THE ALTERNATIVE WEEKLY BRIEF

23 NOVEMBER 2022

By AMUNDI INSTITUTE

HEDGE FUNDS' POSITIVE BUT COMPLEX RELATIONSHIP WITH INFLATION

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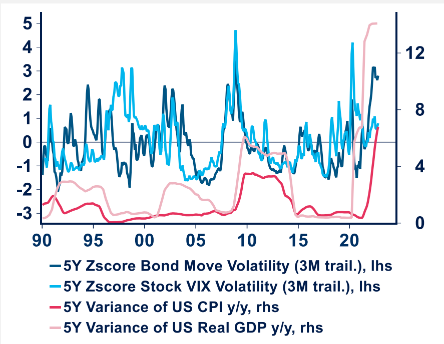
Hedge funds are statistically correlated to inflation. However, sorting out what affects this relationship over time is trickier. Hedge funds' sensitivity to inflation is not binary but matrix, requiring some analytical nuances. First, we distinguish actual inflation (headline and core CPI, inflation surprises) from traded inflation assets (using breakeven and a basket of inflation-sensitive assets). Second, the source of inflation matters. 'Good' inflation tends to be demand-driven, resulting from economic momentum. 'Bad' inflation may stem from supply-shocks, due to commodities, supply-chain issues, trade barriers, insufficient output or geopolitics. It can alternatively be fueled by excess liquidity due to leverage or stimulus. Third, since inflation is simultaneously a cause and consequence of macro turns, we extend the analysis to other major macro drivers such as growth, liquidity, monetary and fiscal policies. These drivers behave differently, depending on the root of inflation. Fourth, we break down hedge fund returns to discern how inflation impacts their beta and alpha contributions. Structural sensitivity to inflation should show in their beta, unlike tactical inflation positions that should show in their alpha. We also run through this analysis for the main strategies. Finally, inflation sequences are important: hedge funds do not react symmetrically when inflation firms up or when it normalizes. The inflation's starting point and pace also matter.

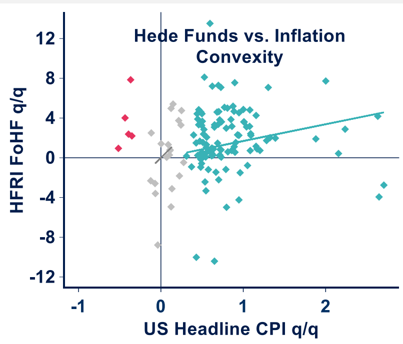
HFs' relationship with inflation is complex and conditional. We find that inflation is not always a key mover for hedge funds. Inflation matters when it is shifting and/or when growth uncertainty is rising. Typically, during phases of 'great moderation' or during mid-cycles, the influence of inflation fades. Besides, while positively correlated to inflation, hedge fund returns are driven by many other factors. Moreover, hedge funds tend to be structurally exposed to inflation induced by economic growth. In contrast, the relationship is more versatile when inflation goes through major shifts. In such cases, inflation tends to be more tactically traded, with hedge funds rather correlated to inflation-markets than actual-inflation.

Why are hedge funds positively sensitive to inflation? The reasons are complex to evidence, in part because of the multiple dimensions of inflation (several sources having differentiated consequences). Also, the hedge fund universe encompasses a wide set of strategies that operate on all markets with changing underlying exposures. To start, one obvious reason though is that hedge funds have an overall long exposure to risky assets, which are influenced both by inflation regimes and economic cycles. Besides, many hedge funds actively trade assets linked to inflation, which make up some of their core holdings. Top-down styles such as fixed income arbitrage and global macro actively trade TIPS or bonds. CTAs usually have large exposures to bonds and commodities. Bottom-up strategies also tend to hold *[continued p2]*

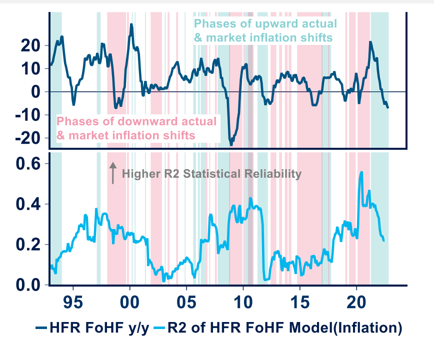
Inflation and growth regime shifts spur volatility



