

Fund Governance: Navigating Liquidity Challenges



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Introduction

... Regulatory Focus ...

Companies are facing varied challenges and increased scrutiny around liquidity. There is an increased regulatory focus at both a European and national level.

This along with more recent market events have highlighted the importance of liquidity, especially for investors.

To fully capture the multifaceted nature of liquidity risk (i.e. where it depends on a variety of factors including market structure and the nature of the asset being traded), investment firms need to use key risk measures which incorporate both the time and cost dimension of liquidity risk, by using dynamic market data-based inputs.

... Multi Faceted Risk

...

At the core of liquidity risk management is the alignment of the investment strategy and fund design with investor redemption rights. The product design stage is of paramount importance as is transparent disclosure of a fund's liquidity profile and redemption rights.

... Operational Efficiency ...

On an ongoing basis liquidity risk management involves measuring how much of a fund's investments/assets can be liquidated and made available to investors over a specified time period, without unduly impacting the remaining investors in the fund.

Incorporating these measures is not necessarily a straightforward process and there are often challenges and impediments to fully operationalising a stringent market liquidity risk monitoring program.

Being able to accurately model a fund's expected behaviour through various market cycles can be difficult.

... Challenges Faced ...

This paper highlights some of the common liquidity challenges facing firms. It attempts to outline why each area is important and the specific challenges relating to such an area.

The paper concludes with a number of additional challenging areas firms should consider when developing their liquidity management solution.

Transparency of Investor Information

Why is it Important

The liquidity of an investment fund is often characterised and analysed based on its underlying investment instruments. However, investor behaviour can have as significant an impact on the underlying funds liquidity profile.

Challenges Faced

Availability of Investor Information / Access to Investor Platforms

In order to conduct liquidity stress testing on the redemption profile of the Fund, the investor characteristics need to be available for analysis. A challenge is extracting the required level of granular detail on the underlying investor profile.

Typically, information on a fund's clients is not easily accessible, particularly when the aim is to perform analysis at a granular level. In this regard, firms do not have the tools to fully systematically monitor structural changes on the liability side.

Distribution channels offer a key challenge in terms of access to underlying investor data. These channels are inextricably linked with the underlying investor type. Some of the key distribution channels include consultant led (pensions), institutional, fund of fund, intermediated, wealth management and direct. The type of channel used can have a significant impact on the quality, availability and depth of information that may be available on the underlying investors. Assessing the behaviour of investors is an important part of the overall liquidity assessment of a fund.

A significant challenge, for some fund types, remains with the intermediated and wealth management channels. These channels rely on an intermediary that sits between the investment fund and the end investors (either retail or high net worth individual). Such intermediaries may or may not have full discretion on investment decision making (i.e. decision to redeem) and clarification of this is important to allow for classification of investor accounts.

An additional challenge, for some funds, is the use of multiple accounts via a centralised clearing institution (e.g. Euroclear, Clearstream) by such intermediaries. This often leads to an inability to clearly identify the underlying investor (or decision maker) which impacts on the classification of the account.

A unique challenge within the consultant-led channel relates to the size of the investments. Investment flows from this channel can be large in nature (due to the underlying investors) and where a consultant changes their view of the investment fund from a buy/hold to a sell this can result in large redemptions in a short time frame.

The importance of the data held by sales and marketing staff at the investment manager and distributors should also not be underestimated as this can provide insights into the investors' behaviours. Fund Administrators/Transfer Agents or operations departments within an investment manager may also be able to provide some insight into the granularity required for monitoring Investor behaviour.

Change in Investor Demographics and Behaviours

Investor concentration is a key risk for many funds. Where a small number of investors hold a significantly large proportion of a Fund's units this increases the liquidity risk due to the size of any potential redemptions at a single point in time.

A shift in the behaviour of the underlying investors can impact the perceived liquidity risk of the fund. For instance, a pension fund has a longer-term view of both the market and liquidity and (depending on the liquidity event type) may be in a position to see through any perceived short-term instability.

However, a significant exposure to stockbroker / retail investors who are more short term focused and minded by recent negative news events might seek to withdraw their investments, regardless if this negative news event had little or minimal impact on the actual liquidity of the securities within the fund.

It is as important to gauge the trending investor profile as it is to assess the liquidity of the underlying assets.

Analysis of Investor Stability

Consider a fund that on a month-to-month basis has consistent / stable flows (subscriptions / redemptions) at the end of the period. This can demonstrate the investors are quite steady and there are no underlying issues.

