bank of St. Louis (FRED) IRLTLT01DEM156N	FRED API monthly	1956-05-01 to 2026-08-01	844	3.18	OK SIGNED OFF
gilt10y_oecd UK 10-year government bond yield (OECD monthly, via FRED)	Federal Reserve Bank of St. Louis (FRED) IRLTLT01GBM156N	FRED API monthly	1960-01-01 to 2026-08-01	800	4.989	OK SIGNED OFF
hyperscaler_cape x Hyperscaler capex (MSFT, GOOGL, AMZN, META, ORCL), quarterly	Company 10-Q / 10-K filings (manual entry) manual/hyperscaler_ capex.csv	Manual CSV quarterly				NOT COLLECTED UNVERIFIED
info_proc_equipm ent PROXY Investment in information processing equipment (SAAR)	Federal Reserve Bank of St. Louis (FRED) Y034RC1Q027SBEA	FRED API quarterly	1947-01-01 to 2026-04-01	318	836.4	OK SIGNED OFF
pnfi Private nonresidential fixed investment (SAAR)	Federal Reserve Bank of St. Louis (FRED) PNFI	FRED API quarterly	1947-01-01 to 2026-04-01	318	4,737	OK SIGNED OFF
pnfi_share_gdp Private nonresidential investment / nominal GDP	Data room (derived) pnfi / ngdp	Derived quarterly	1947-01-01 to 2026-04-01	318	14.55	OK SIGNED OFF
productivity_nfb Nonfarm business labour productivity (output per hour)	Federal Reserve Bank of St. Louis (FRED) OPHNFB	FRED API quarterly	1947-01-01 to 2026-04-01	318	120	OK SIGNED OFF
atl_wage_tracker Atlanta Fed wage growth tracker (3- month moving average of median)	Federal Reserve Bank of St. Louis (FRED) FRBATLWGT3MMAUMHWGO	FRED API monthly	1997-01-01 to 2026-08-01	355	4.1	OK SIGNED OFF

Series	Source	Method	Extent	Obs	Latest	Status
eci_total Employment cost index, total compensation, civilian	Federal Reserve Bank of St. Louis (FRED) ECIALLCIV	FRED API quarterly	2001-01-01 to 2026-04-01	102	177.2	OK SIGNED OFF
ulc_nfb Nonfarm business unit labour costs	Federal Reserve Bank of St. Louis (FRED) ULCNFB	FRED API quarterly	1947-01-01 to 2026-04-01	318	124	OK SIGNED OFF
copper PROXY Global copper price (IMF, monthly)	Federal Reserve Bank of St. Louis (FRED) PCOPPUSDM	FRED API monthly	1992-01-01 to 2026-07-01	415	1.354e+04	OK SIGNED OFF
wti WTI crude oil spot price	Federal Reserve Bank of St. Louis (FRED) DCOILWTIC0	FRED API daily	1986-01-02 to 2026-09-29	9,512	96.16	OK SIGNED OFF
move_index ICE BofA MOVE index	ICE Data Services (paid) MOVE	Not collected daily				NOT COLLECTED UNVERIFIED
ust10y_realised_vol PROXY 10-year yield realised volatility, 20-day, annualised (MOVE proxy)	Data room (derived) $\text{std}(\text{diff}(\text{ust10y}), 20\text{d}) * \text{sqrt}(252) * 100$	Derived daily	1962-01-30 to 2026-09-30	16,152	82.16	OK SIGNED OFF
hy_oas ICE BofA US high yield option-adjusted spread	Federal Reserve Bank of St. Louis (FRED) BAMLH0A0HYM2	FRED API daily	2023-10-02 to 2026-09-30	786	3.12	OK SIGNED OFF
fed_total_assets Federal Reserve total assets (Wednesday level)	Federal Reserve Bank of St. Louis (FRED) WALCL	FRED API weekly	2002-12-18 to 2026-09-30	1,242	6,743,031	OK SIGNED OFF
on_rrp Overnight reverse repo usage (Fed ON RRP)	Federal Reserve Bank of St. Louis (FRED) RRPONTSYD	FRED API daily	2003-02-07 to 2026-10-01	3,338	0.35	OK SIGNED OFF
unemployment US unemployment rate	Federal Reserve Bank of St. Louis (FRED) UNRATE	FRED API monthly	1948-01-01 to 2026-08-01	943	4.1	OK SIGNED OFF

Cross-checks

Each pair compares a series with an independent source or an identity it must satisfy. A failed critical check fails the run.

Table 5. Cross-checks

Check	Series	Value	Tolerance	Result	Severity	Detail
DGS10 vs GSW 10y zero-coupon	ust10y gsw_zc10y	0.151 8	<= 0.25 and corr >= 0.99	OK	critical	441 months since 1990; mean abs diff 0.152pp, corr 0.9971. Par vs zero-coupon yields differ by curve shape, so not identical.
DGS30 vs GSW 30y zero-coupon	ust30y gsw_zc30y	0.167 3	<= 0.35 and corr >= 0.98	OK	critical	247 months since Mar 2006; mean abs diff 0.167pp, corr 0.9912.
DFII10 + T10YIE = DGS10	tips10y breakeven10y ust10y	0	<= 0.1% of days, none > 3bp	OK	critical	5941 common days; 0 off by >1bp (max 0.0bp). FRED defines T10YIE as DGS10 minus DFII10.
T10Y2Y = DGS10 - DGS2	t10y2y_fred ust10y ust2y	0.015 9	<= 0.1% of days, none > 3bp	OK	critical	12580 common days; 2 off by >1bp (max 2.0bp): 1990-11-21, 1991-01-29
MoF JGB 10y (monthly mean) vs OECD Japan 10y	jgb10y jgb10y_oecd	0.034 9	<= 0.10	OK	critical	320 months since 2000.
ACM vs Kim-Wright 10y term premium	acm_tp10 kw_tp10	0.810 6	>= 0.80	OK	warn	321 months since 2000. Different models, so levels differ; they should move together.
BEA interest payments vs MTS net interest (12m)	fed_int erest_bea mts_net _interest	0.994 4	>= 0.95	OK	warn	42 quarters since 2016; median ratio BEA/MTS 1.58. Levels differ by definition (BEA counts interest paid to the public on an accrual basis; MTS net interest nets out interest received), so the test is co-movement, not equality.
MSPD month-end total debt vs Debt to the Penny	mspd_to tal_debt debt_to _penny	0.012 7	<= 0.5%	OK	critical	215 matching month-ends.
TIC current table vs history file (tic_foreign_total)	tic_foreign_total	0	<= 2%	OK	warn	6 overlapping months; max diff 0.0bn. Differences are annual-survey revisions; the current table wins.
TIC current table vs history file (tic_foreign_official)	tic_foreign_official	0	<= 2%	OK	warn	6 overlapping months; max diff 0.0bn. Differences are annual-survey revisions; the current table wins.
RBA daily vs OECD monthly Australia 10y	acgb10y _rba acgb10y _oecd	n/a		SKIPPED	info	Skipped: RBA blocks scripted downloads; OECD series used as fallback.

Not collected, fallbacks and proxies

Not collected or on fallback

- `acgb10y_rba` **FALLBACK** Australia 10-year government bond yield (RBA F2, daily). RBA's site returns HTTP 403 to scripted requests (Akamai). The OECD monthly series is used instead.
- `hyperscaler_capex` **NOT COLLECTED** Hyperscaler capex (MSFT, GOOGL, AMZN, META, ORCL), quarterly. Not available as a free time series. Fill manual/hyperscaler_capex.csv from filings; the register shows NOT_COLLECTED until it has rows.
- `move_index` **NOT COLLECTED** ICE BofA MOVE index. Paid data, not collected. Proxy is `ust10y_realised_vol` (derived).

Proxies (free official stand-ins for paid or unpublished data)

- `info_proc_equipment` Investment in information processing equipment (SAAR). Proxy for AI / data-centre capex. Hyperscaler capex itself is in the manual template.
- `copper` Global copper price (IMF, monthly). Free proxy for LME copper (LME data is paid).
- `auc10_tail_proxy` 10-year auction high yield minus same-day DGS10 (proxy tail). True tail needs the when-issued yield at 1pm (paid data). DGS10 is an end-of-day constant-maturity yield, so this is a noisy proxy. Extremes are real: 9 Oct 2008 (crisis) was -61bp.
- `auc30_tail_proxy` 30-year auction high yield minus same-day DGS30 (proxy tail). Same caveat as the 10-year proxy tail.
- `ust10y_realised_vol` 10-year yield realised volatility, 20-day, annualised (MOVE proxy). Free proxy for the MOVE index (MOVE is option-implied, this is realised).

Verification pack

For each series: where it comes from, what the publisher calls it, what the catalog expected, every check run on it, the chart, and the raw downloads kept on disk. Review a series, then record it with `make signoff` `KEYS="key1 key2" BY="your name"`.

Row 0: Cross-check references

`gsw_zc10y` **10-year zero-coupon yield (Gurkaynak-Sack-Wright, Fed Board)**

OK **VERIFIED** by ml on 2026-10-01

Source

Federal Reserve Board · <https://www.federalreserve.gov/data/nominal-yield-curve.htm>

Identifier

`SVENY10`

Method

CSV download

Units / frequency

percent · D

Extent

1971-08-16 to 2026-09-25 · 13,749 observations

Latest

5.162 (previous 5.169)

10-year zero-coupon yield (Gurkaynak-Sack-Wright, Fed Board) [gsw_zc10y]



Source: Federal Reserve Board · SVENY10
13,749 obs, 1971-08-16 to 2026-09-25 · latest 5.162 percent · method: CSV download

Table 6. gsw_zc10y 10-year zero-coupon yield (Gurkaynak-Sack-Wright, Fed Board): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	13749 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.5202, max 14.94, allowed [0, 20]
history_depth	OK	warn	first 1971-08-16, expected by 1971-08-16
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-25, 7 days old, limit 14

Raw files kept for audit

- data/raw/fed_gsw/2026-10-02/feds200628.csv.gz · sha256 379cae673092e64a · 16,650,134 bytes · <https://www.federalreserve.gov/data/yield-curve-tables/feds200628.csv>

gsw_zc30y 30-year zero-coupon yield (Gurkaynak-Sack-Wright, Fed Board)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Board · <https://www.federalreserve.gov/data/nominal-yield-curve.htm>

Identifier

SVENY30

Method

CSV download

Units / frequency

percent · D

Extent

1985-11-25 to 2026-09-25 · 10,195 observations

Latest

5.512 (previous 5.473)

30-year zero-coupon yield (Gurkaynak-Sack-Wright, Fed Board) [gsw_zc30y]



Source: Federal Reserve Board · SVENY30
10,195 obs, 1985-11-25 to 2026-09-25 · latest 5.512 percent · method: CSV download

Table 7. gsw_zc30y 30-year zero-coupon yield (Gurkaynak-Sack-Wright, Fed Board): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	10195 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 1.25, max 10.76, allowed [0, 20]
history_depth	OK	warn	first 1985-11-25, expected by 1985-11-25
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-25, 7 days old, limit 14

Raw files kept for audit

- data/raw/fed_gsw/2026-10-02/feds200628.csv.gz · sha256 379cae673092e64a · 16,650,134 bytes · <https://www.federalreserve.gov/data/yield-curve-tables/feds200628.csv>

gsw_tips10y 10-year TIPS zero-coupon real yield (Gurkaynak-Sack-Wright, Fed Board)

OK UNVERIFIED

Source

Federal Reserve Board · <https://www.federalreserve.gov/data/tips-yield-curve-and-inflation-compensation.htm>

Identifier

TIPSY10

Method

CSV download

Units / frequency

percent · D

Extent

1999-01-04 to 2026-09-25 · 6,928 observations

Latest

2.841 (previous 2.853)

Notes

Fitted zero-coupon curve. Tracks FRED DFII10 closely (2003+ mean gap about 0.06 pt).

10-year TIPS zero-coupon real yield (Gurkaynak-Sack-Wright, Fed Board) [gsw_tips10y]



Source: Federal Reserve Board · TIPSY10
6,928 obs, 1999-01-04 to 2026-09-25 · latest 2.842 percent · method: CSV download

Table 8. gsw_tips10y 10-year TIPS zero-coupon real yield (Gurkaynak-Sack-Wright, Fed Board): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	6928 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -1.168, max 4.387, allowed [-3, 6]
history_depth	OK	warn	first 1999-01-04, expected by 1999-01-04
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-25, 7 days old, limit 14

Raw files kept for audit

- data/raw/fed_gsw/2026-10-02/feds200805.csv.gz · sha256 42bceb9c2d894774 · 15,121,719 bytes · <https://www.federalreserve.gov/data/yield-curve-tables/feds200805.csv>

gsw_bkeven10 10-year breakeven inflation, zero-coupon (Gurkaynak-Sack-Wright, Fed Board)

OK UNVERIFIED

Source

Federal Reserve Board · <https://www.federalreserve.gov/data/tips-yield-curve-and-inflation-compensation.htm>

Identifier

BKEVEN10

Method

CSV download

Units / frequency

percent · D

Extent

1999-01-04 to 2026-09-25 · 6,928 observations

Latest

2.321 (previous 2.316)

10-year breakeven inflation, zero-coupon (Gurkaynak-Sack-Wright, Fed Board) [gsw_bkeven10]



Source: Federal Reserve Board · BKEVEN10
6,928 obs, 1999-01-04 to 2026-09-25 · latest 2.321 percent · method: CSV download

Table 9. gsw_bkeven10 10-year breakeven inflation, zero-coupon (Gurkaynak-Sack-Wright, Fed Board): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	6928 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.1737, max 3.001, allowed [-3, 6]
history_depth	OK	warn	first 1999-01-04, expected by 1999-01-04
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-25, 7 days old, limit 14

Raw files kept for audit

- data/raw/fed_gsw/2026-10-02/feds200805.csv.gz · sha256 42bceb9c2d894774 · 15,121,719 bytes · <https://www.federalreserve.gov/data/yield-curve-tables/feds200805.csv>

gsw_bkeven5f5 5-year, 5-year-forward breakeven inflation (Gurkaynak-Sack-Wright, Fed Board)

OK UNVERIFIED

Source

Federal Reserve Board · <https://www.federalreserve.gov/data/tips-yield-curve-and-inflation-compensation.htm>

Identifier

BKEVEN5F05

Method

CSV download

Units / frequency

percent · D

Extent

1999-01-04 to 2026-09-25 · 6,928 observations

Latest

2.294 (previous 2.289)

Notes

Runs above FRED T5YIFR (about 0.4-0.5 pt in 2003-05); level-adjust before using FRED-calibrated bands.

5-year, 5-year-forward breakeven inflation (Gurkaynak-Sack-Wright, Fed Board) [gsw_bkeven5f5]



Source: Federal Reserve Board · BKEVEN5F05
6,928 obs, 1999-01-04 to 2026-09-25 · latest 2.294 percent · method: CSV download

Table 10. gsw_bkeven5f5 5-year, 5-year-forward breakeven inflation (Gurkaynak-Sack-Wright, Fed Board): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	6928 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.8233, max 3.595, allowed [-3, 6]
history_depth	OK	warn	first 1999-01-04, expected by 1999-01-04
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-25, 7 days old, limit 14

Raw files kept for audit

- data/raw/fed_gsw/2026-10-02/feds200805.csv.gz · sha256 42bceb9c2d894774 · 15,121,719 bytes · <https://www.federalreserve.gov/data/yield-curve-tables/feds200805.csv>

baa10y Moody's Baa corporate yield minus 10-year Treasury

OK UNVERIFIED

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/BAA10Y>

Identifier

BAA10Y

Method

FRED API

Units / frequency

percent · D

Extent

1986-01-02 to 2026-09-30 · 10,187 observations

Latest

1.47 (previous 1.46)

Publisher title

Moody's Seasoned Baa Corporate Bond Yield Relative to Yield on 10-Year Treasury Constant Maturity

Expected

title contains 'Baa Corporate Bond Yield Relative', units contains 'Percent', freq contains 'D'

Notes

Credit-spread context before HY OAS history (FRED keeps HY OAS from 2023 only). Metadata from cache (refreshed every 6 days).

Moody's Baa corporate yield minus 10-year Treasury [baa10y]



Source: Federal Reserve Bank of St. Louis (FRED) · BAA10Y
10,187 obs, 1986-01-02 to 2026-09-30 · latest 1.47 percent · method: FRED API

Table 11. baa10y Moody's Baa corporate yield minus 10-year Treasury: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	10187 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 1.16, max 6.16, allowed [0, 10]
history_dept_h	OK	warn	first 1986-01-02, expected by 1986-01-02
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7
meta_title	OK	critical	FRED title: "Moody's Seasoned Baa Corporate Bond Yield Relative to Yield on 10-Year Treasury Constant Maturity"; expected to contain 'Baa Corporate Bond Yield Relative'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/BAA10Y.observations.json.gz · sha256 181b536671807267 · 1,008,601 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=BAA10Y&api_key=***&file_type

fed_funds_target_pre2008 Fed funds target rate (single target, to Dec 2008)

OK UNVERIFIED

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/DFEDTAR>

Identifier

DFEDTAR

Method

FRED API

Units / frequency

percent · D

Extent

1982-09-27 to 2008-12-15 · 9,577 observations

Latest

1 (previous 1)

Publisher title

Federal Funds Target Rate (DISCONTINUED)

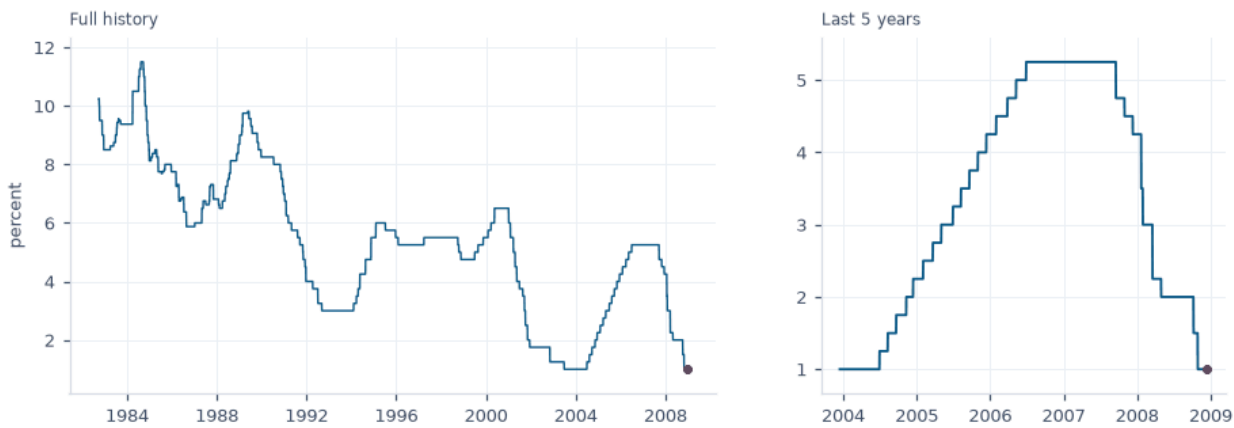
Expected

title contains 'Federal Funds Target Rate', units contains 'Percent', freq contains 'D'

Notes

Discontinued 2008-12-15 (replaced by the target range, DFEDTARU/DFEDTARL). Metadata from cache (refreshed every 6 days).

Fed funds target rate (single target, to Dec 2008) [fed_funds_target_pre2008]



Source: Federal Reserve Bank of St. Louis (FRED) · DFEDTAR
9,577 obs, 1982-09-27 to 2008-12-15 · latest 1 percent · method: FRED API

Table 12. fed_funds_target_pre2008 Fed funds target rate (single target, to Dec 2008): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	9577 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 1, max 11.5, allowed [0, 25]
history_depth	OK	warn	first 1982-09-27, expected by 1982-09-27
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2008-12-15, 6500 days old, limit 100000
meta_title	OK	critical	FRED title: 'Federal Funds Target Rate (DISCONTINUED)'; expected to contain 'Federal Funds Target Rate'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/DFEDTAR.observations.json.gz · sha256 d43db2612eefc138 · 902,570 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=DFEDTAR&api_key=***&file_type

regime_votes Regime vote count from the five headline metrics (monthly)

OK VERIFIED by ml on 2026-10-01

Source

Data room (derived)

Identifier

rows 2, 3, 4, 6, 9 rules

Method

Derived

Units / frequency

votes (A/B/C) · M

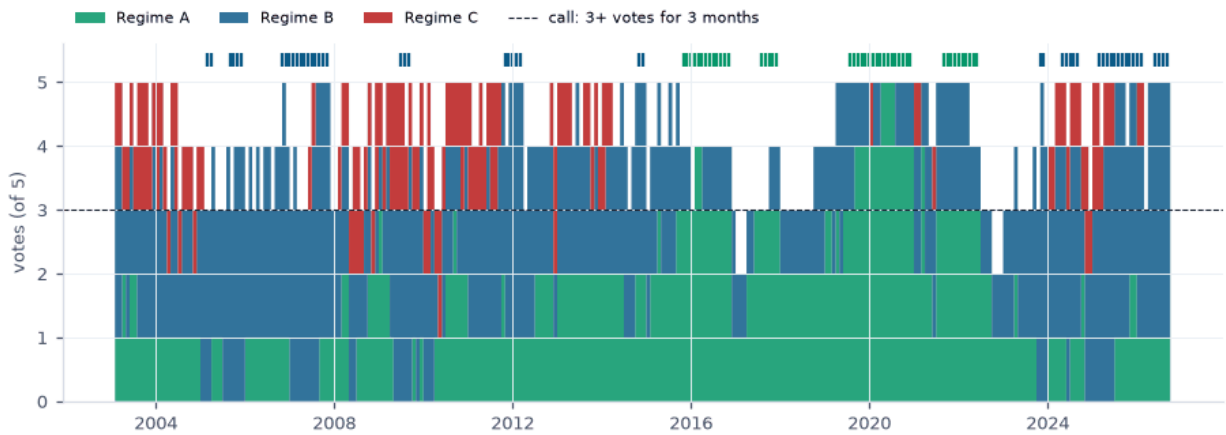
Extent

2003-01-31 to 2026-09-30 · 285 observations

Latest

A1 B2 C0 (call: none) (previous 5)

Regime votes (headline metrics) [regime_votes]



Derived from 5y5y, 10y TIPS, ACM term premium, policy vs 30y, interest/receipts. Ticks on top = months with a regime call.
Latest 2026-09-30: A1 B2 C0 (infl_5y5y=B, tips10y=, acm_tp10=B, policy=, interest=A)

Table 13. regime_votes Regime vote count from the five headline metrics (monthly): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	285 months
coverage	OK	warn	latest month has 5 of 5 headline readings (interest/receipts lags about a month)

Row 1: nominal yields

ust2y US 2-year Treasury yield (constant maturity)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/DGS2>

Identifier

DGS2

Method

FRED API

Units / frequency

percent · D

Extent

1976-06-01 to 2026-09-30 · 12,580 observations

Latest

4.88 (previous 4.89)

Publisher title

Market Yield on U.S. Treasury Securities at 2-Year Constant Maturity, Quoted on an Investment Basis

Expected

title contains '2-Year Constant Maturity', units contains 'Percent', freq contains 'D'

Notes

Metadata from cache (refreshed every 6 days).

US 2-year Treasury yield (constant maturity) [ust2y]

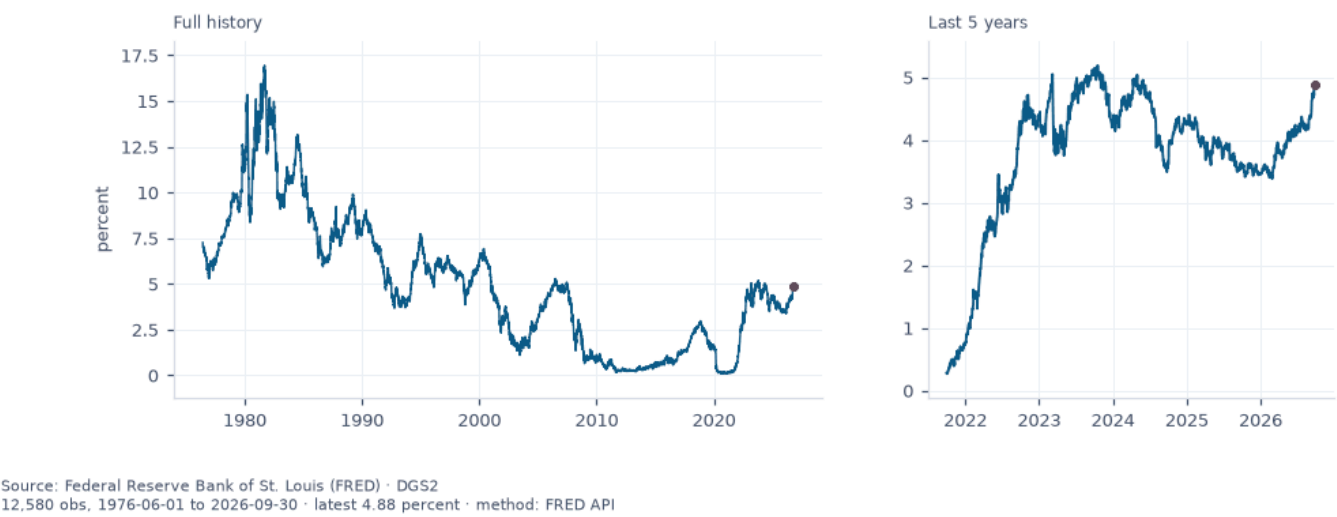


Table 14. ust2y US 2-year Treasury yield (constant maturity): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	12580 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.09, max 16.95, allowed [0, 20]
history_depth	OK	warn	first 1976-06-01, expected by 1976-06-01
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7
meta_title	OK	critical	FRED title: 'Market Yield on U.S. Treasury Securities at 2-Year Constant Maturity, Quoted on an Investment Basis'; expected to contain '2-Year Constant Maturity'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/DGS2.observations.json.gz · sha256 6835d2ce1363dd46 · 1,254,616 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=DGS2&api_key=***&file_type=j

ust5y US 5-year Treasury yield (constant maturity)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/DGS5>

Identifier

DGS5

Method

FRED API

Units / frequency

percent · D

Extent

1962-01-02 to 2026-09-30 · 16,172 observations

Latest

5.09 (previous 5.06)

Publisher title

Market Yield on U.S. Treasury Securities at 5-Year Constant Maturity, Quoted on an Investment Basis

Expected

title contains '5-Year Constant Maturity', units contains 'Percent', freq contains 'D'

Notes

Metadata from cache (refreshed every 6 days).

US 5-year Treasury yield (constant maturity) [ust5y]



Source: Federal Reserve Bank of St. Louis (FRED) · DGS5
16,172 obs, 1962-01-02 to 2026-09-30 · latest 5.09 percent · method: FRED API

Table 15. ust5y US 5-year Treasury yield (constant maturity): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	16172 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.19, max 16.27, allowed [0, 20]
history_depth	OK	warn	first 1962-01-02, expected by 1962-01-02
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7
meta_title	OK	critical	FRED title: 'Market Yield on U.S. Treasury Securities at 5-Year Constant Maturity, Quoted on an Investment Basis'; expected to contain '5-Year Constant Maturity'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/DGS5.observations.json.gz · sha256 eaa31f4e6635c621 · 1,604,124 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=DGS5&api_key=***&file_type=j

ust10y US 10-year Treasury yield (constant maturity)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/DGS10>

Identifier

DGS10

Method

FRED API

Units / frequency

percent · D

Extent

1962-01-02 to 2026-09-30 · 16,172 observations

Latest

5.29 (previous 5.26)

Publisher title

Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis

Expected

title contains '10-Year Constant Maturity', units contains 'Percent', freq contains 'D'

Notes

Metadata from cache (refreshed every 6 days).

