

Navigating Liquidity Risk in Investment Funds

The evolution of macroprudential policies
and J.P. Morgan's solutions



Introduction



In this our latest briefing in a series on Liquidity Risk Management, we delve into pivotal regulatory developments impacting liquidity risk in investment funds.

Building on the insights from our prior briefing, "EU & UK Liquidity Risk Regulatory Developments in Investment Funds (June 2021)"¹, we examine the ongoing evolution of liquidity risk management measures and highlight J.P. Morgan Securities Services' initiatives to help our clients navigate the shifting regulatory landscape.

Liquidity risk within the investment funds sector remains a top supervisory priority for global regulators. The continued proliferation of Non-Bank Financial Intermediaries (NBFIs) and the ever-increasing importance of their role in financing real economies have elevated concerns about the consequential risks and challenges to financial stability. Structural vulnerabilities, such as liquidity mismatches, excessive use of leverage, and the interconnectedness between the investment fund and banking sectors, can all lead to the build-up of systemic risk. International efforts to develop macroprudential frameworks for NBFIs have not progressed at the same pace as they have for banks since the global financial crisis. However, recent market events, such as the liquidity challenges experienced during the onset of the COVID-19 pandemic and the leverage issues with GBP-denominated Liability-Driven Investment (LDI) funds during the UK gilt market crisis, have accelerated efforts to develop policies to mitigate the systemic risks associated with NBFIs. In February 2025, the European Systemic Risk Board (ESRB) expanded its monitoring framework² for systemic liquidity risks to include NBFIs. The broadened framework focuses

on two key aspects of liquidity: funding liquidity and market liquidity. It also introduces a new measure to tackle the potential for contagion and amplification within the financial system.

Liquidity risk in the investment funds sector is consistently being examined by international standard setters and regulatory policymakers who are concerned about vulnerabilities to market shocks that could trigger systemic risks. There is a strong focus on developing macroprudential measures to address the threat posed by the interconnectedness of the funds sector with the broader financial system.

Consequently, fund managers should prepare for an impending tightening of regulations aimed at addressing the liquidity mismatch in Open-End Funds (OEFs). Regulatory and supervisory authorities are poised to implement revised policy recommendations from the Financial Stability Board (FSB) and the International Organization of Securities Commissions (IOSCO), shaping the evolution of their macroprudential frameworks. This proactive stance from regulators underscores a commitment to bolstering financial stability and resilience.

¹ https://pages-jpmcib.jpmorgan.com/rs/726-KZY-402/images/2322-ROI.pdf?mkt_tok=eyJpIjoiTURWalpHSXlaRGN4T0dQailsInQiOiJSSHFvVndBQjJuRHVoV05qYzQyeU1wclVqOWttWDNHc2UOUFhXZEs2amlwTXdmTUNMRTFsSmw1OGs1anQyWTV1REl2XC81OXBHdFRDbWF6eFBOeDFsR3NHWWVwMIRUVkJudQlXNFwvRXZ3ZHFdDmdYS05ndDQ5O-HI3TUxsK1dnekFBSij9

² https://www.esrb.europa.eu/pub/pdf/reports/esrb.report202501_systemicliquidityrisk-90f2044791.en.pdf?5100cfc2caeb54efc04246c6988af826&secureweb=WINWORD

