

Liquidity Management Across Markets – Various Perspectives

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1. Market Perspective

Market Perspective

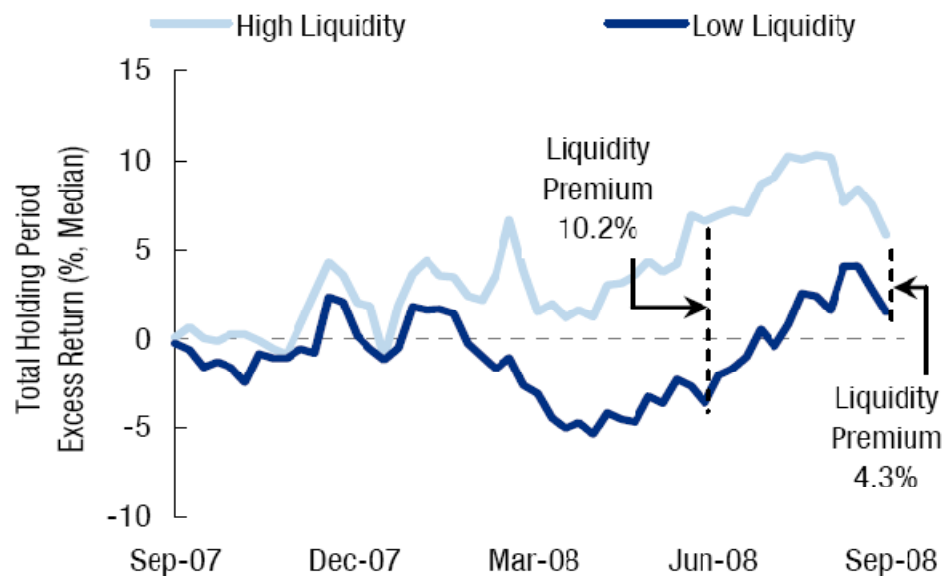
Over the last 12-18 months, the views on Liquidity Management have significantly changed.

	Pre-July 2007	July 2007–2008	Now
The Environment			
Financial Conditions for Corporations	<ul style="list-style-type: none"> • Low interest rates • Strong cash flow generation • Cash deployment challenge 	<ul style="list-style-type: none"> • Strong, but weakening fundamentals • Financing costs increase 	<ul style="list-style-type: none"> • Margins compress • Growth slowing in many sectors
Capital Markets	<ul style="list-style-type: none"> • Ready access to capital • Historically tight credit spreads • Reasonable benchmark rates 	<ul style="list-style-type: none"> • Reduced access to capital • Very wide credit spreads • Very low benchmark rates 	<ul style="list-style-type: none"> • Severe market corrections and strains in funding markets • Spreads widen greatly • Financing limitations bite
Liquidity Strategy			
Approach	<ul style="list-style-type: none"> • “Back of the Envelope” “Directional will do” 	<ul style="list-style-type: none"> • “Piggy Bank” “What can I reasonably access?” 	<ul style="list-style-type: none"> • “Focus like a Laser” “Good is not good enough!”
Liquidity Management	<ul style="list-style-type: none"> • Ready access to external liquidity. Seeking higher yields for cash 	<ul style="list-style-type: none"> • Balance sheet cash oversight and available bank facilities 	<ul style="list-style-type: none"> • Safe haven for balance sheet cash. Intense focus on cash generation and self-sufficiency.
Cost of Getting it “Wrong”	<ul style="list-style-type: none"> • None: Easy access if needed 	<ul style="list-style-type: none"> • Material: Potential distress 	<ul style="list-style-type: none"> • Beyond reach: Dramatically increased risk

