

The Future State of Liquidity Management

Building a Sustainable Response to a Changing Landscape

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The liquidity management landscape for international broker-dealers is changing, with new pressures emerging that may affect how all market intermediaries think about both firm liquidity and segregated client free credit balances.

At J.P. Morgan, we see four key themes that are relevant to liquidity management decision-making for broker-dealers in the near term.

Two emerging pressures for firm liquidity

- (1) New FSA liquidity adequacy regulation (FSA PS 09/16), now extended in scope to include broker-dealers
- (2) Increasing focus on the measuring and reporting of intraday liquidity risk for both broker-dealers and their settlement banks

Two emerging pressures for segregated client balances

- (3) Increasing FSA scrutiny of where and how client assets are invested, including possible rule changes to the *FSA Client Asset Sourcebook*
- (4) Increasing competition amongst brokers-dealers, coupled with increasing client pressure to diversify segregated assets and to pay better returns on excess balances

At a time of pending change in the industry, understanding the impact of these four themes can provide at least part of the foundation and framework for a sustainable liquidity management strategy that can help protect a broker-dealer's business and complement its strategic goals.

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"The target for broker-dealers should be to build a sustainable liquidity strategy for both good times and bad – one that recognises the criticality of maintaining competitive business processes and market confidence through all cycles, and that complements the firm's strategic goals."

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Theme (1): The New FSA Liquidity Adequacy Regulation (FSA PS 09/16)

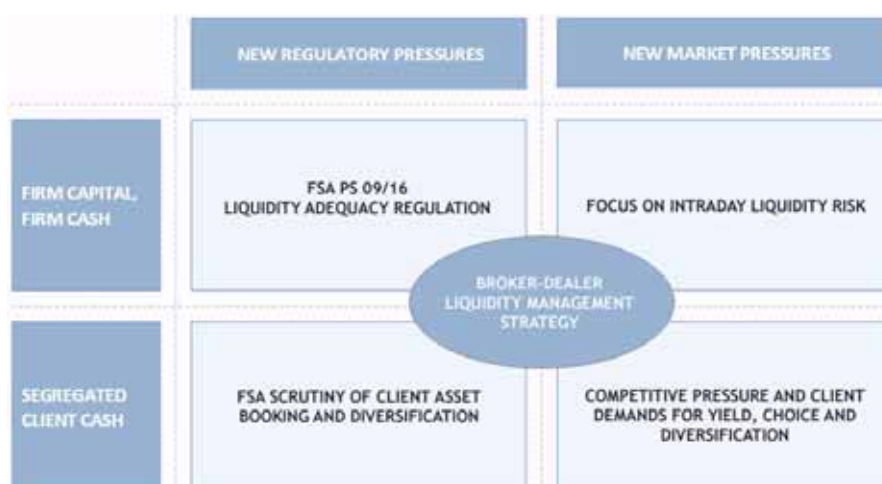
SUMMARY

- The new FSA liquidity adequacy regulation includes all FSA-regulated broker-dealer firms under formal liquidity resource supervision for the first time. It will require them to maintain unencumbered liquidity buffers of high quality instruments, and to periodically turn over these buffers to generate liquidity.
- Compliance with the new, individually-defined liquid asset buffer minimums implies a “profitability drag”, potentially reducing self-funding flexibility and creating additional opportunity costs (i.e., the spread between buffer-eligible government securities and other asset types).
- There are options as to how to construct liquidity buffers in order to demonstrate compliance with the new systems and controls standards, and these options may become important in mitigating the effect of any profitability drag.

Executive Considerations

- **Revising the Liquidity Regulation** – What are the key principles of the new liquidity regulation and how will it impact broker-dealers?
- **Liquidity Buffers: Mix and Match** – Should a liquidity buffer strategy consider direct purchase of allowable securities only, or do reverse repurchase agreements, and the greater operational flexibility and liquidity that they offer, have a part to play?
- **Meeting New Systems and Controls Standards** – How can broker-dealers demonstrate appropriate controls and transparent reporting for their liquidity buffer investment strategy?