Hedge Funds positively correlated to inflation



Inflation matters the most for HF when shifting



Sources: HFR, Bloomberg, Macrobond, Amundi Institute

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Performance: CTAs still hurting over the November rally

Amundi UCITS Peer Group Performance	Last week*	MTD	YTD
Global Amundi UCITS Peer Group	0.1%	0.4%	-1.7%
L/S Equity Directional	0.2%	1.9%	-5.5%
L/S Equity Market Neutral	0.1%	-0.6%	-7.2%
Event-Driven: Merger Arbitrage	0.5%	-0.3%	-0.6%
Event-Driven: Special Situations	0.2%	3.5%	-7.0%
L/S Credit	0.3%	1.2%	-4.4%
Global Macro	0.3%	1.2%	-3.0%
CTAs	-1.0%	-3.8%	12.6%
Risk Premia	0.1%	-1.1%	3.8%
MSCI World	-0.6%	4.4%	-17.7%
Bloomberg Barclays Global Aggr. Bond	0.6%	1.7%	-10.9%

*Last Week: Nov 11 to Nov 18. YTD and MTD until Nov 18. Source: Amundi Institute

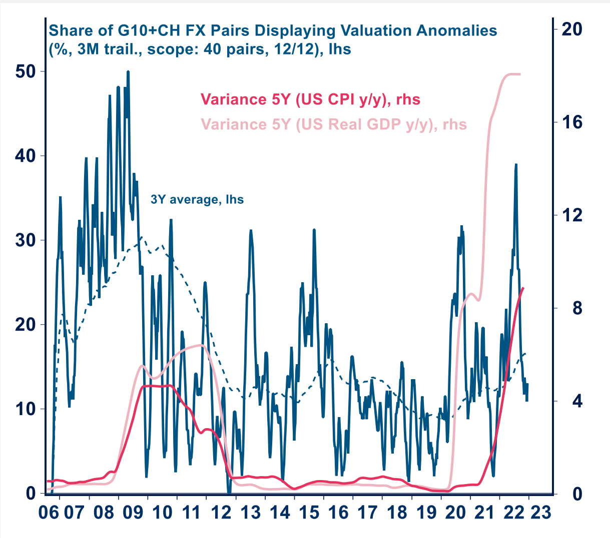
Investors digested last week's encouraging US inflation data and partially reversed earlier trends. US rates trended up, which boosted dollar and weighed on equities. In China, the announcement of measures to improve Covid management and to support property markets temporarily improved sentiment.

Hedge fund performance was yet again slightly positive. Special situations, L/S credit in Europe, and L/S equity directional styles continued to benefit from the rally that unfolded since the end of October, especially in Europe.

In contrast, CTAs performance continued to hurt, with losses in November nearly reaching -4% (their returns are still up +13% YTD though). During the month, all asset class buckets were down, especially in FX and commodities.

Hedge Funds' Positive but Complex Relationship with Inflation *[continued from p1]*

Valuation opportunities multiply when inflation shifts (FX focus)



Source: Bloomberg, Amundi Institute

inflation sensitive assets, especially value-oriented and L/S credit managers. Furthermore, when inflation goes through an upward inflection, volatility in bonds (and beyond) tends to rise, reflecting greater threat for risky assets. Uncertain monetary and fiscal policies add to volatility. Valuation anomalies then tend to multiply while dispersion widens across assets. Risks are higher, but more opportunities become available that are traded by hedge funds. These inflation shifts tend to have lasting power, as convergence trades usually follow as inflation starts to normalize. At this stage, liquidity tightening and greater fundamental discrimination tend to correct valuation anomalies, usually providing a favorable alpha environment.