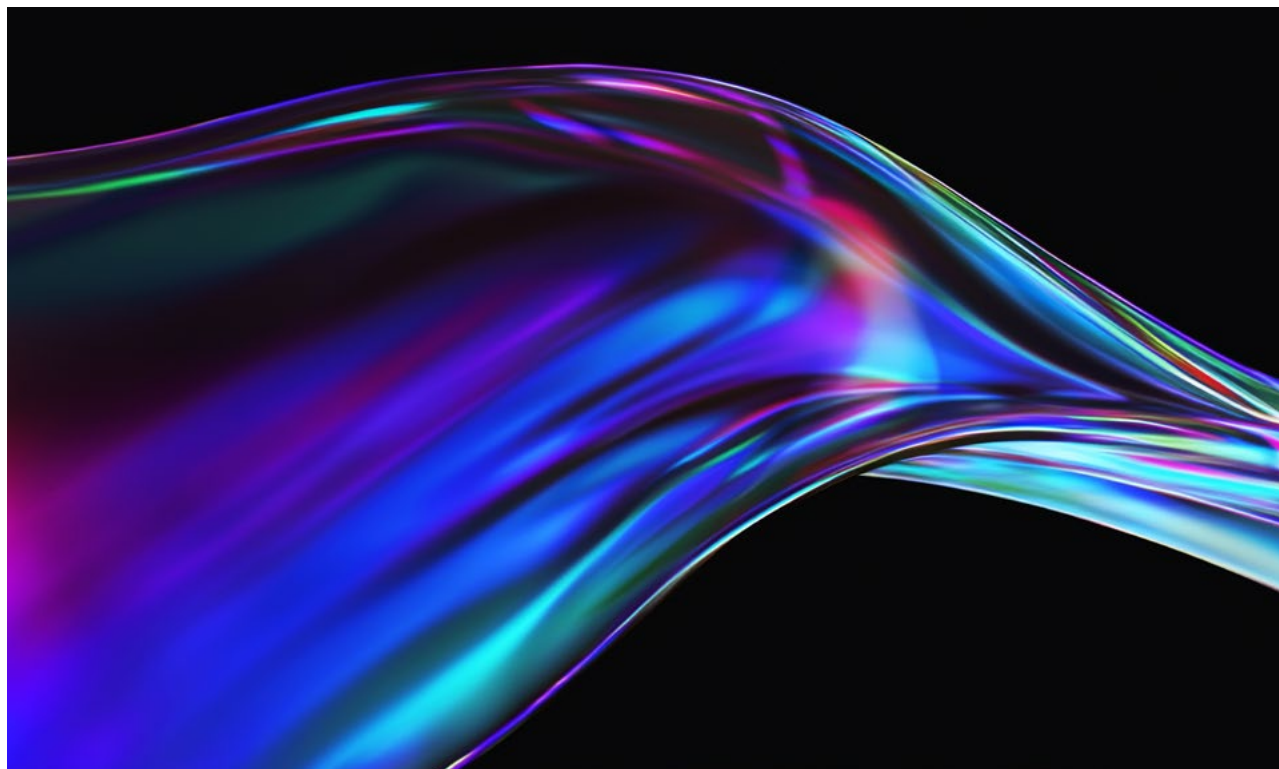
Advancement of international standards and macroprudential policy

In late 2023, the FSB published a revised policy recommendation³ to address structural vulnerabilities from liquidity mismatch in OEFs, while IOSCO published final guidance on Anti-Dilution Liquidity Management Tools⁴ (LMTs) for the effective implementation of the Recommendations for Liquidity Risk Management for Collective Investment Schemes (CIS).

The revised FSB recommendations set out the key objectives for an effective regulatory and supervisory framework aiming to achieve a significant strengthening of liquidity management by OEF managers compared to current practices. The FSB proposes a categorization approach to redemption terms where OEFs would be grouped depending on their liquidity profile, namely liquid, less liquid, illiquid, or comparable categories of their assets. Specific expectations in terms of the redemption terms and conditions would apply to OEFs in each category, and a combination of quantitative and qualitative factors

would be used to determine the liquidity of assets in both normal and stressed market conditions. The recommendations seek to achieve (i) greater inclusion of anti-dilution LMTs in OEF constitutional documents and (ii) greater use of, and greater consistency in the use of, anti-dilution LMTs in both normal and stressed market conditions.

In late 2024, IOSCO published a consultation report⁵ seeking feedback on revised recommendations for Liquidity Risk Management for CIS. IOSCO's revised recommendations have been updated to align with the FSB's 2023 recommendations and recent market events, including COVID-19 and ongoing geopolitical tensions such as the conflict in the Middle East and the Russia-Ukraine conflict. The proposals include 17 recommendations, and IOSCO aims to publish its final report in the first half of 2025.



³ <https://www.fsb.org/2023/12/revised-policy-recommendations-to-address-structural-vulnerabilities-from-liquidity-mismatch-in-open-ended-funds/>

⁴ <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD756.pdf>

⁵ <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD770.pdf>

Macprudential Developments in the European Union

EU

In early 2024, the European Commission (EC) unveiled a pivotal report⁶ to the European Parliament and the Council, on the macroprudential review for credit institutions, the systemic risks relating to NBFIs, and their interconnectedness with credit institutions. The report highlighted several areas of concern and focus. Subsequently, in May 2024, the EC launched a public consultation⁷ on the suitability of macroprudential policies for NBFIs. The objective of the consultation was to identify the vulnerabilities and risks of NBFIs, map the existing macroprudential framework, gather feedback on the current challenges to macroprudential supervision, and discuss areas for further improvement. In its response⁸ to the consultation, the European Securities and Markets Authority (ESMA) suggested that National Competent Authorities (NCAs) could require investment funds that invest in assets that are not liquid to be structured as closed-ended funds. ESMA endorsed the FSB's recommendation regarding the classification of OEFs based on asset liquidity and urged for concerted efforts to ensure these recommendations are applied consistently and uniformly across the EU. ESMA also reiterated its position on the necessity to complete the reform of the MMF Regulation, considering the vulnerabilities identified in its opinion⁹. In March 2025, the EC published a summary report on its targeted consultation¹⁰. After gathering inputs from market participants, public authorities, and civil society, the EC will review the feedback to inform any future initiatives that the College of Commissioners may choose to adopt.