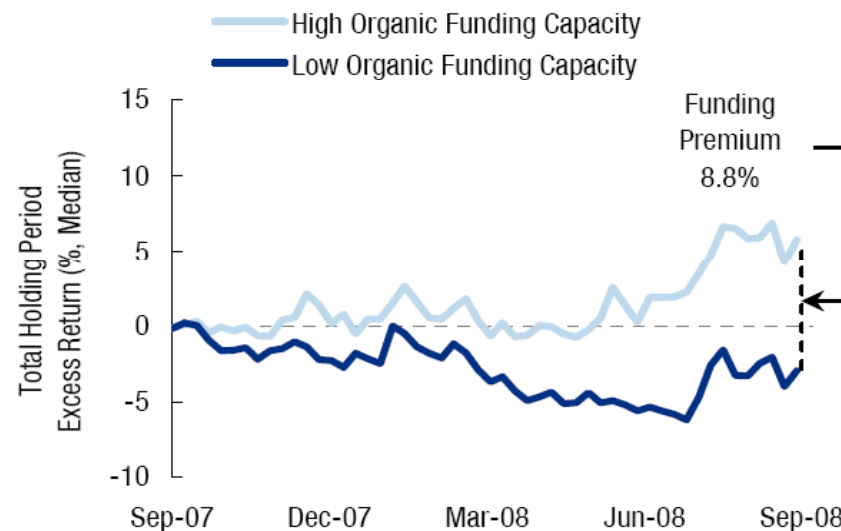
Market Perspective

Investors are rewarding firms that have ample/strong liquidity positions and an ability to pursue their growth plans without too much reliance on external capital financing.

Equity Premium on Strong Liquidity



Equity Premium on Low Capital Market Dependency



2. Bank Perspective

Bank Perspective – Internal Approach

Banks are looking for ways to improve overall liquidity risk management bank-wide (rather than per business unit). This approach will not improve the quality of underlying assets, but may help in dealing with critical events – better and faster.

Recent Thinking

Traditional approach to risk is no longer accurate

- Historically, the primary focus of regulators have been credit, market and operational risk, with liquidity risk viewed as a secondary risk.
- Credit and Market risk models often make sweeping assumptions about the availability of liquidity, which failed to contemplate recent realities (commercial paper market disappearing overnight, interbank lending freezing in London)

The fear of many impacts the confidence of one

- It is not enough for a single bank to have a detailed view of their liquidity needs at a given point in time, if other banks do not, as lending would still stop with the onset of market fears

Holistic approach in managing liquidity risk needed

- Reduce operational overhead for managing bank-wide liquidity.
- Optimizing the bank's return on collateral.
- Improving insight into customer behavior.
- Use operational 'live' data to supplement balance sheet information to provide a more accurate view of the bank at a given time.

Key Challenges and Focus Areas

Getting a quick consistent single liquidity view, bank-wide

- Absorbing, normalizing, aggregating and analyzing cash flows across the entirety of the bank.
- Manage liquidity on a predictive, intraday basis, across all the business units, across all geographies, within the bank.
- Proactively use new technology that enables more flexible, adaptive and comprehensive analysis of risk in volatile and uncertain markets.

Moving liquidity effectively from those who have to those who need it the most within the bank

- Gaining insight into a consolidated view across all flows, as well as who (internally or externally) is using the bank's liquidity and how they are using it.
- Optimizing the flows based on bank priorities – from payment flow control to modeling behavior of customer flows over time.
- Optimize central bank account balances by reducing the 'big' buffers.

Bank Perspective – External Approach

Banks are now applying ‘defensive’ measures on customers – tightening lending standards, scrutinizing approvals more closely, and mobilizing workout process to manage deteriorating credit conditions. Information is key for both credit policy and strategy decisions, as well as managing day-to-day activities within the credit cycle.

	What it Means	Main Challenges
Improve Front Office Workflow	<ul style="list-style-type: none"> Streamline commercial lending operations, effectively unbundling the lending value chain towards a higher degree of specialization (separating client-facing/sales from non-sales and servicing related activities), centralization of underwriting, standardization of procedures for various types of commercial loans, and streamlining decisioning and approvals. 	<ul style="list-style-type: none"> Balance between operational efficiency and business agility Aim would be for intelligent optimization of workflow rather than full integration
Use of Robust Uniform Counterparty Identifier	<ul style="list-style-type: none"> Converge counterparty identifier across businesses to better understand net exposure 	<ul style="list-style-type: none"> Issues of consistency, auditability and transparency arise with the number of information capture points, data owners, and divisions sharing customer information Less than 20% of cross business efforts are successful
Collateral Management	<ul style="list-style-type: none"> Involves collateral information capture, consolidation and processing across collateralization lifecycle Increased proliferation of collateral volumes and asset type pledged has raised the profile of this often ad hoc, back office function Key role in providing transparency into underlying loan quality 	<ul style="list-style-type: none"> Collateral classification is key to ensuring inherent risks are understood and recovery rates optimized Developing an approach to execute effectively despite changing requirements
Loss Data Management	<ul style="list-style-type: none"> Involves analysis and sharing of loss data information bank-wide Useful in supporting advanced credit risk management capabilities, rather than for work out efforts only 	<ul style="list-style-type: none"> Extending beyond parochial stand-alone solutions

Effective Residual Liquidity Risk Management

Banks can apply different Strategies for managing Residual Liquidity Risk.

