

## Why Margin Period of Risk Estimation in Commodities Derivatives Market Deserves a Review

*A volatility-only framework for determining Margin Period of Risk may be overstating liquidation risk, inflating margins, and reducing capital efficiency in India's commodity derivatives market*

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### Summary of this article

- India's current MPOR framework relies largely on price volatility, overlooking liquidity — a critical factor in determining how quickly positions can be unwound.
- Highly volatile contracts like crude oil and natural gas also exhibit deep liquidity, suggesting they may not require longer close-out periods despite elevated price swings.
- Incorporating both volatility and liquidity metrics could improve capital efficiency, reduce excessive margin burdens, and align India's framework with global PFMI standards without weakening safeguards.

India's commodity derivatives market may be operating with a flawed assumption—one that quietly inflates trading costs and locks up capital without necessarily improving safety. At the heart of the issue lies the Margin Period of Risk (MPOR), a key parameter used by clearing corporations to determine how much margin traders must post. MPOR represents the time required to close out a defaulting position. The longer this period, the higher the margin requirement. In India, MPOR is determined almost entirely by one factor: price volatility. On the surface, this seems reasonable.

More volatile assets are riskier and should require more time to unwind. But this logic is incomplete. It ignores a second, equally important dimension of risk—liquidity. Liquidation risk is not just about how much prices move; it is also about how easily positions can be closed without causing significant price impact. A highly volatile asset that trades in deep, active markets can often be unwound quickly. Conversely, even moderately volatile assets can become difficult to exit if trading activity is thin

Treating volatility as the sole determinant of liquidation time risks misjudging actual market conditions.

This is not just a theoretical concern. Evidence from India's own commodity markets suggests a clear pattern. Some of the most volatile contracts—such as natural gas and crude oil—are also among the most liquid. They exhibit high trading volumes, deep order books, and relatively low impact costs. In practice, this means positions in these contracts can often be closed faster than their volatility alone would suggest.

Yet under the current framework, such contracts are assigned longer MPORs simply because they are volatile. The result is a paradox: the very contracts that are easiest to liquidate are treated as if they require more time. Since margin requirements increase mechanically with MPOR, this leads to margins that may be more conservative than necessary.

The consequences are not trivial. Excessively high margins tie up capital, reduce trading efficiency, and can discourage participation—particularly from smaller hedgers and market participants. Over time, this can weaken liquidity and impair price discovery, undermining the very stability that margin frameworks are designed to protect.

Global regulatory standards already recognize this issue. The Principles for Financial Market Infrastructures (PFMI) emphasize that clearing systems should consider both volatility and liquidity when determining close-out periods. India's current approach, which relies solely on [volatility](#) buckets, falls short of this broader risk-sensitive framework.

There is a straightforward way to address this gap without compromising prudence. Regulators could adopt a two-factor approach to MPOR determination. Volatility would continue to play a central role, based on historical price movements. Alongside it, liquidity metrics—such as trading volume, turnover, or impact cost—could be incorporated to capture how easily positions can actually be unwound.

These two dimensions can be combined through a transparent, rule-based framework. For instance, contracts could be classified across both volatility and liquidity categories, with

MPOR determined using a simple lookup matrix. Periodic recalibration using predefined data windows would ensure that the system remains responsive without becoming overly reactive. Importantly, this is not an argument for lowering margins or weakening safeguards.

Clearing corporations must remain resilient under extreme but plausible conditions. The objective is not to dilute risk controls, but to refine them—to ensure that they reflect how markets actually function.

Effective [regulation](#) must strike a balance between caution and precision. A volatility-only approach assumes that turbulence always translates into difficulty in liquidation. In modern commodity markets, that assumption does not always hold.

By incorporating liquidity into MPOR determination, regulators can improve capital efficiency, reduce unnecessary frictions, and strengthen [market resilience](#)—all without compromising safety. The question, then, is not whether India's margin framework is conservative enough. It is whether it is accurate enough.

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