FOUR KEY EMERGING THEMES FOR LIQUIDITY MANAGEMENT



Revising the Liquidity Regulation

As a result of the dramatic market events of the last two years, liquidity management is receiving heightened focus from global regulators, with the FSA taking the lead in Europe. The new FSA liquidity adequacy regulation (FSA PS 09/16) includes broker-dealer firms for the first time and radically changes the nature of liquidity supervision in the UK.

A key principle of the new regulation is that all FSA-regulated entities must maintain liquidity resources “sufficient in both amount and quality” at all times, to ensure that there is no undue risk of a firm not being able to meet its liabilities as they fall due.

Each firm must ensure that it is holding a buffer of high-quality, unencumbered assets as part of their liquidity resources. The size of the liquid asset buffer will be defined by the FSA on a firm-by-firm basis.

The FSA states that assets in the buffer should be highly liquid, high-quality government debt instruments, or reserves held with the Bank of England’s reserve scheme, or with the central banks of the United States, the EEA, Switzerland, Canada and Japan.

Tying up more capital in assets that fall within the narrow parameters allowable by the FSA runs the risk of leading to a “profitability drag”, as each firm will bear the opportunity cost of carrying unencumbered assets in its liquidity buffers

that may provide a lower net return than other asset classes or funding and investment options.

The impact of this opportunity cost will differ from firm to firm depending on current funding models. One indication of the impact of this cost is provided by the FSA’s own scenario modelling in FSA PS 09/16 (see below).

ESTIMATED COSTS DUE TO HOLDING INCREASED LIQUID ASSETS

During the first year of the application of the new regulation, the FSA estimated that firms would need to increase their holdings of high-quality government bonds by £110 billion, which would give rise to an annual cost of £2.2 billion. This assumes a 20% reduction in short-term wholesale funding and a calibration of Individual Liquidity Guidance (ILG) where the firm would need to cover 60% of outflows under the Individual Liquidity Adequacy Assessment (ILAA).

Source: FSA PS 09/16

Notes:

- The FSA sampled the liquidity positions of 18 standard ILAS (Individual Liquidity Adequacy Standards) firms. The sample included building societies and commercial and investment banks, representing more than 95% of the UK banking system by asset size.
- The FSA calculated the cost by assuming that maintaining a portfolio of government bonds has a cost of 150 bp, and that lengthening the maturity of wholesale funding has a cost of 50 bp.

Liquidity Buffers: Mix and Match

Although the FSA clearly defines that firms' liquid asset buffers should only contain the highest-quality government bonds, the exact composition of the buffer can take various forms. The strict guidelines of the new FSA liquidity adequacy regulation can also be partially or wholly satisfied by more flexible constructs than directly held government securities or central bank cash reserves.

For example, when deciding on the appropriate mix of eligible assets, firms should consider the liquidity of bonds in different parts of the government market, their settlement cycle, and maturity, as well as their currency denomination. Careful consideration of the form that the buffer takes, and of the location where it is held, may help to provide greater business and operational flexibility.

Also, all firms may choose to construct part of their liquidity buffers using reverse repurchase agreements, collateralised with eligible government securities, which would provide the opportunity for greater operational flexibility and liquidity. Smaller firms also have the option to satisfy their buffer requirement with holdings in Treasury or government money market funds.

Both of these options, either accessed via a banking provider or transacted directly, have the potential to increase the business and operational flexibility of a broker-dealer's liquidity management strategy over and above directly held government securities.

The Turnover Requirement

Under the new liquidity adequacy regulation, firms are required to turn over their liquidity buffers regularly in private markets to demonstrate that they can generate liquidity from their buffers through sale or repurchase agreements.

Some market participants have expressed concerns that this turnover process could send signals to the market that may be open to misinterpretation. However, given the depth of the high-grade government bond markets, it is unlikely that there would be any negative sentiment raised if a firm was

FSA PS 09/16 QUANTITATIVE REQUIREMENTS IMPLEMENTATION TIMETABLE

The requirement to comply with the quantitative requirements (e.g., to have adequate liquidity at all times and to be self-sufficient for liquidity purposes) comes into force in phases and depends upon the type of firm in question. The FSA will determine a more specific timeline for implementation in Q4 2010.



Source: FSA PS 09/16

noticed to be selling its government securities portfolio.

What may be more challenging is the operational burden and potential cost of having to turn a portfolio on a regular basis.