Ireland

In Ireland, the Central Bank of Ireland (CBI) launched a discussion paper¹¹ in 2023 on the approach to macroprudential policy for investment funds citing leverage and liquidity mismatch as specific vulnerabilities. Whilst the CBI recognizes that international coordination is needed to develop and operationalize a macroprudential framework for the funds sector to address perceived weaknesses that contribute to systemic risk, it has introduced a number of targeted measures, including its macroprudential policy frameworks for Irish property funds¹² and Irish authorized GBP-denominated LDI funds¹³. Due to the cross-border nature of GBP-denominated LDI funds, the CBI sought to ensure international coordination in codifying new measures to safeguard the resilience of LDI funds by working closely with the Commission de Surveillance du Secteur Financier (CSSF), ESMA, the UK authorities, and other relevant stakeholders. The CBI published a feedback statement¹⁴ in July 2024 to its discussion paper in which it emphasized the need to focus on the implementation of the FSB recommendations and IOSCO guidance on liquidity management for OEFs.

6 <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52024DC0021>

7 https://finance.ec.europa.eu/document/download/ddd6c515-3796-4db3-b91d-88a1a64ac07_en?filename=2024-non-bank-financial-intermediation-consultation-document_en.pdf

8 https://www.esma.europa.eu/sites/default/files/2024-11/ESMA50-43599798-9960_ESMA_response_to_the_Macroprudential_review_consultation.pdf

9 https://www.esma.europa.eu/sites/default/files/library/esma34-49-437_finalreportmmfreview.pdf

10 https://finance.ec.europa.eu/document/download/db0e482b-12b8-43d5-ad8d-b54e6af4b315_en?filename=2024-non-bank-financial-intermediation-summary-of-responses_en.pdf

11 https://www.centralbank.ie/docs/default-source/publications/discussion-papers/discussion-paper-11/dp-11-an-approach-to-macroprudential-policy-for-investment-funds.pdf?sfvrsn=23059f1d_3

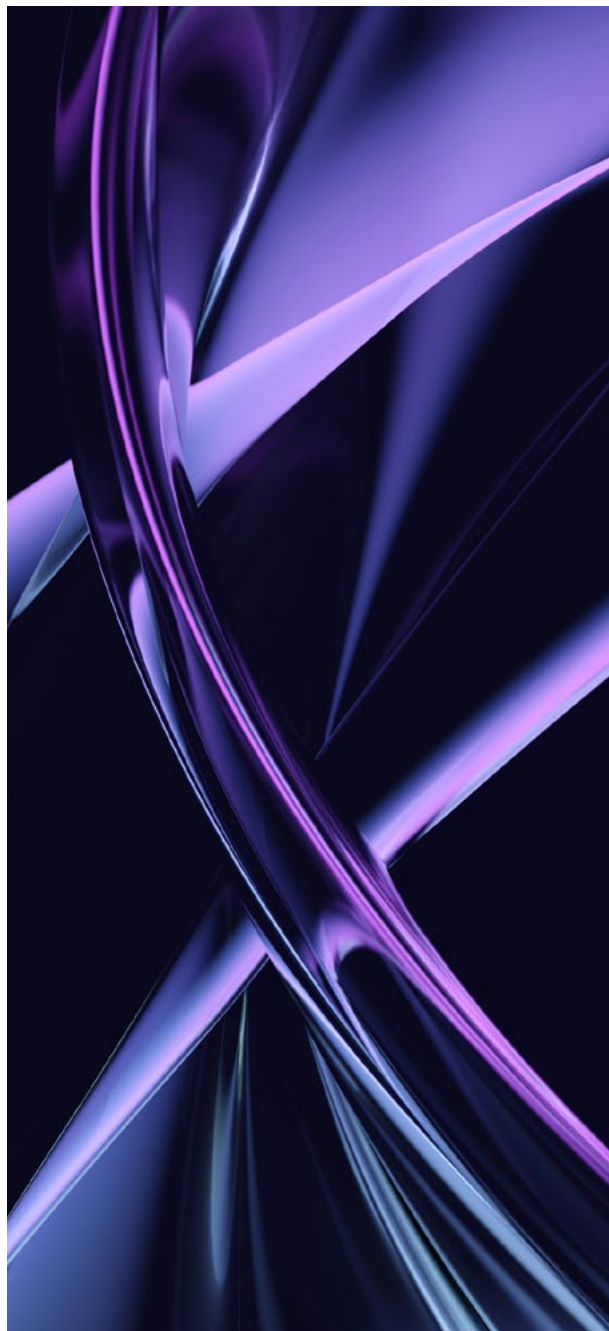
12 <https://www.centralbank.ie/docs/default-source/financial-system/financial-stability/macroprudential-policy/nbfi/macroprudential-measures-for-irish-property-funds.pdf>