US 10-year Treasury yield (constant maturity) [ust10y]

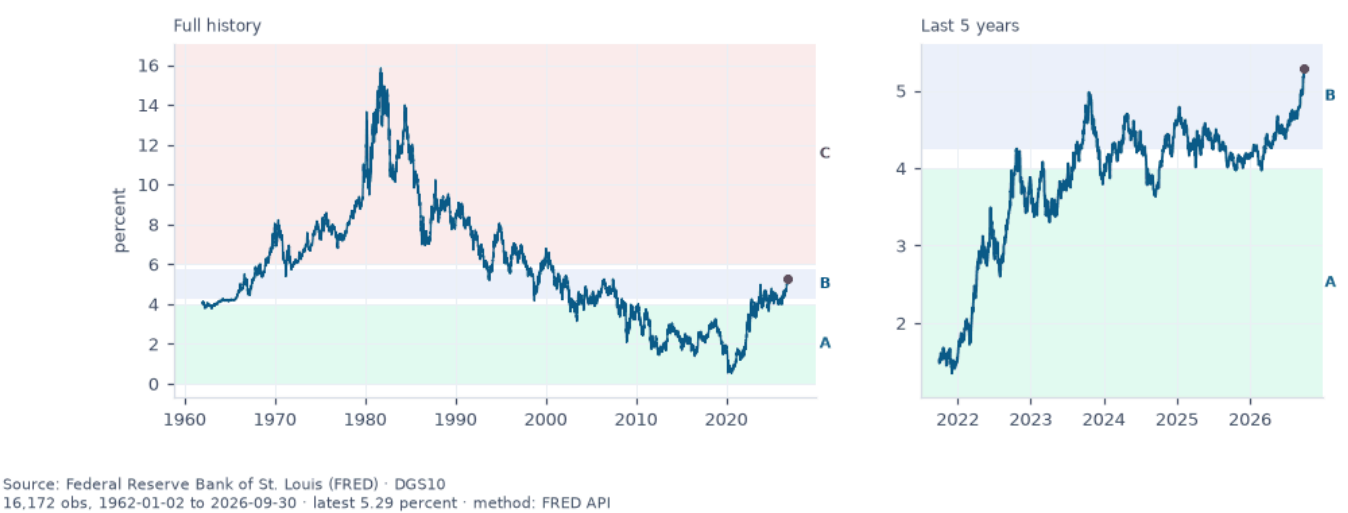


Table 16. ust10y US 10-year Treasury yield (constant maturity): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	16172 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.52, max 15.84, allowed [0, 20]
history_depth	OK	warn	first 1962-01-02, expected by 1962-01-02
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7
meta_title	OK	critical	FRED title: 'Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis'; expected to contain '10-Year Constant Maturity'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/DGS10.observations.json.gz · sha256 aeea79f994196ff6 · 1,604,278 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=DGS10&api_key=***&file_type=

ust30y US 30-year Treasury yield (constant maturity)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/DGS30>

Identifier

DGS30

Method

FRED API

Units / frequency

percent · D

Extent

1977-02-15 to 2026-09-30 · 12,402 observations

Latest

5.64 (previous 5.59)

Publisher title

Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity, Quoted on an Investment Basis

Expected

title contains '30-Year Constant Maturity', units contains 'Percent', freq contains 'D'

Notes

Treasury did not issue 30-year bonds from 2002 to 2006, yet FRED's DGS30 has continuous values for those years. They track the Fed GSW 30-year zero curve as closely as other years do (median gap about -0.19 points), so they are kept but treated as extrapolated. Metadata from cache (refreshed every 6 days).

US 30-year Treasury yield (constant maturity) [ust30y]



Source: Federal Reserve Bank of St. Louis (FRED) · DGS30
12,402 obs, 1977-02-15 to 2026-09-30 · latest 5.64 percent · method: FRED API

Table 17. ust30y US 30-year Treasury yield (constant maturity): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	12402 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.99, max 15.21, allowed [0, 20]
history_depth	OK	warn	first 1977-02-15, expected by 1977-02-15
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7
meta_title	OK	critical	FRED title: 'Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity, Quoted on an Investment Basis'; expected to contain '30-Year Constant Maturity'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/DGS30.observations.json.gz · sha256 028f1791a7b4a072 · 1,230,051 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=DGS30&api_key=***&file_type=

Row 2: inflation expectations**infl_5y5y** 5-year, 5-year forward inflation expectation

OK VERIFIED by ml on 2026-10-01

SourceFederal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/T5YIFR>**Identifier**

T5YIFR

Method

FRED API

Units / frequency

percent · D

Extent

2003-01-02 to 2026-10-01 · 5,942 observations

Latest

2.36 (previous 2.36)

Publisher title

5-Year, 5-Year Forward Inflation Expectation Rate

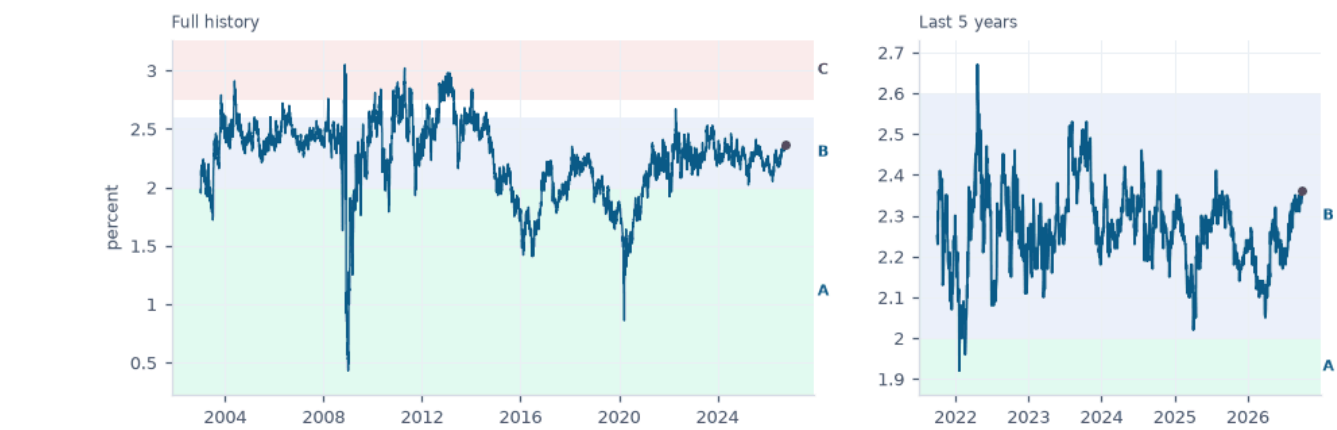
Expected

title contains '5-Year, 5-Year Forward Inflation Expectation', units contains 'Percent', freq contains 'D'

Notes

Metadata from cache (refreshed every 6 days).

5-year, 5-year forward inflation expectation [infl_5y5y]



Source: Federal Reserve Bank of St. Louis (FRED) · T5YIFR
5,942 obs, 2003-01-02 to 2026-10-01 · latest 2.36 percent · method: FRED API

Table 18. infl_5y5y 5-year, 5-year forward inflation expectation: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	5942 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.43, max 3.05, allowed [-2, 6]
history_depth	OK	warn	first 2003-01-02, expected by 2003-01-02
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-10-01, 1 days old, limit 7
meta_title	OK	critical	FRED title: '5-Year, 5-Year Forward Inflation Expectation Rate'; expected to contain '5-Year, 5-Year Forward Inflation Expectation'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/T5YIFR.observations.json.gz · sha256 ad342d9e351cfd32 · 587,922 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=T5YIFR&api_key=***&file_type

breakeven10y 10-year breakeven inflation (nominal minus TIPS)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/T10YIE>

Identifier

T10YIE

Method

FRED API

Units / frequency

percent · D

Extent

2003-01-02 to 2026-10-01 · 5,942 observations

Latest

2.36 (previous 2.36)

Publisher title

10-Year Breakeven Inflation Rate

Expected

title contains '10-Year Breakeven Inflation', units contains 'Percent', freq contains 'D'

Notes

Metadata from cache (refreshed every 6 days).

10-year breakeven inflation (nominal minus TIPS) [breakeven10y]



Source: Federal Reserve Bank of St. Louis (FRED) · T10YIE
5,942 obs, 2003-01-02 to 2026-10-01 · latest 2.36 percent · method: FRED API

Table 19. breakeven10y 10-year breakeven inflation (nominal minus TIPS): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	5942 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.04, max 3.02, allowed [-2, 6]
history_depth	OK	warn	first 2003-01-02, expected by 2003-01-02
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-10-01, 1 days old, limit 7
meta_title	OK	critical	FRED title: '10-Year Breakeven Inflation Rate'; expected to contain '10-Year Breakeven Inflation'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/T10YIE.observations.json.gz · sha256 1ecb8d79bda3c250 · 587,933 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=T10YIE&api_key=***&file_type

Row 3: real yields

tips10y US 10-year TIPS real yield

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/DFII10>

Identifier

DFII10

Method

FRED API

Units / frequency

percent · D

Extent

2003-01-02 to 2026-09-30 · 5,941 observations

Latest

2.93 (previous 2.91)

Publisher title

Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis, Inflation-Indexed

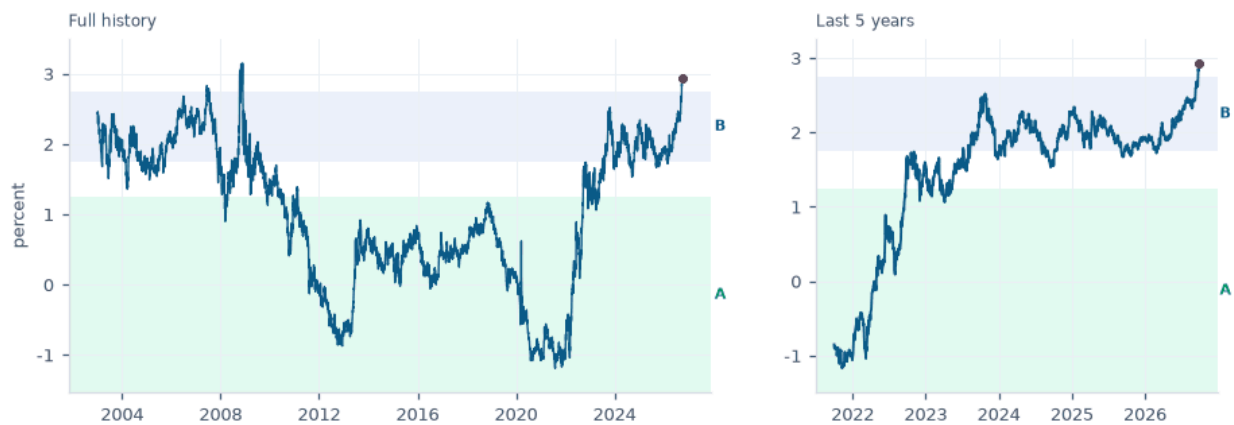
Expected

title contains '10-Year Constant Maturity', units contains 'Percent', freq contains 'D'

Notes

Regime C signal is a falling real yield while nominal yields rise (rule in derive.py), so no fixed C band.
Metadata from cache (refreshed every 6 days).

US 10-year TIPS real yield [tips10y]



Source: Federal Reserve Bank of St. Louis (FRED) · DFII10
5,941 obs, 2003-01-02 to 2026-09-30 · latest 2.93 percent · method: FRED API

Table 20. tips10y US 10-year TIPS real yield: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	5941 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -1.19, max 3.15, allowed [-3, 6]
history_depth	OK	warn	first 2003-01-02, expected by 2003-01-02
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7
meta_title	OK	critical	FRED title: 'Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis, Inflation-Indexed'; expected to contain '10-Year Constant Maturity'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/DFII10.observations.json.gz · sha256 0725b36466243710 · 588,919 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=DFII10&api_key=***&file_type

tips30y US 30-year TIPS real yield

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/DFII30>

Identifier

DFII30

Method

FRED API

Units / frequency

percent · D

Extent

2010-02-22 to 2026-09-30 · 4,156 observations

Latest

3.33 (previous 3.29)

Publisher title

Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity, Quoted on an Investment Basis, Inflation-Indexed

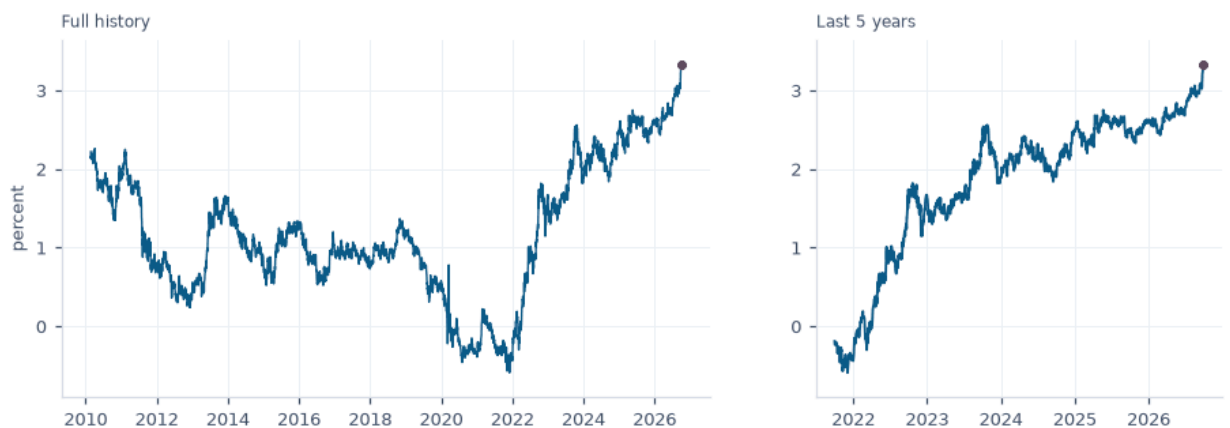
Expected

title contains '30-Year Constant Maturity', units contains 'Percent', freq contains 'D'

Notes

Metadata from cache (refreshed every 6 days).

US 30-year TIPS real yield [tips30y]



Source: Federal Reserve Bank of St. Louis (FRED) · DFII30
4,156 obs, 2010-02-22 to 2026-09-30 · latest 3.33 percent · method: FRED API

Table 21. tips30y US 30-year TIPS real yield: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	4156 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -0.59, max 3.33, allowed [-3, 6]
history_dept_h	OK	warn	first 2010-02-22, expected by 2010-02-22
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7
meta_title	OK	critical	FRED title: 'Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity, Quoted on an Investment Basis, Inflation-Indexed'; expected to contain '30-Year Constant Maturity'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/DFII30.observations.json.gz · sha256 8cf2738d004042b8 · 411,731 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=DFII30&api_key=***&file_type

Row 4: term premium**acm_tp10 10-year term premium (ACM model, daily)**

OK VERIFIED by ml on 2026-10-01

SourceFederal Reserve Bank of New York · https://www.newyorkfed.org/research/data_indicators/term-premia-tabs**Identifier**

ACMTP10

Method

XLS download

Units / frequency

percent · D

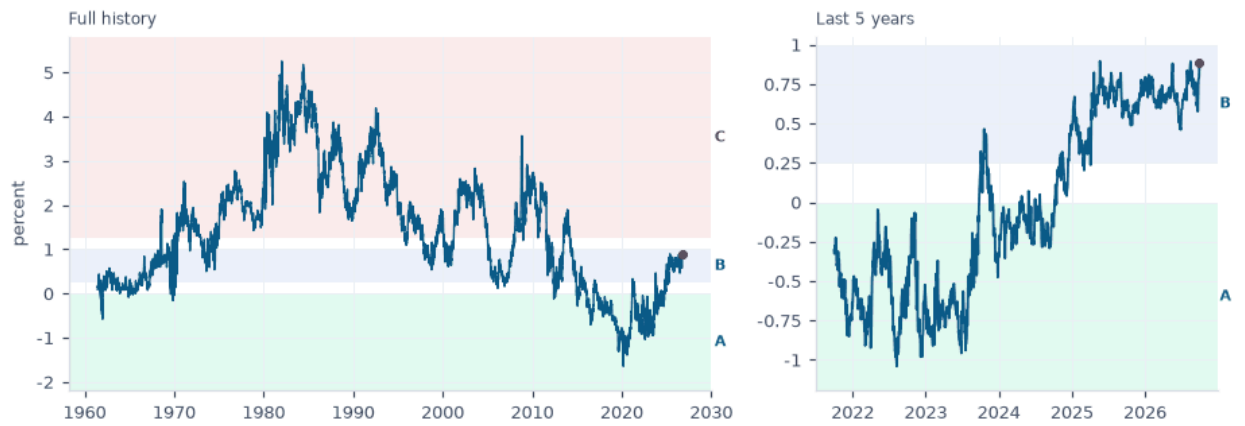
Extent

1961-06-14 to 2026-09-30 · 16,289 observations

Latest

0.8876 (previous 0.8467)

10-year term premium (ACM model, daily) [acm_tp10]



Source: Federal Reserve Bank of New York · ACMP10
16,289 obs, 1961-06-14 to 2026-09-30 · latest 0.8876 percent · method: XLS download

Table 22. acm_tp10 10-year term premium (ACM model, daily): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	16289 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -1.648, max 5.256, allowed [-3, 6]
history_depth	OK	warn	first 1961-06-14, expected by 1961-06-30
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 14

Raw files kept for audit

- data/raw/nyfed/2026-10-02/ACMTermPremium.xls.gz · sha256 f174cbddc004be85 · 10,153,472 bytes
· https://www.newyorkfed.org/medialibrary/media/research/data_indicators/ACMTermPremium.xls

kw_tp10 10-year term premium (Kim-Wright model)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/THREEFYTP10>

Identifier

THREEFYTP10

Method

FRED API

Units / frequency

percent · D

Extent

1990-01-02 to 2026-09-25 · 9,170 observations

Latest

1.02 (previous 1.025)

Publisher title

Term Premium on a 10 Year Zero Coupon Bond

Expected

title contains 'Term Premium on a 10 Year Zero Coupon Bond', units contains 'Percent'

Notes

Metadata from cache (refreshed every 6 days).

10-year term premium (Kim-Wright model) [kw_tp10]



Source: Federal Reserve Bank of St. Louis (FRED) · THREEFYTP10
9,170 obs, 1990-01-02 to 2026-09-25 · latest 1.02 percent · method: FRED API

Table 23. kw_tp10 10-year term premium (Kim-Wright model): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	9170 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -0.6587, max 2.516, allowed [-3, 6]
history_depth	OK	warn	first 1990-01-02, expected by 1990-01-02
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-25, 7 days old, limit 14
meta_title	OK	critical	FRED title: 'Term Premium on a 10 Year Zero Coupon Bond'; expected to contain 'Term Premium on a 10 Year Zero Coupon Bond'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'

Raw files kept for audit

- data/raw/fred/2026-10-02/THREEFYTP10.observations.json.gz · sha256 2cf183a1b0461376 · 929,039 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=THREEFYTP10&api_key=***&file

Row 5: curve

t10y2y_fred 10-year minus 2-year Treasury spread (FRED)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/T10Y2Y>

Identifier

T10Y2Y

Method

FRED API

Units / frequency

percent · D

Extent

1976-06-01 to 2026-10-01 · 12,581 observations

Latest

0.46 (previous 0.41)

Publisher title

10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity

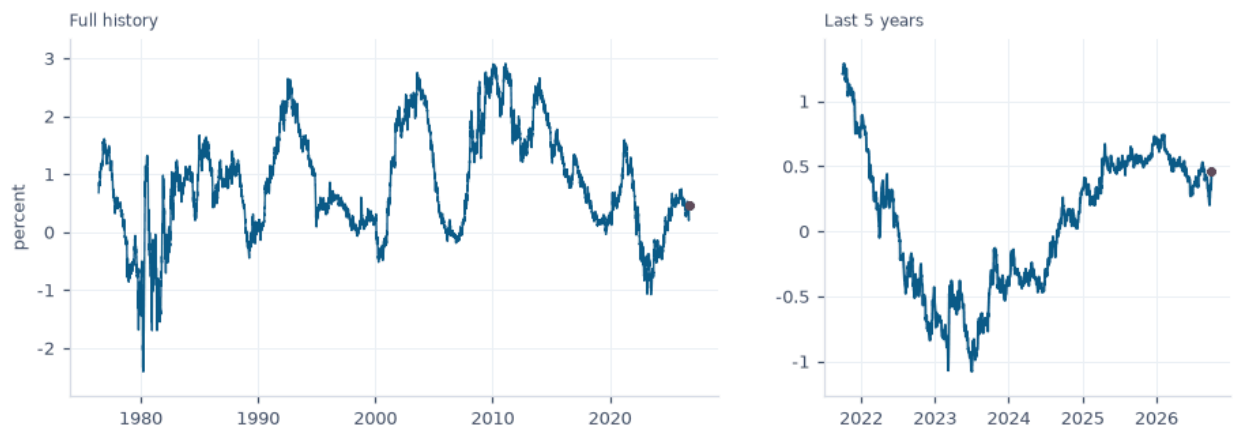
Expected

title contains '10-Year Treasury Constant Maturity Minus 2-Year', units contains 'Percent', freq contains 'D'

Notes

Metadata from cache (refreshed every 6 days).

10-year minus 2-year Treasury spread (FRED) [t10y2y_fred]



Source: Federal Reserve Bank of St. Louis (FRED) · T10Y2Y
12,581 obs, 1976-06-01 to 2026-10-01 · latest 0.46 percent · method: FRED API

Table 24. t10y2y_fred 10-year minus 2-year Treasury spread (FRED): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	12581 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -2.41, max 2.91, allowed [-4, 5]
history_depth	OK	warn	first 1976-06-01, expected by 1976-06-01
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-10-01, 1 days old, limit 7
meta_title	OK	critical	FRED title: '10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity'; expected to contain '10-Year Treasury Constant Maturity Minus 2-Year'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/T10Y2Y.observations.json.gz · sha256 dd9f4c366116ac24 · 1,248,112 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=T10Y2Y&api_key=***&file_type

slope_2s10s Curve slope 10y minus 2y

OK VERIFIED by ml on 2026-10-01

Source

Data room (derived)

Identifier

ust10y - ust2y

Method

Derived

Units / frequency

bp · D

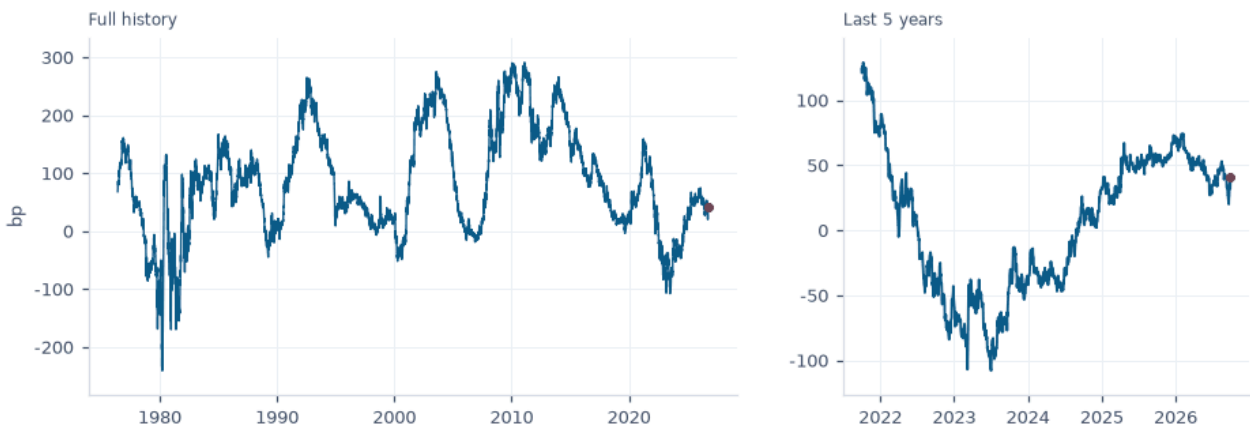
Extent

1976-06-01 to 2026-09-30 · 12,580 observations

Latest

41 (previous 37)

Curve slope 10y minus 2y [slope_2s10s]



Source: Data room (derived) · `ust10y - ust2y`
12,580 obs, 1976-06-01 to 2026-09-30 · latest 41 bp · method: Derived

Table 25. slope_2s10s Curve slope 10y minus 2y: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	12580 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -241, max 291, allowed [-400, 500]
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7

slope_2s30s Curve slope 30y minus 2y

OK VERIFIED by ml on 2026-10-01

Source

Data room (derived)

Identifier

ust30y - ust2y

Method

Derived

Units / frequency

bp · D

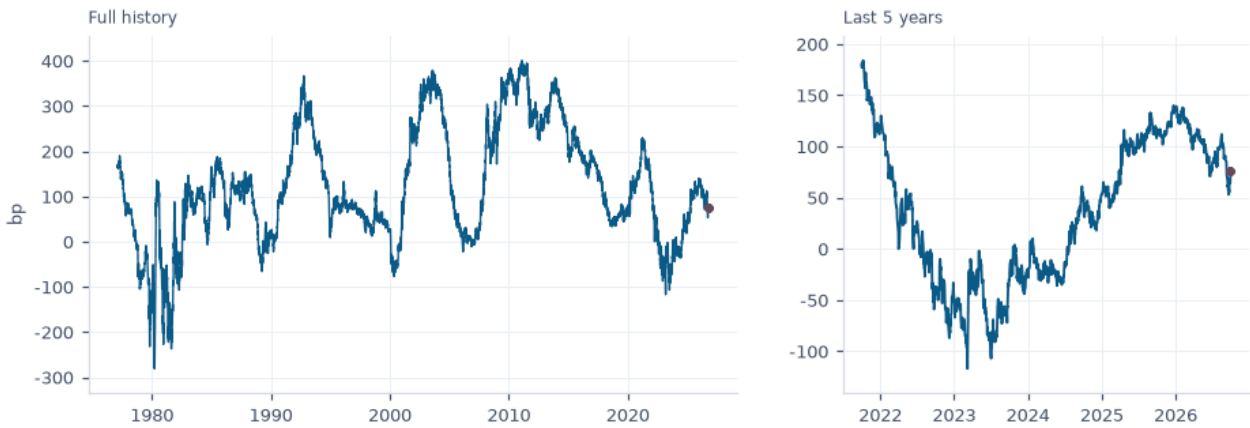
Extent

1977-02-15 to 2026-09-30 · 12,402 observations

Latest

76 (previous 70)

Curve slope 30y minus 2y [slope_2s30s]



Source: Data room (derived) · ust30y - ust2y
12,402 obs, 1977-02-15 to 2026-09-30 · latest 76 bp · method: Derived

Table 26. slope_2s30s Curve slope 30y minus 2y: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	12402 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -281, max 401, allowed [-400, 500]
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7

slope_5s30s Curve slope 30y minus 5y

OK VERIFIED by ml on 2026-10-01

Source

Data room (derived)

Identifier

ust30y - ust5y

Method

Derived

Units / frequency

bp · D

Extent

1977-02-15 to 2026-09-30 · 12,402 observations

Latest

55 (previous 53)

Curve slope 30y minus 5y [slope_5s30s]

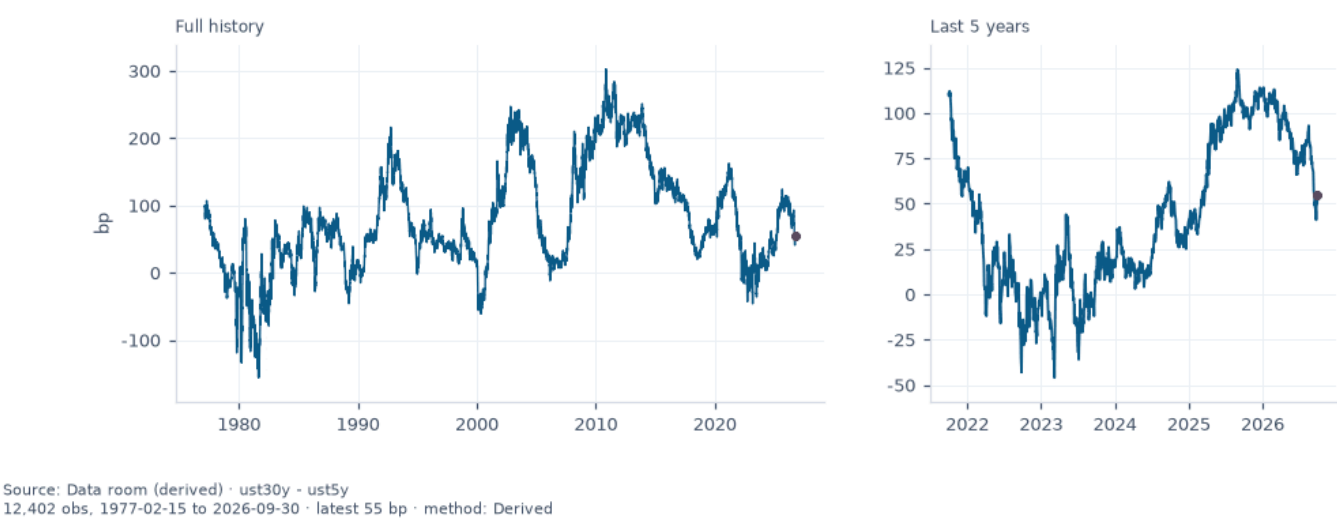


Table 27. slope_5s30s Curve slope 30y minus 5y: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	12402 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -156, max 302, allowed [-400, 500]
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7

Row 6: policy rate and r*

fed_funds_eff Effective federal funds rate

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/DFE>

Identifier

DFE

Method

FRED API

Units / frequency

percent · D

Extent

1954-07-01 to 2026-09-30 · 26,390 observations

Latest

3.88 (previous 3.88)

Publisher title

Federal Funds Effective Rate

Expected

title contains 'Federal Funds Effective Rate', units contains 'Percent', freq contains 'D'

Notes

Metadata from cache (refreshed every 6 days).

