Collateral Management in the current scenario of higher interest rates

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Collateral management is a different game since 2022, in its July 2022 meeting, the European Central Bank (ECB) decided to increase its three key interest rates by 50 basis points (0.5%): the interest rate on the main refinancing operations, the interest rate on the marginal lending facility, and the interest rate on the deposit facility (ECB, July 2022). This measure surprised the market with its magnitude, but not with its direction, as the growing inflation in the eurozone demanded a complete change in monetary policy. This event also marked the beginning of a series of consecutive increases that have reshaped financial markets, signaling the end of an era informally known as the 'free money era.'

This article explores how higher interest rates have affected various processes related to managing collateral in transactions such as derivatives, repos, and securities lending. To this end, we will analyze the impact on four different aspects: I. optimization of assets posted as collateral, II. cost of the collateral pledged, III. collateral liquidity, and IV. collateral valuation.

WHAT IS COLLATERAL MANAGEMENT

Collateral management is the process of posting guarantees in the form of financial assets (cash or securities) to secure different transactions or activities. As mentioned by Accenture *(2011)*, collateral can be used for four different purposes: OTC derivatives margining, secured funding with market counterparties and central banks, trading with central counterparties (CCPs), and settlement. Collateral management became a critical activity in the financial markets after the credit crisis of 2008, when clearinghouses around the world gained prominence and importance. It became normal in the OTC market for all transactions to be covered and governed by bilateral contracts with counterparty risk mitigants in the form of netting and collateral.

I. OPTIMIZATION OF ASSETS POSTED AS COLLATERAL

The level of interest rates and the direction of monetary policy are elements that directly affect the decisions of those needing to transfer collateral, influencing the selection of assets perceived as the best choice. In a high-interest-rate environment, those protected from interest rate increases have likely struggled with more collateral requirements due to a deterioration in the market value of the instruments used as a hedge. This is relatively new, considering that, since 2008, this type of protection has required a lot of collateral due to a sustained decrease in interest rates *(Heemelaar, 2022)*.

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Interest rate increases may also impact the composition of collateral posted and received. From a purely economic perspective, when interest rates are low, cash is often considered a more cost-effective option compared to securities for posting assets as collateral.[1] However, with interest rates now considerably higher, borrowing or posting cash has become a more expensive alternative. It would be expected that many market participants would opt to use securities to meet their collateral obligations. However, several non-economic factors can also influence the decision between cash and securities, including the degree of access to the repo market, the correlation between cash remuneration and repo rates, and certain constraints directly imposed by clearinghouses.

II. COST OF THE COLLATERAL PLEDGE

The cost of collateral pledge is directly related to the previous point, as the expense of posting or borrowing collateral is a crucial factor to consider when market participants assess the optimal composition of delivered collateral. However, the cost of collateral also has a significant impact on the financial viability of certain transactions. If the cost of collateral in collateralized deals is sufficiently high, many market participants may be unwilling to enter such deals due to reduced profit margins.

Analyzing the figures reported by ISDA in its Margin Survey Year End 2022, it becomes evident that the rise in interest rates has imposed a significant cost on the industry. According to the numbers released by ISDA at the end of 2022, the total amount of collateral received was $1,290.9 billion.[2] In the second half of 2022 alone, interest rates in the Eurozone increased by 2%. Extrapolating this increase to other economies, it results in an additional collateral cost of nearly $26 billion per year.

The substantial rise in collateral costs during 2022 and 2023 offers significant opportunities for the industry. As highlighted by Dona *(2022)*, there is a pressing need for the industry to evolve and enhance operational efficiency by developing new systems capable of supporting emerging assets. This evolution also provides market participants with the opportunity to craft innovative collateral selection strategies that align with controlled cost budgets.

Financial institutions stand to benefit from various opportunities. For instance, those adept at identifying market dislocations and inefficiencies resulting from shifts in monetary policy may seize profitable trading and arbitrage opportunities. Additionally, non-financial clients grappling with heightened margin requirements or collateral constraints can turn to financial institutions for assistance in managing their collateral obligations. It is worth noting that 'Hawkish' measures from Central Banks often come with intensified regulatory requirements and scrutiny. Therefore, financial institutions that proactively adapt their collateral management practices to comply with regulatory changes can gain a competitive advantage by demonstrating regulatory compliance, transparency, and operational robustness.

Furthermore, technology emerges as a critical ally in collateral management. Strategic partnerships with technology developers, providers, fintech startups, and other financial institutions can pave the way for the development of innovative collateral management solutions. These partnerships offer access to specialized expertise, innovative technology platforms, and invaluable market insights, fostering collaboration and driving innovation in collateral management practices.

III. COLLATERAL LIQUIDITY

Higher interest rates not only make cash a more expensive collateral choice, as interest rates rise, the opportunity cost of holding cash increases, so that liquidity offerors may demand higher returns or set stricter terms when cash is used as collateral, making it less attractive for cash borrowers but also may represent an additional constrain by limiting the amount of cash and cash equivalents available in the market. In this situation many participants with cash surplus prefer a safe deposit to participating as cash providers for collateral, which impacts the ability of market participants to manage their cleared positions, making it more challenging to meet collateral obligations.

Another undesirable effect, from the perspective of a market participant with open cleared positions, is the heightened demand for high-quality liquid bonds. In a scenario of high interest rates, the solvency of bond issuers is expected to deteriorate, particularly for those rated as High-Yield or in the lower categories of Investment Grade. Consequently, investors tend to favor assets with better credit quality, leading to increased difficulty in obtaining collateral. Additionally, this situation elevates systemic risk in the market as there may be a shortage of high-quality assets available.

IV. COLLATERAL VALUATION:

High interest rates can affect the valuation of assets used as collateral. Apart from cash, most collateral assets such as government and corporate bonds are sensitive to interest rates. Considering that bonds and other securities accounted for 28.9% and 13.6% of total collateral received and 25.8% and 5.3% of total collateral posted, according to the figures shared by the ISDA Margin Survey Year-end 2022, from the second half of 2022, the market value of these assets has decreased as interest rates have increased. This situation can result in a need for additional collateral to meet margin requirements or maintain an adequate level of credit risk mitigation.

On the other hand, there is another impact of high interest rates that might be considered as positive for many market participants: it is lower volatility in collateral value. This is because, as interest rates are at elevated levels, the first-order sensitivity (also known as delta or DV01) of the price of bonds and securities to interest rates is lower, and, marginally, new increases in interest rates have a minor effect on the price of these assets.

CONCLUSIONS

The restrictive monetary policies adopted by the ECB and other central banks worldwide have significantly impacted collateral management practices. As central banks implement measures to curb inflation and stabilize the economy, financial and non-financial institutions must navigate a landscape marked by higher borrowing costs, tighter margin requirements, and increased volatility in collateral markets. To mitigate risks and maintain efficiency in this uncertain environment, market participants need to adapt their practices. The development of global economic situations and their impact on inflation, unemployment, and interest rates creates a lot of uncertainty, challenging the capacity of these participants to adapt to different conditions and to remain relevant. As Albert Einstein famously said, *"The measure of intelligence is the ability to change."*

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Notes

1 ISDA Margin Survey Year end 2022 (P.12), shows that "Cash comprised 57.6% of total collateral received and 68.9% of total collateral posted (including IM and VM) at the end of 2022. In comparison, cash accounted for 62.4% of total collateral received and 67.3% of total collateral posted at the end of 2021".

2 ISDA Margin Survey Year end 2022 (P.12)