Consider Changing Capital Structure	Significant Cost of Opportunity	Better Utilise Existing Internal Cash Flow
<ul style="list-style-type: none">• Reduce reliance on inter-bank market• Increase core deposits<ul style="list-style-type: none">– Pricing– Services<ul style="list-style-type: none">▪ Convenience▪ Efficiency• Increase long-term debt• Diversification of funding sources• Rights issue	<ul style="list-style-type: none">• Yield curve• No longer the cheapest alternative• Cost of improved service• Equity is the most expensive source of capital	<ul style="list-style-type: none">• Adopt an effective nostro liquidity management strategy to move cash from areas of surplus to areas to deficit• Discount trade, credit card receivables

3. Corporate Client Perspective

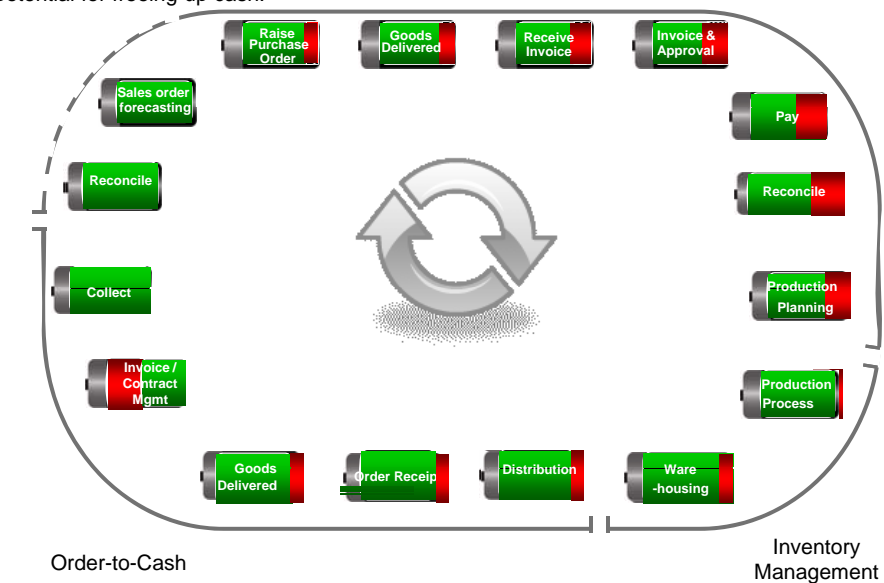
Corporate Client Perspective – Internal Approach

Traditional sources of capital are now expensive and scarce. Companies are increasingly looking at internal sources of cash, the cheapest source of funding, to fund operating needs and business growth.

3 Step Approach: Know Where the Cash is, Get Access to It, Do Something with It (reduce debt or invest)

Where is the Cash Trapped?

Cash is trapped through the cycle. **Green** areas represent domains that offer the greatest potential for freeing up cash.



- Customer delinquency also comes from a variety of **upstream root causes** (billing errors, product delivery errors, poor receivable management)
- Effective methods to determine and fix root causes do not exist in-house
- **Improved AR performance directly increases customer satisfaction**

How Can it be Found?

- Analyze Receivables cycle closely-focus on the **Cash Conversion Cycle**
- Enforce payment term discipline
- Ensure timely delivery of good/service, minimise damages
- Minimise elapsed time between good/service delivery and invoice rendition
- Minimise invoicing errors
- Shrink the collection cycle
- Pro-active resolution of commercial disputes
- Focus on data quality to streamline AR reconciliation and cash application
- Timely update of customer credit lines

- Improving DSO performance not only provides liquidity, but also positively impacts ROCE
- According to FSG analysis, high organic funding, profitability and liquidity are most rewarded in terms of the impact on returns
- There are several companies that require significant improvements to move closer to their industry DSO median
- **In short, cash is king, driving return differentials today**

Corporate Client Perspective – External Approach

In recent months, Corporate Treasurers play an increasingly important role in overall firm sustainability – with a strong focus on a ‘daily’ liquidity management approach. Additionally, critical evaluation of counterparty risk has been extended to core banking partners – as even idle cash can be at risk!

Recent Thinking

Treasurers taking radical, tactical, day-by-day approach towards cash, liquidity & working capital management

- Safeguarding company assets and managing cash resources have reached critical levels – which could cause the collapse of the firm or allow it to weather the ongoing global crisis.
- Strong focus on preservation of capital and maximizing cash on hand/cash flows/returns.
- Strong focus on resource exploitation and leveraging existing assets – ROel (Return on Existing Investment) replaces ROI.