Effective federal funds rate [fed_funds_eff]



Table 28. fed_funds_eff Effective federal funds rate: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	26390 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.04, max 22.36, allowed [0, 25]
history_depth	OK	warn	first 1954-07-01, expected by 1954-07-01
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7
meta_title	OK	critical	FRED title: 'Federal Funds Effective Rate'; expected to contain 'Federal Funds Effective Rate'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/DFF.observations.json.gz · sha256 2d5dc42581af1f85 · 2,526,273 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=DFF&api_key=***&file_type=js

fed_funds_upper Fed funds target range, upper limit

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/DFEDTARU>

Identifier

DFEDTARU

Method

FRED API

Units / frequency

percent · D

Extent

2008-12-16 to 2026-10-01 · 6,499 observations

Latest

4 (previous 4)

Publisher title

Federal Funds Target Range - Upper Limit

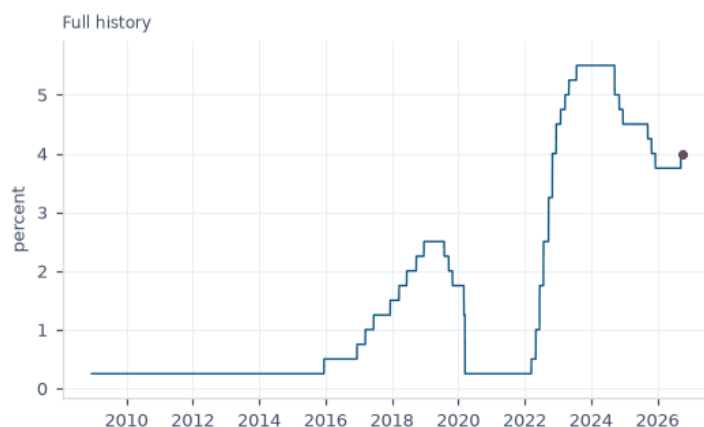
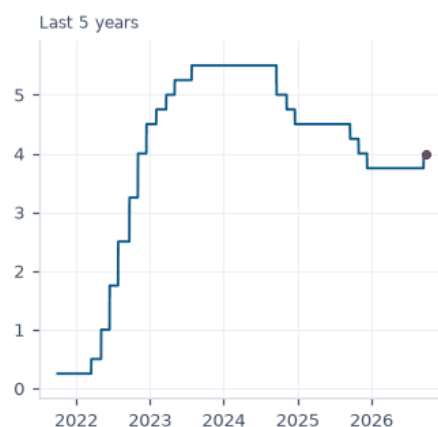
Expected

title contains 'Upper Limit', units contains 'Percent', freq contains 'D'

Notes

Metadata from cache (refreshed every 6 days).

Fed funds target range, upper limit [fed_funds_upper]



Source: Federal Reserve Bank of St. Louis (FRED) · DFEDTARU
6,499 obs, 2008-12-16 to 2026-10-01 · latest 4 percent · method: FRED API

Table 29. fed_funds_upper Fed funds target range, upper limit: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	6499 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.25, max 5.5, allowed [0, 25]
history_depth	OK	warn	first 2008-12-16, expected by 2008-12-16
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-10-01, 1 days old, limit 7
meta_title	OK	critical	FRED title: 'Federal Funds Target Range - Upper Limit'; expected to contain 'Upper Limit'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/DFEDTARU.observations.json.gz · sha256 25cac1ff13429be8 · 617,595 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=DFEDTARU&api_key=***&file_type=

fomc_longrun_median FOMC longer-run fed funds projection (SEP median)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/FEDTARMDLR>

Identifier

FEDTARMDLR

Method

FRED API

Units / frequency

percent · irregular

Extent

2012-01-25 to 2026-09-16 · 59 observations

Latest

3.2 (previous 3.1)

Publisher title

Longer Run FOMC Summary of Economic Projections for the Fed Funds Rate, Median

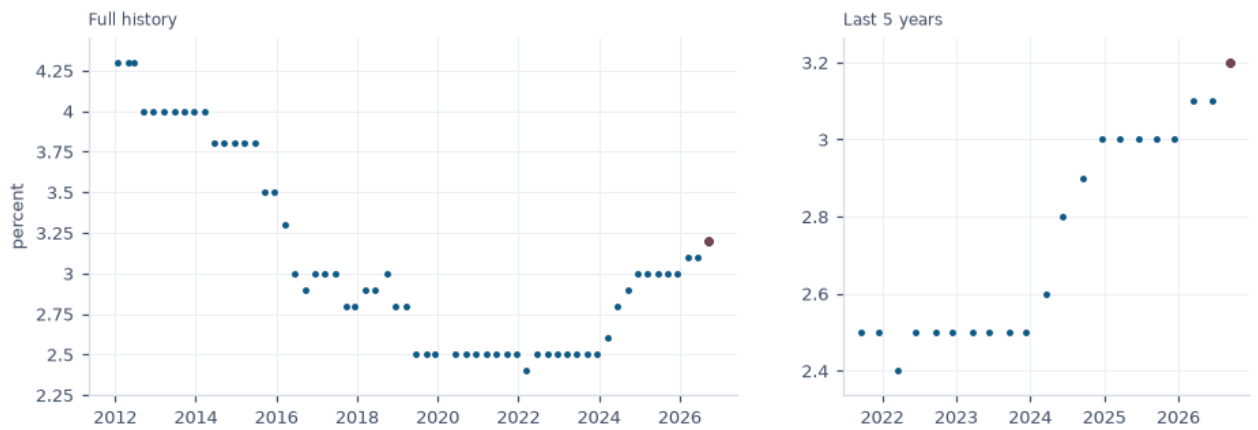
Expected

title contains 'Longer Run', units contains 'Percent'

Notes

Metadata from cache (refreshed every 6 days).

FOMC longer-run fed funds projection (SEP median) [fomc_longrun_median]



Source: Federal Reserve Bank of St. Louis (FRED) · FEDTARMDLR
59 obs, 2012-01-25 to 2026-09-16 · latest 3.2 percent · method: FRED API

Table 30. fomc_longrun_median FOMC longer-run fed funds projection (SEP median): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	59 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 2.4, max 4.3, allowed [0, 10]
history_depth	OK	warn	first 2012-01-25, expected by 2012-01-25
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-16, 16 days old, limit 120
meta_title	OK	critical	FRED title: 'Longer Run FOMC Summary of Economic Projections for the Fed Funds Rate, Median'; expected to contain 'Longer Run'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'

Raw files kept for audit

- data/raw/fred/2026-10-02/FEDTARMDLR.observations.json.gz · sha256 652a430469f0990c · 5,821 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=FEDTARMDLR&api_key=***&file

hlw_rstar_us Natural rate of interest r^* (Holston-Laubach-Williams, US)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of New York · <https://www.newyorkfed.org/research/policy/rstar>

Identifier

HLW Estimates: Natural Rate (r^*) US

Method

XLSX download

Units / frequency

percent · Q

Extent

1961-01-01 to 2026-04-01 · 262 observations

Latest

1.009 (previous 1.092)

Natural rate of interest r^* (Holston-Laubach-Williams, US) [hlw_rstar_us]



Source: Federal Reserve Bank of New York · HLW Estimates: Natural Rate (r^*) US
262 obs, 1961-01-01 to 2026-04-01 · latest 1.009 percent · method: XLSX download

Table 31. hlw_rstar_us Natural rate of interest r^* (Holston-Laubach-Williams, US): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	262 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.5664, max 5.697, allowed [-4, 8]
history_depth	OK	warn	first 1961-01-01, expected by 1961-01-01
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-04-01, 184 days old, limit 220

Raw files kept for audit

- data/raw/nyfed/2026-10-02/HLW_current_estimates.xlsx.gz · sha256 120f1587a5501d96 · 178,850 bytes · https://www.newyorkfed.org/medialibrary/media/research/economists/williams/data/Holston_La

Row 7: core inflation

core_pce Core PCE price index

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/PCEPILFE>

Identifier

PCEPILFE

Method

FRED API

Units / frequency

index 2017=100 · M

Extent

1959-01-01 to 2026-08-01 · 812 observations

Latest

130.5 (previous 130.1)

Publisher title

Personal Consumption Expenditures Excluding Food and Energy (Chain-Type Price Index)

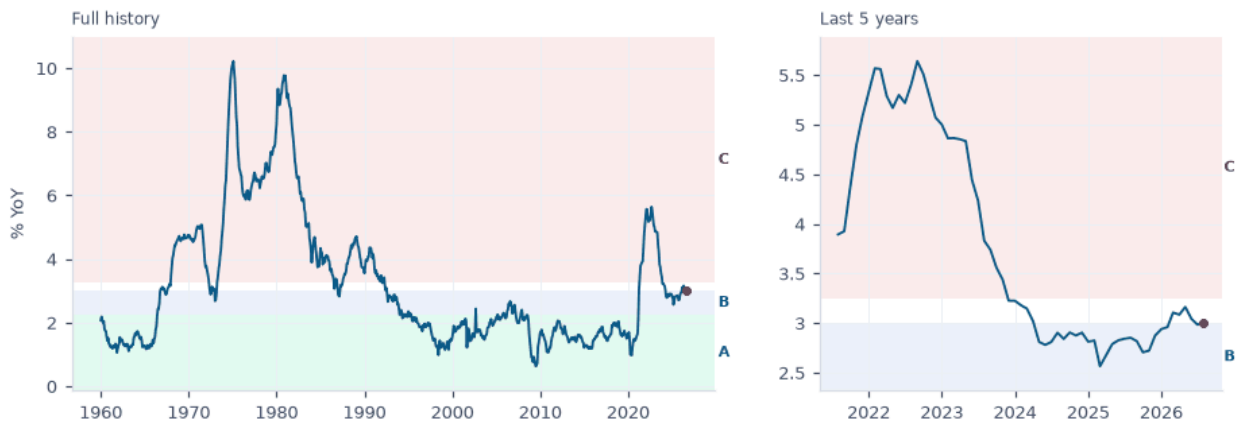
Expected

title contains 'Excluding Food and Energy', units contains 'Index', freq contains 'M'

Notes

Metadata from cache (refreshed every 6 days).

Core PCE price index (YoY %) [core_pce]



Source: Federal Reserve Bank of St. Louis (FRED) · PCEPILFE
800 obs, 1960-01-01 to 2026-08-01 · latest 3.008 % YoY · method: FRED API

Table 32. core_pce Core PCE price index: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	812 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 15.5, max 130.5, allowed [10, 300]
history_depth	OK	warn	first 1959-01-01, expected by 1959-01-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-01, 62 days old, limit 75
meta_title	OK	critical	FRED title: 'Personal Consumption Expenditures Excluding Food and Energy (Chain-Type Price Index)'; expected to contain 'Excluding Food and Energy'
meta_units	OK	critical	FRED units: 'Index 2017=100'; expected to contain 'Index'
meta_frequency	OK	critical	FRED frequency 'M'; expected 'M'

Raw files kept for audit

- data/raw/fred/2026-10-02/PCEPILFE.observations.json.gz · sha256 1fd2690ae2a2e2c0 · 79,053 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=PCEPILFE&api_key=***&file_ty

pce_services_ex_housing PCE services excluding energy and housing price index

OK **VERIFIED** by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/IA001260M>

Identifier

IA001260M

Method

FRED API

Units / frequency

index 2017=100 · M

Extent

1959-01-01 to 2026-08-01 · 812 observations

Latest

134.7 (previous 134.2)

Publisher title

Personal Consumption Expenditures: Services Excluding Energy and Housing (Chain-Type Price Index)

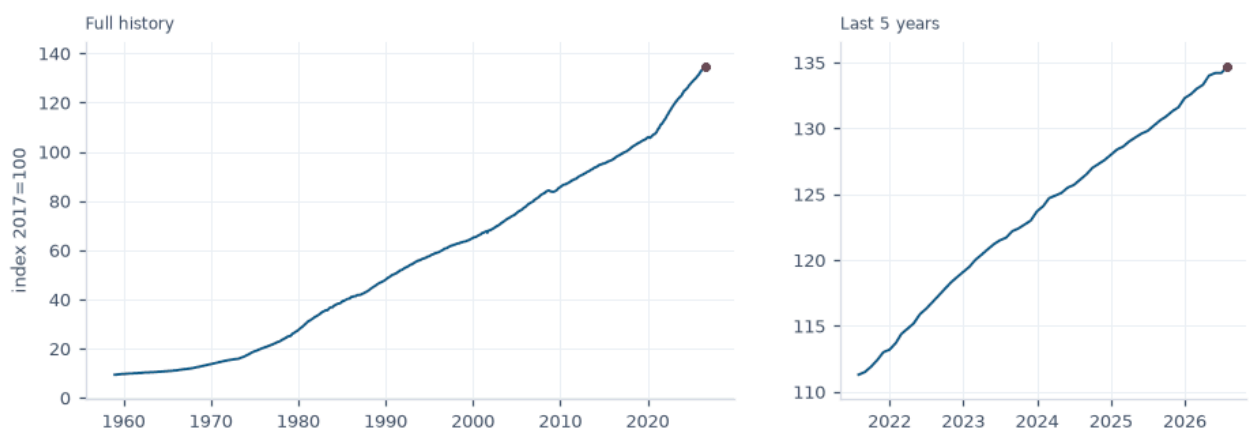
Expected

title contains 'excluding energy and housing', units contains 'Index', freq contains 'M'

Notes

Metadata from cache (refreshed every 6 days).

PCE services excluding energy and housing price index [pce_services_ex_housing]



Source: Federal Reserve Bank of St. Louis (FRED) · IA001260M
812 obs, 1959-01-01 to 2026-08-01 · latest 134.7 index 2017=100 · method: FRED API

Table 33. pce_services_ex_housing PCE services excluding energy and housing price index: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	812 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 9.4, max 134.7, allowed [5, 300]
history_dept_h	OK	warn	first 1959-01-01, expected by 1959-01-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-01, 62 days old, limit 75
meta_title	OK	critical	FRED title: 'Personal Consumption Expenditures: Services Excluding Energy and Housing (Chain-Type Price Index)'; expected to contain 'excluding energy and housing'
meta_units	OK	critical	FRED units: 'Index 2017=100'; expected to contain 'Index'
meta_frequency	OK	critical	FRED frequency 'M'; expected 'M'

Raw files kept for audit

- data/raw/fred/2026-10-02/IA001260M.observations.json.gz · sha256 98cf08543c5bd19e · 77,500 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=IA001260M&api_key=***&file_t

core_cpi Core CPI (all items less food and energy)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/CPILFESL>

Identifier

CPILFESL

Method

FRED API

Units / frequency

index 1982-84=100 · M

Extent

1957-01-01 to 2026-08-01 · 835 observations

Latest

337.8 (previous 336.8)

Publisher title

Consumer Price Index for All Urban Consumers: All Items Less Food and Energy in U.S. City Average

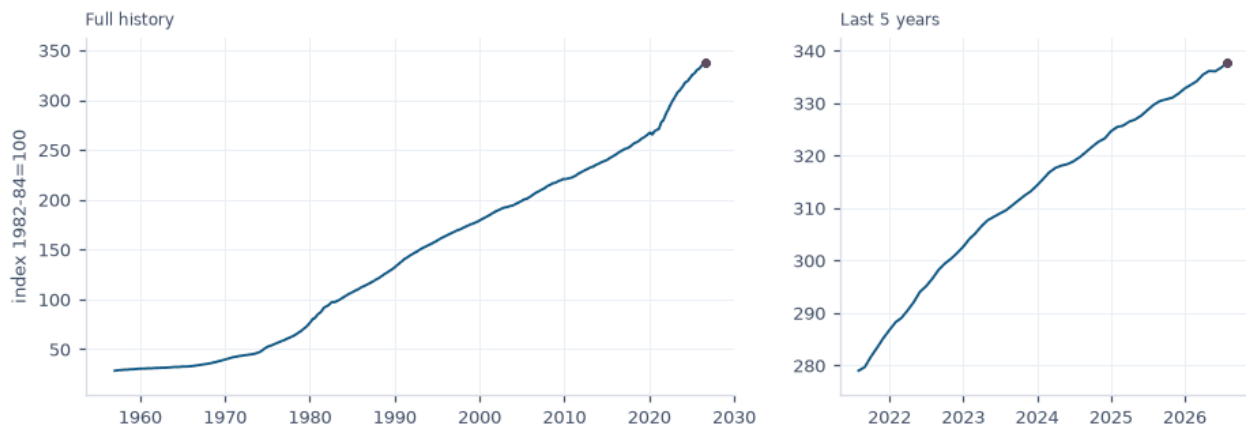
Expected

title contains 'Less Food and Energy', units contains 'Index', freq contains 'M'

Notes

BLS published no October 2025 figure (federal government shutdown). Metadata from cache (refreshed every 6 days).

Core CPI (all items less food and energy) [core_cpi]



Source: Federal Reserve Bank of St. Louis (FRED) · CPILFESL
835 obs, 1957-01-01 to 2026-08-01 · latest 337.8 index 1982-84=100 · method: FRED API

Table 34. core_cpi Core CPI (all items less food and energy): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	835 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 28.5, max 337.8, allowed [20, 500]
history_depth	OK	warn	first 1957-01-01, expected by 1957-01-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-01, 62 days old, limit 75
meta_title	OK	critical	FRED title: 'Consumer Price Index for All Urban Consumers: All Items Less Food and Energy in U.S. City Average'; expected to contain 'Less Food and Energy'
meta_units	OK	critical	FRED units: 'Index 1982-1984=100'; expected to contain 'Index'
meta_frequency	OK	critical	FRED frequency 'M'; expected 'M'

Raw files kept for audit

- data/raw/fred/2026-10-02/CPILFESL.observations.json.gz · sha256 dd682bbc49bb85d3 · 80,639 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=CPILFESL&api_key=***&file_ty

Row 8: nominal growth

ngdp US nominal GDP (SAAR)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/GDP>

Identifier

GDP

Method

FRED API

Units / frequency

USD bn SAAR · Q

Extent

1947-01-01 to 2026-04-01 · 318 observations

Latest

3.256e+04 (previous 3.191e+04)

Publisher title

Gross Domestic Product

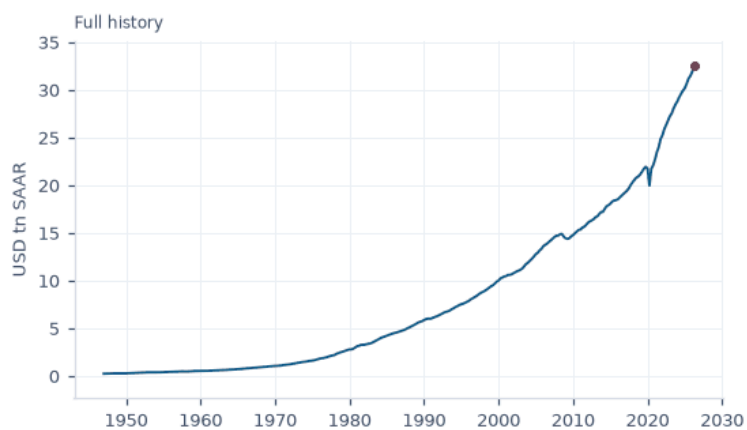
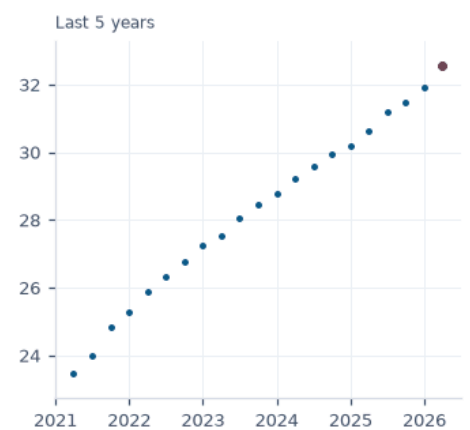
Expected

title contains 'Gross Domestic Product', units contains 'Billions of Dollars', freq contains 'Q'

Notes

Metadata from cache (refreshed every 6 days).

US nominal GDP (SAAR) [ngdp]



Source: Federal Reserve Bank of St. Louis (FRED) · GDP
318 obs, 1947-01-01 to 2026-04-01 · latest 32.56 USD tn SAAR · method: FRED API

Table 35. ngdp US nominal GDP (SAAR): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	318 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 243.2, max 3.256e+04, allowed [100, 100000]
history_depth	OK	warn	first 1947-01-01, expected by 1947-01-01
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-04-01, 184 days old, limit 220
meta_title	OK	critical	FRED title: 'Gross Domestic Product'; expected to contain 'Gross Domestic Product'
meta_units	OK	critical	FRED units: 'Billions of Dollars'; expected to contain 'Billions of Dollars'
meta_frequency	OK	critical	FRED frequency 'Q'; expected 'Q'

Raw files kept for audit

- data/raw/fred/2026-10-02/GDP.observations.json.gz · sha256 aae126eb84bc50bb · 32,091 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=GDP&api_key=***&file_type=js

ngdp_yoy_minus_10y Nominal GDP growth y/y minus 10-year yield

OK VERIFIED by ml on 2026-10-01

Source

Data room (derived)

Identifier

yoy(ngdp) - ust10y (quarter average)

Method

Derived

Units / frequency

percentage points · Q

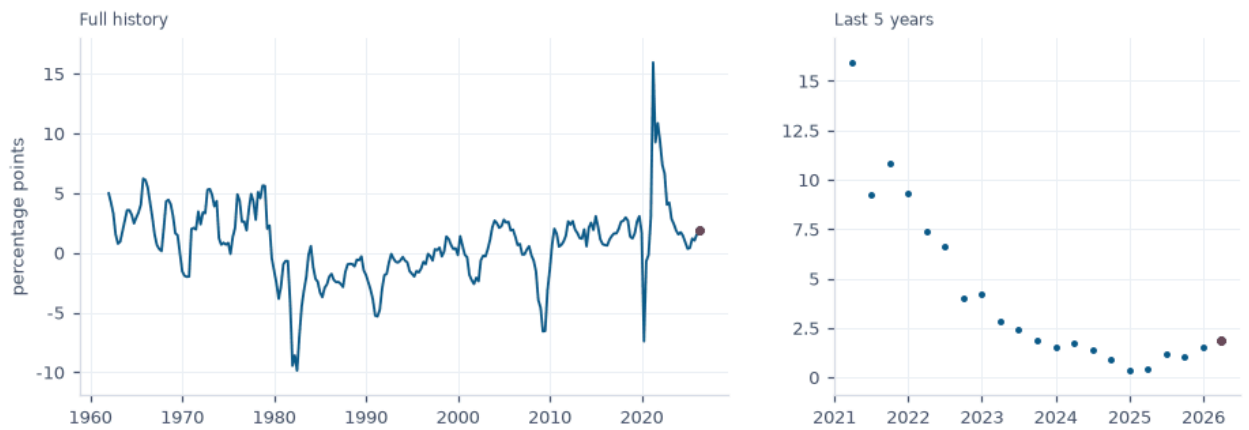
Extent

1962-01-01 to 2026-04-01 · 258 observations

Latest

1.888 (previous 1.55)

Nominal GDP growth y/y minus 10-year yield [ngdp_yoy_minus_10y]



Source: Data room (derived) · yoy(ngdp) - ust10y (quarter average)
258 obs, 1962-01-01 to 2026-04-01 · latest 1.888 percentage points · method: Derived

Table 36. ngdp_yoy_minus_10y Nominal GDP growth y/y minus 10-year yield: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	258 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -9.87, max 15.94, allowed [-30, 30]
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-04-01, 184 days old, limit 220

Row 9: interest burden

fed_interest_bea Federal government interest payments (BEA, SAAR)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/A091RC1Q027SBEA>

Identifier

A091RC1Q027SBEA

Method

FRED API

Units / frequency

USD bn SAAR · Q

Extent

1947-01-01 to 2026-04-01 · 318 observations

Latest

1,280 (previous 1,253)

Publisher title

Federal government current expenditures: Interest payments

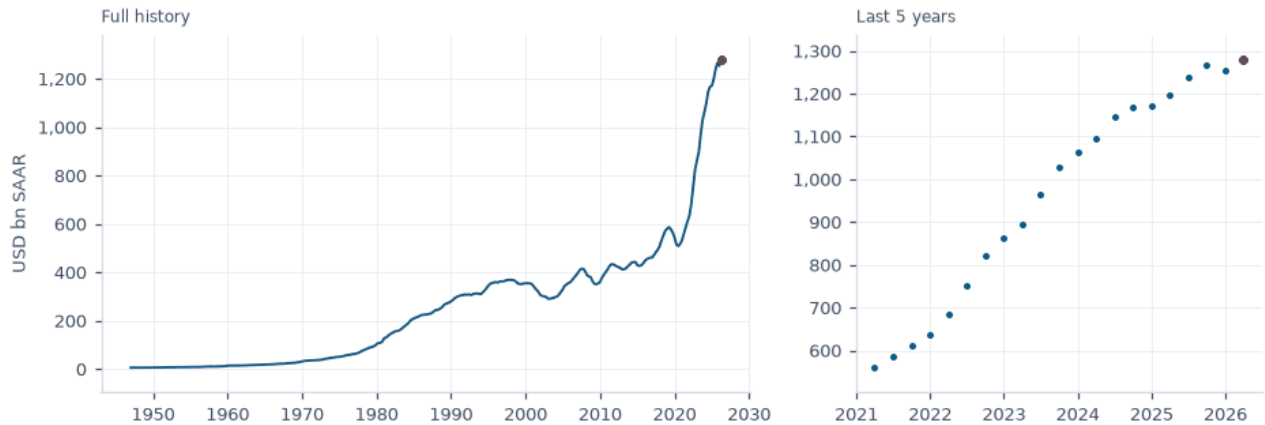
Expected

title contains 'Interest payments', units contains 'Billions of Dollars', freq contains 'Q'

Notes

Metadata from cache (refreshed every 6 days).