13 https://www.centralbank.ie/docs/default-source/publications/consultation-papers/cp157/macroprudential-framework-for-irish-authorized-gbp-ldi-funds.pdf?sfvrsn=7b9a631a_3

14 <https://www.centralbank.ie/docs/default-source/publications/discussion-papers/discussion-paper-11/feedback-statement-to-dp11-an-approach-to-macroprudential-policy-for-investment-funds.pdf>

Luxembourg

In Luxembourg, the CSSF published its macroprudential policy¹⁵ in June 2024. The CSSF is of the view that the Undertakings for Collective Investment in Transferable Securities (UCITS) Directive and Alternative Investment Fund Managers Directive (AIFMD) rulesets present a robust and proven framework that generally provides for the resilience of the investment fund sector. However, the CSSF also acknowledged that pockets of vulnerabilities have been identified during recent crises and should be addressed. The CSSF is fully supportive of the ongoing work at the international and European level regarding the availability and use of LMTs.



¹⁵ https://www.cssf.lu/wp-content/uploads/Macroprudential_policy_investment-funds.pdf

AIFMD Review

Harmonisation of LMTs across UCITS and Alternative Investment Funds (AIFs)

In early 2024, EU policymakers concluded their AIFMD review and enacted several targeted measures to enhance the regulatory and supervisory framework for AIFs, some of which were deemed to be equally relevant for the activities of UCITS funds. The enhancements included new rules designed to harmonize the availability and use of LMTs for OEFs by both Alternative Investment Fund Managers (AIFMs) and UCITS Management Companies. The legislative texts¹⁶ amending the AIFMD and UCITS Directive came into effect on April 16, 2024, and member states now have a period of two years to transpose them into national law.

To deal with redemption pressures under stressed market conditions, the new rules require managers of open-ended AIFs/UCITS to select and include at least two additional LMTs from a prescribed list set out in accompanying annexes. The LMTs should be appropriate to the investment strategy, the liquidity profile, and the redemption policy of the AIF/UCITS. ESMA, acknowledging that the primary responsibility for liquidity risk management lies with the AIFM/UCITS, was tasked with developing regulatory technical standards (RTS) for the selection and calibration of LMTs by April 2025. In July 2024, ESMA initiated two consultations on draft guidelines¹⁷ and RTS¹⁸ on LMTs. By April 2025, ESMA published its final implementing rules, including the draft RTS¹⁹ and final report on the Guidelines²⁰ on LMTs. ESMA decided to discard proposed guidelines on governance principles requiring managers to develop liquidity management policies and plans, along with guidelines for depositaries to verify managers' documentation of liquidity management procedures.

LMTs to be available to open-ended AIFs/UCITS following the AIFMD Review

- Suspensions of subscriptions, repurchases and redemptions
- Redemption gates
- Extensions of notice periods
- Redemption fees
- Swing pricing
- Dual pricing
- Anti-dilution levy
- Redemption in kind
- Side Pockets

Side Pockets

Both open-ended AIFs and UCITS will now be able to activate side pockets in exceptional cases. The ability to use side pockets had been seen as a somewhat contentious issue prior to February 2022, given the potential for 'moral hazard' problems should fund managers use them inappropriately or unnecessarily. However, international sanctions linked to Russia's actions in Ukraine prompted multiple investment funds to segregate impacted assets to protect underlying investors from dilution. Key supervisors, including ESMA, the CSSF, the CBI and the UK Financial Conduct Authority (FCA), issued guidance during 2022 on the use of side pockets which could be structured either as a ring-fenced "internal" side pocket using accounting segregation or an "external" side pocket where either liquid assets or assets of concern could be transferred to a new "clone" fund.