Again, choice of instrument and partner may offer some help: building all or part of a firm's buffer using treasury or government reverse repurchase agreements, accessed via a banking provider's agency/omnibus sweep mechanisms, can provide efficient and cost-effective operational support to satisfy turnover requirements while also maintaining full confidentiality to the market.

Meeting New Systems and Control Standards

Robust systems and controls are essential to an adequate liquidity risk management framework, and the recent financial crisis has exposed infrastructural weaknesses in many firms. In response, the FSA is applying liquidity risk management, stress testing and contingency funding plan (CFP) requirements to all firms regulated by the *FSA Prudential Sourcebook* (both ILAS and non-ILAS firms), and obliging each firm's governing body to express and check conformity with its stated liquidity risk profile.

Reporting transparency and robust, systematic controls are becoming ever-more critical as firms are called upon to demonstrate their compliance to the new regulation. If firms choose to make use of banking providers' capabilities for securities clearance and custody, and/or cash investment, then there are new factors to consider over and above simple capability: the level of systematic controls

(e.g., governing trading guidelines and parameters), and the timeliness and breadth of available reporting (e.g. positions and collateral) should now be key determinants for broker-dealers in choosing bank providers.

Theme (2): Focus on Intraday Liquidity Risk

SUMMARY

- The impact of more derivatives products being pushed into central clearing is leading to a potential increase in the number and value of margin calls.
- More stringent regulatory measures around intraday liquidity risk are forcing broker-dealers to have a thorough understanding of the terms of the credit lines extended to them by their settlement banks.
- As market participants and their agents respond to these regulatory changes, the previously "hidden" costs of intraday liquidity are becoming more apparent.

Executive Considerations

- **Margin Payments Growing in Size and Frequency** – What does the potential for increasing margin calls mean for both broker-dealers and their settlement banks?
- **FSA Focus on Intraday Liquidity Risk** – How has the FSA's view of intraday liquidity risk changed, and what are the key implications for broker-dealers?
- **The Cost of Intraday Liquidity** – What will be the cost of intraday liquidity to broker-dealers and settlement banks in light of FSA PS 09/16?

Margin Payments Growing in Size and Frequency

There are several trends in today's changing marketplace that suggest a likely increase in both the size and frequency of margin calls:

- More centralised clearing of over-the-counter (OTC) derivatives, via existing and new central counterparties
- Greater market volatility in assets prices increases the value of margin calls
- More sensitive margining mechanisms from clearing houses (24-hour margining)
- Some new OTC derivatives products are being margined on a gross basis, enabling the clients of broker-dealers to maximise balances held with clearing houses
- Increasing pressure from the FSA to diversify segregated client cash, which may drive some broker-dealers to increase the use of cash at clearing houses in preference to securities

This likely increase in the size of the margin calls is coupled with a growing focus from the FSA on the intraday liquidity risk of both indirect payment participants such as broker-dealers, and direct payment participants such as their settlement banks.

FSA Focus on Intraday Liquidity Risk

Under the ILAS regulation, the FSA requires indirect payment participants to have a thorough understanding of the terms of any of the credit lines extended to them by their settlement banks. As part of their ILAA they must provide details to the FSA of the policies governing the use of intra-day credit provided to them, including any alternative arrangements they have in place to continue to meet their obligations in the event of an operational or other disruption at their settlement bank.

One extreme interpretation of this requirement, which we do not necessarily share, is that previously undisclosed intraday credit lines will now need to be disclosed by the settlement bank to the client, in order for them to pass the FSA's liquidity stress test.

The Cost of Intraday Liquidity

Generally, across the markets, banks rarely disclose intraday settlement lines because they are not committed and are provided solely at the bank's option. The disclosure of intraday lines may be of concern to banks as it could then be construed that the lines are committed. This would have an impact on a bank's balance sheet and therefore the cost of intraday liquidity.

In order to extend their balance sheets intraday to all clients, settlement banks incur both direct funding costs, as well as the opportunity costs of maintaining funds in central bank accounts and tying up collateral reserves in order to obtain central bank credit. Banks will also of course now need to maintain their own liquid asset buffers.

With the FSA's increased focus on intraday liquidity risk, coupled with rising margin call volumes and values, the consequence, should there be any requirement for settlement banks to disclose lines to clients, is almost certainly for settlement banks to require recompense for the use of their balance sheets to support the intraday liquidity needs of their clients.