Federal government interest payments (BEA, SAAR) [fed_interest_bea]



Source: Federal Reserve Bank of St. Louis (FRED) · A091RC1Q027SBEA
318 obs, 1947-01-01 to 2026-04-01 · latest 1280 USD bn SAAR · method: FRED API

Table 37. fed_interest_bea Federal government interest payments (BEA, SAAR): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	318 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 5.352, max 1280, allowed [0, 5000]
history_depth	OK	warn	first 1947-01-01, expected by 1947-01-01
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-04-01, 184 days old, limit 220
meta_title	OK	critical	FRED title: 'Federal government current expenditures: Interest payments'; expected to contain 'Interest payments'
meta_units	OK	critical	FRED units: 'Billions of Dollars'; expected to contain 'Billions of Dollars'
meta_frequency	OK	critical	FRED frequency 'Q'; expected 'Q'

Raw files kept for audit

- data/raw/fred/2026-10-02/A091RC1Q027SBEA.observations.json.gz · sha256 13f938700bcdae18 · 31,225 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=A091RC1Q027SBEA&api_key=***&

fed_receipts_bea Federal government current receipts (BEA, SAAR)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/FGRECPT>

Identifier

FGRECPT

Method

FRED API

Units / frequency

USD bn SAAR · Q

Extent

1947-01-01 to 2026-04-01 · 318 observations

Latest

6,056 (previous 5,937)

Publisher title

Federal Government Current Receipts

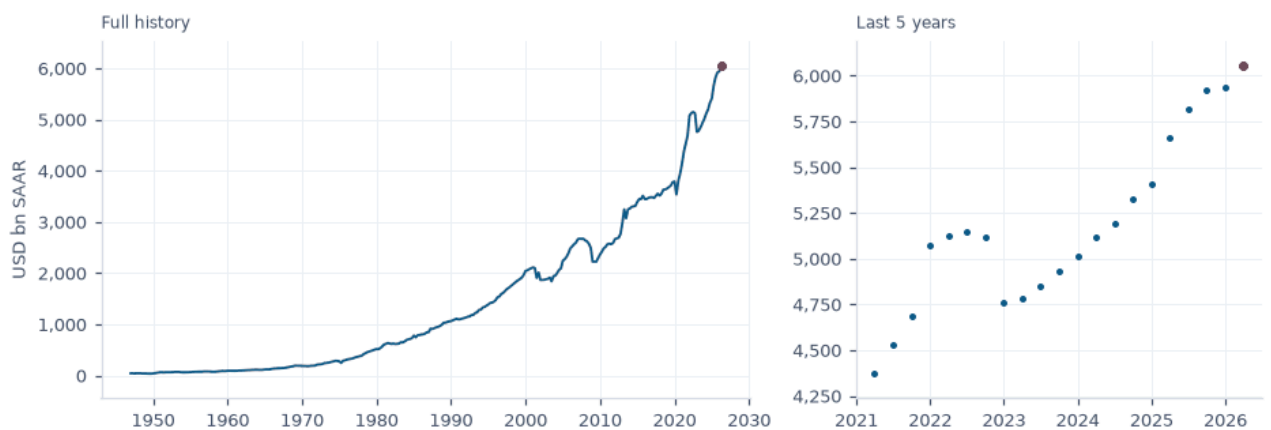
Expected

title contains 'Current Receipts', units contains 'Billions of Dollars', freq contains 'Q'

Notes

Metadata from cache (refreshed every 6 days).

Federal government current receipts (BEA, SAAR) [fed_receipts_bea]



Source: Federal Reserve Bank of St. Louis (FRED) · FGRECPT
318 obs, 1947-01-01 to 2026-04-01 · latest 6056 USD bn SAAR · method: FRED API

Table 38. fed_receipts_bea Federal government current receipts (BEA, SAAR): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	318 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 36.16, max 6056, allowed [10, 20000]
history_depth	OK	warn	first 1947-01-01, expected by 1947-01-01
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-04-01, 184 days old, limit 220
meta_title	OK	critical	FRED title: 'Federal Government Current Receipts'; expected to contain 'Current Receipts'
meta_units	OK	critical	FRED units: 'Billions of Dollars'; expected to contain 'Billions of Dollars'
meta_frequency	OK	critical	FRED frequency 'Q'; expected 'Q'

Raw files kept for audit

- data/raw/fred/2026-10-02/FGRECPT.observations.json.gz · sha256 20650547ce8bd573 · 31,870 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=FGRECPT&api_key=***&file_type=

mts_net_interest Net interest outlays, monthly (Monthly Treasury Statement table 9)

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, Bureau of the Fiscal Service · <https://fiscaldata.treasury.gov/datasets/monthly-treasury-statement/>

Identifier

mts_table_9: Net Interest

Method

JSON API

Units / frequency

USD bn · M

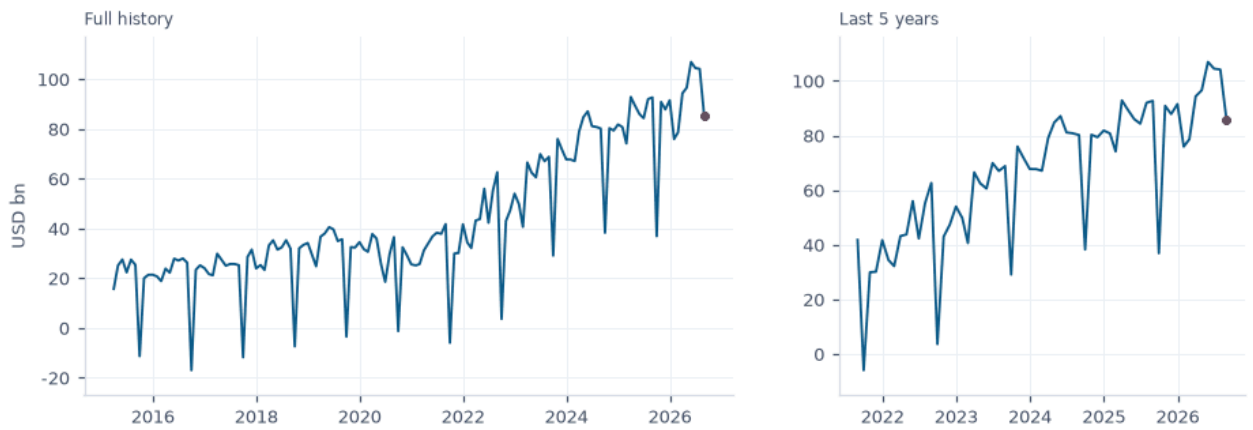
Extent

2015-03-31 to 2026-08-31 · 138 observations

Latest

85.61 (previous 104.2)

Net interest outlays, monthly (Monthly Treasury Statement table 9) [mts_net_interest]



Source: US Treasury, Bureau of the Fiscal Service · mts_table_9: Net Interest
138 obs, 2015-03-31 to 2026-08-31 · latest 85.61 USD bn · method: JSON API

Table 39. mts_net_interest Net interest outlays, monthly (Monthly Treasury Statement table 9): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	138 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -16.97, max 107, allowed [-50, 400]
history_depth	OK	warn	first 2015-03-31, expected by 2015-03-31
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-31, 32 days old, limit 60

Raw files kept for audit

- data/raw/fiscaldata/2026-10-02/mts9_p1.json.gz · sha256 e8ea7282f02f3baa · 54,541 bytes · https://api.fiscaldata.treasury.gov/services/api/fiscal_service/v1/accounting/mts/mts_tabl

mts_receipts Total federal receipts, monthly (MTS table 9)

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, Bureau of the Fiscal Service · <https://fiscaldata.treasury.gov/datasets/monthly-treasury-statement/>

Identifier

mts_table_9: Total (receipts)

Method

JSON API

Units / frequency

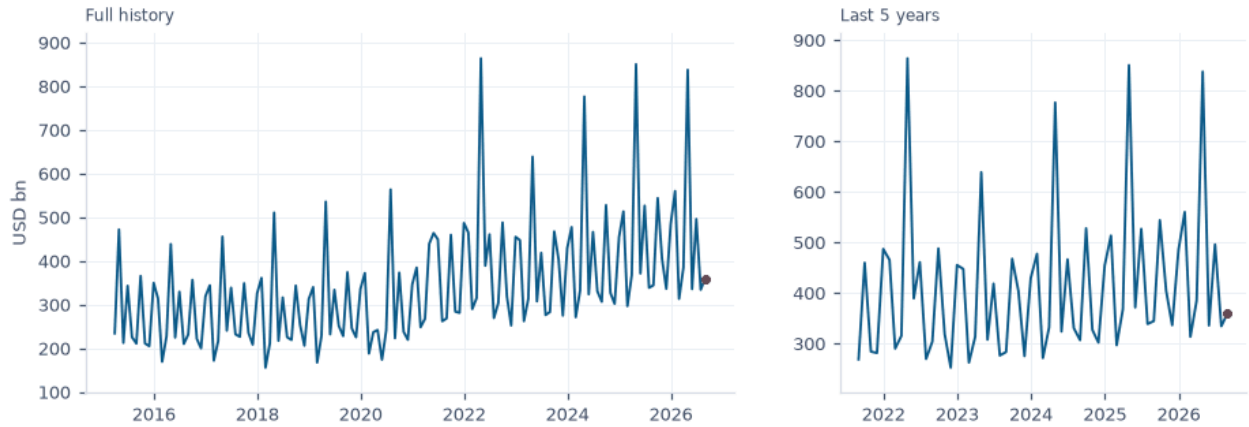
USD bn · M

Extent

2015-03-31 to 2026-08-31 · 138 observations

Latest

Total federal receipts, monthly (MTS table 9) [mts_receipts]



Source: US Treasury, Bureau of the Fiscal Service · mts_table_9: Total (receipts)
138 obs, 2015-03-31 to 2026-08-31 · latest 360 USD bn · method: JSON API

Table 40. mts_receipts Total federal receipts, monthly (MTS table 9): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	138 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 155.6, max 863.6, allowed [50, 2000]
history_depth	OK	warn	first 2015-03-31, expected by 2015-03-31
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-31, 32 days old, limit 60

Raw files kept for audit

- data/raw/fiscaldata/2026-10-02/mts9_p1.json.gz · sha256 e8ea7282f02f3baa · 54,541 bytes · https://api.fiscaldata.treasury.gov/services/api/fiscal_service/v1/accounting/mts/mts_tabl

mts_outlays Total federal outlays, monthly (MTS table 9)

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, Bureau of the Fiscal Service · <https://fiscaldata.treasury.gov/datasets/monthly-treasury-statement/>

Identifier

mts_table_9: Total (outlays)

Method

JSON API

Units / frequency

USD bn · M

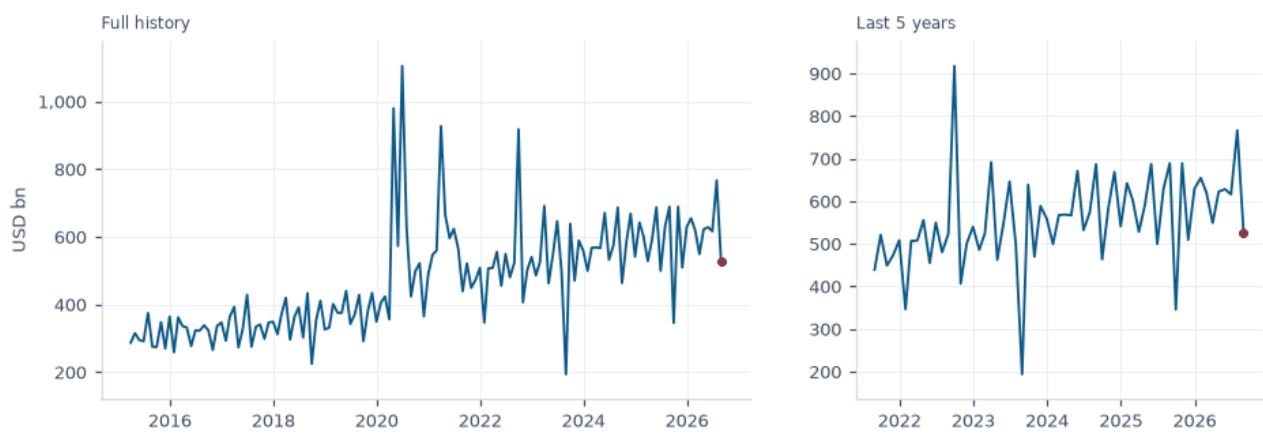
Extent

2015-03-31 to 2026-08-31 · 138 observations

Latest

526.8 (previous 766.3)

Total federal outlays, monthly (MTS table 9) [mts_outlays]



Source: US Treasury, Bureau of the Fiscal Service · mts_table_9: Total (outlays)
138 obs, 2015-03-31 to 2026-08-31 · latest 526.8 USD bn · method: JSON API

Table 41. mts_outlays Total federal outlays, monthly (MTS table 9): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	138 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 193.9, max 1105, allowed [50, 2500]
history_depth	OK	warn	first 2015-03-31, expected by 2015-03-31
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-31, 32 days old, limit 60

Raw files kept for audit

- data/raw/fiscaldata/2026-10-02/mts9_p1.json.gz · sha256 e8ea7282f02f3baa · 54,541 bytes · https://api.fiscaldata.treasury.gov/services/api/fiscal_service/v1/accounting/mts/mts_tabl

interest_to_receipts_bea Federal interest payments / current receipts (BEA, quarterly)

OK VERIFIED by ml on 2026-10-01

Source

Data room (derived)

Identifier

fed_interest_bea / fed_receipts_bea

Method

Derived

Units / frequency

percent · Q

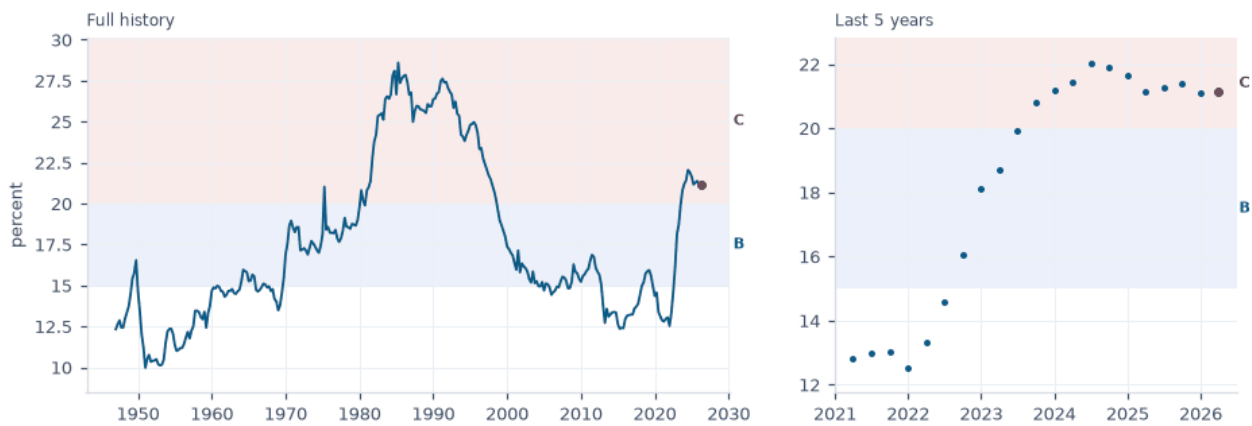
Extent

1947-01-01 to 2026-04-01 · 318 observations

Latest

21.13 (previous 21.1)

Federal interest payments / current receipts (BEA, quarterly) [interest_to_receipts_bea]



Source: Data room (derived) · fed_interest_bea / fed_receipts_bea
318 obs, 1947-01-01 to 2026-04-01 · latest 21.13 percent · method: Derived

Table 42. interest_to_receipts_bea Federal interest payments / current receipts (BEA, quarterly): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	318 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 9.971, max 28.6, allowed [0, 60]
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-04-01, 184 days old, limit 220

interest_to_receipts_mts Net interest / receipts, trailing 12 months (MTS)

OK VERIFIED by ml on 2026-10-01

Source

Data room (derived)

Identifier

sum12(mts_net_interest) / sum12(mts_receipts)

Method

Derived

Units / frequency

percent · M

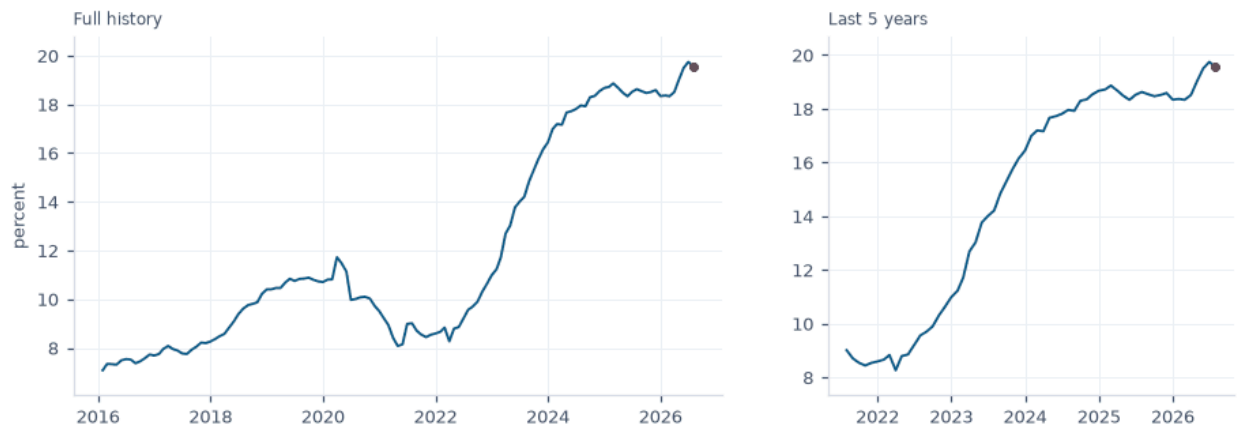
Extent

2016-02-01 to 2026-08-01 · 127 observations

Latest

19.56 (previous 19.75)

Net interest / receipts, trailing 12 months (MTS) [interest_to_receipts_mts]



Source: Data room (derived) · $\text{sum12}(\text{mts_net_interest}) / \text{sum12}(\text{mts_receipts})$
 127 obs, 2016-02-01 to 2026-08-01 · latest 19.56 percent · method: Derived

Table 43. interest_to_receipts_mts Net interest / receipts, trailing 12 months (MTS): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	127 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 7.084, max 19.75, allowed [0, 60]
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-01, 62 days old, limit 75

Row 10: deficit and debt

deficit_pct_gdp_annual Federal surplus (+) / deficit (-), % of GDP, annual

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/FYFSGDA188S>

Identifier

FYFSGDA188S

Method

FRED API

Units / frequency

percent of GDP · A

Extent

1929-01-01 to 2025-01-01 · 97 observations

Latest

-5.769 (previous -6.196)

Publisher title

Federal Surplus or Deficit [-] as Percent of Gross Domestic Product

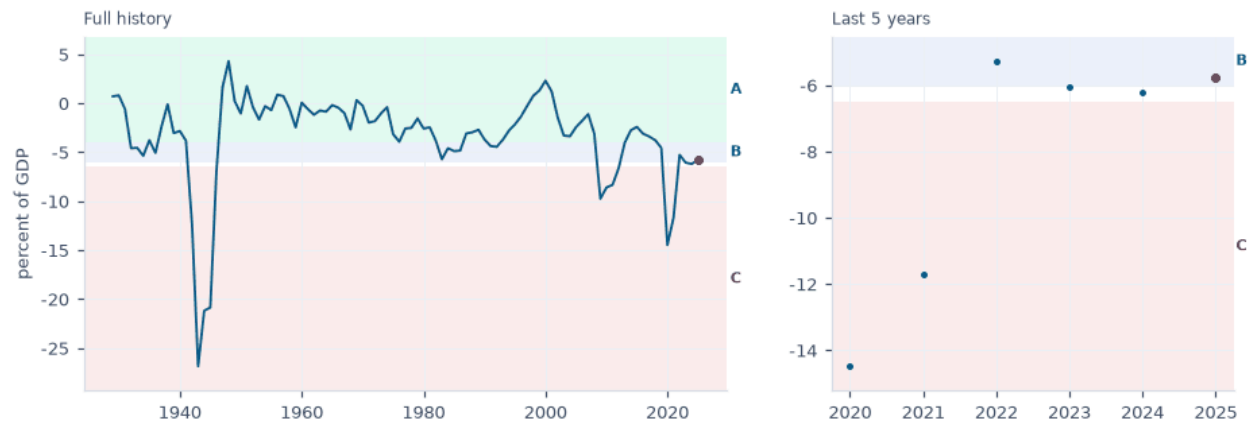
Expected

title contains 'Surplus or Deficit', units contains 'Percent of GDP', freq contains 'A'

Notes

Metadata from cache (refreshed every 6 days).

Federal surplus (+) / deficit (-), % of GDP, annual [deficit_pct_gdp_annual]



Source: Federal Reserve Bank of St. Louis (FRED) · FYFSGDA188S
97 obs, 1929-01-01 to 2025-01-01 · latest -5.769 percent of GDP · method: FRED API

Table 44. deficit_pct_gdp_annual Federal surplus (+) / deficit (-), % of GDP, annual: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	97 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -26.86, max 4.298, allowed [-35, 10]
history_depth	OK	warn	first 1929-01-01, expected by 1929-01-01
frequency	OK	warn	declared A, detected A
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2025-01-01, 639 days old, limit 800
meta_title	OK	critical	FRED title: 'Federal Surplus or Deficit [-] as Percent of Gross Domestic Product'; expected to contain 'Surplus or Deficit'
meta_units	OK	critical	FRED units: 'Percent of GDP'; expected to contain 'Percent of GDP'
meta_frequency	OK	critical	FRED frequency 'A'; expected 'A'

Raw files kept for audit

- data/raw/fred/2026-10-02/FYFSGDA188S.observations.json.gz · sha256 903f8495038da0ab · 9,867 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=FYFSGDA188S&api_key=***&file

debt_pct_gdp Total public debt, % of GDP

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/GFDEGDQ188S>

Identifier

GFDEGDQ188S

Method

FRED API

Units / frequency

percent of GDP · Q

Extent

1966-01-01 to 2026-01-01 · 241 observations

Latest

122.6 (previous 122.6)

Publisher title

Federal Debt: Total Public Debt as Percent of Gross Domestic Product

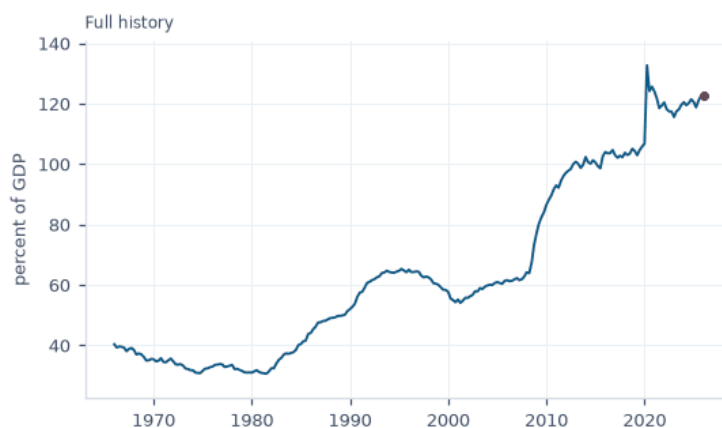
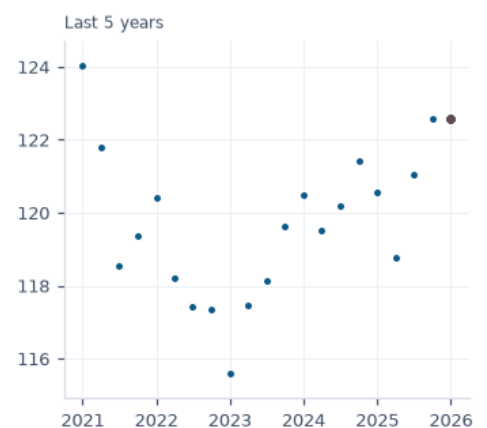
Expected

title contains 'Total Public Debt as Percent of Gross Domestic Product', units contains 'Percent of GDP', freq contains 'Q'

Notes

Metadata from cache (refreshed every 6 days).