¹⁶ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L.202400927>

¹⁷ https://www.esma.europa.eu/sites/default/files/2024-07/ESMA34-1985693317-1097_CP_on_LMTs_of_UCITS_and_open-ended_AIFs.pdf

¹⁸ https://www.esma.europa.eu/sites/default/files/2024-07/ESMA34-1985693317-1095_CP_on_RTS_on_LMTs_under_AIFMD_and_UCITS_Directive.pdf?secureweb=OUTLOOK

¹⁹ https://www.esma.europa.eu/sites/default/files/2025-04/ESMA34-1985693317-1259_Final_Report_on_the_Draft_Regulatory_Technical_Standards_on_Liquidity_Management_Tools_under_the_AIFMD_and_UCITS_Directive.pdf

²⁰ https://www.esma.europa.eu/sites/default/files/2025-04/ESMA34-1985693317-1160_Final_Report_on_the_Guidelines_on_LMTs_of_UCITS_and_open-ended_AIFs.pdf



Loan-originating AIFs & Long-Term Investment Funds

The revised AIFMD also includes a new EU-wide regime for loan-originating AIFs. Most recently, in December 2024, ESMA published a consultation²¹ on draft RTS on open-ended Loan-Originating Alternative Investment Funds (LO AIFs) under the revised AIFMD. The RTS will provide detailed guidelines for AIFMs to demonstrate to NCAs that their liquidity risk management systems are aligned with investment strategies and redemption policies. Imposing a requirement for LO AIFs to maintain a minimum level of liquid assets is likely to face opposition, as it could curtail certain investment strategies. In a parallel context, ESMA's draft RTS proposed for the European Long Term Investment Fund (ELTIF) in late 2023 ignited significant debate among fund managers, policymakers, and regulators over whether these products should be mandated to maintain a minimum level of liquid assets to protect investors during times of stress. Ultimately, the EC opted for more discretionary minimum liquidity requirements for the ELTIF²², and fund managers are likely to advocate for a similar outcome for LO AIFs. Similarly, when the UK introduced its Long-Term Asset Fund²³ (LTAF) regime in 2021, the liquidity requirements were designed to balance the need for investor access to their capital with the long-term investment horizon and illiquid nature of the assets held.

²¹ https://www.esma.europa.eu/sites/default/files/2024-12/ESMA34-1985693317-1085_CP_RTS_on_open-ended_loan-originating_AIFs_under_the_AIFMD.pdf

²² https://www.jpmmorgan.com/content/dam/jpm/cib/complex/content/securities-services/regulatory-solutions/Updated_Fresh_Momentum_for_Reformed_ELITF.pdf

²³ https://www.jpmmorgan.com/content/dam/jpm/cib/complex/content/securities-services/regulatory-solutions/Democratization_private_assets_UK_Long-Term_Asset_Fund.pdf

UCITS Eligible Assets Directive Review

In 2024, ESMA launched a Call for Evidence²⁴ on the review of the UCITS Eligible Assets Directive (EAD). The EC had mandated ESMA to carry out an assessment of the implementation of the EAD in the Member States to analyze whether any divergences have arisen in this area and to provide a set of recommendations on how the EAD should be revised to keep it in line with market developments.

One notable focus area of ESMA's review is the use of a variety of broad notions and concepts, such as the presumption of liquidity and negotiability set out

in the EAD. ESMA's Common Supervisory Action in 2020²⁵ highlighted shortcomings identified by NCAs where UCITS managers had placed overreliance on the presumption of liquidity by investing in listed securities where no meaningful trading volume was evident. ESMA is seeking feedback and proposals on how to amend the EAD to better specify these notions with a view toward improving investor protection and supervisory convergence. ESMA's consultation closed in August 2024, and it is set to deliver its technical advice to the EC in 2025.

U.S. Developments

In recent years, the U.S. Securities and Exchange Commission (SEC) has taken significant steps to enhance liquidity risk management for OEFs, including mutual funds and exchange-traded funds (ETFs). These measures aim to ensure that funds can meet redemption requests under both normal and stressed market conditions, thereby protecting investors and maintaining market stability.

Back in 2016, the SEC adopted Rule 22e-4 under the Investment Company Act of 1940, which requires OEFs to implement comprehensive liquidity risk management programs. Under Rule 22e-4, funds (i) must classify each portfolio investment into one of four liquidity categories; highly liquid, moderately liquid, less liquid, and illiquid; (ii) determine and maintain a minimum percentage of their net assets in highly liquid investments; and (iii) adopt a written liquidity risk management program, which includes policies and procedures for assessing, managing, and periodically reviewing liquidity risk. Provisions of the rule increase transparency by requiring funds to report detailed portfolio holdings and liquidity classifications to the SEC on a monthly basis. This data is used to monitor liquidity risk and ensure compliance with Rule 22e-4.

In 2022, the SEC issued a release (the Release) proposing amendments to its current rules for

registered OEFs regarding liquidity risk management programs, swing pricing, and various reporting forms. The Release states that the proposed amendments are designed to address certain shortcomings and enhance the effectiveness of the existing framework. The proposed changes aim to improve the accuracy and consistency of liquidity classifications, enhance the oversight and reporting mechanisms, ensure that funds are better prepared to meet redemption requests under various market conditions, improve transparency in liquidity classifications, and also mitigate dilution of shareholders' interests in a fund by requiring any OEF, other than a money market fund or ETF, to use swing pricing under certain conditions.

