

Methodology & Key Assumptions

Data Construction

- **Sample Period:** 2013-2024 (241 total events: 144 CPI, 97 FOMC)
- **Return Calculation:** T+0 returns calculated as $\text{close}/\text{price_at_announcement_time}$
 - CPI announcements: 8:30 AM ET
 - FOMC announcements: 2:00 PM ET
 - Other days (T-2, T-1, T+1, T+2): Standard close-to-close returns
 - Close being market trading hours close - 4 pm

Event Classification

- **Surprise Direction:** Based on actual vs forecast values
- **Inline Definition:** Within ± 0.01 threshold of forecast
- **Sample Sizes:** Limited for some categories (FOMC better n=12, FOMC worse n=16)

Statistical Measures

- **Mean**
- **Median**
- **Standard Deviation**
- **Win Rate:** Percentage of positive return instances

Key Limitations

- **Small sample bias:** Some categories have limited observations
- **Non-stationarity:** Market regime changes not accounted for
- **Event overlap:** No adjustment for events occurring close together

Observational Findings

CPI Patterns (n=68 better, n=70 worse)

Better CPI (T+0): Mean +0.24%, Median +0.27%, StdDev 1.05%, 63% WR

Worse CPI (T+0): Mean -0.09%, Median +0.02%, StdDev 1.19%, 50% WR

Observation: Markets appear to show minimal reaction to worse CPI data. This asymmetric response pattern doesn't exactly align with the **CPI Bottom** strategy concept of buying weakness on bad inflation data.

FOMC Patterns - Limited Sample Sizes

Dovish Surprises (n=12 - small sample):

- T-2: Mean +0.84%, Median +0.32%, StdDev 2.81%, 67% WR
- T+0: Mean -1.51%, Median -0.56%, StdDev 3.52%, 42% WR
- T+2: Mean +0.56%, Median +0.41%, StdDev 2.36%, 67% WR

Observation: The T-2 to T+0 to T+2 pattern resembles anticipation -> disappointment -> relief, which bears some similarity to the **Fed Relief** strategy timing, though sample size (n=12) limits confidence.

Inline FOMC (n=69):

- T-1: Mean +0.26%, Median +0.17%, StdDev 0.84%, 65% WR
- T+0: Mean +0.06%, Median +0.08%, StdDev 0.69%, 57% WR

Observation: Pre-meeting positioning appears consistent when no surprise is expected.