However, this does not tell the full story. A consistent outflow of once-stable long-term investor flows can be masked by inflows of short-term investors. The true and full picture of the investor stability can only be determined by analysing the fund flows (both inflows and outflows) at the investor level.

Thus, a drill down of the subscriptions and redemptions at an investor level is critical to gauge the individual investors behaviour within the fund, however as mentioned above this is not always possible due to a lack of look-through data.

Investor Profile

When assessing the redemption profile of investors relative to the volumes required for redemption scenarios, indicative guidance provided by the NCA on the tiering of investors would be helpful.

Within the industry, different investors are "tiered" within the internal guidance and approach taken by individual firms. However, this may not be a consistent treatment of investor types and as such would result in skewed results from redemption coverage ratio's across different asset managers.

For instance, in scenario A, a pension/endowment fund would be considered a long-term investor and during "normalised-condition" liquidity issues, would not be expected to redeem any of their positions as they are long-term focused and understand the short-term nature of certain liquidity issues within the market.

However, stockbrokers /retail investors would be anticipated to be more inclined to redeem in the short term given a negative liquidity event or announcement.

If it was the case however that in scenario B, the liquidity event was reputational related, or ESG related then given the fundamental stance of the pension/endowment fund, they might be inclined to reduce or fully redeem their entire position as soon as practicable.

Both scenarios above pose an important challenge on the bucketing or “tiering” of investors for various redemption scenarios and the need for consistency of their application across the industry. With further guidance or suggested scenario tiering provided by the NCA, a more consistent approach can be adapted within the industry.

It should be noted though that assumptions on investor behaviour are inherently difficult to validate, and therefore should not be solely relied upon in the absence of industry-wide adoption.

Conclusion

Access to investor data is an on-going challenge the industry faces when trying to accurately analyse and predict investor behaviour.

As mentioned above asset managers who rely on, for example, external platforms to distribute funds may be unable to fully access transaction level flows and attributes required to model idiosyncratic redemption behaviour.

Depending on the distribution model fund managers may not have direct access to the information necessary for modelling investor behaviour, e.g. transactional history or whether the investors are on a tax incentivized or pension savings account.

Where standard access to data is not available, regulations requiring standardized reporting of transaction level flows with investor type and other attributes for omnibus accounts would be beneficial for asset managers in helping to evaluate redemption behaviour.

National Competent Authorities (NCAs) could collaborate on this topic to assist in ensuring the standardisation of investor data which will help firms deliver enhanced liquidity protection and analysis to investors.

Market Data Availability & Historical Backfill

Why is it Important

Market Data is an important element in helping to manage liquidity risk. Depending on the asset class there can be limited data availability and data can often be expensive for a firm to access.

Challenges Faced

Market Depth Information

Despite market depth information being one of the core inputs into any liquidity risk model there remains a number of significant challenges in the area. Market depth information varies by asset class, type of trading venue and access of the market participant.

Asset class is often the most discussed area within market depth. Those classes traded on exchange are easiest to acquire data on (e.g. large cap equities) while off exchange (fixed income and real assets (e.g. property)) are more difficult. Those investment funds with trading strategies with small/mid cap equities, fixed income and real assets exposure can face significant challenges.

Trading venues are split by geographic location, execution type and those where observations are not available (e.g. dark pools or unlit venues). Unlit venues/dark pools play a substantial role in market liquidity. Market participants for legitimate reasons may wish to execute directly with a sell-side firm/market maker off exchange to allow successful implementation of a particular trading strategy or execution. Post MiFID II, details of what depth may be within such pools has increased but significantly not all data vendors can provide such details. Implications are quite significant where such unlit venues are not included in the data set leading to increased limitations of a liquidity risk model.

Importantly, it should be remembered that market depth information is historical and is only one input (time and cost being the other) of an asset side risk model.

Market Data Vendors Costs

Costs associated with the provision of liquidity risk data and analytics from market data vendors can be significant and can have material impacts on a firm's data budgets.

Firms should consider appropriate vendors at the fund design stage to ensure they have the appropriate data coverage for the strategy of their fund.

OTC Liquidity Information

Liquidity issues can arise due to margin stress during the lifecycle of each contract e.g. market stress. There can also be times where a counterparty is unable to challenge or validate the margin call on their instruments.

This difficulty can be caused by a difficulty to determine the valuation drivers of the counterparties pricing models. This can lead to an OTC position being over collateralised and thus lead to a liquidity squeeze within the fund.

