Enabling an Efficient and Holistic Liquidity Management Framework Yields Exponential Results

Global Liquidity and Investments
Global Transaction Services

Thursday, June 2\textsuperscript{nd}, 2011
I. Market and Recent Trends Overview

II. Treasury Trends
   I. Liquidity & Risk Management
   II. Netting
   III. In-House Banking
   IV. Benefits of Centralization

III. Enablers, Challenges & Success Factors
   I. People, Process, Technology
   II. Organization, Experience/Advisory, Service Provider
Market and Recent Trends Overview
Global Corporate Finance Backdrop in 2011: Recovery

The global corporate sector entered 2011 in a position of strength. The overarching corporate finance challenge is deciding when and where to deploy this spending power – on organic growth opportunities, on M&A, on further balance sheet strengthening or increased capital distribution.

**Strategic Trends**

- Increase in M&A
  - Emerging Markets
  - Cross Border
- Internal investment in high-growth markets
- Surge in shareholder distributions
- Risk of investor pressure for those failing to deliver growth

**Balance Sheet Trends**

- High cash buffers, but much of it offshore or trapped
- Attractive EM capital issuance opportunities - local firms and MNC’s
- Underfunded pension plans
- Liquidity and working capital management strategies under review
Treasury Priorities: Dealing with Complexity

With CEO/CFO priorities shifting from crisis management to “risk aware” sustainable growth, the role of the Treasurer has been re-defined as a strategic partner and “gatekeeper” of the balance sheet.

**Treasury Challenges: Increasing Complexity**
- **Multiple countries and currencies of operation**
- **Proliferating number of bank accounts** to support international activities, with varying local banking practices / standards
- **Multiple systems and data formats**
- **Insufficient global visibility** into liquidity and risk
- **Challenges in consolidating critical information** for senior management decision-support

**Maximizing Cash Efficiency**
- Building foundation of effective liquidity management and increased cash visibility
- Connecting working capital to liquidity management
- Developing accurate cash forecasting

**Improving Risk Management**
- Develop firm-wide view of exposures
- Implement policies & clear governance, monitor compliance
- Leverage technology to provide visibility, de-risk processes

**Supporting Growth**
- Tap into local knowledge and expertise in growth markets
- Deploy options to reduce trapped cash
- Integrate treasury processes over acquisitions, tighten JV oversight
- Leverage technology to automate and integrate, free resource time

**Key Enablers**
- **Streamlining and standardizing treasury processes** to achieve productivity gains and enhance control
- Leveraging **effective treasury technology solutions** to help achieve all of the above
Our proprietary Citi Treasury Diagnostics benchmarking service began in 2009. It has attracted more than 250 major global firms, across all industries, providing objective benchmarking of their treasury operations.

**Six Pillars of Treasury Operations**

- Liquidity Management
- Cash Management
- Risk Management
- Funding & Repatriation
- Policy & Governance
- Systems & Technology

**Benchmarking with Citi Treasury DiagnosticsSM Service**

**Benchmarking:** Where company stands relative to peers, what counts as best in class

**Distribution of universe and peer group scores**

**Relative performance table by sub-category**

<table>
<thead>
<tr>
<th>Process Area</th>
<th>Against Peer Group</th>
<th>Against Universe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquidity/funding risk</td>
<td>Better</td>
<td>Better</td>
</tr>
<tr>
<td>Interest rate risk</td>
<td>Better</td>
<td>Better</td>
</tr>
<tr>
<td>Foreign Exchange (Transactional)</td>
<td>Better</td>
<td>Better</td>
</tr>
</tbody>
</table>

Winner, Innovative Product

Winner, Celent Model Bank Award

Silver Winner, Solution of the Year, Treasury & Risk Alexander Hamilton Awards

Monarch Innovation Awards

Winner, Innovative Product
Key Treasury Concerns drive focus towards Best-in-Class

Cost of credit and Bank Regulation

- Failure to secure **adequate liquidity** can cripple growth plans and create exposure to undue financial risk.

Economic Volatility & EM Shift

- Post crisis, M&A activity is increasing along with natural expansion in to **new markets**

Risk Management: Operational as well as Financial

- Expense and risk considerations drive demand for **automated “no touch” solutions**
- Treasurers continue to look for **centralized solutions** to manage cash and liquidity

Counterpart Stability

- Balancing need for **diversification** whilst focusing on key service providers that deliver the most value
- **Control** subsidiaries and JV within agreed limits

Global Tax Environment

- Increased scrutiny and legislation pending
- Impacts on cash concentration centers and **In-house banks** in “tax-favorable markets”

Investor Valuations

- Liquidity solutions help reduce working capital, pay down debt and have a **positive impact on EPS and balance sheet management**
 Benchmarking with Citi Treasury Diagnostics Service

Insights from “best-in-class” treasury organizations that excel in liquidity management and netting as they gravitate towards in-house banking

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**Key Differentiators**

**Liquidity Management**
- 95% + visibility of global cash
- Rationalized account structure with key banking providers
- Centralized, global management of physical and notional cash pooling with 95%+ operating cash flows in the pools

