TRU PRIMER

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The Mechanics of Arbitrage: Spreads, Rates & Market Sentiment

Background

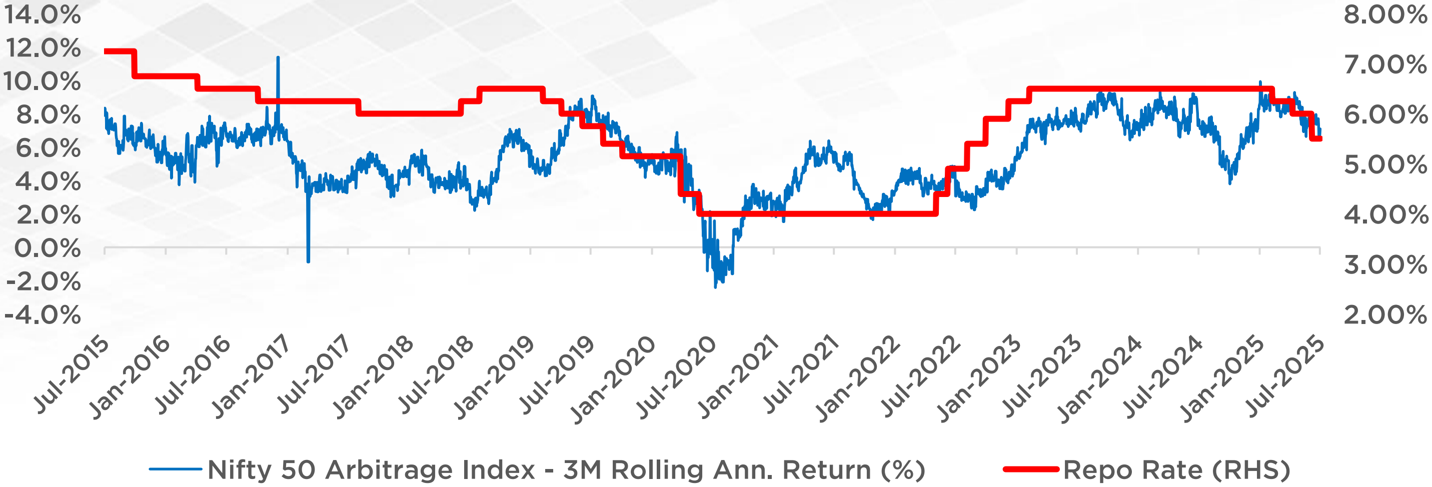
- Arbitrage funds primarily invest >65% of the portfolio in hedged equity positions by simultaneously taking long positions in cash equities and short positions in futures, capitalizing on the cash-future spread.
- The remaining portfolio is allocated to short-term debt instruments, typically in money market securities, which contribute stable income aligned with prevailing interest rates.
- As a result, returns of arbitrage funds are a blend of arbitrage spreads and money market yields, offering a hybrid return profile.
- While debt returns are influenced by short-term yield movements, arbitrage spreads are more dynamic, shaped by multiple market and behavioral factors. This note aims to decode those spread drivers.

Key factors driving arbitrage spreads

Factor	Rising Arbitrage Spreads	Falling Arbitrage Spreads
Equity Market Sentiment	Bullish markets: Strong buying interest leads to futures trading at a higher premium, widening spreads	Bearish markets: More selling of futures compresses spreads
Interest Rates	Higher rates: Increases cost of carry, widening spreads	Lower rates: Reduces cost of carry, narrowing spreads
FII Hedging/Borrowing Costs	Higher costs increases spreads	Lower costs narrows spreads
Category Flows	Lower flows: Fewer arbitrage players, wider spreads	Higher flows: More participants compress spreads
F&O Universe Breadth	Expansion: More arbitrage opportunities, wider spreads	Contraction: Fewer opportunities, tighter spreads
Market Volatility	Moderate volatility: Creates pricing inefficiencies and wider spreads	Low volatility: Efficient pricing narrows spreads
Liquidity in Futures Market	Low liquidity: Increases price impact, widening spreads	High liquidity: Narrower bid-ask spreads, tighter arbitrage spreads

Source: Bandhan AMC, Invesco AMC

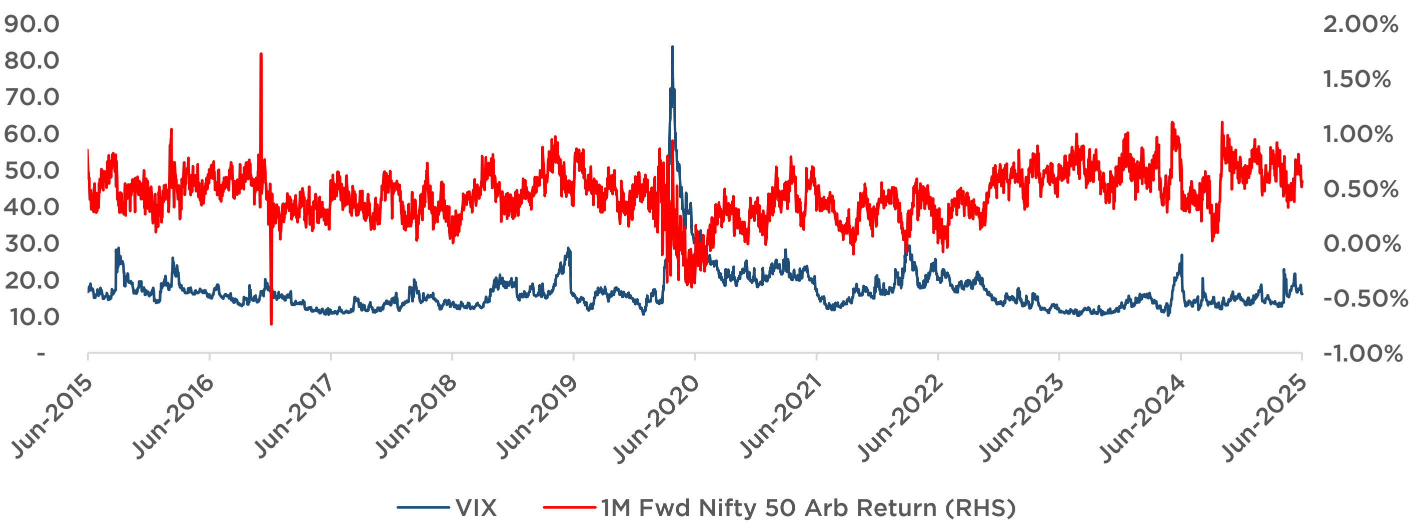
Interest rate cycles are a significant driver of arbitrage spread performance



Source: NSE, RBI, ACE MF

- **3-month annualized rolling return of Nifty 50 Arbitrage Index and repo rate movement has a strong correlation of 0.61 over last 10 years.**
- **Higher policy rates generally supports higher arbitrage returns. This relationship is primarily driven by the cost of carry component - when interest rates rise, futures tend to trade at a wider premium to spot, enhancing arbitrage spreads.**

India VIX has negative correlation with Nifty 50 Arb Return



Source: NSE

- **A moderate negative correlation of -0.35 between VIX and 1-month forward arbitrage returns likely indicates that excessive volatility or bearish sentiment dampens arbitrage spreads.**
- **Elevated VIX levels often coincide with risk aversion and unwinding of arbitrage positions, leading to lower or even negative spreads.**

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