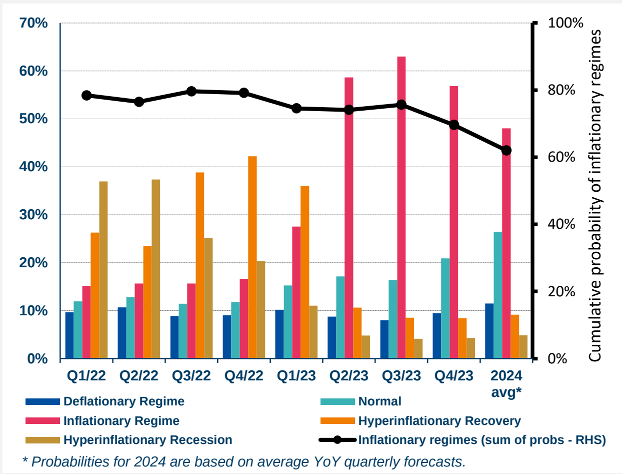
The left table simplistically recaps uneven strategies' sensitivity to inflation. While 'bad inflation' and its consequences is a hurdle for the majority, some strategies strive in these markets, others remain resilient at least. Moreover, we find that hedge funds usually outperform in the subsequent disinflationary phase. **Hedge fund's positive but dynamic inflation exposures thus look attractive in inflationary backdrops**.

Typical HF strategies' behaviors over inflation cycles

HF Strategies returns over inflation regimes	'Good' Inflation ↗	'Bad' Inflation ↗	Inflation normalizes ↘	Strength of relationship
HFRI FoHF	🟢	🔴	🟢🟢	**Medium**
L/S Equity Diversified	🟢🟢	🔴🔴	🟢	Strong
L/S Equity Neutral	🟢	⚫/🔴	🟢	Low
L/S Equity EM focus	🟢🟢	🔴🔴	🟢	Strong
Merger Arbitrage	🟢	⚫/🔴	⚫/🟢	Low
Special Situation	🟢🟢	🔴🔴	🟢🟢	Strong
L/S Credit	🟢	🔴🔴	🟢	Medium
Sovereign FI RV	⚫/🟢	🔴	🟢🟢	Strong
EM Focused FI RV	🟢🟢	🔴🔴	🟢🟢	Strong
Global Macro Discretionary	⚫/🟢	⚫/🟢	🟢🟢	Medium
Global Macro Systematic	⚫	🟢	🟢🟢	Strong
Global Macro EM focus	⚫/🔴	🟢	🟢🟢	Medium
CTAs	⚫/🟢	🟢🟢	⚫/🔴	Low

Source: Amundi Institute

Amundi's Inflation Phaser (quarterly probabilities 2022-2024)



Source: Amundi Institute (as of Nov 2022)

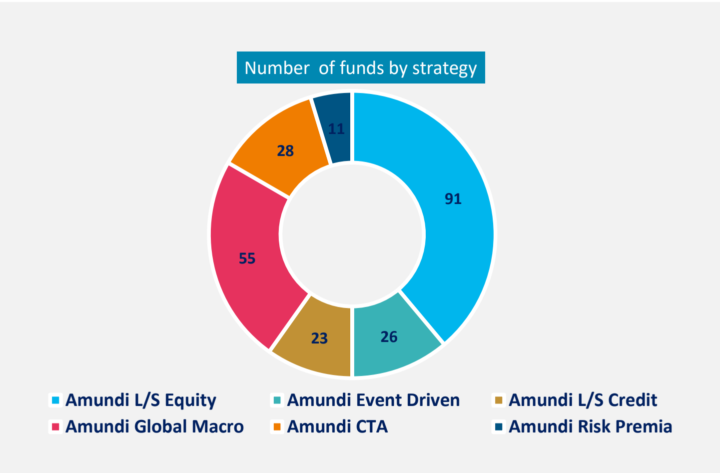
METHODOLOGICAL APPENDIX

The information contained in this report on the performance of hedge funds is based on publicly available information. The universe of underlying funds is relatively stable but varies depending on the criteria of inclusion presented below. It is based on an unbiased selection from our hedge fund analyst team.

Performance is calculated on a weekly basis, as of end-of-week, using an arithmetic average (equally weighted average).

Regarding share classes used in these peer groups, we selected the primary share class as referenced in Bloomberg. Non-USD share classes are hedged in USD based on hedging costs available on Bloomberg.

Amundi Hedge Fund Peer Groups: number of funds by strategy



- 234 strategies across the main categories in the industry
- USD 154 billion of assets under management
- As of November 2022

Criteria of inclusion

The criteria of inclusion are fourfold:

- Only UCITS strategies are included
- Assessment by Amundi’s Hedge Fund selection team based on funds’ materials or manager interaction
- Strategies included must have assets under management of at least USD 50 million
- Strategies included must display at least a one-year track record

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Date of first use: 3 June 2022.

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