PRISM Engine

Multi-Lens Economic Indicator Analysis

Analysis Date: 2025-11-29

Indicators Analyzed: 32

Data Points: 16,924 days

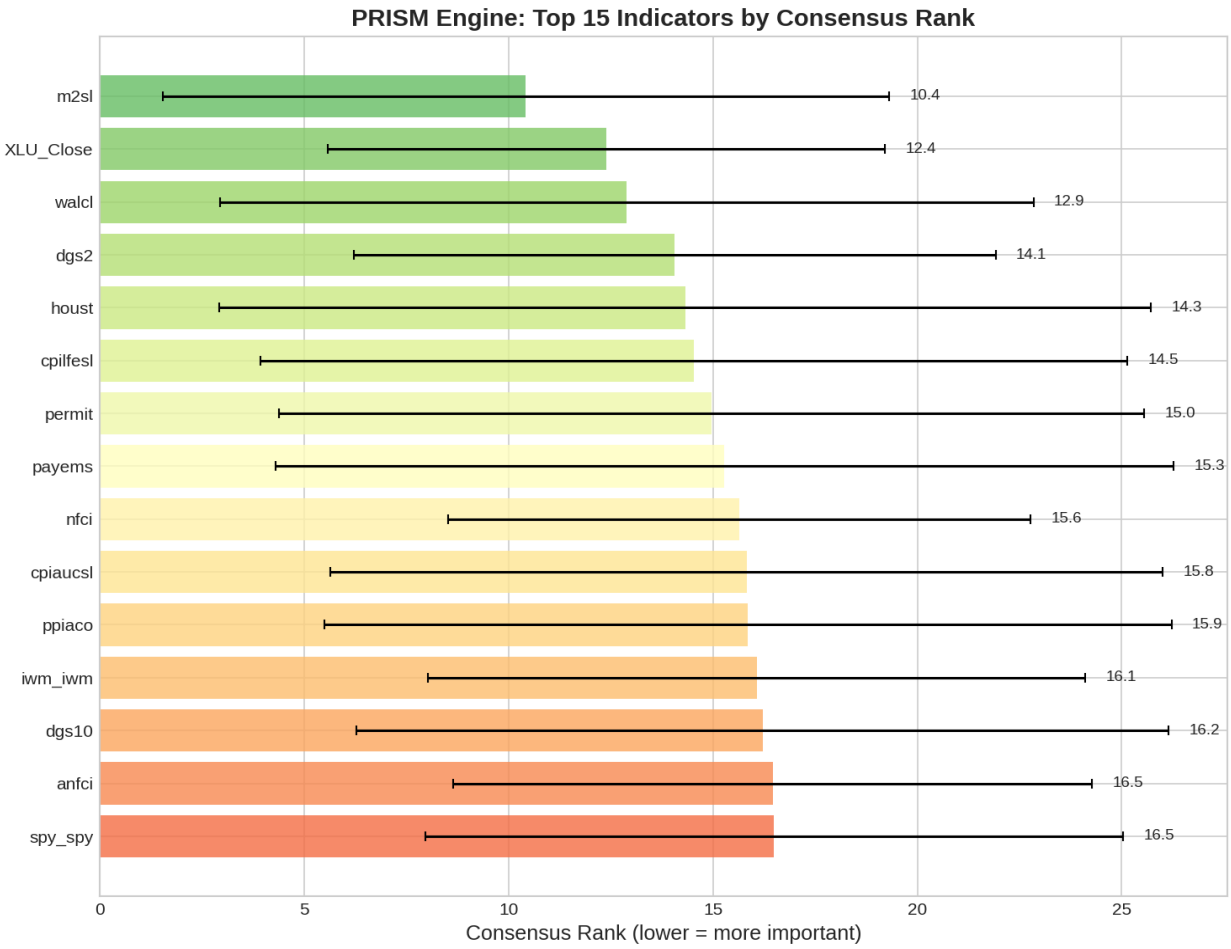
Lenses Applied: 14

Top 10 Consensus Rankings

Rank	Indicator	Avg Rank	Std Dev
1	m2sl	10.4	8.9
2	XLU_Close	12.4	6.8
3	walcl	12.9	9.9
4	dgs2	14.1	7.8
5	houst	14.3	11.4
6	cpilfesl	14.5	10.6
7	permit	15.0	10.6
8	payems	15.3	11.0
9	nfci	15.6	7.1
10	cpiaucsl	15.8	10.2