Total public debt, % of GDP [debt_pct_gdp]



Source: Federal Reserve Bank of St. Louis (FRED) · GFDEGDQ188S
241 obs, 1966-01-01 to 2026-01-01 · latest 122.6 percent of GDP · method: FRED API

Table 45. debt_pct_gdp Total public debt, % of GDP: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	241 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 30.6, max 132.7, allowed [20, 200]
history_depth	OK	warn	first 1966-01-01, expected by 1966-01-01
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-01-01, 274 days old, limit 300
meta_title	OK	critical	FRED title: 'Federal Debt: Total Public Debt as Percent of Gross Domestic Product'; expected to contain 'Total Public Debt as Percent of Gross Domestic Product'
meta_units	OK	critical	FRED units: 'Percent of GDP'; expected to contain 'Percent of GDP'
meta_frequency	OK	critical	FRED frequency 'Q'; expected 'Q'

Raw files kept for audit

- data/raw/fred/2026-10-02/GFDEGDQ188S.observations.json.gz · sha256 1e7fadfbc1464f6c · 24,175 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=GFDEGDQ188S&api_key=***&file

debt_to_penny Total public debt outstanding (Debt to the Penny)

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, Bureau of the Fiscal Service · <https://fiscaldata.treasury.gov/datasets/debt-to-the-penny/>

Identifier

debt_to_penny: tot_pub_debt_out_amt

Method

JSON API

Units / frequency

USD bn · D

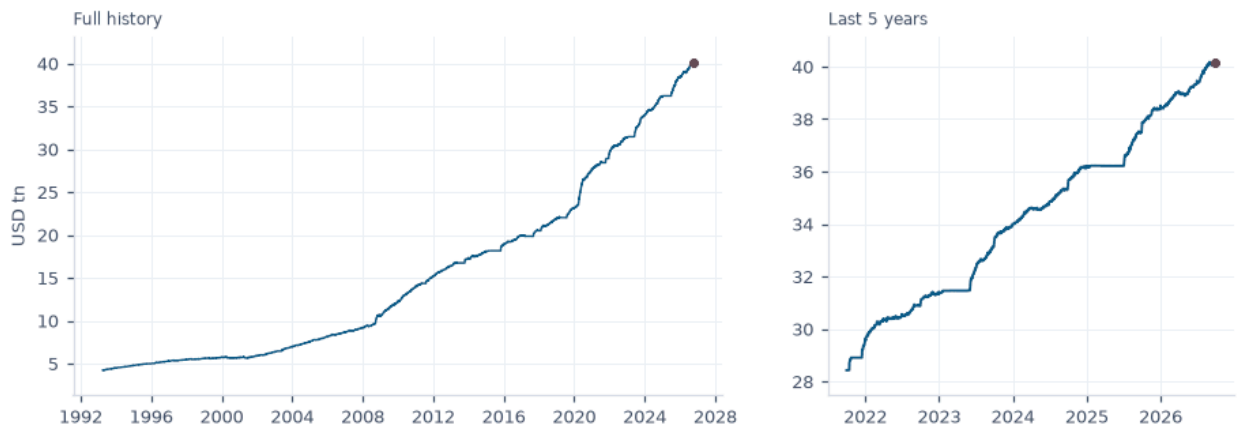
Extent

1993-04-01 to 2026-09-30 · 8,404 observations

Latest

4.017e+04 (previous 4.01e+04)

Total public debt outstanding (Debt to the Penny) [debt_to_penny]



Source: US Treasury, Bureau of the Fiscal Service · debt_to_penny: tot_pub_debt_out_amt
8,404 obs, 1993-04-01 to 2026-09-30 · latest 40.17 USD tn · method: JSON API

Table 46. debt_to_penny Total public debt outstanding (Debt to the Penny): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	8404 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 4226, max 4.018e+04, allowed [1000, 100000]
history_depth	OK	warn	first 1993-04-01, expected by 1993-04-01
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7

Raw files kept for audit

- data/raw/fiscaldata/2026-10-02/debt_to_penny_p1.json.gz · sha256 83bae632fa5d67ce · 601,695 bytes · https://api.fiscaldata.treasury.gov/services/api/fiscal_service/v2/accounting/od/debt_to_p

deficit_12m_pct_gdp Federal deficit, trailing 12 months, % of nominal GDP (MTS / BEA)

OK VERIFIED by ml on 2026-10-01

Source

Data room (derived)

Identifier

sum12(mts_receipts - mts_outlays) / ngdp

Method

Derived

Units / frequency

percent of GDP · M

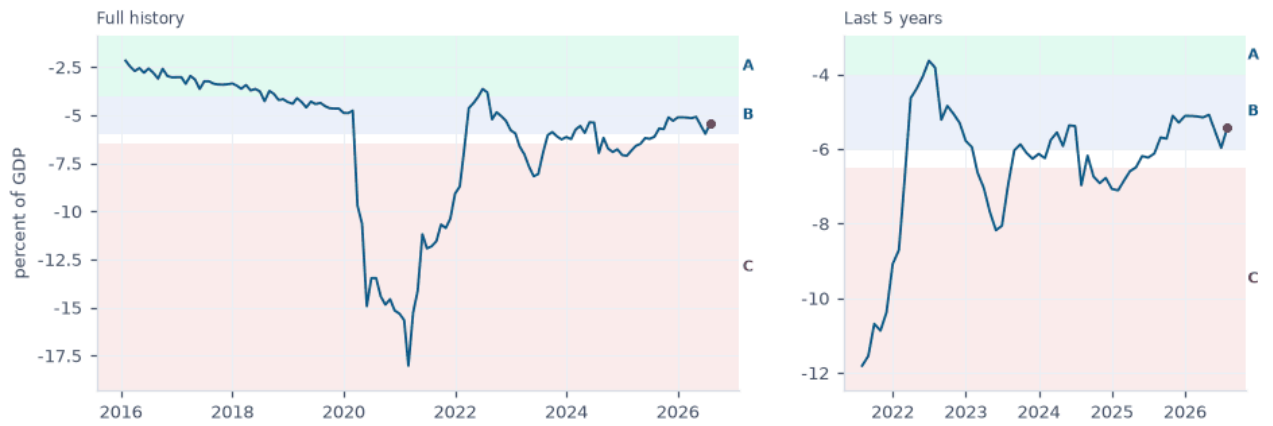
Extent

2016-02-01 to 2026-08-01 · 127 observations

Latest

-5.428 (previous -5.975)

Federal deficit, trailing 12 months, % of nominal GDP (MTS / BEA) [deficit_12m_pct_gdp]



Source: Data room (derived) · $\text{sum12}(\text{mts_receipts} - \text{mts_outlays}) / \text{ngdp}$
 127 obs, 2016-02-01 to 2026-08-01 · latest -5.428 percent of GDP · method: Derived

Table 47. deficit_12m_pct_gdp Federal deficit, trailing 12 months, % of nominal GDP (MTS / BEA): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	127 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -18.03, max -2.172, allowed [-35, 10]
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-01, 62 days old, limit 75

Row 11: auctions

auc10_high_yield 10-year note auction high yield (incl. reopenings, ex-TIPS)

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, TreasuryDirect · <https://www.treasurydirect.gov/auctions/auction-query/>

Identifier

securities/search highYield (10-Year Note)

Method

JSON API

Units / frequency

percent · irregular

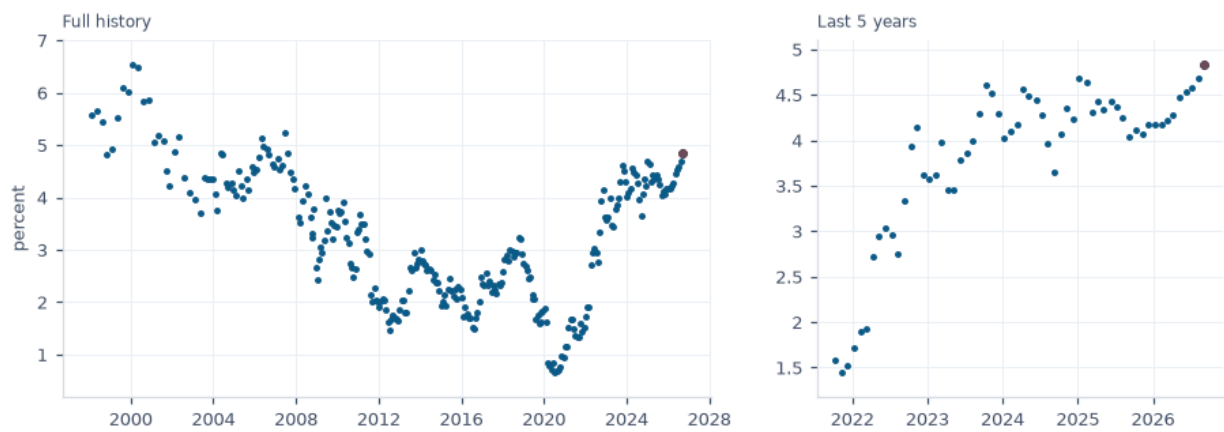
Extent

1998-02-11 to 2026-09-09 · 284 observations

Latest

4.834 (previous 4.683)

10-year note auction high yield (incl. reopenings, ex-TIPS) [auc10_high_yield]



Source: US Treasury, TreasuryDirect · securities/search highYield (10-Year Note)
284 obs, 1998-02-11 to 2026-09-09 · latest 4.834 percent · method: JSON API

Table 48. auc10_high_yield 10-year note auction high yield (incl. reopenings, ex-TIPS): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	284 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.653, max 6.54, allowed [0, 20]
history_depth	OK	warn	first 1998-02-11, expected by 1998-12-31
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-09, 23 days old, limit 45

Raw files kept for audit

- data/raw/treasurydirect/2026-10-02/auctions_Note.json.gz · sha256 cba7f7f17ccf4376 · 6,154,104 bytes · https://www.treasurydirect.gov/TA_WS/securities/search?securityType=Note&format=json&start

auc10_btc 10-year note auction bid-to-cover

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, TreasuryDirect · <https://www.treasurydirect.gov/auctions/auction-query/>

Identifier

securities/search bidToCoverRatio (10-Year Note)

Method

JSON API

Units / frequency

ratio · irregular

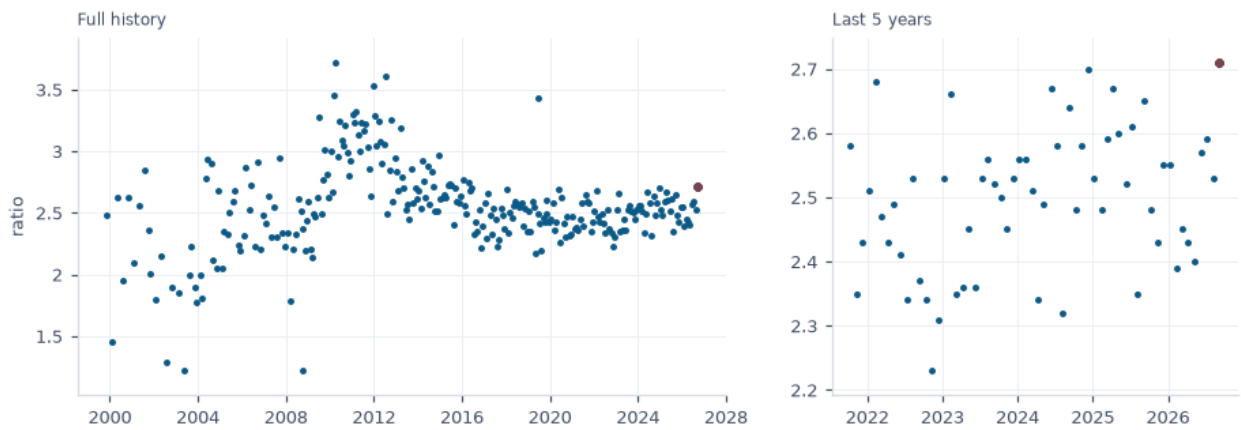
Extent

1999-11-10 to 2026-09-09 · 277 observations

Latest

2.71 (previous 2.53)

10-year note auction bid-to-cover [auc10_btc]



Source: US Treasury, TreasuryDirect · securities/search bidToCoverRatio (10-Year Note)
277 obs, 1999-11-10 to 2026-09-09 · latest 2.71 ratio · method: JSON API

Table 49. auc10_btc 10-year note auction bid-to-cover: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	277 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 1.22, max 3.72, allowed [1, 5]
history_depth	OK	warn	first 1999-11-10, expected by 1999-11-30
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-09, 23 days old, limit 45

Raw files kept for audit

- data/raw/treasurydirect/2026-10-02/auctions_Note.json.gz · sha256 cba7f7f17ccf4376 · 6,154,104 bytes · https://www.treasurydirect.gov/TA_WS/securities/search?securityType=Note&format=json&start

auc10_indirect_share 10-year note auction indirect bidder share of accepted

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, TreasuryDirect · <https://www.treasurydirect.gov/auctions/auction-query/>

Identifier

securities/search indirectBidderAccepted / competitiveAccepted (10-Year Note)

Method

JSON API

Units / frequency

percent · irregular

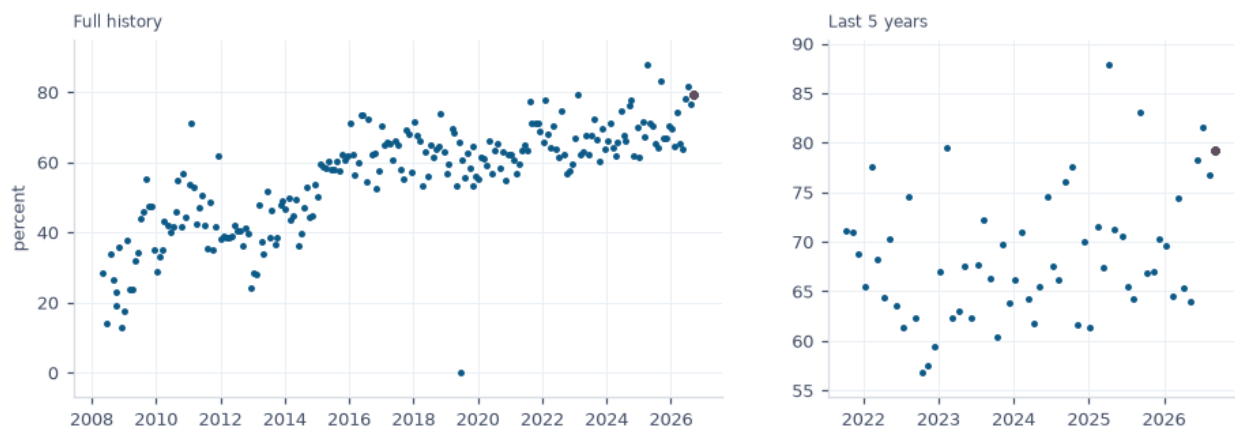
Extent

2008-05-07 to 2026-09-09 · 223 observations

Latest

79.18 (previous 76.73)

10-year note auction indirect bidder share of accepted [auc10_indirect_share]



Source: US Treasury, TreasuryDirect · securities/search indirectBidderAccepted / competitiveAccepted (10-Year Note)
223 obs, 2008-05-07 to 2026-09-09 · latest 79.18 percent · method: JSON API

Table 50. auc10_indirect_share 10-year note auction indirect bidder share of accepted: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	223 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0, max 87.9, allowed [0, 100]
history_depth	OK	warn	first 2008-05-07, expected by 2009-12-31
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-09, 23 days old, limit 45

Raw files kept for audit

- data/raw/treasurydirect/2026-10-02/auctions_Note.json.gz · sha256 cba7f7f17ccf4376 · 6,154,104 bytes · https://www.treasurydirect.gov/TA_WS/securities/search?securityType=Note&format=json&start

auc30_high_yield 30-year bond auction high yield (incl. reopenings, ex-TIPS)

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, TreasuryDirect · <https://www.treasurydirect.gov/auctions/auction-query/>

Identifier

securities/search highYield (30-Year Bond)

Method

JSON API

Units / frequency

percent · irregular

Extent

1998-02-12 to 2026-09-10 · 230 observations

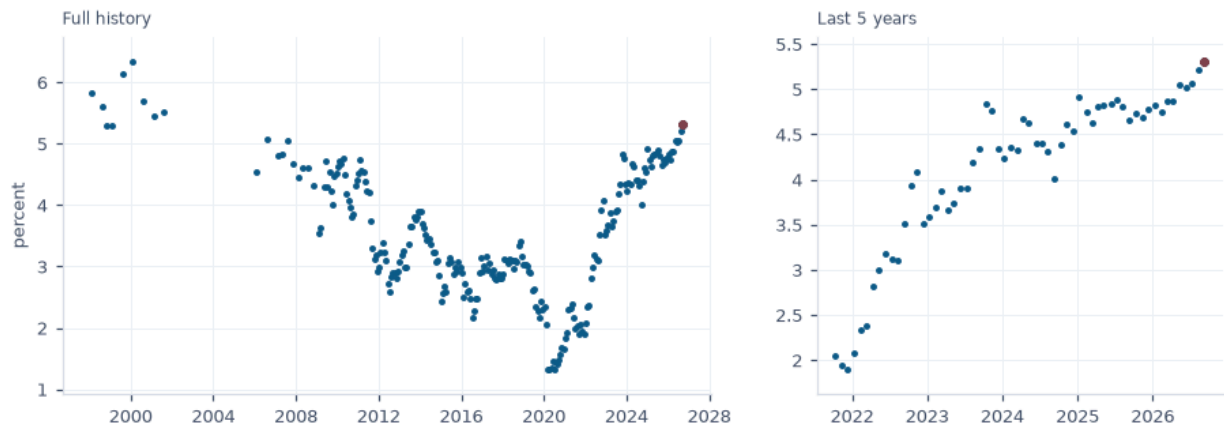
Latest

5.308 (previous 5.216)

Notes

No 30-year auctions Aug 2001-Feb 2006 (bond suspended Oct 2001). Includes bonds first issued as 29-Year 9-Month or 30-Year 3-Month.

30-year bond auction high yield (incl. reopenings, ex-TIPS) [auc30_high_yield]



Source: US Treasury, TreasuryDirect · securities/search highYield (30-Year Bond)
230 obs, 1998-02-12 to 2026-09-10 · latest 5,308 percent · method: JSON API

Table 51. auc30_high_yield 30-year bond auction high yield (incl. reopenings, ex-TIPS): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	230 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 1.32, max 6.34, allowed [0, 20]
history_depth	OK	warn	first 1998-02-12, expected by 1998-12-31
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-10, 22 days old, limit 45

Raw files kept for audit

- data/raw/treasurydirect/2026-10-02/auctions_Bond.json.gz · sha256 83cffe6506834d7f · 1,327,323 bytes · https://www.treasurydirect.gov/TA_WS/securities/search?securityType=Bond&format=json&start

auc30_btc 30-year bond auction bid-to-cover

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, TreasuryDirect · <https://www.treasurydirect.gov/auctions/auction-query/>

Identifier

securities/search bidToCoverRatio (30-Year Bond)

Method

JSON API

Units / frequency

ratio · irregular

Extent

2000-02-10 to 2026-09-10 · 225 observations

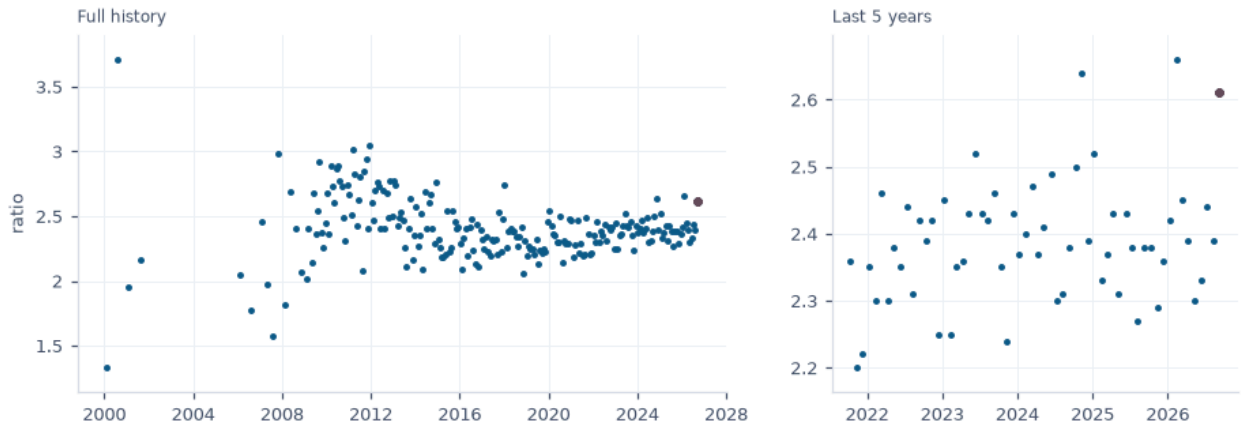
Latest

2.61 (previous 2.39)

Notes

No 30-year auctions Aug 2001-Feb 2006 (bond suspended Oct 2001). Includes bonds first issued as 29-Year 9-Month or 30-Year 3-Month.

30-year bond auction bid-to-cover [auc30_btc]



Source: US Treasury, TreasuryDirect · securities/search bidToCoverRatio (30-Year Bond)
225 obs, 2000-02-10 to 2026-09-10 · latest 2.61 ratio · method: JSON API

Table 52. auc30_btc 30-year bond auction bid-to-cover: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	225 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 1.33, max 3.71, allowed [1, 5]
history_depth	OK	warn	first 2000-02-10, expected by 2001-02-28
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-10, 22 days old, limit 45

Raw files kept for audit

- data/raw/treasurydirect/2026-10-02/auctions_Bond.json.gz · sha256 83cffe6506834d7f · 1,327,323 bytes · https://www.treasurydirect.gov/TA_WS/securities/search?securityType=Bond&format=json&start

auc30_indirect_share 30-year bond auction indirect bidder share of accepted

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, TreasuryDirect · <https://www.treasurydirect.gov/auctions/auction-query/>

Identifier

securities/search indirectBidderAccepted / competitiveAccepted (30-Year Bond)

Method

JSON API

Units / frequency

percent · irregular

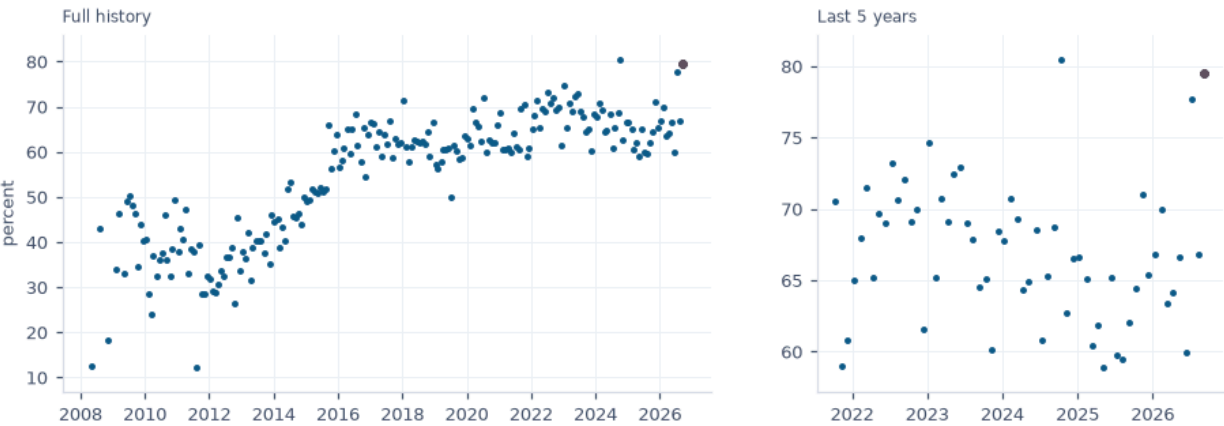
Extent

2008-05-08 to 2026-09-10 · 214 observations

Latest

79.48 (previous 66.85)

30-year bond auction indirect bidder share of accepted [auc30_indirect_share]



Source: US Treasury, TreasuryDirect · securities/search indirectBidderAccepted / competitiveAccepted (30-Year Bond)
214 obs, 2008-05-08 to 2026-09-10 · latest 79.48 percent · method: JSON API

Table 53. auc30_indirect_share 30-year bond auction indirect bidder share of accepted: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	214 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 12.16, max 80.47, allowed [0, 100]
history_depth	OK	warn	first 2008-05-08, expected by 2009-12-31
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-10, 22 days old, limit 45

Raw files kept for audit

- data/raw/treasurydirect/2026-10-02/auctions_Bond.json.gz · sha256 83cffe6506834d7f · 1,327,323 bytes · https://www.treasurydirect.gov/TA_WS/securities/search?securityType=Bond&format=json&start

auc10_tail_proxy 10-year auction high yield minus same-day DGS10 (proxy tail)

OK VERIFIED by ml on 2026-10-01

Source

Data room (derived)

Identifier

auc10_high_yield - ust10y (auction date)

Method

Derived

Units / frequency

bp · irregular

Extent

1998-02-11 to 2026-09-09 · 284 observations

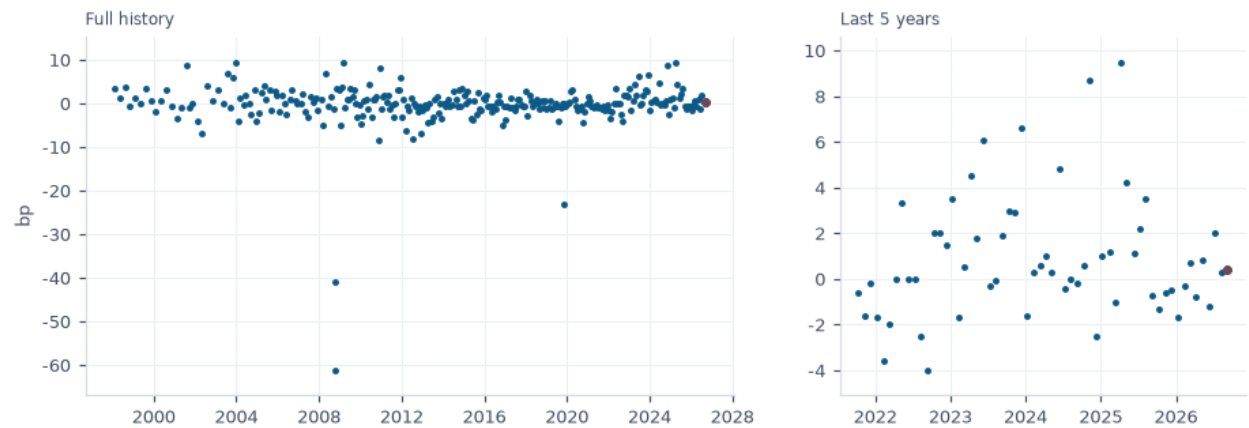
Latest

0.4 (previous 0.3)

Notes

True tail needs the when-issued yield at 1pm (paid data). DGS10 is an end-of-day constant-maturity yield, so this is a noisy proxy. Extremes are real: 9 Oct 2008 (crisis) was -61bp.

10-year auction high yield minus same-day DGS10 (proxy tail) [auc10_tail_proxy]



Source: Data room (derived) · auc10_high_yield - ust10y (auction date) PROXY
284 obs, 1998-02-11 to 2026-09-09 · latest 0.4 bp · method: Derived

Table 54. auc10_tail_proxy 10-year auction high yield minus same-day DGS10 (proxy tail): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	284 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -61.2, max 9.5, allowed [-100, 100]
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-09, 23 days old, limit 45

auc30_tail_proxy 30-year auction high yield minus same-day DGS30 (proxy tail)

OK VERIFIED by ml on 2026-10-01

Source

Data room (derived)

Identifier

auc30_high_yield - ust30y (auction date)

Method

Derived

Units / frequency

bp · irregular

Extent

1998-02-12 to 2026-09-10 · 230 observations

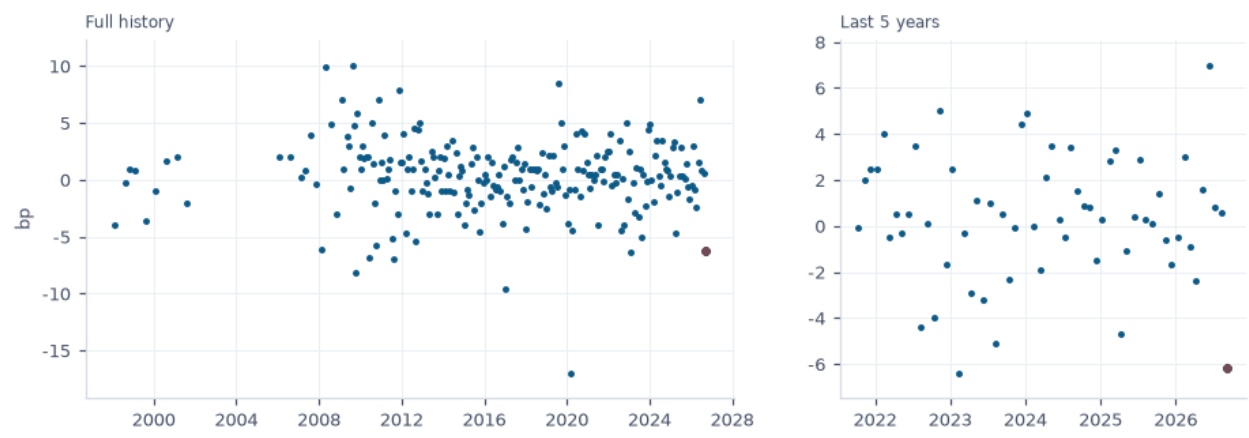
Latest

-6.2 (previous 0.6)

Notes

Same caveat as the 10-year proxy tail.

