For Alpha

The Strategy Spotlight: Examining Systematic Global Macro Funds

Overview

Systematic global macro strategies, represented by the HFR Global Macro Systematic Diversified Index, use algorithmic models to identify investment opportunities across multiple asset classes—including equities, fixed income, currencies, and commodities. These strategies target statistically robust patterns and typically engage in highly liquid markets.

The key questions that investors frequently raise are:

1. Do these strategies incorporate trend-following models, and how does that shape their overall trading approach?
2. What are their preferred asset class exposures, and how do they allocate risk across different markets, including emerging currencies, industrial metals, soft commodities, credit derivative indices, or Bitcoin futures?

Methodology

To analyze performance, we benchmarked several Global Macro Systematic trading Strategies against the HFR Global Macro Systematic Diversified Index. Our primary tool is the *Daily Decoding* edition of Ai For Alpha, an advanced model that leverages graphical methods to decode the underlying drivers of the benchmark. It measures two pivotal factors:

- **Direct Market Exposure** – Simple long or short positions in a given market.
- **Trend Factor Exposure** – Performance from trend-following models, approximated by replicating long and short lookback straddles with time horizons of 20, 60, 120, 250, and 500 days.

Model Configurations

Four models spanning 13, 20, 36, and 37 markets were constructed, covering equities, commodities, fixed income, currencies, and credit derivatives on CDS indices:

- **13-market model:** Focuses on major equity indices, sovereign bond futures, G3 currencies (EUR, GBP, JPY), and gold.

- **20-market model:** Extends investment universe to include Japanese sovereign bonds, a broader range of major G10 currencies, and commodities such as copper and Brent crude oil.
- **36-market model:** Further adds Scandinavian currencies, select liquid emerging market currencies (CNH, INR, PLN, MXN, BRL, ZAR), and introduces credit derivatives via high-yield CDS indices in both Europe and the U.S.
- **37-market model:** Builds on the 36-market framework by incorporating Bitcoin futures to assess potential benefits of digital assets.

Trading Style and Preferred Habitat

Key Findings

1. **Trend Factors Influence**
    - Excluding trend factors from the investment universe, we obtain Sharpe Ratios between 0.21 and 0.43, with correlations rising from 75% to 84% as coverage expands.
    - By introducing trend-followingmodels Sharpe Ratios increase across all variations, culminating at 0.60 for the 37-market model. Correlations also improve substantially, reaching 90% in the 36-market configuration.
2. **Value of Market Diversification**
    - Expanding the investment universe improves performance. Sharpe Ratios move from 0.21 to 0.43 (without trend) and 0.23 to 0.48 (with trend) when expanding from 13 to 36 markets.
    - Incorporating Bitcoin futures (37 markets) yields a notable uptick in Sharpe Ratio to 0.60, indicating the potential diversification and performance benefits of digital assets.

Overall, systematic global macro strategies profit from both trend-following components and broad asset coverage. Trend factors, in particular, drive stronger risk-adjusted returns and consistently enhance replication accuracy relative to the benchmark.

Version	Sharpe Ratio 5Y	Correl 5Y
Without Trend Factors		
13 Markets	0.21	75%
20 Markets	0.38	82%
36 Markets	0.43	84%
With Trend Factors		
13 Markets	0.23	83%
20 Markets	0.38	89%
36 Markets	0.48	90%
37 Markets adding BTC	0.60	89%

Table 1: Sharpe Ratio of the replication strategy and correlation to the HFR Global Macro Systematic Diversified Index Over the Last 5 Years.