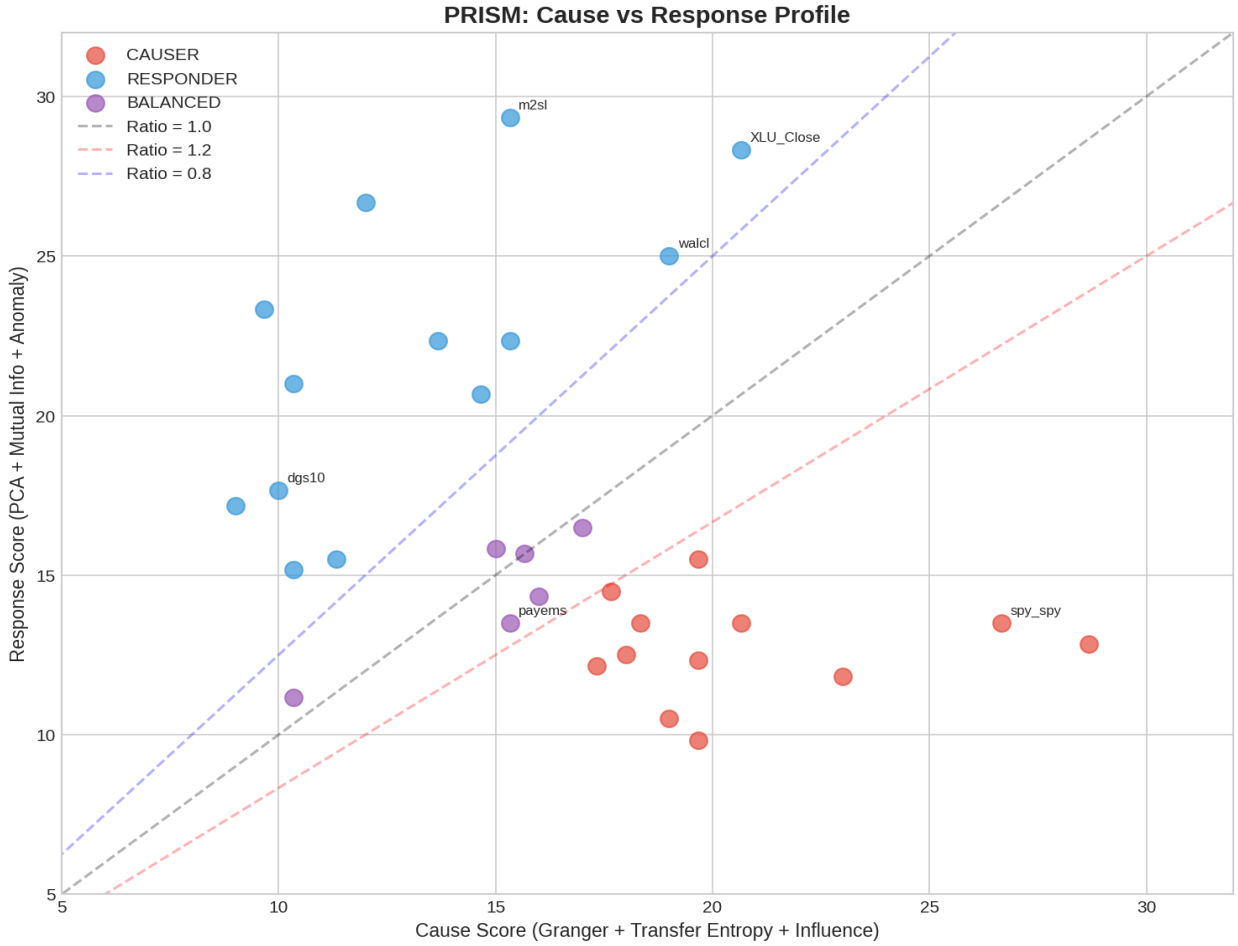
Consensus Rankings

The consensus ranking aggregates all 14 mathematical lenses. Lower rank = more important. Error bars show standard deviation across lenses (higher = more disagreement).



