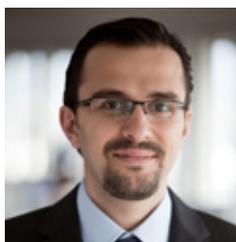


HQLA MANAGEMENT: OPTIMISING RETURNS IN A CHALLENGING MARKET



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With bank profitability under pressure, and the possibility of interest rate rises adversely impacting the value of fixed income portfolios, active management of risk premia offers a way to optimise HQLA pools' returns.

Bank treasurers appear caught in a conundrum. On the one hand, Basel III's banking reforms force them to hold far more capital than ever before. On the other, record low interest rates mean they earn little return on this. Yet if treasurers apply advanced asset management techniques to their pools of "high-quality liquid assets" (HQLA), we believe that they can enhance risk-adjusted returns significantly.

One of the key elements of Basel III is the Liquidity Coverage Ratio (LCR), which requires banks to hold a certain percentage of their potential 30-day outflows in HQLA. While the LCR ensures that banks have sufficient liquidity at times of market stress, it drives them to hold sovereign bonds with low or negative yields.

With many European banks struggling with profitability anyway, this is a further unwelcome pressure. But by applying sophisticated investment management techniques, we believe treasurers could add up to 50 basis points per year to returns, with benefits for profitability. They could also reduce the risk of volatility triggered by interest rate rises.

What treasurers must master is the active management of risk premia. A risk premium is the amount of return over the risk-free rate investors require for holding a risky asset. As investors are risk averse, a risk premium should exceed potential losses from the risk. We see four risk premia that banks can benefit from:

>> SPEED READ

- >> Actively managing risk premia gives banks an opportunity to enhance returns from HQLA pools
- >> These techniques can mitigate risks and improve returns
- >> Tools can assess whether a risk premium reflects underlying risks
- >> The current low interest rate environment increases the case for active management

FOUR TYPES OF RISK PREMIA

1. CREDIT RISK PREMIUM

"Risk-based investing", a methodology similar to the "risk-parity" multi-asset investing style, can broaden a treasurer's investment universe, for example taking in non-domestic bonds. In a risk-based investing approach, allocations are based on two factors: 1) pre-set risk budgets, and 2) actual risk contributions. In order to balance risk, sectors with high volatility and high correlations to others receive lower allocations than sectors with low volatility and low correlations. Allocations are dynamically adjusted depending on market circumstances. For example, if a sector's volatility rises, the allocation to that sector decreases.

¹ The risk-free rate is defined as the theoretical rate of return of an investment with no risk of financial loss. The return on short-dated AAA-rated government bonds is normally perceived as a good proxy.

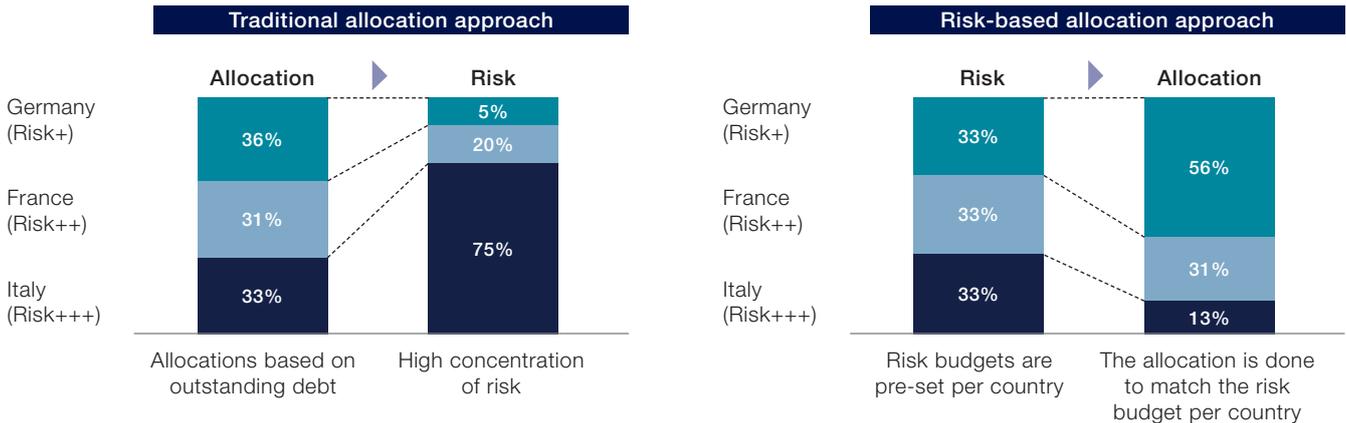
Risk-based investing has three advantages:

1. It enhances the HQLA pool's risk/return profile, reducing volatility and draw downs
2. It allows treasurers to diversify the investment

universe, protecting against individual risk (volatility of sectors) and against collective risk (correlation between sectors)

3. It tends to reduce exposures to bonds before credit downgrades, reducing exposure to price falls.

FIGURE 1: How risk-based investing balances risk more evenly



2. LIQUIDITY RISK PREMIUM

Treasurers have a particular opportunity to benefit from managing the liquidity risk premium. Some tend to eschew higher yielding bonds, fearing they are illiquid in times of market distress. Yet less liquid bonds can offer a significant premium over liquid bonds. As depicted in figure 2, German agency bonds (e.g., KfW Bank) have yielded up to 25 bps more than government bonds during

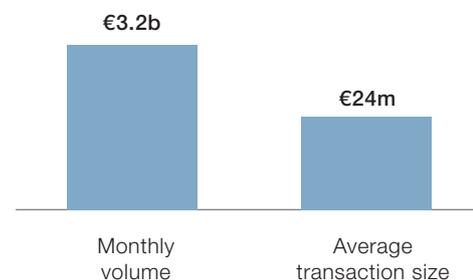
the last three years. Bonds such as these may be more liquid than treasurers realise. Lyxor and Euroclear have developed a liquidity measure for publicly traded bonds, called “e-Data Liquidity”, which allows assessing whether a bond’s yield is in line with its liquidity. The measure is based on transactions through Euroclear, which handles approximately 60% of all European bond orders.