Corporates are having to manage counterparty risk on existing core banking relationships

- Will the Bank be forced to merge? What businesses in the Bank will survive? How will bailouts impact the Banks with which the Corporate does business?
- Corporates experience firsthand the lack of bank liquidity – not willing to extend credit facilities at all, looking for flaws in the contract with a view to terminate, looking to exit facility agreements immediately, offering facilities much less than originally requested, pricing as much as 5x 2004 levels

Key Challenges and Focus Areas

Treasurer’s ability to act on timely key info received

- Gathering and critical analysis of news and Information from multiple sources – both internally and externally.
- Implementing cost control and reduction, and centralization of treasury functions in a short span of time.
- Ability to meet increasing technology needs with limited resources.
- Daily Cash Management becomes a mandatory practice, with real time visibility into cash balances locally, regionally and globally across all banking relationships
- Reporting will become a key feature, not only for internal management, but to communicate to external stakeholders.

Full evaluation of counterparty exposure – customers, suppliers, insurance companies and financial institutions

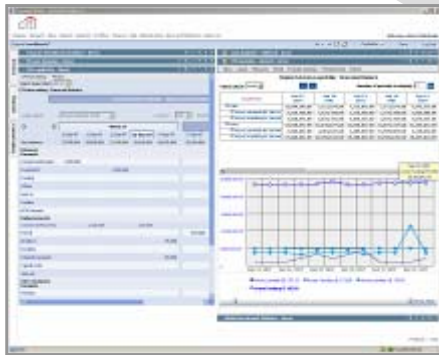
- Increase control over banking relationships by taking over from subsidiaries, and consolidation of accounts to a few banking partners
- Increase loyalty to the banks that offer credit facilities
- Focus on timeliness and reliability of the execution of cash flow transactions
- Timing investment maturities with cash flow needs

Effective Liquidity Management Planning

The basic Framework for Liquidity Management Planning involve: Moving the right amount of money, at the right time and the right place; Structure solutions to effectively utilise cash and optimise return.

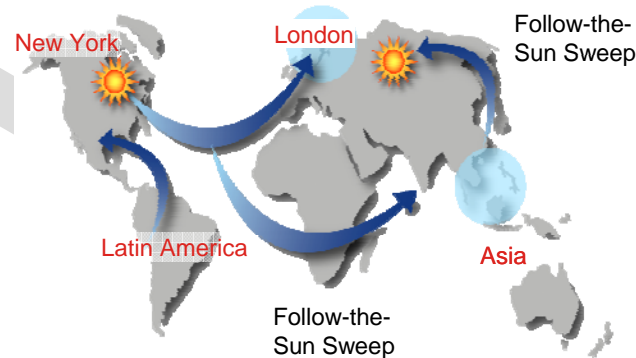
Risk

1. **Visualisation** is about Treasurers' ability to access all cash flows



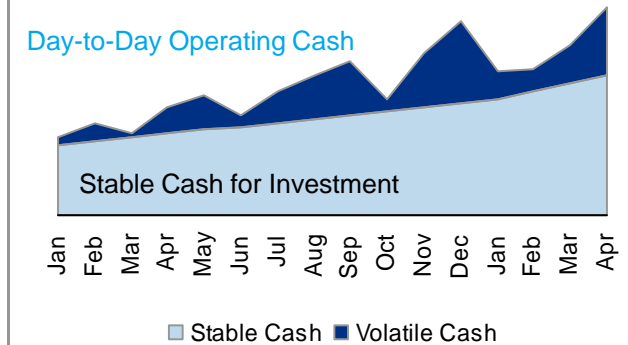
- Determine the amount of monies needed for operations vs. excess monies to be invested
- **Example of solutions:** Treasury systems to aggregate financial information from multiple banks and present it in a web-based front end

2. **Mobilisation** is about Treasurers' ability to consolidate excess cash at the right place



- Structure solution to **concentrate liquidity** at the right place and the right time based on relevant accounting rules, regulations, and tax rules across a spectrum of countries
- **Example of solutions:** Multi-bank Target balancing accounts

3. **Optimisation** is about obtaining risk adjusted return on excess cash



- Maximise yield while minimizing risk
- Concentrate volatile cash to minimise it
- Diversify stable cash by
 - Tenor: Per business plan's cash flow projections, from overnight to one year
 - Risk profile: Per board policy, typically from AAA to BBB

Return

4. Regulatory Perspective

Regulatory Perspective

Central Banks and Regulators globally have collectively taken a very active approach to restoring market confidence and strengthening the credit markets. As the general public seeks information on how such monies are being used, regulators are reviewing their disclosure policies and improving public access to information.