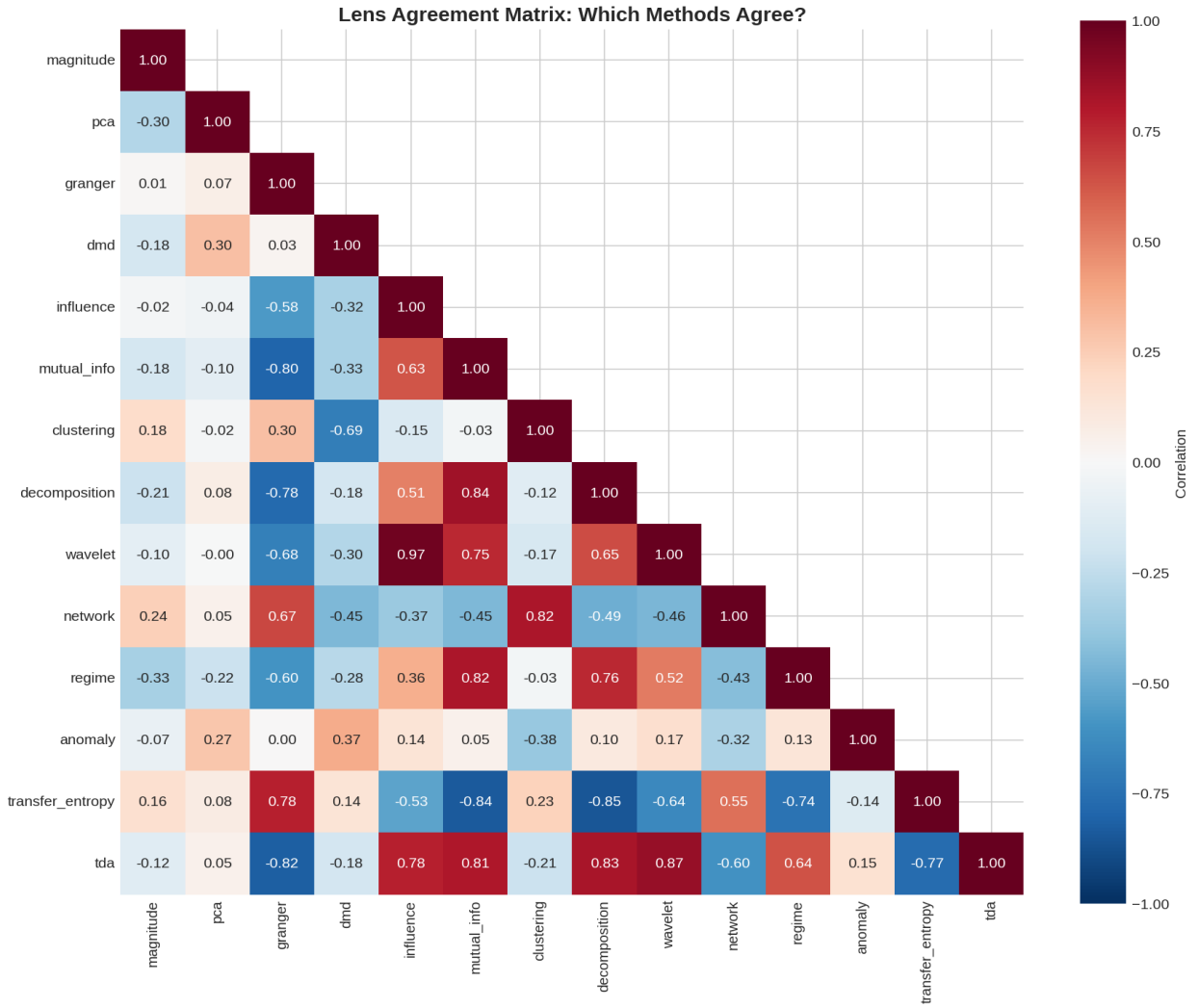
Cause vs Response Analysis

CAUSERS (red) predict other indicators. RESPONDERS (blue) reflect system state. M2, yields, and XLU are responders. SPY, QQQ are causers (markets price expectations first).