Conclusion

A full understanding of the fund's assets, its strategy and market operations is essential to ensure the firm understands where there may be data gaps. This will allow them to adequately plan and map out assumptions (where necessary) at the product design stage.

The costs of market data required to appropriately measure and monitor liquidity risk should also be properly scoped out at this stage.

This will allow firms not only to budget appropriately but also document assumptions for timely approval within the appropriate governance framework.

Multiple Asset Classes

Why is it Important

The methods for analysing liquidity can vary depending on the asset classes held in funds. Some asset classes are more traditional and have more easily accessible liquidity information e.g. equities, whereas other asset classes (e.g. OTCs) have limited liquidity information and will require assumptions to be made and documented within an appropriate liquidity risk governance framework.

Challenges Faced

Product Planning

Product planning across multiple asset classes, and in particular with regards liquidity planning, may not take a consistent approach: a variety of liquidity analysis and management techniques are conducted across varied asset classes, and more often than not, structuring a generic approach to apply across all classes is often neither practicable nor possible.

Nor is it often appropriate given the depth of market information for certain asset classes and varied approaches taken by multiple guidelines and regulations (for instance IOSCO, UCITS, AIFMD and local regulatory bodies).

Difficulties arise in terms of choosing the appropriate liquidity analysis & management technique across assets classes and within funds.

Methods such as cost to liquidate, or the waterfall approach are examples, but different funds may be more suited to other methods. How a manager acts while liquidating a fund will be unique, thus there is no one size fits all in terms of calculating liquidity, the aim of the calculation should be to closely match how the manager would actually liquidate the portfolio.

For example, in a highly liquid fund a vertical slice of the fund may be possible and a waterfall approach would be very representative of the actual liquidity within the fund, whereas a fund with a mix of liquid and illiquid positions will rely on manager discretion to liquidate while maintaining the investment profile for the remaining investors. In this case a liquidity waterfall may overestimate what is actually available while having minimal impact on market prices. So, it must be understood that planning around asset liquidation is an indication of what is available rather than an exact figure.

The modelling of assets will be easier or more difficult depending on the nature of the assets. Equities are relatively standard as they are exchange traded and historical data is readily available, thus simple calculations can give relatively accurate estimates.

Credit instruments are traded across several different venues meaning there is no central data store. Without historical data available, a model needs to be developed to have a view on available liquidity. Models require expert knowledge and some assumptions to develop and implement. As market conditions change accuracy of models and assumptions will change and may need to be updated. Added difficulty for a multi-asset class fund is how to mix data from two different methods i.e. historical and modelled.

Conclusion

What should drive consistency in the approach to liquidity management are the core elements and stages of the product planning lifecycle:

Pre-Launch

Prior to the launch of any new product, liquidity analysis and/or stress testing should be conducted, to ensure that the product aligns to the liquidity risk profile of the underlying investors.

The extent of analysis conducted depends on the nature of the product, however some form of pre-launch analysis should be available for the Board to assess the suitability of this product. The challenge faced by some is the nature of stress testing required and appropriateness of the depth of stress testing for multiple asset classes. It is important that the level of stress testing conducted is appropriate and bespoke for the type of asset class.

In cases where there are limitations to performing certain analysis, then best efforts basis analysis should be conducted with full visibility of any underlying assumptions or rationales chosen.

Post-Launch

During the day-to-day management of the product, what capabilities are present for various asset classes to ensure monitoring and stress testing is conducted on a regular basis to provide appropriate oversight of the products.

Is there a formal forum / liquidity committee where concerns or issues during the period can be identified and challenged?

Capacity Management

For products where this is appropriate, what capabilities and data are available to monitor and assess this? Who is responsible within the company for management and approval of levels of tolerance / maximum capacity?

The challenge may be the involvement of risk, product, compliance, business development and investment teams: who is ultimately responsible for assessing and managing this, and who is responsible for ensuring the accuracy of the management information?

Fund Liquidity Profile

Why is it Important

A fundamental step in product design (e.g. pre-launch) is matching the liquidity profile of the asset classes to be held in the fund with the proposed investor liquidity offered in the fund's documentation.