In the publication of its 2024 Spring Regulatory Agenda, the SEC announced that it would re-propose this rule by Q2 2025. As a result of the U.S. Presidential election, the outlook for these amendments is uncertain. On January 20, 2025, President Trump signed an Executive Order which called for pending rules to be paused and for no new rules to be proposed until the President's nominees for Chairs of the various agencies, including his nomination for the Securities Exchange Commission's Chair, Paul Atkins, can assume their positions.

²⁴ https://www.esma.europa.eu/sites/default/files/2024-05/ESMA34-1270380148-1032_Call_for_Evidence_on_the_UCITS_EAD_Review.pdf

²⁵ https://www.esma.europa.eu/sites/default/files/library/esma_34-43-880-_public_statement_-_2020_csa_ucits_liquidity_risks_management.pdf



U.K. Developments

The UK authorities continue to progress several initiatives in relation to liquidity management. A response to the FCA consultation on the introduction of notice periods in regulated real estate funds is still expected, and the industry has strongly welcomed the clear statements from the FCA that any mandatory requirements would only be introduced with a suitable implementation period. The FCA is also expected to take forward previous work by the UK Financial Policy Committee and Bank of England on liquidity risk within OEFs when progressing initiatives linked to the recent IOSCO and FSB publications.

The FCA continues to prioritize liquidity management in OEFs as a key supervisory focus. In July 2023, it unveiled findings from a mini-review of liquidity management among authorized fund managers,

issuing a Dear CEO²⁶ letter that revealed most firms were not meeting the standards set in its 2019 good practice letter. In a March 2024 interim update²⁷ to previous “Dear CEO letters”, the FCA confirmed plans to conduct a comprehensive multi-firm review into the valuation of private assets in 2024. The FCA subsequently published its findings in March 2025²⁸. Robust valuation processes showed independence, expertise, transparency, and consistency. Good practices included quality reporting, documentation, and third-party valuation advisers. However, areas for improvement were identified, such as conflicts of interest, independence in valuation processes, and ad hoc valuations.

²⁶ <https://www.fca.org.uk/publications/multi-firm-reviews/liquidity-management-multi-firm-review>

²⁷ <https://www.fca.org.uk/publication/correspondence/portfolio-letter-asset-management-alternatives-supervisory-strategy-interim-update.pdf>

²⁸ <https://www.fca.org.uk/publications/multi-firm-reviews/private-market-valuation-practices>



J.P. Morgan Service Solutions

Continuous geopolitical tensions and conflicts, coupled with a swiftly evolving regulatory environment, pose substantial challenges for our clients in sustaining an efficient operating model and managing liquidity risk. Market volatility can affect the liquidity of certain assets, particularly those directly linked to the regions involved in a particular conflict, making it challenging for funds to buy or sell these assets, potentially leading to liquidity constraints.

To effectively support our clients' evolving business needs and help them navigate regulatory complexities, J.P. Morgan Securities Services is dedicated to offering a comprehensive suite of proprietary and third-party solutions. These solutions, developed in collaboration

with our strategic partners, are seamlessly integrated with our operating model and infrastructure throughout the investment lifecycle.

Anti-dilution techniques are some of the LMTs generally available to fund managers across different types of funds. J.P. Morgan Securities Services, in its role as a **Fund Accountant**, currently supports funds employing anti-dilution techniques, including swing pricing, dual pricing, and dilution levies. We publish swing prices or dual prices as applicable and process shareholder transactions to reflect the correct accounting treatment of component parts of unit creations and liquidation. We support partial and full-swing models, including tiered swing factors



driven by investor flow size, and we are currently developing the ability for share class specific factors to enable inclusion of additional costs such as share class hedging to be attributed to specific share classes. Periodic reporting for visible transaction costs (as captured through the accounting record) is also available. Our Fund Accounting capabilities combine well with our new **Fusion Risk Anti-Dilution Analytics Service** to provide an end-to-end solution for Swing Price calculation and processing enabling our clients to meet evolving regulatory scrutiny in fund liquidity management. International sanctions linked to Russia's actions in Ukraine prompted some funds to segregate impacted assets to protect underlying investors from

dilution. J.P. Morgan Securities Services supported clients who chose to create side pockets whereby UCITS funds were permitted to implement a side pocket arrangement only for Russian and Belarusian assets subject to the approval of the relevant NCA.