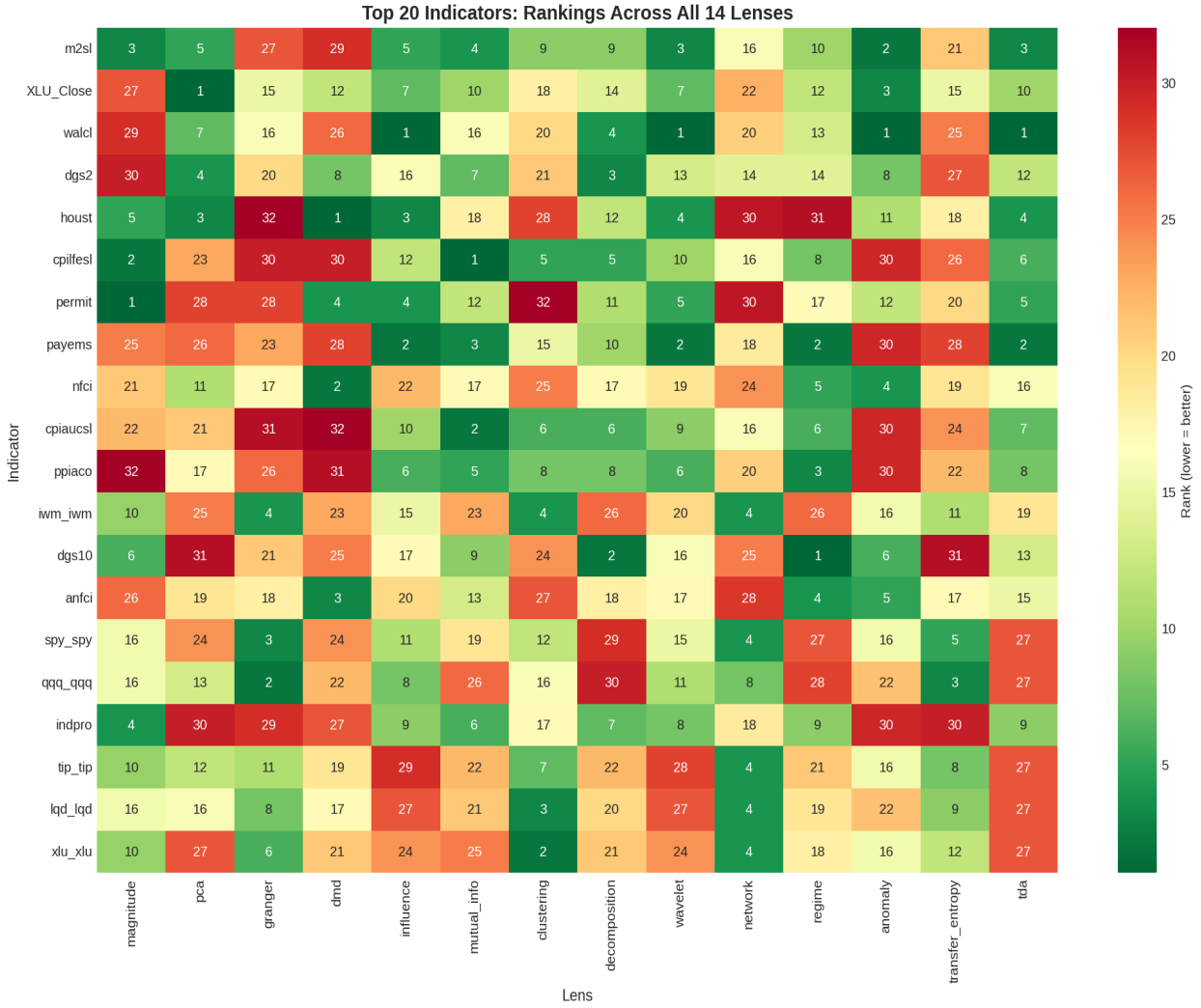
Lens Agreement Matrix

Blue = lenses agree. Red = lenses disagree. Key finding: Influence↔Wavelet agree strongly (r=0.97). Granger↔Decomposition strongly disagree (r=-0.85). Different math, different answers.