As part of this process, consideration must be given to the dealing frequency of the fund against the intended asset classes to be held to help the fund achieve its investment objective

Challenges Faced

Liquidity Profile Modelling

Following the notable liquidity events that have occurred during 2019, a number of regulators have drawn a focus to investment funds that offer daily liquidity terms with investment strategies that may not match to this (e.g. high yield credit, small cap equities). Maintaining a consistent liquidity profile for the fund versus the investor terms offered throughout the life of the fund can be difficult due to market conditions and investor profiles changing.

The changing market conditions mean that the asset side liquidity profile, to an extent, is fluid in terms of what is available on any given day/month. This means that the risk metrics in place, e.g. RCR still have a level of uncertainty around the output.

Also given there is no standard approach, meaningful comparisons across different asset managers is difficult e.g. model inputs will be different depending on who's modelling.

There are also situations where the model doesn't accurately represent true liquidity for a position. For example, inputs for modelling a fixed income product may include historical trading volumes. This product could be a highly rated sought-after product that has mostly been bought to hold until maturity. So even though there may be significant demand for the issue, were it to become available to market, the historical trading data available may show it as being highly illiquid. This will skew an asset-liability liquidity profile.

This also creates difficulty for example at a liquidity committee level about the types of limits that should be in place, should there be hard limits/soft limits/warning flags. Strict limits may be restrictive for a fund under changing market conditions. In terms of the actual limits, should they be fund specific, or based around a worst-case scenario, for example flagged if the calculated liquidity available ever falls below top "x" number of investors holdings?

Evidence Fair Treatment of Investors

Liquidity stress testing is a key part of the process whereby the remaining shareholders in the fund are treated the same as those whose redemption has a significant impact on the fund.

As mentioned above accurately modelling investor behaviour, possibly through "tiering" is essential to try and foresee the impact of both market and investor shocks on the fund and its liquidity. The difficulty can be trying to have a standardised approach which allows a firm to clearly justify their decisions and document how such decisions were made.

Measuring of Other Liabilities

Measuring, monitoring and even predicting investor redemption activity can be a challenge but it is not the only liability that needs to be considered from a liquidity risk management perspective. For example, a fund that holds leveraged derivative positions could end up being unable to meet its margin requirements in times of market stress.

The difficulty many investment managers will face is accurately predicting (a) when such an event will occur, and (b) the impact of such an event on fund liquidity (i.e. on both the asset and liability side). Accurate and robust modelling is a key challenge all investment managers will face.

For a fund to remain solvent it must be able meet its liabilities as they fall due and as such being able to predict what level of funding is required during different market cycles is key.

Conclusion

It is of critical importance that a fund's offering terms continue to match the investor profile and asset/liability side liquidity profile. Fund manufacturers should ensure there is a robust framework in place which allows for verification as to the dealing frequency of the fund.

Detailed asset side and liability side (e.g. investor, debt, collateral) liquidity analysis should be conducted to support decisions. Where assumptions underpin the analysis, this should be highlighted and challenged within the appropriate governance framework.

Where additional redemption terms are included within the funds offering documentation (anti-dilution levies, gating, in-kind redemptions) these should be made in a manner that is clear, fair and not misleading.

In all cases, the investment manager must ensure a sufficient stress testing framework is in place to be able to manage their fund through downward market cycles. They must consider all aspects of the fund i.e. both assets and liabilities. Again, the profile of the fund is something that needs to be considered at the product design stage, and where there is intended leverage the impact of this fund liquidity profile.

All processes should be properly documented and tested, outlining how decisions are made and who is responsible for approval.

Cost Transparency

Why is it Important

Cost transparency is an important focus for both regulators and investors. A firm needs to give consideration as to what is an appropriate cost input into their liquidity models.

Challenges Faced

As mentioned previously, liquidity risk models (asset side) have three primary inputs, market depth, cost and timeframe. Availability of transaction costs has significantly increased in recent years due to MiFID II requirements and a greater push for transparency. Similar though to market depth information there remains a number of challenges in this area.

As highlighted previously, the availability of market data, including cost data, will vary between market data vendors. This is a significant challenge for investment firms and can in some instances result in the use of multiple vendors.

As market data vendors increase the sophistication of the liquidity risk models (moving away from % of ADV to a liquidity surface which is a function of depth, cost and time) one of the challenges placed on investment managers will be determining what the appropriate cost input should be.

This challenge is increased as market participants do not have a uniformed approach to the cost inputs into liquidity risk management data systems.

Conclusion

Investment managers should document their approach in this area which should be reviewed and challenged within the appropriate governance framework.

Stress Test Assumptions

Why is it Important

All asset managers are required to stress test the liquidity of their funds.