30-year auction high yield minus same-day DGS30 (proxy tail) [auc30_tail_proxy]



Source: Data room (derived) · auc30_high_yield - ust30y (auction date) PROXY
230 obs, 1998-02-12 to 2026-09-10 · latest -6.2 bp · method: Derived

Table 55. auc30_tail_proxy 30-year auction high yield minus same-day DGS30 (proxy tail): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	230 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -17, max 10.1, allowed [-60, 60]
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-10, 22 days old, limit 45

Row 12: foreign holdings

tic_foreign_total Foreign holdings of US Treasuries, total (TIC)

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, Treasury International Capital · https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/slt_table5.txt

Identifier

slt_table5 + mfhhis01: Grand Total

Method

TXT parse

Units / frequency

USD bn · M

Extent

2000-03-01 to 2026-07-01 · 317 observations

Latest

9,248 (previous 9,298)

Foreign holdings of US Treasuries, total (TIC) [tic_foreign_total]



Source: US Treasury, Treasury International Capital · slt_table5 + mfhhis01: Grand Total
317 obs, 2000-03-01 to 2026-07-01 · latest 9248 USD bn · method: TXT parse

Table 56. tic_foreign_total Foreign holdings of US Treasuries, total (TIC): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	317 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 975.9, max 9487, allowed [500, 20000]
history_depth	OK	warn	first 2000-03-01, expected by 2000-03-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-07-01, 93 days old, limit 110

Raw files kept for audit

- data/raw/tic/2026-10-02/slt_table5.txt.gz · sha256 17386d290389cda8 · 3,802 bytes · https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/slt_table5.tx
- data/raw/tic/2026-10-02/mfhhis01.txt.gz · sha256 a10bd7817d1d8cc9 · 99,490 bytes · <https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/mfhhis01.txt>

tic_foreign_official Foreign official holdings of US Treasuries (TIC)

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, Treasury International Capital · https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/slt_table5.txt

Identifier

slt_table5 + mfhhis01: Foreign Official

Method

TXT parse

Units / frequency

USD bn · M

Extent

2000-03-01 to 2026-07-01 · 317 observations

Latest

3,773 (previous 3,778)

Foreign official holdings of US Treasuries (TIC) [tic_foreign_official]



Source: US Treasury, Treasury International Capital · slt_table5 + mfhhis01: Foreign Official
317 obs, 2000-03-01 to 2026-07-01 · latest 3773 USD bn · method: TXT parse

Table 57. tic_foreign_official Foreign official holdings of US Treasuries (TIC): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	317 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 586.9, max 4265, allowed [300, 10000]
history_depth	OK	warn	first 2000-03-01, expected by 2000-03-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-07-01, 93 days old, limit 110

Raw files kept for audit

- data/raw/tic/2026-10-02/slt_table5.txt.gz · sha256 17386d290389cda8 · 3,802 bytes · https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/slt_table5.tx
- data/raw/tic/2026-10-02/mfhhis01.txt.gz · sha256 a10bd7817d1d8cc9 · 99,490 bytes · <https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/mfhhis01.txt>

tic_japan Japan holdings of US Treasuries (TIC)

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, Treasury International Capital · https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/slt_table5.txt

Identifier

slt_table5 + mfhhis01: Japan

Method

TXT parse

Units / frequency

USD bn · M

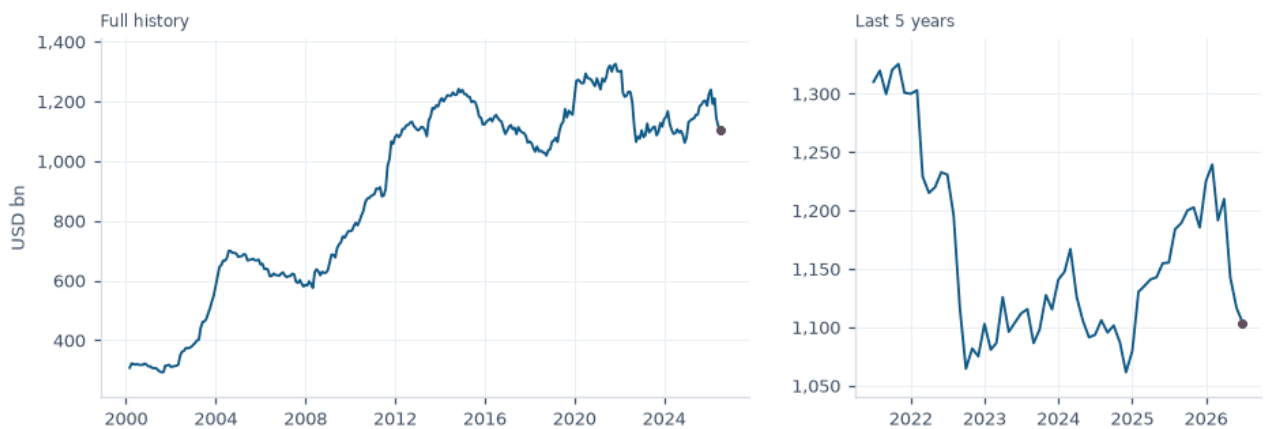
Extent

2000-03-01 to 2026-07-01 · 317 observations

Latest

1,104 (previous 1,117)

Japan holdings of US Treasuries (TIC) [tic_japan]



Source: US Treasury, Treasury International Capital · slt_table5 + mfhhis01: Japan
317 obs, 2000-03-01 to 2026-07-01 · latest 1104 USD bn · method: TXT parse

Table 58. tic_japan Japan holdings of US Treasuries (TIC): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	317 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 292.9, max 1326, allowed [100, 3000]
history_depth	OK	warn	first 2000-03-01, expected by 2000-03-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-07-01, 93 days old, limit 110

Raw files kept for audit

- data/raw/tic/2026-10-02/slt_table5.txt.gz · sha256 17386d290389cda8 · 3,802 bytes · https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/slt_table5.tx
- data/raw/tic/2026-10-02/mfhhis01.txt.gz · sha256 a10bd7817d1d8cc9 · 99,490 bytes · <https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/mfhhis01.txt>

tic_china China (mainland) holdings of US Treasuries (TIC)

OK VERIFIED by ml on 2026-10-01

Source

Identifier

slt_table5 + mfhhis01: China, Mainland

Method

TXT parse

Units / frequency

USD bn · M

Extent

2000-03-01 to 2026-07-01 · 317 observations

Latest

618 (previous 633.4)

China (mainland) holdings of US Treasuries (TIC) [tic_china]



Source: US Treasury, Treasury International Capital · slt_table5 + mfhhis01: China, Mainland
317 obs, 2000-03-01 to 2026-07-01 · latest 618 USD bn · method: TXT parse

Table 59. tic_china China (mainland) holdings of US Treasuries (TIC): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	317 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 58.9, max 1317, allowed [20, 3000]
history_depth	OK	warn	first 2000-03-01, expected by 2000-03-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-07-01, 93 days old, limit 110

Raw files kept for audit

- data/raw/tic/2026-10-02/slt_table5.txt.gz · sha256 17386d290389cda8 · 3,802 bytes · https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/slt_table5.tx
- data/raw/tic/2026-10-02/mfhhis01.txt.gz · sha256 a10bd7817d1d8cc9 · 99,490 bytes · <https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/mfhhis01.txt>

foreign_held_debt_z1 Federal debt held by foreign and international investors (quarterly)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/FDHBFIN>

Identifier

FDHBFIN

Method

FRED API

Units / frequency

USD bn · Q

Extent

1970-01-01 to 2026-01-01 · 225 observations

Latest

9,355 (previous 9,270)

Publisher title

Federal Debt Held by Foreign and International Investors

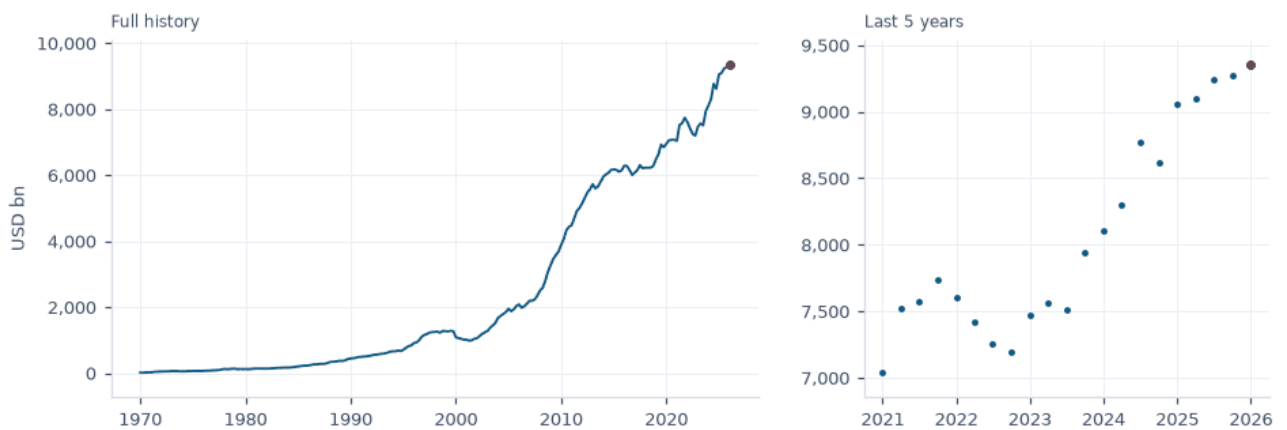
Expected

title contains 'Foreign and International Investors', units contains 'Billions of Dollars', freq contains 'Q'

Notes

Metadata from cache (refreshed every 6 days).

Federal debt held by foreign and international investors (quarterly) [foreign_held_debt_z1]



Source: Federal Reserve Bank of St. Louis (FRED) · FDHBFIN
225 obs, 1970-01-01 to 2026-01-01 · latest 9355 USD bn · method: FRED API

Table 60. foreign_held_debt_z1 Federal debt held by foreign and international investors (quarterly): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	225 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 12.4, max 9355, allowed [10, 20000]
history_depth	OK	warn	first 1970-01-01, expected by 1970-01-01
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-01-01, 274 days old, limit 300
meta_title	OK	critical	FRED title: 'Federal Debt Held by Foreign and International Investors'; expected to contain 'Foreign and International Investors'
meta_units	OK	critical	FRED units: 'Billions of Dollars'; expected to contain 'Billions of Dollars'
meta_frequency	OK	critical	FRED frequency 'Q'; expected 'Q'

Raw files kept for audit

- data/raw/fred/2026-10-02/FDHBFIN.observations.json.gz · sha256 d4138c4295c79abe · 21,961 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=FDHBFIN&api_key=***&file_type=

foreign_official_share Foreign official holdings / marketable Treasury debt

OK VERIFIED by ml on 2026-10-01

Source

Data room (derived)

Identifier

tic_foreign_official / mspd_marketable

Method

Derived

Units / frequency

percent · M

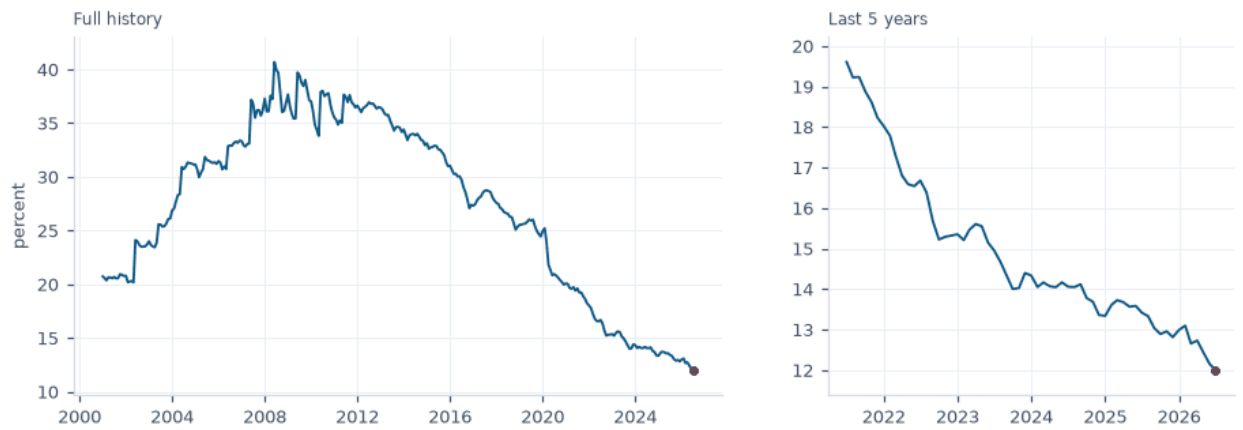
Extent

2001-01-01 to 2026-07-01 · 307 observations

Latest

12 (previous 12.15)

Foreign official holdings / marketable Treasury debt [foreign_official_share]



Source: Data room (derived) · tic_foreign_official / mspd_marketable
307 obs, 2001-01-01 to 2026-07-01 · latest 12 percent · method: Derived

Table 61. foreign_official_share Foreign official holdings / marketable Treasury debt: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	307 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 12, max 40.69, allowed [3, 60]
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-07-01, 93 days old, limit 110

Row 13: issuance mix

mspd_bills Marketable Treasury bills outstanding (MSPD)

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, Bureau of the Fiscal Service · <https://fiscaldata.treasury.gov/datasets/monthly-statement-public-debt/>

Identifier

mspd_table_1: Marketable / Bills

Method

JSON API

Units / frequency

USD bn · M

Extent

2001-01-31 to 2026-08-31 · 308 observations

Latest

7,248 (previous 6,989)

Marketable Treasury bills outstanding (MSPD) [mspd_bills]



Source: US Treasury, Bureau of the Fiscal Service · mspd_table_1: Marketable / Bills
308 obs, 2001-01-31 to 2026-08-31 · latest 7248 USD bn · method: JSON API

Table 62. mspd_bills Marketable Treasury bills outstanding (MSPD): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	308 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 618.5, max 7248, allowed [100, 30000]
history_depth	OK	warn	first 2001-01-31, expected by 2001-01-31
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-31, 32 days old, limit 60

Raw files kept for audit

- data/raw/fiscaldata/2026-10-02/mspd_p1.json.gz · sha256 2ff77e3b15559175 · 640,881 bytes · https://api.fiscaldata.treasury.gov/services/api/fiscal_service/v1/debt/mspd/mspd_table_1?

mspd_marketable Total marketable Treasury debt outstanding (MSPD)

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, Bureau of the Fiscal Service · <https://fiscaldata.treasury.gov/datasets/monthly-statement-public-debt/>

Identifier

mspd_table_1: Total Marketable

Method

JSON API

Units / frequency

USD bn · M

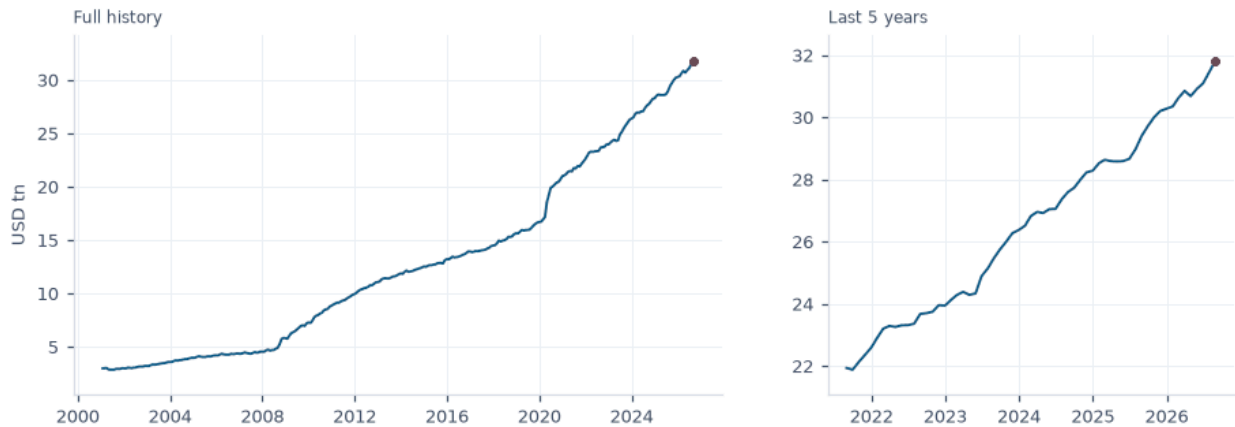
Extent

2001-01-31 to 2026-08-31 · 308 observations

Latest

3.183e+04 (previous 3.146e+04)

Total marketable Treasury debt outstanding (MSPD) [mspd_marketable]



Source: US Treasury, Bureau of the Fiscal Service · mspd_table_1: Total Marketable
308 obs, 2001-01-31 to 2026-08-31 · latest 31.83 USD bn · method: JSON API

Table 63. mspd_marketable Total marketable Treasury debt outstanding (MSPD): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	308 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 2853, max 3.183e+04, allowed [1000, 100000]
history_depth	OK	warn	first 2001-01-31, expected by 2001-01-31
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-31, 32 days old, limit 60

Raw files kept for audit

- data/raw/fiscaldata/2026-10-02/mspd_p1.json.gz · sha256 2ff77e3b15559175 · 640,881 bytes · https://api.fiscaldata.treasury.gov/services/api/fiscal_service/v1/debt/mspd/mspd_table_1?

mspd_total_debt Total public debt outstanding, month-end (MSPD)

OK VERIFIED by ml on 2026-10-01

Source

US Treasury, Bureau of the Fiscal Service · <https://fiscaldata.treasury.gov/datasets/monthly-statement-public-debt/>

Identifier

mspd_table_1: Total Public Debt Outstanding

Method

JSON API

Units / frequency

USD bn · M

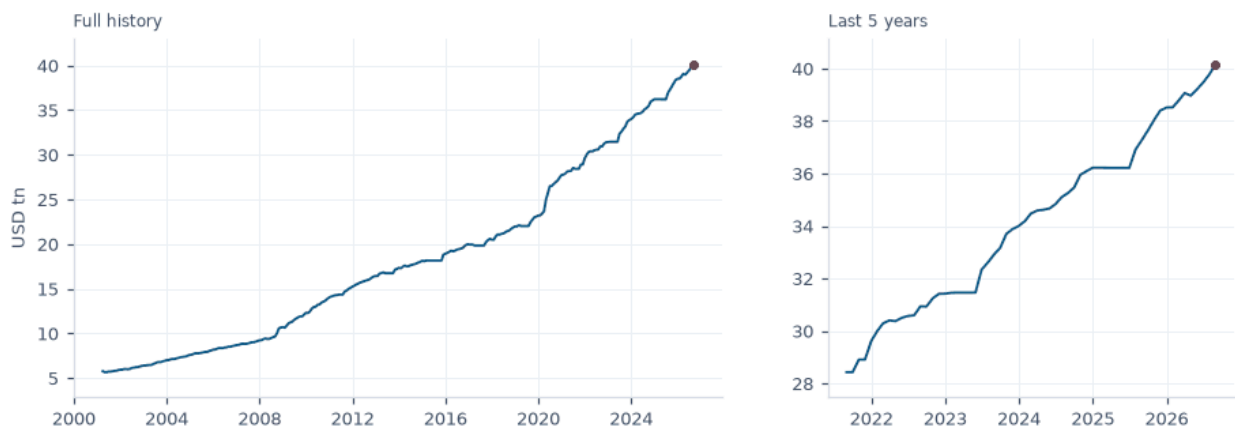
Extent

2001-03-31 to 2026-08-31 · 306 observations

Latest

4.018e+04 (previous 3.977e+04)

Total public debt outstanding, month-end (MSPD) [mspd_total_debt]



Source: US Treasury, Bureau of the Fiscal Service · mspd_table_1: Total Public Debt Outstanding
306 obs, 2001-03-31 to 2026-08-31 · latest 40.18 USD tn · method: JSON API

Table 64. mspd_total_debt Total public debt outstanding, month-end (MSPD): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	306 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 5656, max 4.018e+04, allowed [1000, 100000]
history_depth	OK	warn	first 2001-03-31, expected by 2001-03-31
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-31, 32 days old, limit 60

Raw files kept for audit

- data/raw/fiscaldata/2026-10-02/mspd_p1.json.gz · sha256 2ff77e3b15559175 · 640,881 bytes · https://api.fiscaldata.treasury.gov/services/api/fiscal_service/v1/debt/mspd/mspd_table_1?

bills_share Bills share of marketable Treasury debt

OK VERIFIED by ml on 2026-10-01

Source

Data room (derived)

Identifier

mspd_bills / mspd_marketable

Method

Derived

Units / frequency

percent · M

Extent

2001-01-31 to 2026-08-31 · 308 observations

Latest

22.77 (previous 22.22)

Bills share of marketable Treasury debt [bills_share]



Source: Data room (derived) · mspd_bills / mspd_marketable
308 obs, 2001-01-31 to 2026-08-31 · latest 22.77 percent · method: Derived

Table 65. bills_share Bills share of marketable Treasury debt: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	308 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 9.943, max 34.41, allowed [5, 60]
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-31, 32 days old, limit 60

Row 14: Japan

jgb10y Japan 10-year JGB yield (MoF)

OK VERIFIED by ml on 2026-10-01

Source

Ministry of Finance, Japan · https://www.mof.go.jp/english/policy/jgbs/reference/interest_rate/index.htm

Identifier

jgbcme 10Y

Method

CSV download

Units / frequency

percent · D

Extent

1986-07-05 to 2026-10-01 · 9,949 observations

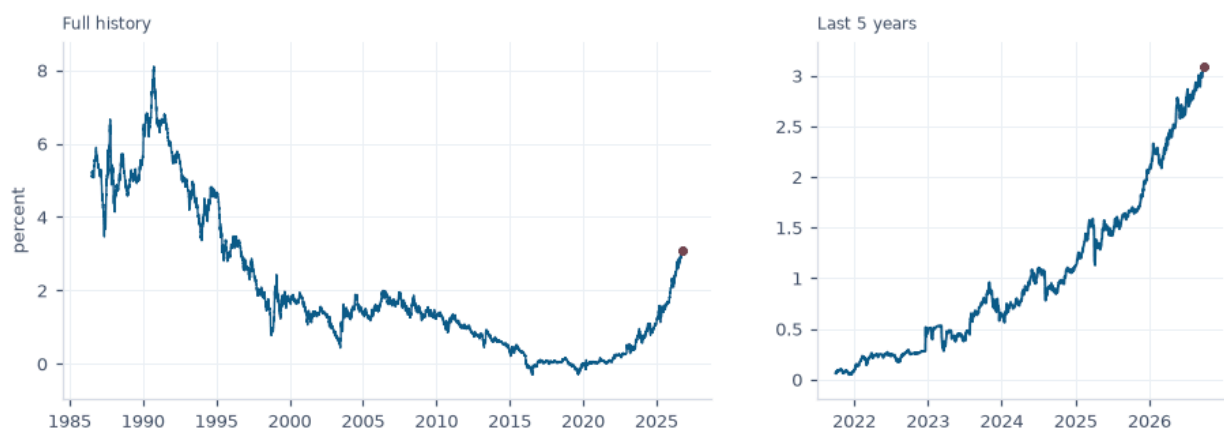
Latest

3.092 (previous 3.057)

Notes

Golden Week 2019 was a 10-day holiday (imperial succession).

Japan 10-year JGB yield (MoF) [jgb10y]



Source: Ministry of Finance, Japan · jgbcme 10Y
9,949 obs, 1986-07-05 to 2026-10-01 · latest 3.092 percent · method: CSV download

Table 66. jgb10y Japan 10-year JGB yield (MoF): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	9949 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -0.297, max 8.105, allowed [-1, 12]
history_depth	OK	warn	first 1986-07-05, expected by 1986-07-05
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-10-01, 1 days old, limit 10

Raw files kept for audit

- data/raw/mof_japan/2026-10-02/jgbcme_all.csv.gz · sha256 ffeb33ecaf557f4e · 1,195,548 bytes · https://www.mof.go.jp/english/policy/jgbs/reference/interest_rate/historical/jgbcme_all.cs
- data/raw/mof_japan/2026-10-02/jgbcme.csv.gz · sha256 aa50f3d1a564a1a3 · 346 bytes · https://www.mof.go.jp/english/policy/jgbs/reference/interest_rate/jgbcme.csv

jgb30y Japan 30-year JGB yield (MoF)

OK VERIFIED by ml on 2026-10-01

Source

Ministry of Finance, Japan · https://www.mof.go.jp/english/policy/jgbs/reference/interest_rate/index.htm

Identifier

jgbcme 30Y

Method

CSV download

Units / frequency

percent · D

Extent

1999-09-02 to 2026-10-01 · 6,633 observations

Latest

4.122 (previous 4.098)

Notes

Golden Week 2019 was a 10-day holiday (imperial succession).

Japan 30-year JGB yield (MoF) [jgb30y]



Source: Ministry of Finance, Japan · jgbcme 30Y
6,633 obs, 1999-09-02 to 2026-10-01 · latest 4.122 percent · method: CSV download

Table 67. jgb30y Japan 30-year JGB yield (MoF): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	6633 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.042, max 4.131, allowed [-1, 12]
history_depth	OK	warn	first 1999-09-02, expected by 2000-01-04
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-10-01, 1 days old, limit 10

Raw files kept for audit

- data/raw/mof_japan/2026-10-02/jgbcme_all.csv.gz · sha256 ffeb33ecaf557f4e · 1,195,548 bytes · https://www.mof.go.jp/english/policy/jgbs/reference/interest_rate/historical/jgbcme_all.cs
- data/raw/mof_japan/2026-10-02/jgbcme.csv.gz · sha256 aa50f3d1a564a1a3 · 346 bytes · https://www.mof.go.jp/english/policy/jgbs/reference/interest_rate/jgbcme.csv

jgb10y_oecd Japan 10-year government bond yield (OECD monthly, via FRED)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/IRLTLT01JPM156N>

Identifier

IRLTLT01JPM156N

Method

FRED API

Units / frequency

percent · M

Extent

1989-01-01 to 2026-08-01 · 452 observations

Latest

2.94 (previous 2.79)

Publisher title

Interest Rates: Long-Term Government Bond Yields: 10-Year: Main (Including Benchmark) for Japan

Expected

title contains 'Japan', units contains 'Percent', freq contains 'M'

Notes

Metadata from cache (refreshed every 6 days).