The cost of intraday liquidity can be recovered in various ways, giving broker-dealers and settlement banks some scope to work together to choose the most appropriate option to match their respective liquidity strategies.

Direct payment participants will be expected to report to the FSA any charges associated with providing intraday credit to indirect participants (Reference: CP08/22, p. 38).

Theme (3): FSA Scrutiny of Client Asset Booking and Diversification

SUMMARY

- The current UK client money regulation is expected to change in 2010, with a possible shift towards greater diversification of deposits and increased counterparty due diligence.
- The FSA has a scheduled consultation to be published in Q1 2010 reviewing the *FSA Client Asset Sourcebook*.
- The increased complexity of managing client money segregation requirements across multiple currencies, counterparties and deposit tenors may benefit from a more strategic approach, including potential use of agency providers to execute new deposit placement strategies.

Executive Considerations

- **Client Money Rules** – What regulatory requirements are imposed on firms holding client money?
- **Risk Diversification** – How should firms prepare for the expected changes to the rules governing the placement of client money, which may include more prescriptive changes to the current, broad guidelines on diversification?
- **Counterparty Management: Oversight and Control** – What are the implications of diversifying balances for a broker-dealer's oversight and control infrastructure; where can agency providers help?
- **Liquidity Ratios** – When investing client money, how do firms strike the balance between term yield pick-up and liquidity availability? Once appropriate ratios have been defined, can daily maintenance of those ratios on a currency-by-currency basis be assured?

Client Money Rules

Protecting assets and money belonging to clients has been a cornerstone of the UK regulatory regime since 1988. In March 2009, the FSA issued a letter to the compliance officers of all firms that hold relevant client money permissions, to remind them of their responsibility under FSA Principle 10: “A firm must arrange adequate protection for clients' assets when it is responsible for them.”

In particular, the FSA reminded firms of the importance of accurate recordkeeping. Primary client money holders must be mindful of trust arrangements at all levels of their investment strategy, including cash account “client money account status” and naming convention, deposit booking system naming conventions and segregation, trading platform balance naming conventions and segregation, and trust arrangements with counterparties.

The FSA expects firms to maintain a central file, including client assets and money policy and procedures documentation, letters of acknowledgement of trust arrangements and other relevant, recordkeeping requirements.

Risk Diversification

It is noteworthy that in its March 2009 letter, the FSA also chose to highlight the themes of risk diversification and counterparty management:

“In particular, we highlight the need for senior management to consider the need for diversification of risks, the credit rating and capital of the relevant credit institution or bank, and the level of risk in the investment and loan activities undertaken by the relevant credit institution, bank or affiliated company.”

Arranging adequate protection of clients' assets and money

FSA Letter, 20 March 2009

The existing broad guidelines on diversification are expected to change in the Q1 2010 FSA Consultation Paper.

Any new client money diversification requirements are likely to have a significant impact on broker-dealers, especially those that are part of a wider banking group. At these firms, it is common practice to place excess client margin with the parent bank or an affiliate, and any restriction on the use of

an affiliate as client money deposit taker has implications for the ongoing profitability model of the broker-dealer, as well as for the deposit base stability of the parent bank.

When planning a sustainable liquidity management strategy, broker-dealers will need to consider the potential regulatory changes that may impact their deposit diversification strategy.

The economic benefits of placing client money balances with either a parent or affiliate, or of chasing the best price from deposit takers in the market, need to be weighed carefully against the value of demonstrating risk management best practice to both underlying broker-dealer clients and the regulators.

Counterparty Management – Oversight and Control

Implementing a client money deposit diversification strategy further raises the importance of robust counterparty risk management and monitoring processes, and the associated credit expertise and infrastructure that these processes require.

Frequent counterparty due diligence would be anticipated by the regulators, especially in periods of market turbulence, and the additional oversight and control costs may prove prohibitive.

Broker-dealers will have to weigh these costs and risks against the potential to outsource a diversified deposit programme to an agency provider that can demonstrate effective risk management, control and transparency of reporting.

Liquidity Ratios

Although some broker-dealers choose to hold client money only in overnight deposits, current FSA client money rules only provide broad guidelines regarding the required liquidity profile of excess client margin investments.