ESMA guidelines on liquidity stress testing in UCITS and AIFs will come into force on 30 September 2020 and firms need to ensure that they have read and understood these and have in place the appropriate framework.

Challenges Faced

The ESMA guidelines recommend that fund liquidity stress testing be conducted on a quarterly basis or more/less frequently as deemed appropriate, depending on the characteristics and nature of individual funds.

Stress testing ensures the liquidity profile of the fund is regularly and actively assessed to strengthen the liquidity profile for investors and help identify potential weaknesses within an investment strategy.

However, the broad ESMA guidance on the stress testing requirements does not provide for guidance on a consistent approach to assumptions and underlying methodology, although the ESMA guidelines state the liquidity stress testing conducted must:

- Be Tailored towards the individual fund;
- Reflect the most applicable risks to a fund;
- Be Sufficiently extreme or unfavourable (yet plausible);
- Sufficiently model how a manager is likely to act in times of stressed market conditions

The broad nature of the guidance issued by ESMA is open to interpretation by the individual Fund Manager making it difficult for a comparable approach across the industry.

Conclusion

Investment managers should develop their stress test suite ensuring each stress test performed is relevant to the individual fund. The investment manager should be able to ensure that they are accurately stressing both assets and liabilities on an individual, combined and where applicable, aggregated basis across funds.

Stress tests should be periodically tested to ensure they are still relevant, with all assumptions properly recorded and documented. This should be done within an agreed liquidity framework, which provides the appropriate level of oversight, accountability, as well as the ability for independent challenge to all stress tests developed.

Outlining the communication and escalation channels within the firm's governance framework is important to ensure all parties understand how stress test results should be managed.

Other Considerations When Establishing a Liquidity Risk Management Solution

Resourcing

I.T. Infrastructure

A lot of Investment firms will have liquidity risk platforms within their systems. These platforms can sometimes have limited liquidity information, especially given the increasingly complex quantitative regulatory and market requirements.

The events of recent years have taught us that taking a one-dimensional point-in-time view of liquidity will not deliver the robust solution that Boards (and investors) seek. Investment managers are having to complement their legacy risk and investment platforms with data ingestion, blended visualisation techniques, enhanced data mining, extrapolated metrics and regression analysis to drive the desired solution for assessing liquidity risk.

This is not without its constraints. Legacy systems often lack the flexibility required to adequately integrate new user functionality and may require a third-party or internally built platform. This may not be an optimal solution within a company for varied reasons, not least the resource-intensive requirement of a frequently stretched I.T. Department.

The interim solution of developing a process in Excel / SQL or another local platform (such as R / Python) often becomes the long-term solution, thereby embedding the increase in operational risk associated with the workaround.

As such each manager should give careful consideration when choosing a risk system, to ensure they have the ability to effectively manage and mitigate their risks.

Information Systems / Technology Resources

System challenges aside, - there is a growing demand and strain on the availability of technical resources to action and enhance these system upgrades.

Previously, the I.T. department would have had minimal interface with the front-line business and would not have been seen as part of the process. This model has evolved and now I.T. are fully engrained within the DNA of the business, engaging multiple areas on a regular basis on various projects and tasks.

This shift in the dynamic of the I.T. department's role has mounted pressure and resource constraints on an already tightly stretched area. Firms need to ensure that have the appropriate resources in place to meet the growing regulatory and market demands.

Liquidity Risk Department Resources

Within the asset management industry, there may not be a specific department targeted towards specific monitoring of liquidity risk. Existing resources from the investment risk monitoring team are typically building and implementing additional monitoring programs in order to both enhance the state of liquidity monitoring, and to ensure compliance with all regulatory and legislative requirements.

This is leaving risk departments under resourced and is opening up firms to both liquidity and operational risks. Staffing appropriately and retaining existing staff is key to ensuring continuity and maintaining an appropriate knowledge base within a firm.

Board Agenda

Is liquidity risk a standing agenda item on the Investment Risk Board reporting? Is it engrained and called out in the Risk Appetite statement where the Board can digest this information and assess their satisfaction at the process?

Does the Board have the time to devote full attention to this as a stand-alone agenda item and can it be adequately captured within the Risk Appetite and accompanying Investment Risk Board reporting?

A Liquidity Committee (or Risk / Product Committee) where liquidity is a stand-alone agenda item with detailed minutes provided to the Board would ensure the important points of observation are clearly articulated to the Board for their attention.

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