When US yields jump, which currencies break? 24 currencies against the 10-year Treasury, 2004–2026

Gaurav Gupta · Research note · 7 November 2026 · Weekly spot vs USD, Apr 2004 – Oct 2026 (1,179 weeks)

−4.6%
Yen per +100 bp in the 10-year yield, holding stocks fixed (t = −11.1)

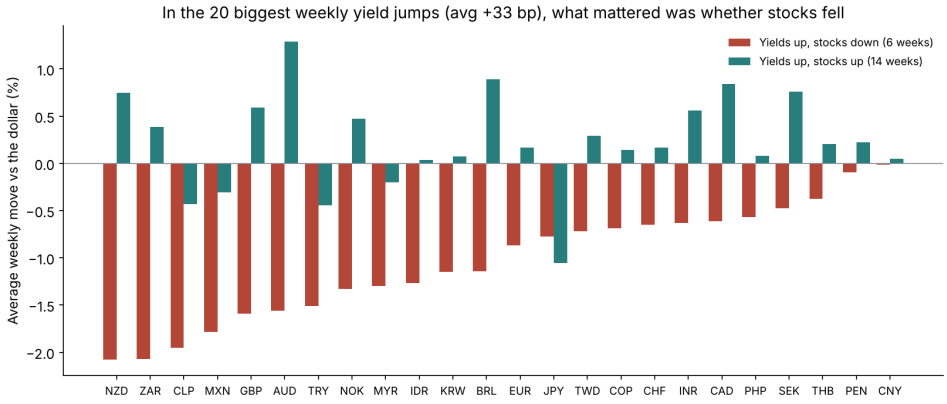
+0.04%
Brazilian real on the same basis

−2.1%
Rand and NZ dollar in yield jumps with stocks falling

0.56
Rank correlation of sensitivities, 2004–15 vs 2016–26

Currency	% per +100 bp	S&P beta	Shocks, stocks down	Shocks, stocks up	Taper 2013	2022
Japanese yen	−4.6	−0.03	−0.8%	−1.1%	−0.8%	−23.8%
Swiss franc	−2.3	0.10	−0.7%	+0.2%	0.0%	−8.5%
Euro	−1.5	0.14	−0.9%	+0.2%	+0.9%	−13.7%
Mexican peso	−1.3	0.34	−1.8%	−0.3%	−7.6%	+2.9%
South African rand	−1.5	0.39	−2.1%	+0.4%	−11.0%	−14.6%
Indian rupee	−0.35	0.11	−0.6%	+0.6%	−17.9%	−9.4%
Brazilian real	+0.04	0.29	−1.1%	+0.9%	−13.8%	+8.7%

Spot vs USD, positive = currency strengthened. Shocks = 20 largest weekly 10-year yield rises (avg +33 bp): 6 with S&P 500 down, 14 up. Taper: May–Sep 2013 (+124 bp). 2022: Jan–Oct (+271 bp). Carry not included.



Average weekly move in the 20 biggest yield jumps, by whether stocks fell.

SOURCES

- FX, Treasury yields, SPY: defeatbeta/yahoo-finance-data (ODC-BY), sha256-pinned
- Eichengreen & Gupta (2015), Emerging Markets Review 25
- Newey & West (1987), Econometrica 55(3)

METHOD

- Weekly spot returns; centred-median bad-tick filter (66 prints)
- Currency on Δ10y (bp) and S&P 500, Newey-West t-stats
- 20 biggest yield jumps split by stocks up/down; three episodes
- Split at 2015: Spearman rank stability

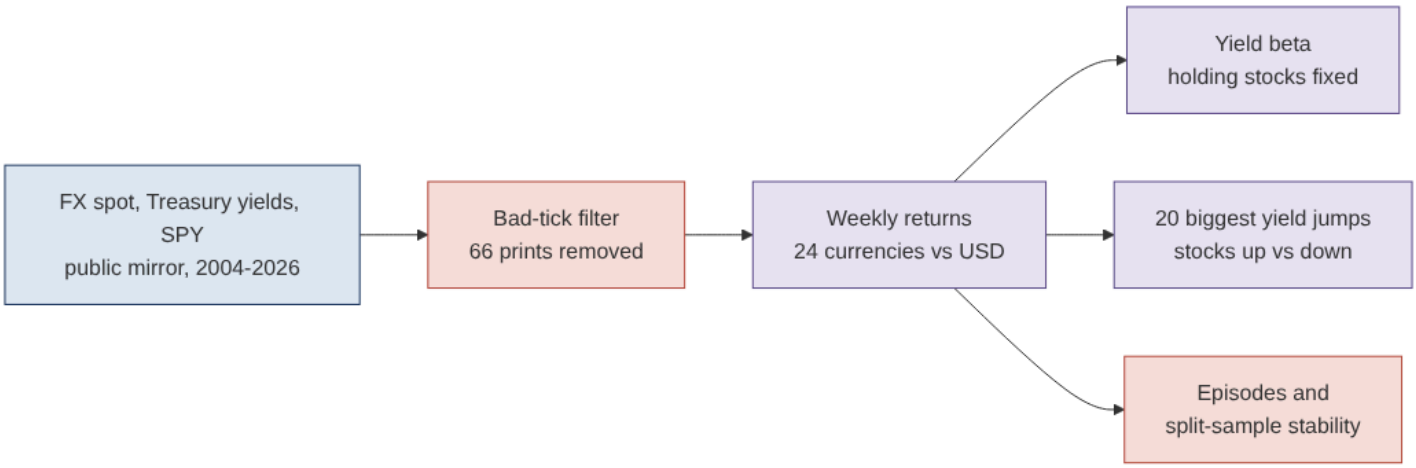
KEY CALCULATIONS

- $100M unhedged yen: −4.6% × $100M ≈ −$4.6M per +100 bp
- Median sensitivity −0.8% → −1.4% per 100 bp; 18 of 24 rose
- Stocks-down shock week: rand/NZD ≈ −2.1% ≈ −$2.1M per $100M

RECOMMENDATIONS

- Run two yield-shock scenarios: stocks falling and stocks rising.
- Classify yen and franc exposure as rate risk, not only safe-haven risk.
- Pair EM FX rate scenarios with equity-drawdown scenarios.
- Re-estimate currency betas quarterly; sensitivity has risen.
- Judge high-yield currencies on spot plus carry.

Independent research on public data; spot only, carry excluded; not deployed; not investment advice. Dollar figures are illustrative. Analysis, code, charts and text were produced with AI assistance and reviewed by the author. Code: github.com/guptagaurav-info/fx-yield-shocks



Pipeline. Blue: sources. Lavender: code. Red: checks.