Japan 10-year government bond yield (OECD monthly, via FRED) [jgb10y_oecd]



Source: Federal Reserve Bank of St. Louis (FRED) · IRLTL01JPM156N
452 obs, 1989-01-01 to 2026-08-01 · latest 2.94 percent · method: FRED API

Table 68. jgb10y_oecd Japan 10-year government bond yield (OECD monthly, via FRED): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	452 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -0.28, max 8.032, allowed [-1, 12]
history_depth	OK	warn	first 1989-01-01, expected by 1989-01-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-01, 62 days old, limit 75
meta_title	OK	critical	FRED title: 'Interest Rates: Long-Term Government Bond Yields: 10-Year: Main (Including Benchmark) for Japan'; expected to contain 'Japan'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'M'; expected 'M'

Raw files kept for audit

- data/raw/fred/2026-10-02/IRLTLT01JPM156N.observations.json.gz · sha256 02f0130119e1796d · 43,552 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=IRLTLT01JPM156N&api_key=***&

usdjpy Japanese yen per US dollar

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/DEXJPUS>

Identifier

DEXJPUS

Method

FRED API

Units / frequency

JPY per USD · D

Extent

1971-01-04 to 2026-09-25 · 13,970 observations

Latest

157.2 (previous 158.9)

Publisher title

Japanese Yen to U.S. Dollar Spot Exchange Rate

Expected

title contains 'Japanese Yen to U.S. Dollar', units contains 'Japanese Yen', freq contains 'D'

Notes

FX markets closed after the Nixon shock, Aug 1971. Metadata from cache (refreshed every 6 days).

Japanese yen per US dollar [usdjpy]



Source: Federal Reserve Bank of St. Louis (FRED) · DEXJPUS
13,970 obs, 1971-01-04 to 2026-09-25 · latest 157.2 JPY per USD · method: FRED API

Table 69. usdjpy Japanese yen per US dollar: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	13970 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 75.72, max 358.4, allowed [50, 400]
history_depth	OK	warn	first 1971-01-04, expected by 1971-01-04
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-25, 7 days old, limit 10
meta_title	OK	critical	FRED title: 'Japanese Yen to U.S. Dollar Spot Exchange Rate'; expected to contain 'Japanese Yen to U.S. Dollar'
meta_units	OK	critical	FRED units: 'Japanese Yen to One U.S. Dollar'; expected to contain 'Japanese Yen'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/DEXJPUS.observations.json.gz · sha256 e0a0931d063861b6 · 1,411,138 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=DEXJPUS&api_key=***&file_type

Row 15: global long ends

acgb10y_rba Australia 10-year government bond yield (RBA F2, daily)

FALLBACK UNVERIFIED

Source

Reserve Bank of Australia · <https://www.rba.gov.au/statistics/tables/#interest-rates>

Identifier

F2: FCMYGBAG10D

Method

CSV download

Units / frequency

percent · D

Extent

to · observations

Latest

(previous)

Notes

RBA's site returns HTTP 403 to scripted requests (Akamai). The OECD monthly series is used instead. HTTP 403 from <https://www.rba.gov.au/statistics/tables/csv/f2-data.csv>. Using acgb10y_oecd instead.

Error

HTTP 403 from <https://www.rba.gov.au/statistics/tables/csv/f2-data.csv>. Using acgb10y_oecd instead.

acgb10y_oecd Australia 10-year government bond yield (OECD monthly, via FRED)

OK **VERIFIED** by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/IRLTLT01AUM156N>

Identifier

IRLTLT01AUM156N

Method

FRED API

Units / frequency

percent · M

Extent

1969-07-01 to 2026-08-01 · 686 observations

Latest

5.015 (previous 4.919)

Publisher title

Interest Rates: Long-Term Government Bond Yields: 10-Year: Main (Including Benchmark) for Australia

Expected

title contains 'Australia', units contains 'Percent', freq contains 'M'

Notes

Metadata from cache (refreshed every 6 days).

Australia 10-year government bond yield (OECD monthly, via FRED) [acgb10y_oecd]



Source: Federal Reserve Bank of St. Louis (FRED) · IRLTLT01AUM156N
686 obs, 1969-07-01 to 2026-08-01 · latest 5.015 percent · method: FRED API

Table 70. acgb10y_oecd Australia 10-year government bond yield (OECD monthly, via FRED): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	686 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.802, max 16.5, allowed [-1, 20]
history_depth	OK	warn	first 1969-07-01, expected by 1969-07-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-01, 62 days old, limit 75
meta_title	OK	critical	FRED title: 'Interest Rates: Long-Term Government Bond Yields: 10-Year: Main (Including Benchmark) for Australia'; expected to contain 'Australia'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'M'; expected 'M'

Raw files kept for audit

- data/raw/fred/2026-10-02/IRLTLT01AUM156N.observations.json.gz · sha256 6fa8cc0a4de9746a · 67,302 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=IRLTLT01AUM156N&api_key=***&

bund10y_oecd Germany 10-year government bond yield (OECD monthly, via FRED)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/IRLTLT01DEM156N>

Identifier

IRLTLT01DEM156N

Method

FRED API

Units / frequency

percent · M

Extent

1956-05-01 to 2026-08-01 · 844 observations

Latest

3.18 (previous 3.07)

Publisher title

Interest Rates: Long-Term Government Bond Yields: 10-Year: Main (Including Benchmark) for Germany

Expected

title contains 'Germany', units contains 'Percent', freq contains 'M'

Notes

Metadata from cache (refreshed every 6 days).

Germany 10-year government bond yield (OECD monthly, via FRED) [bund10y_oecd]



Source: Federal Reserve Bank of St. Louis (FRED) · IRLTLT01DEM156N
844 obs, 1956-05-01 to 2026-08-01 · latest 3.18 percent · method: FRED API

Table 71. bund10y_oecd Germany 10-year government bond yield (OECD monthly, via FRED): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	844 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -0.6491, max 10.8, allowed [-2, 15]
history_depth	OK	warn	first 1956-05-01, expected by 1956-05-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-01, 62 days old, limit 75
meta_title	OK	critical	FRED title: 'Interest Rates: Long-Term Government Bond Yields: 10-Year: Main (Including Benchmark) for Germany'; expected to contain 'Germany'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'M'; expected 'M'

Raw files kept for audit

- data/raw/fred/2026-10-02/IRLTLT01DEM156N.observations.json.gz · sha256 8e06e53f9ffa715a · 83,732 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=IRLTLT01DEM156N&api_key=***&

gilt10y_oecd UK 10-year government bond yield (OECD monthly, via FRED)

OK **VERIFIED** by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/IRLTLT01GBM156N>

Identifier

IRLTLT01GBM156N

Method

FRED API

Units / frequency

percent · M

Extent

1960-01-01 to 2026-08-01 · 800 observations

Latest

4.989 (previous 4.932)

Publisher title

Interest Rates: Long-Term Government Bond Yields: 10-Year: Main (Including Benchmark) for United Kingdom

Expected

title contains 'United Kingdom', units contains 'Percent', freq contains 'M'

Notes

Metadata from cache (refreshed every 6 days).

UK 10-year government bond yield (OECD monthly, via FRED) [gilt10y_oecd]



Source: Federal Reserve Bank of St. Louis (FRED) · IRLTLT01GBM156N
800 obs, 1960-01-01 to 2026-08-01 · latest 4.989 percent · method: FRED API

Table 72. gilt10y_oecd UK 10-year government bond yield (OECD monthly, via FRED): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	800 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.2094, max 16.34, allowed [-2, 20]
history_depth	OK	warn	first 1960-01-01, expected by 1960-01-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-01, 62 days old, limit 75
meta_title	OK	critical	FRED title: 'Interest Rates: Long-Term Government Bond Yields: 10-Year: Main (Including Benchmark) for United Kingdom'; expected to contain 'United Kingdom'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'M'; expected 'M'

Raw files kept for audit

- data/raw/fred/2026-10-02/IRLTLT01GBM156N.observations.json.gz · sha256 ec709b8180456cf4 · 77,149 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=IRLTLT01GBM156N&api_key=***&

audusd US dollars per Australian dollar

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/DEXUSAL>

Identifier

DEXUSAL

Method

FRED API

Units / frequency

USD per AUD · D

Extent

1971-01-04 to 2026-09-25 · 13,969 observations

Latest

0.7033 (previous 0.7016)

Publisher title

U.S. Dollars to Australian Dollar Spot Exchange Rate

Expected

title contains 'Australian Dollar', units contains 'U.S. Dollars', freq contains 'D'

Notes

Metadata from cache (refreshed every 6 days).

US dollars per Australian dollar [audusd]



Source: Federal Reserve Bank of St. Louis (FRED) · DEXUSAL
13,969 obs, 1971-01-04 to 2026-09-25 · latest 0.7033 USD per AUD · method: FRED API

Table 73. audusd US dollars per Australian dollar: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	13969 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0.4828, max 1.488, allowed [0.3, 1.6]
history_depth	OK	warn	first 1971-01-04, expected by 1971-01-04
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-25, 7 days old, limit 10
meta_title	OK	critical	FRED title: 'U.S. Dollars to Australian Dollar Spot Exchange Rate'; expected to contain 'Australian Dollar'
meta_units	OK	critical	FRED units: 'U.S. Dollars to One Australian Dollar'; expected to contain 'U.S. Dollars'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/DEXUSAL.observations.json.gz · sha256 ceab8cab1e09ff24 · 1,407,558 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=DEXUSAL&api_key=***&file_type

acgb_minus_ust10 Australia 10-year minus US 10-year (monthly averages)

OK VERIFIED by ml on 2026-10-01

Source

Data room (derived)

Identifier

acgb10y_oecd - monthly mean(ust10y)

Method

Derived

Units / frequency

bp · M

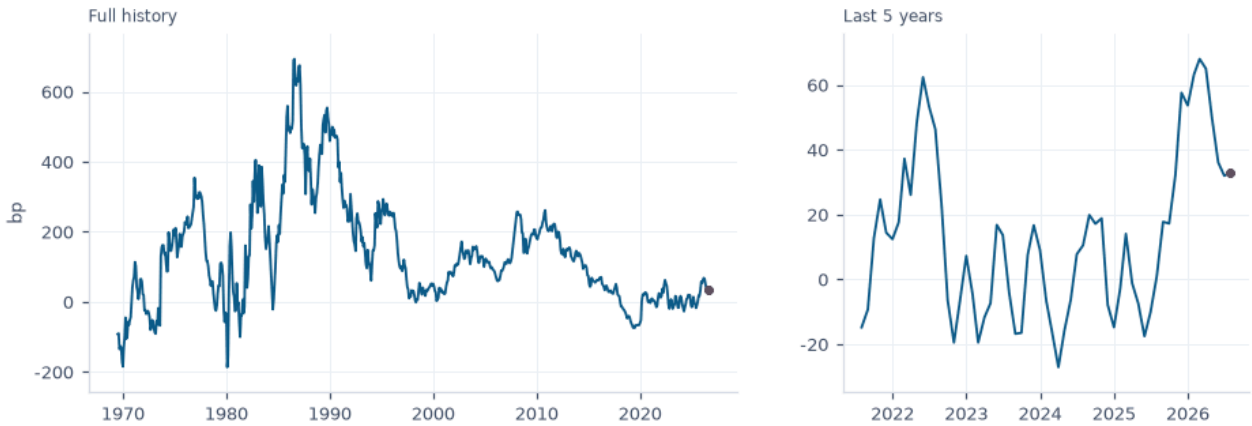
Extent

1969-07-01 to 2026-08-01 · 686 observations

Latest

33.07 (previous 31.95)

Australia 10-year minus US 10-year (monthly averages) [acgb_minus_ust10]



Source: Data room (derived) · acgb10y_oecd - monthly mean(ust10y)
686 obs, 1969-07-01 to 2026-08-01 · latest 33.07 bp · method: Derived

Table 74. acgb_minus_ust10 Australia 10-year minus US 10-year (monthly averages): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	686 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -186.5, max 693.4, allowed [-300, 700]
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-01, 62 days old, limit 75

Row 16: capex

pnfi Private nonresidential fixed investment (SAAR)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/PNFI>

Identifier

PNFI

Method

FRED API

Units / frequency

USD bn SAAR · Q

Extent

1947-01-01 to 2026-04-01 · 318 observations

Latest

4,737 (previous 4,597)

Publisher title

Private Nonresidential Fixed Investment

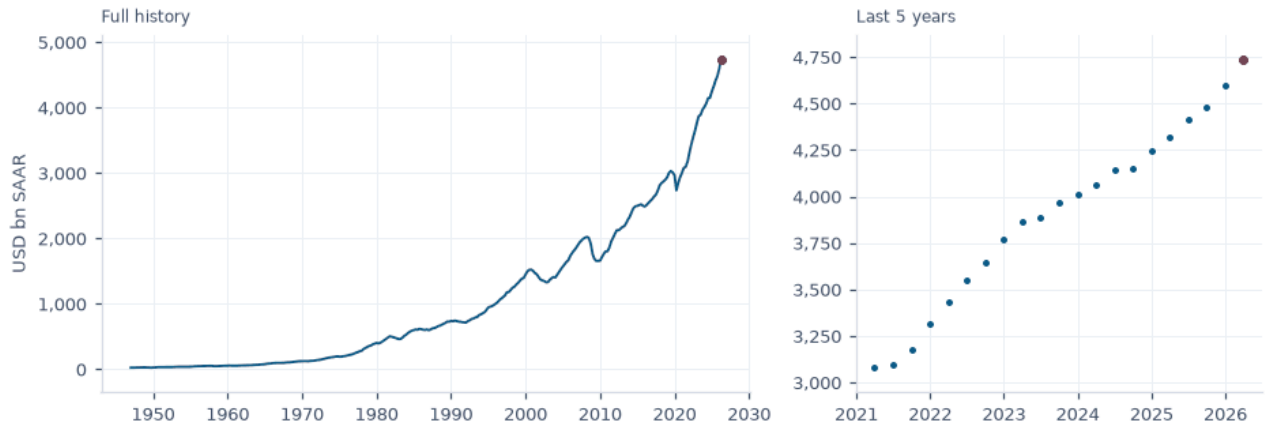
Expected

title contains 'Private Nonresidential Fixed Investment', units contains 'Billions of Dollars', freq contains 'Q'

Notes

Metadata from cache (refreshed every 6 days).

Private nonresidential fixed investment (SAAR) [pnfi]



Source: Federal Reserve Bank of St. Louis (FRED) · PNFI
318 obs, 1947-01-01 to 2026-04-01 · latest 4737 USD bn SAAR · method: FRED API

Table 75. pnfi Private nonresidential fixed investment (SAAR): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	318 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 24.82, max 4737, allowed [10, 20000]
history_depth	OK	warn	first 1947-01-01, expected by 1947-01-01
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-04-01, 184 days old, limit 220
meta_title	OK	critical	FRED title: 'Private Nonresidential Fixed Investment'; expected to contain 'Private Nonresidential Fixed Investment'
meta_units	OK	critical	FRED units: 'Billions of Dollars'; expected to contain 'Billions of Dollars'
meta_frequency	OK	critical	FRED frequency 'Q'; expected 'Q'

Raw files kept for audit

- data/raw/fred/2026-10-02/PNFI.observations.json.gz · sha256 039637b534d76d09 · 31,803 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=PNFI&api_key=***&file_type=j

info_proc_equipment Investment in information processing equipment (SAAR)

OK **VERIFIED** by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/Y034RC1Q027SBEA>

Identifier

Y034RC1Q027SBEA

Method

FRED API

Units / frequency

USD bn SAAR · Q

Extent

1947-01-01 to 2026-04-01 · 318 observations

Latest

836.4 (previous 795.6)

Publisher title

Gross Private Domestic Investment: Fixed Investment: Nonresidential: Equipment: Information Processing Equipment

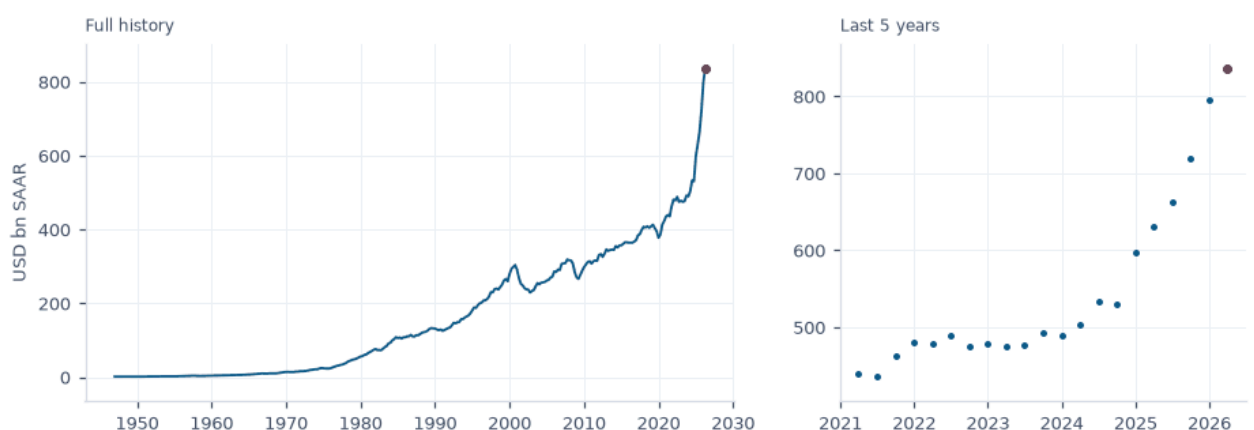
Expected

title contains 'Information Processing Equipment', units contains 'Billions of Dollars', freq contains 'Q'

Notes

Proxy for AI / data-centre capex. Hyperscaler capex itself is in the manual template. Metadata from cache (refreshed every 6 days).

Investment in information processing equipment (SAAR) [info_proc_equipment]



Source: Federal Reserve Bank of St. Louis (FRED) · Y034RC1Q027SBEA · PROXY
318 obs, 1947-01-01 to 2026-04-01 · latest 836.4 USD bn SAAR · method: FRED API

Table 76. info_proc_equipment Investment in information processing equipment (SAAR): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	318 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 1.525, max 836.4, allowed [1, 10000]
history_dept_h	OK	warn	first 1947-01-01, expected by 1947-01-01
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-04-01, 184 days old, limit 220
meta_title	OK	critical	FRED title: 'Gross Private Domestic Investment: Fixed Investment: Nonresidential: Equipment: Information Processing Equipment'; expected to contain 'Information Processing Equipment'
meta_units	OK	critical	FRED units: 'Billions of Dollars'; expected to contain 'Billions of Dollars'
meta_frequency	OK	critical	FRED frequency 'Q'; expected 'Q'

Raw files kept for audit

- data/raw/fred/2026-10-02/Y034RC1Q027SBEA.observations.json.gz · sha256 05a00dc4d96fd8f5 · 31,179 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=Y034RC1Q027SBEA&api_key=***&

hyperscaler_capex Hyperscaler capex (MSFT, GOOGL, AMZN, META, ORCL), quarterly

NOT COLLECTED UNVERIFIED

Source

Company 10-Q / 10-K filings (manual entry) · <https://www.sec.gov/edgar/search/>

Identifier

manual/hyperscaler_capex.csv

Method

Manual CSV

Units / frequency

USD bn · Q

Extent

to · observations

Latest

(previous)

Notes

Not available as a free time series. Fill manual/hyperscaler_capex.csv from filings; the register shows NOT_COLLECTED until it has rows. hyperscaler_capex.csv does not exist

Error

hyperscaler_capex.csv does not exist

pnfi_share_gdp Private nonresidential investment / nominal GDP

OK **VERIFIED** by ml on 2026-10-01

Source

Data room (derived)

Identifier

pnfi / ngdp

Method

Derived

Units / frequency

percent · Q

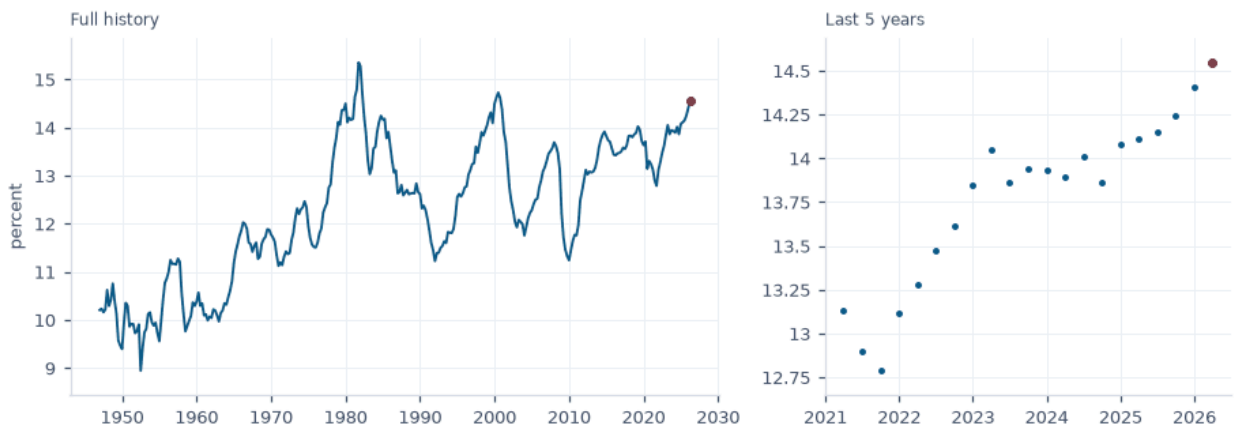
Extent

1947-01-01 to 2026-04-01 · 318 observations

Latest

14.55 (previous 14.41)

Private nonresidential investment / nominal GDP [pnfi_share_gdp]



Source: Data room (derived) · pnfi / ngdp
318 obs, 1947-01-01 to 2026-04-01 · latest 14.55 percent · method: Derived

Table 77. pnfi_share_gdp Private nonresidential investment / nominal GDP: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	318 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 8.945, max 15.35, allowed [5, 25]
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-04-01, 184 days old, limit 220

Row 17: productivity

productivity_nfb Nonfarm business labour productivity (output per hour)

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/OPHNFB>

Identifier

OPHNFB

Method

FRED API

Units / frequency

index 2017=100 · Q

Extent

1947-01-01 to 2026-04-01 · 318 observations

Latest

120 (previous 119.6)

Publisher title

Nonfarm Business Sector: Labor Productivity (Output per Hour) for All Workers

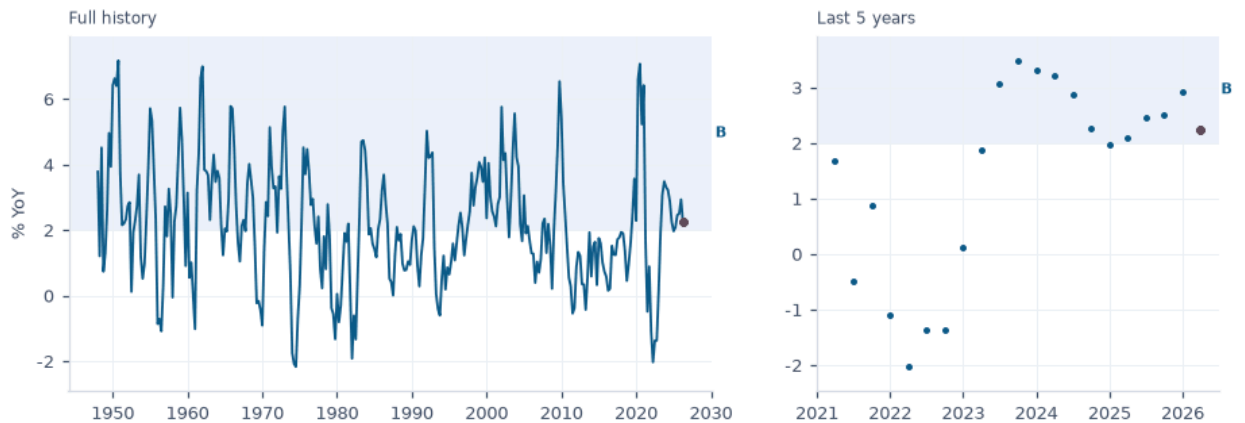
Expected

title contains 'Labor Productivity', units contains 'Index', freq contains 'Q'

Notes

Metadata from cache (refreshed every 6 days).

Nonfarm business labour productivity (output per hour) (YoY %) [productivity_nfb]



Source: Federal Reserve Bank of St. Louis (FRED) · OPHNFB
314 obs, 1948-01-01 to 2026-04-01 · latest 2.242 % YoY · method: FRED API

Table 78. productivity_nfb Nonfarm business labour productivity (output per hour): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	318 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 22.07, max 120, allowed [10, 300]
history_depth	OK	warn	first 1947-01-01, expected by 1947-01-01
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-04-01, 184 days old, limit 220
meta_title	OK	critical	FRED title: 'Nonfarm Business Sector: Labor Productivity (Output per Hour) for All Workers'; expected to contain 'Labor Productivity'
meta_units	OK	critical	FRED units: 'Index 2017=100'; expected to contain 'Index'
meta_frequency	OK	critical	FRED frequency 'Q'; expected 'Q'

Raw files kept for audit

- data/raw/fred/2026-10-02/OPHNFB.observations.json.gz · sha256 a23a5e87b69bc904 · 31,158 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=OPHNFB&api_key=***&file_type

Row 18: labour costs

ulc_nfb Nonfarm business unit labour costs

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/ULCNFB>

Identifier

ULCNFB

Method

FRED API

Units / frequency

index 2017=100 · Q

Extent

1947-01-01 to 2026-04-01 · 318 observations

Latest

124 (previous 123.6)

Publisher title

Nonfarm Business Sector: Unit Labor Costs for All Workers

Expected

title contains 'Unit Labor Costs', units contains 'Index', freq contains 'Q'

Notes

Metadata from cache (refreshed every 6 days).