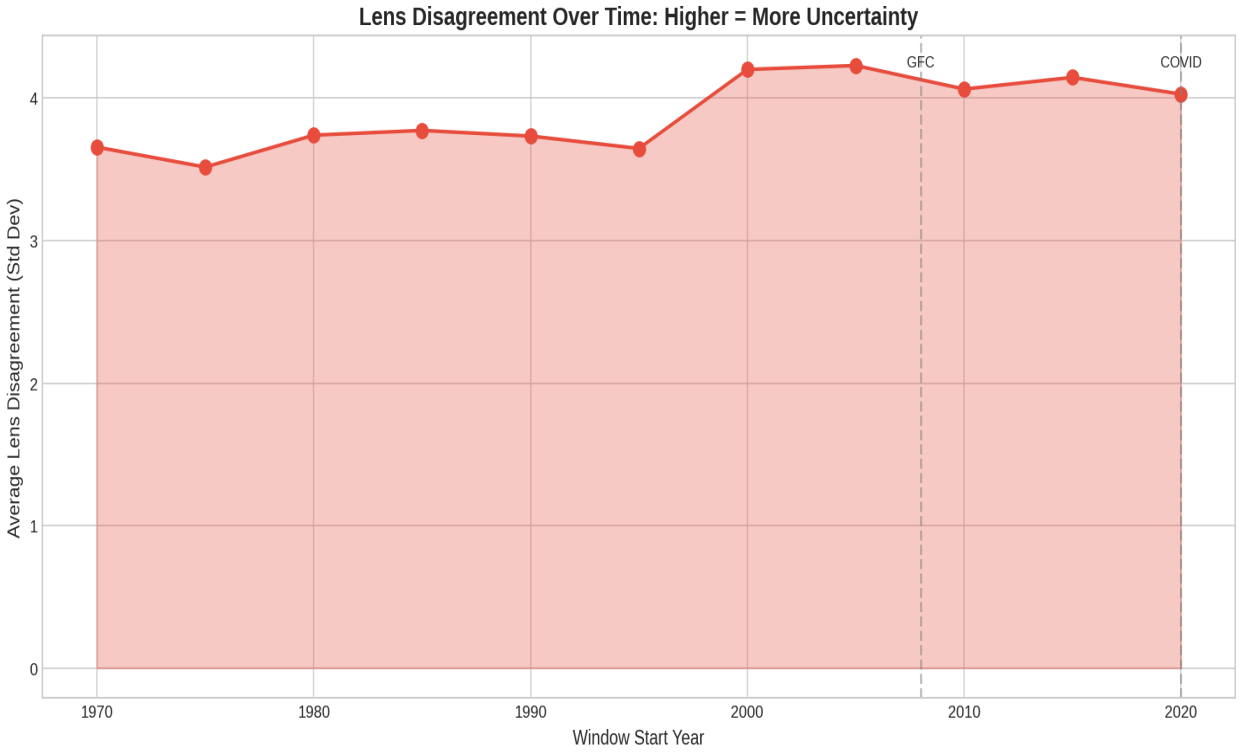
Individual Lens Rankings

How each lens ranks the top 20 indicators. Green = high rank, Red = low rank. Wide variation across a row indicates lens disagreement on that indicator.