- **Ease monetary policy** (i.e reduce base rates)
- **Provide short term liquidity to sound financial institutions** (i.e new facilities for auctioning short term credit)
 - to ensure that financial institutions have adequate access to liquidity and ease conditions in the interbank lending markets
 - as some interest rates are tied contractually to key interbank rates (Libor), to the extent that the provision of ample liquidity to banks reduces Libor, other borrowers will also see their payments decline
- **Bilateral currency liquidity agreements** (between 15 central banks)
 - aimed at easing the conditions in the dollar funding market globally
 - swap facilities will allow central banks to acquire dollars from the US Federal Reserve, that the central banks may lend to financial institutions in their jurisdictions
- **Provision of liquidity directly to borrowers and investors in key credit markets** (i.e purchase of highly rated commercial paper, provide backup liquidity for money market mutual funds, lend against AAA-rated asset-backed securities collateralized by recently originated student, auto and credit card loans)
 - to restart activity in key securitization markets and lead to lower borrowing rates and improved access in the markets for consumer and small business credit
- **Purchase of longer-term securities** (e.g US Fed to purchase up to \$100 billion of the debt of government-sponsored enterprises including Fannie Mae, Freddie Mac, and the Federal Home Loan Banks)
 - to lower mortgage rates, thereby supporting housing activity and the broader economy
- **Direct capital injection and loans** (e.g US Troubles Asset Relief Program)
 - to stabilize systemically critical financial institutions
- **Bank Deposit guarantees** by most major central banks or their treasuries

Regulatory Perspective

With recent events, the quality of governance in many firms have become questionable. To restore confidence, more intrusive regulation is the inevitable repercussion. Risk management needs to be recognized as a value-added activity and not just a barrier to business or a compliance exercise only.

	What it Means	What it Means for Banks
Improve Stress & Scenario Testing	<ul style="list-style-type: none"> • Current models that incorporate single factor tests and historical scenarios have not worked sufficiently • Risk impact of potential future crisis has been largely underestimated • Stress tests should be all encompassing, covering credit risk, market risk and operational risk • Due consideration should be given to portfolio concentration levels, reputational impact and the effect on the availability of liquidity sources 	<ul style="list-style-type: none"> • Banks need to revisit their current risk modeling, incorporating time horizon, unexpected illiquidity, lack of hedges, aggregation and correlation into the mix • Rigorous assessment of material risks with mitigating management actions need to be actively pursued
Introduce Reverse Stress Testing	<ul style="list-style-type: none"> • Banks to identify and assess scenarios most likely to cause their current business plan to become unviable • May be reached before regulatory capital is exhausted • Objective is to ensure the bank may continue long enough to either restructure its business, or allow a more orderly wind-down or transfer 	<ul style="list-style-type: none"> • Banks need to take a holistic approach and consider both liquidity risk and risk to capital positions • Banks will be expected to hold capital to withstand specific yield curve shifts and severe market events
Renewed Focus on Group Risk Management	<ul style="list-style-type: none"> • Stress testing needs to be performed at different levels – firm wide, business unit, business line – and bring together top-down & bottom-up assessment in a coherent way • Consideration should be given to the fact that liquidity stresses in one market can spread across multiple markets 	<ul style="list-style-type: none"> • Banks will need to consistently and comprehensively apply stress testing throughout the organization • Active senior management participation is a must

5. Conclusion

Conclusion

Keeping the Global Enterprise Liquid:

You can't do today's job with yesterday's methods and be in business tomorrow.

- In recent months, the markets have put extra value in liquidity – so both banks and their customers need to focus on managing liquidity and reducing risk
- Banks need to ensure a consistent liquidity risk management approach extends bank-wide
- With credit concerns, Banks that are able to manage client lending risks properly have the opportunity to create a loyal client base that will reap rewards in the long term
- For Corporates, optimizing internal cash flow in times of crisis is the most effective liquidity risk management
- With Corporate Treasury in the limelight, there is opportunity to direct firm-wide centralization efforts to ensure there is sufficient working capital to sustain business operations and fund the enterprise globally
- In today's environment, closing the gap between mismatches in sources and uses of funds has become more limited, more expensive, and more challenging
- Expect new regulations that will require increased capital requirements, increased transparency and improved reaction time
- Overall, Cash remains King, and Liquidity is its Queen.

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