Nonfarm business unit labour costs (YoY %) [ulc_nfb]

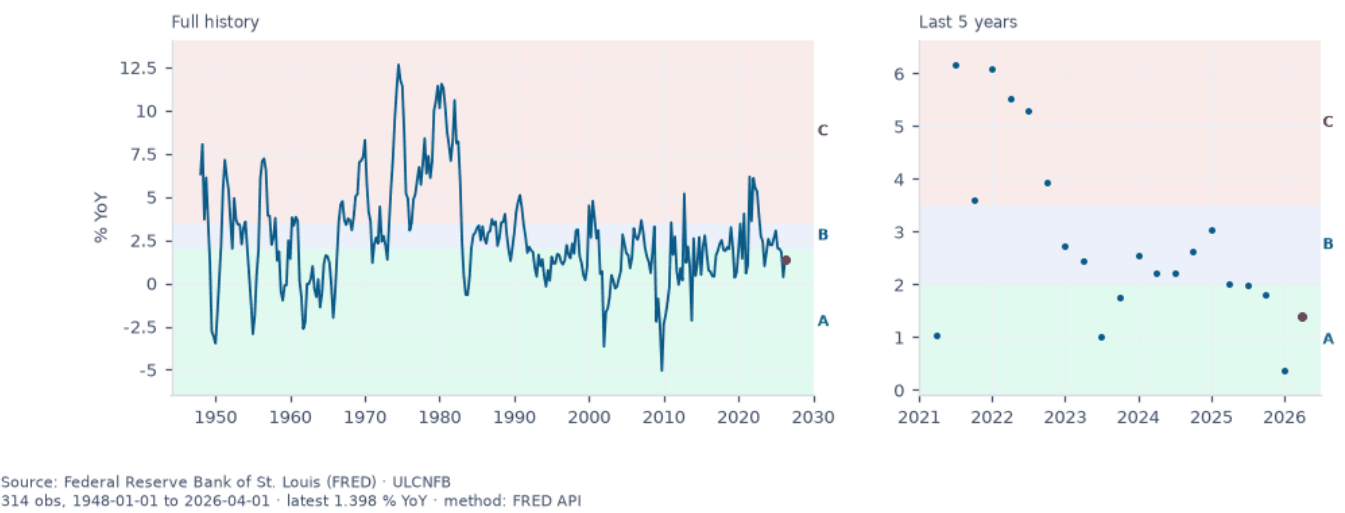


Table 79. ulc_nfb Nonfarm business unit labour costs: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	318 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 14.98, max 124, allowed [5, 300]
history_depth	OK	warn	first 1947-01-01, expected by 1947-01-01
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-04-01, 184 days old, limit 220
meta_title	OK	critical	FRED title: 'Nonfarm Business Sector: Unit Labor Costs for All Workers'; expected to contain 'Unit Labor Costs'
meta_units	OK	critical	FRED units: 'Index 2017=100'; expected to contain 'Index'
meta_frequency	OK	critical	FRED frequency 'Q'; expected 'Q'

Raw files kept for audit

- data/raw/fred/2026-10-02/ULCNFB.observations.json.gz · sha256 24c8466ee7108f78 · 31,158 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=ULCNFB&api_key=***&file_type

eci_total Employment cost index, total compensation, civilian

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/ECIALLCIV>

Identifier

ECIALLCIV

Method

FRED API

Units / frequency

index Dec 2005=100 · Q

Extent

2001-01-01 to 2026-04-01 · 102 observations

Latest

177.2 (previous 175.6)

Publisher title

Employment Cost Index: Total compensation: All Civilian

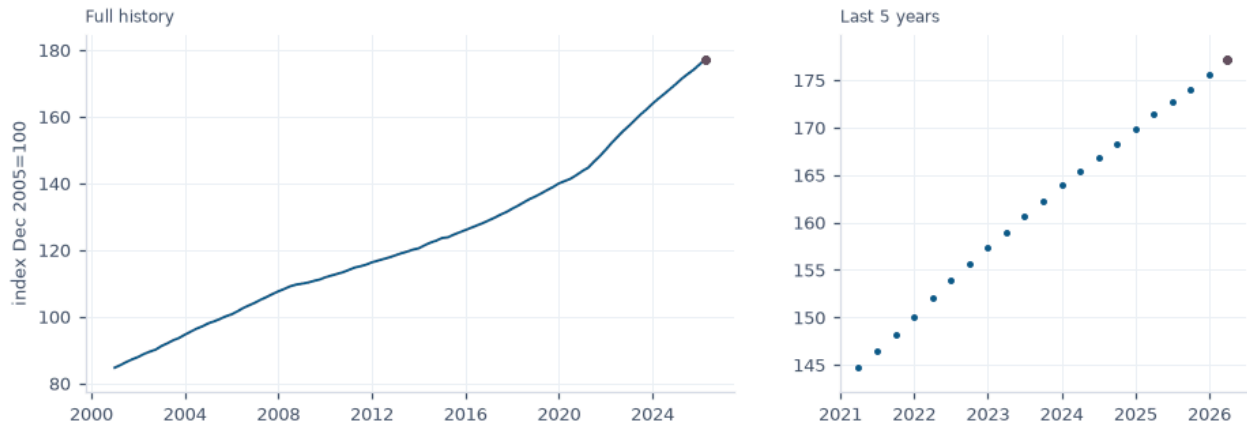
Expected

title contains 'Employment Cost Index', units contains 'Index', freq contains 'Q'

Notes

Metadata from cache (refreshed every 6 days).

Employment cost index, total compensation, civilian [eci_total]



Source: Federal Reserve Bank of St. Louis (FRED) · ECIALLCIV
102 obs, 2001-01-01 to 2026-04-01 · latest 177.2 index Dec 2005=100 · method: FRED API

Table 80. eci_total Employment cost index, total compensation, civilian: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	102 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 84.7, max 177.2, allowed [50, 300]
history_depth	OK	warn	first 2001-01-01, expected by 2001-01-01
frequency	OK	warn	declared Q, detected Q
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-04-01, 184 days old, limit 220
meta_title	OK	critical	FRED title: 'Employment Cost Index: Total compensation: All Civilian'; expected to contain 'Employment Cost Index'
meta_units	OK	critical	FRED units: 'Index Dec 2005=100'; expected to contain 'Index'
meta_frequency	OK	critical	FRED frequency 'Q'; expected 'Q'

Raw files kept for audit

- data/raw/fred/2026-10-02/ECIALLCIV.observations.json.gz · sha256 7592e6a2c80ed1ce · 10,059 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=ECIALLCIV&api_key=***&file_t

atl_wage_tracker Atlanta Fed wage growth tracker (3-month moving average of median)

OK **VERIFIED** by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/FRBATLWGT3MMAUMHWGO>

Identifier

FRBATLWGT3MMAUMHWGO

Method

FRED API

Units / frequency

percent y/y · M

Extent

1997-01-01 to 2026-08-01 · 355 observations

Latest

4.1 (previous 3.8)

Publisher title

3-Month Moving Average of Unweighted Median Hourly Wage Growth: Overall

Expected

title contains 'Wage', units contains 'Percent'

Notes

BLS published no October 2025 figure (federal government shutdown). Metadata from cache (refreshed every 6 days).

Atlanta Fed wage growth tracker (3-month moving average of median) [atl_wage_tracker]



Source: Federal Reserve Bank of St. Louis (FRED) · FRBATLWGT3MMAUMHWGO
355 obs, 1997-01-01 to 2026-08-01 · latest 4.1 percent y/y · method: FRED API

Table 81. atl_wage_tracker Atlanta Fed wage growth tracker (3-month moving average of median): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	355 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 1.6, max 6.7, allowed [-5, 15]
history_depth	OK	warn	first 1997-01-01, expected by 1997-01-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-01, 62 days old, limit 75
meta_title	OK	critical	FRED title: '3-Month Moving Average of Unweighted Median Hourly Wage Growth: Overall'; expected to contain 'Wage'
meta_units	OK	critical	FRED units: 'Percent Change from Year Ago'; expected to contain 'Percent'

Raw files kept for audit

- data/raw/fred/2026-10-02/FRBATLWGT3MMAUMHWGO.observations.json.gz · sha256 70f9a914a93c1a05 · 33,738 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=FRBATLWGT3MMAUMHWGO&api_key=

Row 19: commodities

wti WTI crude oil spot price

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/DCOILWTICO>

Identifier

DCOILWTICO

Method

FRED API

Units / frequency

USD per barrel · D

Extent

1986-01-02 to 2026-09-29 · 9,512 observations

Latest

96.16 (previous 99.37)

Publisher title

Crude Oil Prices: West Texas Intermediate (WTI) - Cushing, Oklahoma

Expected

title contains 'West Texas Intermediate', units contains 'Dollars per Barrel', freq contains 'D'

Notes

FRED/EIA has three short gaps in 1999 spot quotes. Metadata from cache (refreshed every 6 days).

WTI crude oil spot price [wti]



Source: Federal Reserve Bank of St. Louis (FRED) · DCOILWTICO
9,512 obs, 1986-01-02 to 2026-09-29 · latest 96.16 USD per barrel · method: FRED API

Table 82. wti WTI crude oil spot price: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	9512 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min -36.98, max 145.3, allowed [-50, 300]
history_depth	OK	warn	first 1986-01-02, expected by 1986-01-02
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-29, 3 days old, limit 10
meta_title	OK	critical	FRED title: 'Crude Oil Prices: West Texas Intermediate (WTI) - Cushing, Oklahoma'; expected to contain 'West Texas Intermediate'
meta_units	OK	critical	FRED units: 'Dollars per Barrel'; expected to contain 'Dollars per Barrel'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/DCOILWTICO.observations.json.gz · sha256 d2d0046c7966737c · 1,016,548 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=DCOILWTICO&api_key=***&file

copper Global copper price (IMF, monthly)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/PCOPPUSDM>

Identifier

PCOPPUSDM

Method

FRED API

Units / frequency

USD per tonne · M

Extent

1992-01-01 to 2026-07-01 · 415 observations

Latest

1.354e+04 (previous 1.355e+04)

Publisher title

Global price of Copper

Expected

title contains 'Copper', units contains 'Dollars per Metric Ton', freq contains 'M'

Notes

Free proxy for LME copper (LME data is paid). Metadata from cache (refreshed every 6 days).

Global copper price (IMF, monthly) [copper]



Source: Federal Reserve Bank of St. Louis (FRED) · PCOPPUSDM PROXY
415 obs, 1992-01-01 to 2026-07-01 · latest 13,543 USD per tonne · method: FRED API

Table 83. copper Global copper price (IMF, monthly): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	415 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 1377, max 1.355e+04, allowed [500, 30000]
history_depth	OK	warn	first 1992-01-01, expected by 1992-01-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-07-01, 93 days old, limit 100
meta_title	OK	critical	FRED title: 'Global price of Copper'; expected to contain 'Copper'
meta_units	OK	critical	FRED units: 'U.S. Dollars per Metric Ton'; expected to contain 'Dollars per Metric Ton'
meta_frequency	OK	critical	FRED frequency 'M'; expected 'M'

Raw files kept for audit

- data/raw/fred/2026-10-02/PCOPPUSDM.observations.json.gz · sha256 aa8a84e0b7bd5fba · 57,373 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=PCOPPUSDM&api_key=***&file_t

Row 20: bond volatility

move_index ICE BofA MOVE index

NOT COLLECTED

UNVERIFIED

Source

ICE Data Services (paid) · <https://www.ice.com/>

Identifier

MOVE

Method

Not collected

Units / frequency

index · D

Extent

to · observations

Latest

(previous)

Notes

Paid data, not collected. Proxy is ust10y_realised_vol (derived). Paid data, not collected. Proxy is ust10y_realised_vol (derived).

ust10y_realised_vol 10-year yield realised volatility, 20-day, annualised (MOVE proxy)

OK

VERIFIED

by ml on 2026-10-01

Source

Data room (derived)

Identifier

$\text{std}(\text{diff}(\text{ust10y}), 20\text{d}) * \text{sqrt}(252) * 100$

Method

Derived

Units / frequency

bp per year · D

Extent

1962-01-30 to 2026-09-30 · 16,152 observations

Latest

82.16 (previous 82.32)

Notes

Free proxy for the MOVE index (MOVE is option-implied, this is realised).

10-year yield realised volatility, 20-day, annualised (MOVE proxy) [ust10y_realised_vol]

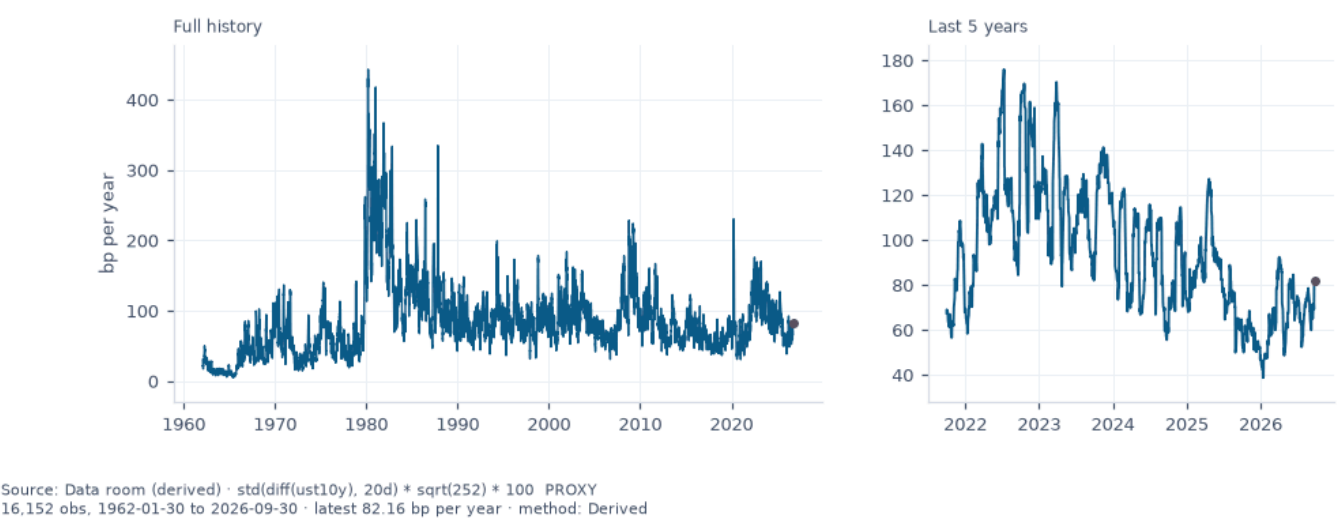


Table 84. ust10y_realised_vol 10-year yield realised volatility, 20-day, annualised (MOVE proxy): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	16152 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 4.886, max 443, allowed [0, 600]
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7

Row 21: credit

hy_oas ICE BofA US high yield option-adjusted spread

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/BAMLH0A0HYM2>

Identifier

BAMLH0A0HYM2

Method

FRED API

Units / frequency

percent · D

Extent

2023-10-02 to 2026-09-30 · 786 observations

Latest

3.12 (previous 3.08)

Publisher title

ICE BofA US High Yield Index Option-Adjusted Spread

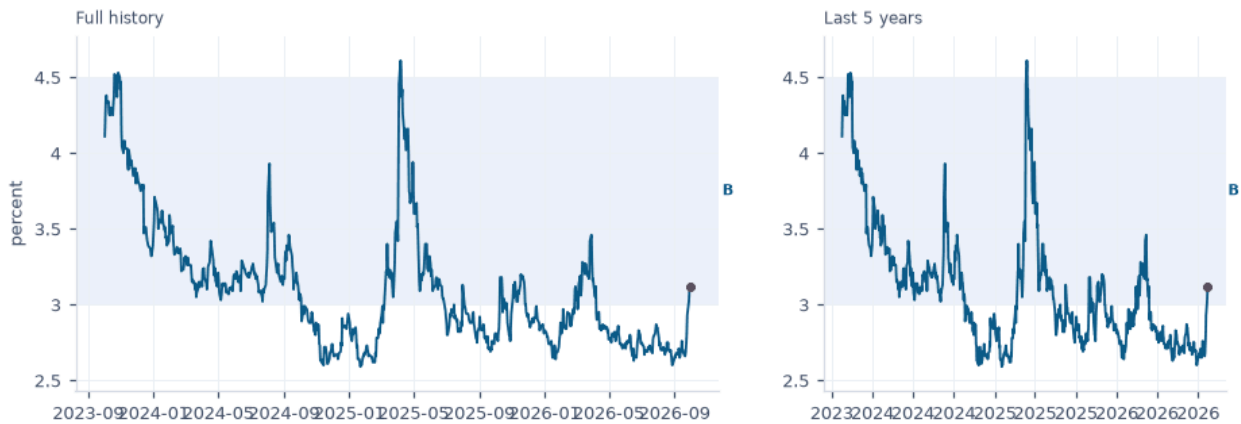
Expected

title contains 'High Yield Index Option-Adjusted Spread', units contains 'Percent', freq contains 'D'

Notes

FRED only serves a rolling ~3-year window of ICE data, so the data room keeps older points it has already collected (accumulate). Metadata from cache (refreshed every 6 days).

ICE BofA US high yield option-adjusted spread [hy_oas]



Source: Federal Reserve Bank of St. Louis (FRED) · BAMLH0A0HYM2
786 obs, 2023-10-02 to 2026-09-30 · latest 3.12 percent · method: FRED API

Table 85. hy_oas ICE BofA US high yield option-adjusted spread: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	786 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 2.59, max 4.61, allowed [1, 25]
history_depth	OK	warn	first 2023-10-02, expected by 2023-10-02
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 7
meta_title	OK	critical	FRED title: 'ICE BofA US High Yield Index Option-Adjusted Spread'; expected to contain 'High Yield Index Option-Adjusted Spread'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/BAMLH0A0HYM2.observations.json.gz · sha256 22380ef66abd8bea · 75,672 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=BAMLH0A0HYM2&api_key=***&file

Row 22: Fed balance sheet

fed_total_assets Federal Reserve total assets (Wednesday level)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/WALCL>

Identifier

WALCL

Method

FRED API

Units / frequency

USD mn · W

Extent

2002-12-18 to 2026-09-30 · 1,242 observations

Latest

6,743,031 (previous 6,747,704)

Publisher title

Assets: Total Assets: Total Assets (Less Eliminations from Consolidation): Wednesday Level

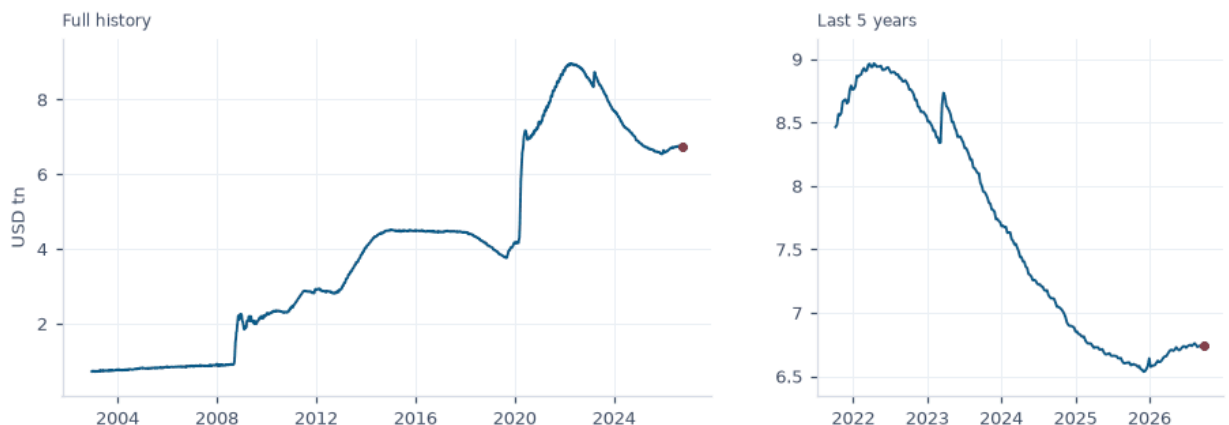
Expected

title contains 'Total Assets', units contains 'Millions of U.S. Dollars', freq contains 'W'

Notes

Metadata from cache (refreshed every 6 days).

Federal Reserve total assets (Wednesday level) [fed_total_assets]



Source: Federal Reserve Bank of St. Louis (FRED) · WALCL
1,242 obs, 2002-12-18 to 2026-09-30 · latest 6,743 USD tn · method: FRED API

Table 86. fed_total_assets Federal Reserve total assets (Wednesday level): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	1242 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 7.128e+05, max 8.965e+06, allowed [100000, 20000000]
history_depth	OK	warn	first 2002-12-18, expected by 2002-12-18
frequency	OK	warn	declared W, detected W
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-09-30, 2 days old, limit 14
meta_title	OK	critical	FRED title: 'Assets: Total Assets: Total Assets (Less Eliminations from Consolidation): Wednesday Level'; expected to contain 'Total Assets'
meta_units	OK	critical	FRED units: 'Millions of U.S. Dollars'; expected to contain 'Millions of U.S. Dollars'
meta_frequency	OK	critical	FRED frequency 'W'; expected 'W'

Raw files kept for audit

- data/raw/fred/2026-10-02/WALCL.observations.json.gz · sha256 81db499dbb2a6b77 · 122,462 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=WALCL&api_key=***&file_type=

on_rrp Overnight reverse repo usage (Fed ON RRP)

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/RRPONTSYD>

Identifier

RRPONTSYD

Method

FRED API

Units / frequency

USD bn · D

Extent

2003-02-07 to 2026-10-01 · 3,338 observations

Latest

0.35 (previous 11.54)

Publisher title

Overnight Reverse Repurchase Agreements: Treasury Securities Sold by the Federal Reserve in the Temporary Open Market Operations

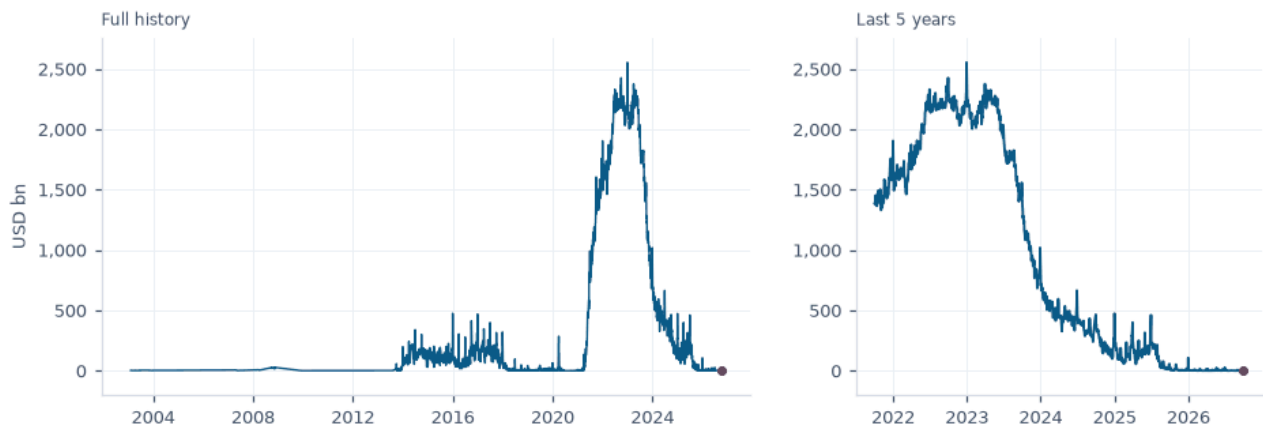
Expected

title contains 'Reverse Repurchase', units contains 'Billions of US Dollars', freq contains 'D'

Notes

Before the ON RRP facility opened in Sep 2013 the Fed ran reverse repos only occasionally, so early history is sparse. Metadata from cache (refreshed every 6 days).

Overnight reverse repo usage (Fed ON RRP) [on_rrp]



Source: Federal Reserve Bank of St. Louis (FRED) · RRPONTSYD
3,338 obs, 2003-02-07 to 2026-10-01 · latest 0.35 USD bn · method: FRED API

Table 87. on_rrp Overnight reverse repo usage (Fed ON RRP): checks run

Check	Result	Severity	Detail
non_empty	OK	critical	3338 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 0, max 2554, allowed [0, 3000]
history_depth	OK	warn	first 2003-02-07, expected by 2003-02-07
frequency	OK	warn	declared D, detected D
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-10-01, 1 days old, limit 7
meta_title	OK	critical	FRED title: 'Overnight Reverse Repurchase Agreements: Treasury Securities Sold by the Federal Reserve in the Temporary Open Market Operations'; expected to contain 'Reverse Repurchase'
meta_units	OK	critical	FRED units: 'Billions of US Dollars'; expected to contain 'Billions of US Dollars'
meta_frequency	OK	critical	FRED frequency 'D'; expected 'D'

Raw files kept for audit

- data/raw/fred/2026-10-02/RRPONTSYD.observations.json.gz · sha256 1742fad65736a3dc · 585,061 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=RRPONTSYD&api_key=***&file_t

Row 23: extra

unemployment US unemployment rate

OK VERIFIED by ml on 2026-10-01

Source

Federal Reserve Bank of St. Louis (FRED) · <https://fred.stlouisfed.org/series/UNRATE>

Identifier

UNRATE

Method

FRED API

Units / frequency

percent · M

Extent

1948-01-01 to 2026-08-01 · 943 observations

Latest

4.1 (previous 4.1)

Publisher title

Unemployment Rate

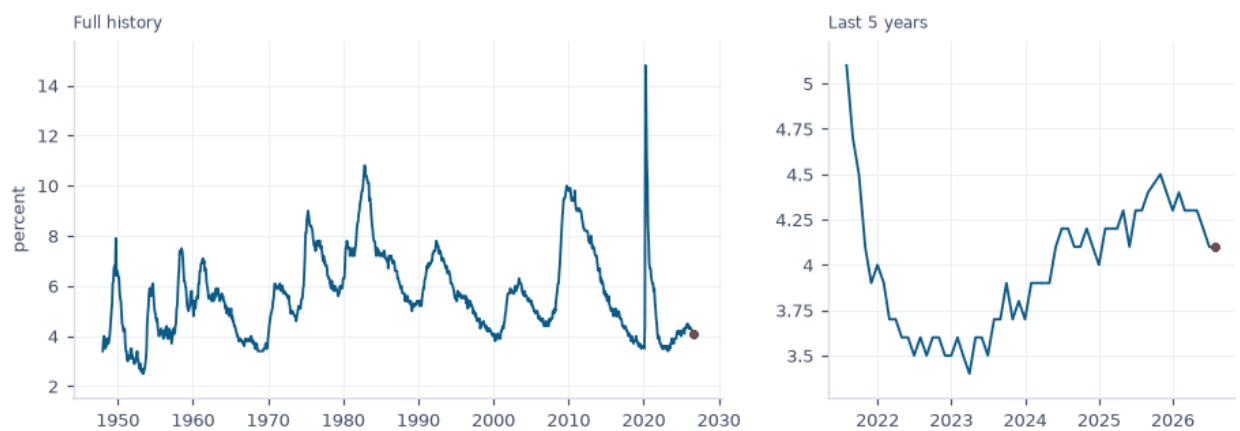
Expected

title contains 'Unemployment Rate', units contains 'Percent', freq contains 'M'

Notes

BLS published no October 2025 figure (federal government shutdown). Metadata from cache (refreshed every 6 days).

US unemployment rate [unemployment]



Source: Federal Reserve Bank of St. Louis (FRED) · UNRATE
943 obs, 1948-01-01 to 2026-08-01 · latest 4.1 percent · method: FRED API

Table 88. unemployment US unemployment rate: checks run

Check	Result	Severity	Detail
non_empty	OK	critical	943 observations
no_duplicates	OK	critical	none
in_range	OK	critical	min 2.5, max 14.8, allowed [1, 30]
history_depth	OK	warn	first 1948-01-01, expected by 1948-01-01
frequency	OK	warn	declared M, detected M
no_unexpected_gaps	OK	warn	none
fresh	OK	stale	last 2026-08-01, 62 days old, limit 75
meta_title	OK	critical	FRED title: 'Unemployment Rate'; expected to contain 'Unemployment Rate'
meta_units	OK	critical	FRED units: 'Percent'; expected to contain 'Percent'
meta_frequency	OK	critical	FRED frequency 'M'; expected 'M'

Raw files kept for audit

- `data/raw/fred/2026-10-02/UNRATE.observations.json.gz` · sha256 `5de165542934d06d` · 89,025 bytes · https://api.stlouisfed.org/fred/series/observations?series_id=UNRATE&api_key=***&file_type

Refresh and sign-off

- `make refresh` fetches everything, validates, rebuilds the register, charts and this report. A `launchd` job runs it daily at 07:00 and posts a notification if anything fails.
- `make refresh-one KEYS="ust10y tips10y"` refreshes only some series.
- `make probe` tests every source URL; `make test` runs the parser and anchor tests.
- `make signoff KEYS="..." BY="name"` records a review. A sign-off is tied to a fingerprint of the source, identifier, parameters and units, so changing any of them voids it.
- Hyperscaler capex is entered by hand in `manual/hyperscaler_capex.csv` (columns `date`, `value`, `source_note`).

Generated by `dataroom report` from `catalog/series.yaml`, `register/` and `data/`. Self-contained HTML; no other files required.