As a **Transfer Agent**, we support clients with reliable and timely data by providing several options with regards to transaction data reporting. Clients can receive transaction data feeds (ranging from five-minute intervals to once per day) via Secure File Transfer Protocol connectivity, real-time Application Programming Interface, daily transaction reporting via email, and access to the Transfer Agency Portal

that provides clients with real-time downloadable data on investor and redemption activity. This data can be incorporated readily into reporting provided to senior management and/or fund boards to support the level of governance expected by regulators.

Transfer Agency can support the use of Anti-Dilution Tools (ADTs) to mitigate material investor dilution in both normal and stressed market conditions:

- **Swing pricing:** we can provide an indicative swing intentions file based on the previous day's Net Asset Value (NAV), in a machine-readable format. The file is to be used as a comparative tool in combination with the client's own data. Following the provision of the price file by the Fund Accountant, Transfer Agency will import only the swung prices.
- **Anti-dilution levies:** we can impose a dilution levy fee, based on an agreed percentage or threshold at the sub-fund level, which is retained by the fund for the benefit of existing investors.

During periods of market stress, Transfer Agency can also support other a range of quantitative-based LMTs and ADTs, activated to mitigate the elevated liquidity risk, including:

- **Redemption fees/liquidity fees:** Clients have the option to impose a liquidity fee, which is a percentage of the Net Asset Value (NAV), on investor redemption and switch-out orders. This redemption or liquidity fee will be reflected on the investor's contract note.
- **Suspensions:** Clients may need to suspend the NAV, declare a non-dealing day, or manage fund outflows. If the NAV is suspended, Transfer Agency will inform the client about the status of deals from the previous dealing period.
- **Gating:** For limited share classes and orders, Transfer Agency will restrict transactions as instructed by the fund following a market liquidity event. Procedures must be pre-agreed to define roles, responsibilities, and reporting. However, acceptance of gated deal confirmations by investors or intermediaries is not guaranteed.

As a **Depository**, we perform oversight of certain fund manager obligations, including ensuring that fund valuations, cash flows, and procedures for investor dealing are carried out in line with fund documentation and applicable regulations and national laws. **Depository Services** employs a robust oversight model, including ongoing assessment of client funds and fund manager controls, in response to regulatory and client expectations. This includes enhanced monitoring of significant fund NAV movements and verification that managers have an appropriate liquidity stress testing process in place.

Fusion Risk Anti-Dilution Analytics Service

In a recent initiative, J.P. Morgan Securities Services has focused on developing a bespoke swing pricing solution in partnership with MSCI, a leading provider of analytics solutions.

[J.P. Morgan Securities Services Fusion Analytics](#) provides comprehensive portfolio analytics solutions, including performance measurement, compliance reporting and risk management. Most recently, Fusion Analytics collaborated with MSCI to integrate their advanced risk calculation engine into Fusion's Market and Liquidity Risk Analytics service. This partnership offers our clients the comprehensive data management, normalization, and distribution features of Fusion, along with MSCI's powerful market and liquidity risk analytics capabilities.

Fusion Analytics offers a swing pricing solution to support our clients' liquidity risk workflow and manage transaction costs effectively under various market conditions. By utilizing position-level fund accounting data and MSCI's advanced liquidity risk calculation engine, the service supports multiple asset class funds, including global equities, bonds, and derivatives, helping clients meet regulatory reporting requirements.

Using MSCI's liquidity models, the expected transaction cost is calculated for each position within the fund, based on order size and liquidation horizon. The aggregation of position level data into fund level

"Our new swing pricing solution not only helps to protect long-term investors but also aligns with our clients' regulatory needs. Our commitment to innovation and excellence continues to drive us forward, empowering our clients with the tools they need to succeed in today's dynamic financial environment."

– **Jason Mirsky**, Head of Data Solutions, J.P. Morgan Securities Services

transaction cost supports 55 swing pricing thresholds across multiple liquidation horizons. The liquidity analytics output allows for detailed position-level diagnostics reporting, providing full transparency of the contributory drivers of the overall fund transaction cost.

The service includes the impact of explicit trading costs (total expenses including commission) by utilising fund specific historical trading data at the security level for purchases and sales. This data is calculated and weighted according to the country of risk. Explicit and implicit trading costs are aggregated to calculate a fund bid and offer swing factor.

Our solution supports various swing pricing methods: (i) partial swing pricing (ii) full swing pricing and (iii) tiered swing pricing.

Hypothetical scenario stress tests across the investment fund show the impact of shifts in the bid-ask spread, market depth, and volatility. Historical replays are also captured to assess the potential impact to the fund should there be a repeat of past market events.

Fusion Analytics has created an end-to-end solution, optimizing the process of calculating the swing factor, attaining client approval of the output, and integrating the factor into the fund accounting NAV calculation process.