FIGURE 2: Difference in yield between 10-year KfW bonds and German government bonds (basis points).



The figures relating to past performances refer or relate to past periods and are not a reliable indicator of future results. This also applies to historical market data. Source: Bloomberg, Lyxor analysis. Data as at 3 November 2016.

FIGURE 3: Liquidity indicators for 3 – 5 years KfW bonds for June 2016.

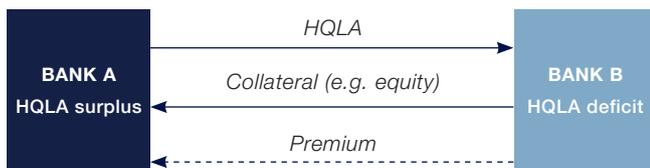


The figures relating to past performances refer or relate to past periods and are not a reliable indicator of future results. This also applies to historical market data. Source: Lyxor, Euroclear e-Data liquidity.

3. SECURED LENDING RISK PREMIUM

Active management of secured lending is another way to optimise HQLA risk-adjusted returns. In a secured lending transaction, two parties temporarily exchange an asset such as a government bond or an HQLA mutual fund, while collateral is provided as a security buffer. Generally, one party pays a premium. Figure 4 shows how a bank with excess HQLA assets generates a performance pickup through a transaction with a bank with an HQLA deficit.

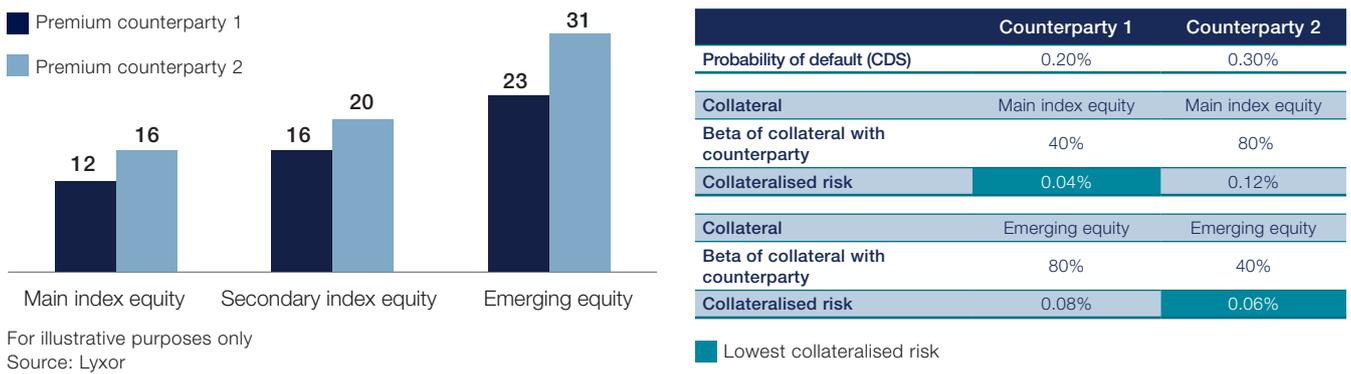
FIGURE 4: Harvesting the secured lending risk premium



Different banks offer different premia and the premium varies as a function of the quality of the collateral. While choosing the optimal counterparty and the collateral to be exchanged, one must take into account the probability that both the counterparty defaults and the collateral is at a loss. Lyxor has developed a model to do so, the results of which can be seen in figure 5.

Electronic trading platforms, such as Elixium, have significantly simplified engaging in secured lending transactions. The platform allows two parties, who might be unaware of each other's interests, to agree on commercial terms. To our knowledge, Lyxor is the first asset manager to have introduced its funds on such a platform.

FIGURE 5: Assessing counterparties in a secured lending transaction



For illustrative purposes only
Source: Lyxor

Counterparty 1 has the most interesting risk / reward profile for Main index equities, whereas Counterparty 2 has the most interesting profile for Emerging equities.

4. INTEREST RATE RISK PREMIUM

Interest rates are at record lows but the possibility of future rises may adversely impact the value of existing portfolios. This situation makes managing the interest rate risk premium, which rewards investors for locking-in an interest rate for a specific time, particularly topical. Some smaller banks take on the duration risk of investing in longer-dated bonds without hedging, while others sacrifice yield by investing in short-dated bonds. But using swaps gives treasurers the opportunity to optimally balance yield and risk. This technique offers multiple advantages:

1. HQLA pools can invest across the yield curve, gaining diversification
2. Investments in long duration, higher yielding bonds become possible, without substantially increasing interest rate risk
3. Any existing long maturity bonds can be hedged against interest rate rises.

Third-party banks or asset managers can provide the necessary infrastructure for managing HQLA portfolios hedged against interest rate risk.

A TOPICAL SOLUTION

We believe that active management of these four risk premia can significantly improve the risk-adjusted returns of HQLA pools. With the possibility of interest rate rises, bank treasurers need the most sophisticated tools possible. Applying sophisticated asset management techniques, tried and tested over many years, can boost returns and minimise risk. With bank treasurers still questioning how to adapt to the new regulatory environment, it is likely that asset management tools offer part of the answer.

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