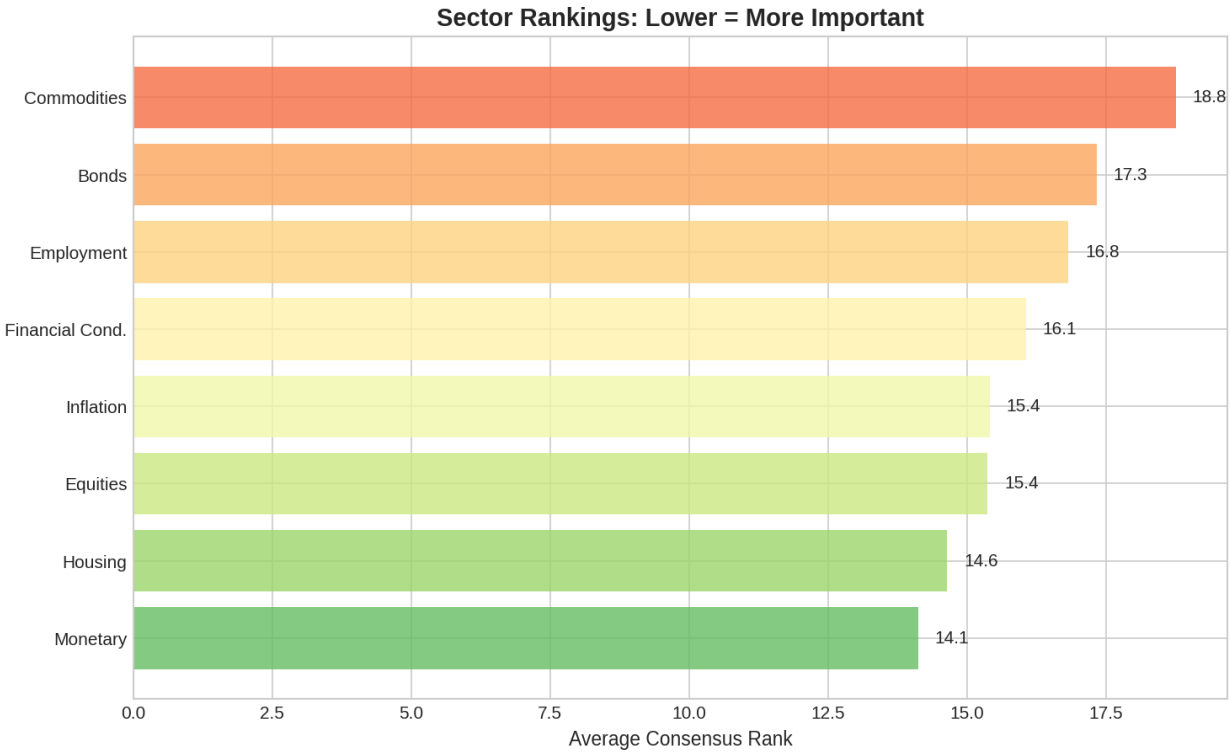
Temporal Stability

Average lens disagreement over rolling 5-year windows. Higher values indicate periods where the mathematical methods disagree more about indicator importance.



Sector Summary

Average consensus rank by sector. Housing and Monetary indicators rank highest. Commodities and Bond ETFs rank lowest.


Sector Rankings: Lower = More Important
Commodities
Bonds
Employment
Financial Cond.
Inflation
Equities
Housing
Monetary
18.8
17.3
16.8
16.1
15.4
15.4
14.6
14.1
0.0
2.5
5.0
7.5
10.0
12.5
15.0
17.5
Average Consensus Rank

Key Findings

1. M2 Paradox: M2 ranks #10.4 consensus but shows a 0.52 cause/response ratio. It's structurally central but not causally leading — the 'water level' everything floats on.

2. XLU as Thermometer: Utilities rank #12.4 with PCA #1 but Magnitude #27. XLU reflects system state (rate expectations, risk appetite) without causing it.

3. SPY Ranks Low: Markets rank mid-pack in consensus (#16.5) but high on causal lenses. They're information aggregators, not fundamental drivers.

4. Lens Clusters: Influence↔Wavelet (r=0.97) see the world similarly. Granger↔Decomposition (r=-0.85) fundamentally disagree. This is methodological, not noise.

5. Housing Dominance: With only 2 indicators, Housing ranks #1 by sector. Five different lenses independently flag housing as central.

Known Limitations

• Clustering lens failed in 3 windows (2013-2017) due to numerical precision issues

• No statistical significance tests on consensus rankings

• Equal weighting across lenses — no theoretical justification provided

• 2024 regime break needs independent confirmation

• No out-of-sample predictive testing performed

Methodology

PRISM applies 14 mathematical lenses to rank indicator importance: Magnitude, PCA, Granger, DMD, Influence, Mutual Info, Clustering, Decomposition, Wavelet, Network, Regime, Anomaly, Transfer Entropy, and TDA. Each lens answers a different question about 'importance.' Consensus rank is the average across all lenses. Lens disagreement (std dev) indicates methodological uncertainty.