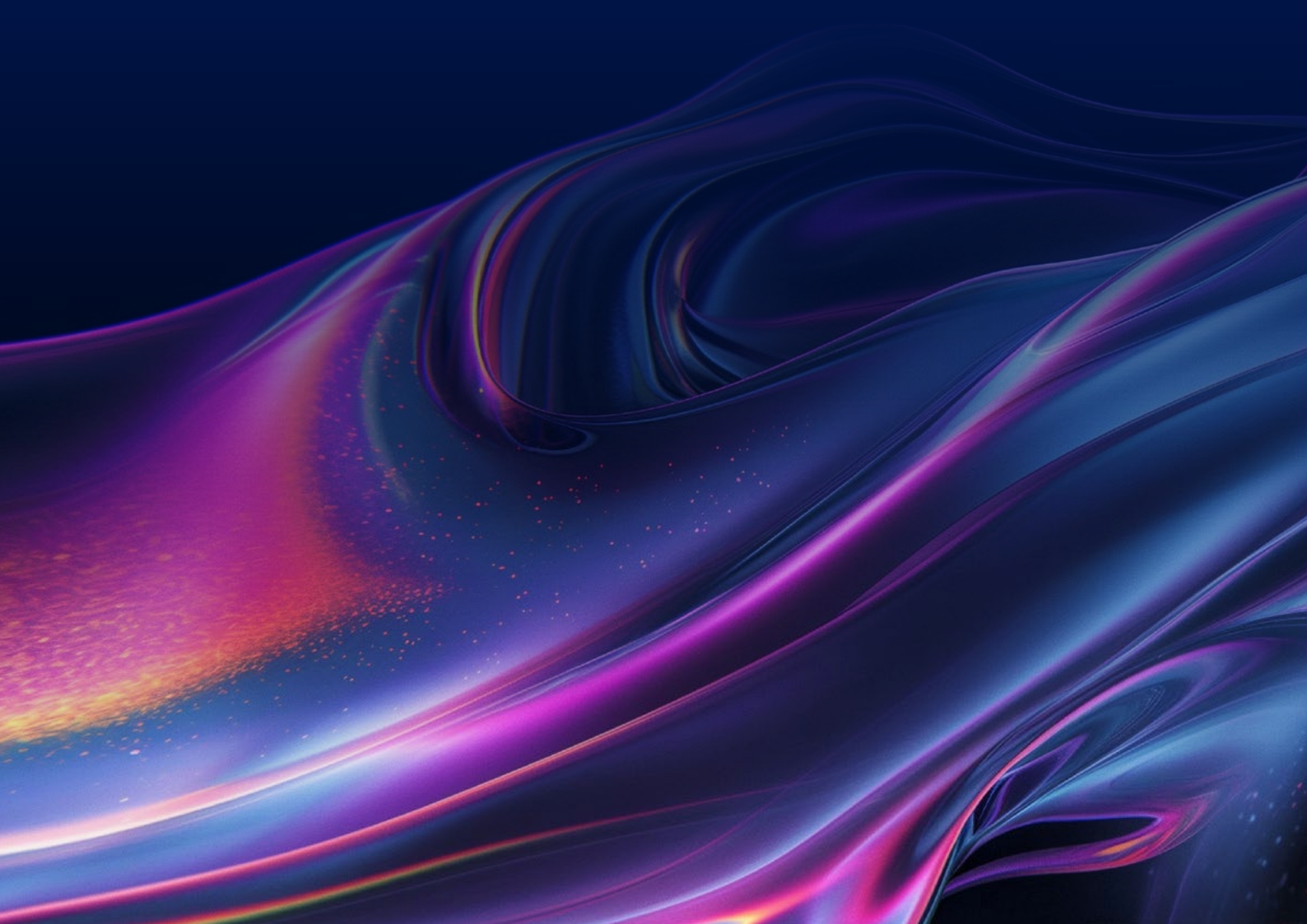


Looking Ahead

Liquidity risk management is undeniably at the forefront of the regulatory agenda for the funds sector, highlighting its vital role in safeguarding financial stability and protecting investors.

Fund managers should anticipate intensified scrutiny of their policies and procedures for operating, administering, activating, and deactivating their chosen LMTs to mitigate liquidity risk. Moreover, fund managers must convincingly demonstrate to NCAs that their selected LMTs not only serve the best interests of all investors but are also well-suited to prevailing market conditions. This heightened focus underscores the critical importance of robust and transparent liquidity management in today's dynamic financial landscape.

J.P. Morgan Securities Services looks forward to partnering with our clients to develop solutions and help them navigate the evolving regulatory complexities.



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