

Cross Asset Correlations

Checklist

Signal Pilot Education Hub

Cross-Asset

Correlations Trading

Checklist

Lesson 31: Cross-Asset Correlations

This checklist helps you use relationships between stocks, bonds, currencies, and commodities to confirm trade direction and anticipate market moves.



Pre-Trade Correlation Analysis

Major Correlation Pairs to Monitor

- [] **SPY vs. TLT (Stocks vs. Bonds)** - Inverse correlation: Stocks up → Bonds down (risk-on)

- [] **DXY vs. Gold (Dollar vs. Gold)** - Inverse correlation: Dollar up → Gold down
- [] **VIX vs. SPY (Volatility vs. Stocks)** - Inverse: VIX spike → Stocks drop (fear gauge)
- [] **Oil (USO) vs. Energy stocks (XLE)** - Positive: Oil up → Energy stocks up
- [] **10-Year Yield (TNX) vs. SPY** - Rising yields often pressure stocks (discount rate)

Correlation Strength Check

- [] **Calculate correlation coefficient** - Use 60-day lookback (1.0 = perfect, 0 = none)
- [] **Check if correlation is stable** - Has correlation shifted recently? (regime change)
- [] **Identify leading vs. lagging asset** - Which moves first? (e.g., TNX leads SPY)
- [] **Monitor correlation breakdown** - If correlation breaks, major shift underway

Divergence Detection (High-Probability Setups)

- [] **Look for positive correlation divergence** - SPY up but XLE flat (energy weakness = SPY risk)
- [] **Check inverse correlation divergence** - VIX falling but SPY not rising (bullish confirmation)
- [] **Monitor sector rotation** - If tech (QQQ) leads but SPY lags, narrow leadership
- [] **Watch for currency impact** - DXY rally while SPY rallies = unusual (dollar headwind)

Macro Context Confirmation

- [] **Risk-on confirmation** - SPY up, TLT down, VIX down, DXY down = strong risk-on
- [] **Risk-off confirmation** - SPY down, TLT up, VIX up, Gold up = risk-off (defensive)
- [] **Check commodity confirmation** - Commodities (DBC) up = inflation/growth trade
- [] **Monitor international markets** - EFA (international) leads or lags SPY? (global risk)

🎯 During Trade (Correlation Monitoring)

Entry Confirmation via Correlations

- [] **Confirm directional bias with correlations** - Long SPY? Check TLT falling, VIX falling
- [] **Look for all lights green** - Multiple correlations aligned = higher confidence
- [] **Wait for lagging asset to catch up** - If TNX up but SPY hasn't dropped, wait for SPY drop
- [] **Avoid trades with conflicting signals** - SPY up but VIX rising = mixed/unclear

Position Management Based on Correlations

- [] **Exit if correlation breaks** - SPY rising but TLT also rising = risk-off shift (exit longs)

- [] **Reduce size if divergence appears** - Correlations misaligned = uncertainty (cut risk)
- [] **Add to position if correlation strengthens** - All assets confirming = scale in
- [] **Hedge with inverse correlation** - Long SPY + Long TLT = hedged against risk-off

Real-Time Divergence Alerts

- [] **Set alert: VIX spikes > 5 points** - Immediate risk-off signal (consider exit)
- [] **Monitor DXY for sharp moves** - Dollar rally > 1% = SPY headwind
- [] **Watch 10-Year yield** - Yield spike > 0.10 intraday = stock pressure
- [] **Check sector breadth** - If SPY up but only 1-2 sectors green, weak rally



Post-Trade Correlation Review

Correlation Accuracy Check

- [] **Were correlations aligned at entry?** - Did risk-on/risk-off assets confirm direction?
- [] **Did divergence signal work?** - If traded on divergence, did convergence occur?
- [] **Which leading asset was most accurate?** - TNX? VIX? DXY? (refine future use)
- [] **Did correlation break during trade?** - If yes, did you exit or ignore it?

Performance by Correlation Signal

- [] **Track win rate when all correlations aligned** - Green lights = higher win rate?
- [] **Track win rate on divergence trades** - Did correlation convergence play out?
- [] **Measure avg R by signal strength** - Strong correlation = larger moves?
- [] **Log correlation state at entry** - Tag: Risk-on, Risk-off, Mixed, Divergence

Lessons Learned

- [] **Which correlation pair most reliable?** - SPY/TLT? VIX/SPY? DXY/Gold?
- [] **Did I wait for confirmation or jump early?** - Patience in aligning signals pays
- [] **How fast did I react to correlation break?** - Should I exit faster next time?
- [] **Next improvement** - Build correlation dashboard, set auto-alerts for divergences



Pro Tips

Correlation Trading Mastery

- **Use 3+ confirming correlations** - Don't trade on one correlation alone (SPY/TLT/VIX)
- **Monitor correlation on multiple timeframes** - Daily trumps 15-min

- **Watch for regime shifts** - Correlations can invert during crises (e.g., Gold + Stocks both fall in 2008)
- **Leading indicators matter most** - TNX and DXY often lead SPY by hours/days

Common Mistakes to Avoid

- **✗** Trading without checking correlations first (missing macro context)
- **✗** Ignoring correlation breakdowns (major warning sign)
- **✗** Overcomplicating with too many correlations (stick to 4-5 key pairs)
- **✗** Using outdated correlation assumptions (correlations shift over time)

Key Correlation Rules of Thumb

- **Risk-on environment:** SPY ↑, TLT ↓, VIX ↓, DXY ↓, Commodities ↑
- **Risk-off environment:** SPY ↓, TLT ↑, VIX ↑, Gold ↑, DXY ↑ (safe havens)
- **Inflation trade:** Commodities ↑, Gold ↑, TLT ↓ (yields rising)
- **Deflation trade:** TLT ↑, Commodities ↓, DXY ↑ (safe havens + dollar strength)

Divergence Trade Playbook

1. **SPY up, but XLE/XLF/QQQ flat** = Narrow breadth (fading rally opportunity)
2. **VIX falling but SPY not rising** = Bullish setup (fear removal = eventual rally)
3. **DXY rallying but SPY rallying** = Unsustainable (dollar headwind catches up)
4. **TLT and SPY both falling** = Rotation to cash (extreme risk-off)



Related Resources

- **Lesson 29:** Market Regime Recognition (correlations shift by regime)
- **Lesson 38:** Portfolio Theory Advanced (use correlations for diversification)
- **Recommended Tools:** TradingView (overlay multiple assets), FinViz Correlation Map

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Difficulty: Advanced

Remember: No asset trades in isolation. Correlations reveal the hidden forces moving markets. Trade with the macro flow, not against it.

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