It is therefore possible to see a range of different strategies implemented, including those that reach for greater yield by using term investments for a portion of their balances.

Managing a laddered portfolio of multi-currency cash deposits, whilst at the same time meeting more rigorous diversification requirements and limits, and also ensuring daily cash availability to agreed and defined parameters, can prove to be a challenging task.

As client money diversification requirements are expected to become more explicit, agency providers with expertise in managing and reporting on multicurrency laddered portfolios may have a stronger part to play, enabling broker-dealers to focus more on their core competencies.

Theme (4): Competitive Pressure and Client Demands for Yield, Choice and Diversification

SUMMARY

- Clients of broker-dealers are beginning to exert more pressure on the key liquidity strategy themes of transparency, competitive yields and investment option choice.
- Broker-dealers may see a significant shift in their treasury management strategies and revenue models in order to remain competitive in an increasingly demanding marketplace.

Executive Considerations

- **Emerging Client Asset Options** – How and when should emerging investment options like money market funds be used for client excess margins?
- **Constructing Yields to Clients** – What are the revenue dynamics and implications for broker-dealers of the different ways in which these investment options can be used?
- **Best Practice** – Is it better to wait and continue to make use of existing revenue streams for as long as possible, or to shift to a more transparent model now and get ahead of the curve?

Emerging Client Asset Options

In an increasingly competitive marketplace, two factors emerge as important differentiators for broker-dealers:

- (1) The rate of return paid to clients for excess margin balances
- (2) The choice of investment options offered to clients for excess margin balances

Clients are becoming more demanding, and the pressure to pay up for excess margin balances is likely to increase as all market participants focus on costs and profitability in a sustained, low interest rate environment.

In addition, more investment options are now available to broker dealers and their clients. As an example, since the introduction of MiFID in 2007, FSA client money rules have allowed for investment into qualifying money market funds, subject to approval by effected clients.

Better client returns and more investment options have definite implications for broker-dealers and their current revenue models. Hard choices may be on the horizon between retaining current revenue streams and remaining competitive to a client base with increasing demands.

Constructing Yields to Clients

Current market practice is such that client excess margin balances are compensated on the basis of a preagreed market benchmark, less a defined spread, with the broker-dealer's treasury team responsible for the excess margin investment strategy.

This model allows for net interest income on excess balances to be a revenue stream for the broker-dealer, and any change in investment policy or instrument choice will be controlled overall at the Treasury level (although new instruments may require approval by effected clients).

Increasing demand for returns, investment options and risk diversification may well cause the market to shift towards more explicit investment choices and returns (e.g., clients may expect to be able to select and receive published money market fund returns, rather than a rate manufactured by the broker-dealer).

Best Practice

Remaining competitive may therefore involve some fundamental shifts in a broker-dealer's liquidity strategy and revenue model. Developing and communicating best practice liquidity strategies that address transparency, risk diversification and investment option choice issues raised by clients may well be driven as much by the clients of broker-dealers as by the regulators. Deciding whether and when to hold on to current models or get ahead of the curve is an important consideration in a rapidly changing market environment.

Creating a Sustainable Liquidity Management Strategy

The individual and combined impact of the regulatory and market shifts discussed in this paper may be significant. A series of potential outcomes (forced diversification of client assets, client demands for greater transparency and higher yields), particularly if they all coincide, may require the rapid adjustment of a broker-dealer's business model.

Planning for change is usually better than waiting for it to happen, and adopting an integrated view that considers the full breadth of market and regulatory changes will minimise rework.

Bank providers have a role to play and can provide the infrastructure, depth and breadth of product capability that enables a broker-dealer to remain flexible and responsive to these challenges.

Bank providers can offer a variety of capabilities to cope with these changes – for example, automated investment sweeps into a range of qualifying money market funds, high-grade government security collateralised reverse repurchase agreements or third-party time deposits. Either individually or in combination these components can provide some of the heavy lifting required to evolve a liquidity strategy.

The target for broker-dealers should be to build a sustainable liquidity strategy for both good times and bad. Building a sustainable liquidity strategy that complements the firm's strategic business goals, meets regulatory requirements and responds to client demands is critical to successfully weathering market cycles.