**Cash Flow Forecasting**
- Cash forecasts should be created at the legal entity since most liquidity issues are also isolated by legal entity
- Performed daily, with supporting automation
  - Collections forecast using expected receipts pattern
  - Payables forecast using standard payment terms
- Variance analysis, with supporting KPIs/scorecard

**Netting**
- Inclusive of 95% of legal entities and currencies (where allowed by regulations)
- Interface to ERP and TWS is fully-automated transfer
- Monthly Netting Cycle
Evolution Towards Efficiency

I. I/C Fixed Loans / Deposits

II. (Regional) Liquidity Management;

III. Cash Flow Forecasting / FX Risk Management

IV. External Deposits / Investments

V. Intercompany Netting Internal “Cashless”

VI. POBO / ROBO External

IHB (Integrated with Business Units)

IHB (Treasury Functionality)

Finance Company

Phases of Evolution

Centralization

▲ Strategic structural funding and defunding
▲ Reduced banking fees and rationalized account structure
▲ Enhanced global cash access and utilization
▲ Efficient “real-time” funding of Bus

▲ Improved risk visibility and mitigation
▲ Minimized FX spreads
▲ Improved cash planning and repatriation
▲ Improved cash positioning

▲ Optimized global cash utilization and yields

▲ Reduced transaction costs on internal flows
▲ Reduced transaction costs on external flows
Poll Questions

When you do Cash Pool, how do you manage your process (choose one)

A. Bank provided Pooling only
B. Bank and Treasury Workstation facilitated
C. Treasury Workstation facilitated
D. Manually Initiated
E. n/a; Pooling not utilized
Poll Questions

When you do intercompany transaction netting, what percentage of your eligible entities are included? (choose one)

A. 95%+
B. 76-94%
C. 50-75%
D. Less than 50%.
E. n/a; Netting not utilized
Poll Questions

Do you have an in-house bank?

A. Yes
B. No, but planning for
C. No, no plans
Effective In-House Banking

An effective In-House Bank enables a Corporate to capture efficiencies of centralization as it aggregates liquidity and net flows within risk, tax, legal and regulatory considerations.

Enterprise-wide Risk Management
- Liquidity Risk
- Foreign Exchange Risk
- Interest Rate Risk
- Counterparty Risk

Centralization of commercial flows
- Third Party commercial payments
- Internal commercial flows
- Third Party commercial receipts

Efficiency through scale and centralization
- Bid / Offer Spread
- Transaction Costs
- Enforces Policy, Procedures and Control
- Increases Purchasing Power
Case Study: Large Oil Producer

A large oil producer wanted to centralize their treasury to gain visibility and control over subsidiary cash flows and their large number of banking relationships.

Customer Need
- Enhance treasury effectiveness, increase focus on liquidity and cash operations
  - Lack of visibility over subs cash flows
  - Lack of control over subs opening of local accounts, creating potential financial and audit risk
  - More than 40 active banking relationships
  - Consolidated debit of US$5.5 billion
  - Excess cash balances of US$1.5 billion (despite excess cash balances, need to use external borrowings)

Citi Solution
Liquidity Management Model
- Shift from a decentralized to a centralized treasury model – managing cash centrally
- Real-time visibility and access to subsidiaries balances and use of global cash forecasting
- Provide internal funding to subsidiaries; intercompany lending and central external borrowing through zero balance sweep structures
- Increased control over Subs opening of local accounts
- Rationalize banking relationships
- Tapped into internal liquidity, freed up cash and reduced external debt
**Netting Case Study**

A large multi-national corporation required a solution to reduce funding and FX at the local level as well as coordinate internal fund flows between 75 business units and subsidiaries.

### Customer Need
- Simplify the management of intercompany trade flows in 16 currencies, between 75 business units, generating 160,000 I/C invoices per month
- Minimize resources managing disputes on internal transactions
- Reduce significant volume of intra-organizational trading crossing many jurisdictions
- Systematize ad hoc approach to settlement
- Reduce funding and FX at local level
- Limited visibility and zero control at treasury level

### Citi Solution
- 16 bank accounts in name of Netting Center entity – participants retain own local accounts
- End-to-end automation of process:
  - Self service management of Netting database
  - Online dispute management
  - Host-to-host load of transactions directly from SAP by SSC
  - Generating all cash settlements to and from each participant.
  - 2 netting cycles per month matching organizational calendar
- Efficient FX deal execution through ChiefDealer with agreed spreads

### After
- Reduced cash transactions to 180 per cycle
- Reduced FX volume to one FX deal per currency pair
- Disciplined, streamlined process bringing enhanced co-ordination and control along with comprehensive visibility and reporting
- Annualized savings of over $3.5MM
Enablers
Corporate Enablers

Stronger partnerships emerging between treasury and business are evidence that success requires new strategies for funding, as well as, coordinated support for investments in treasury technology.

- Treasury organization structure must be aligned with business to ensure that common goals and objectives can be met.
- Expansion into new markets may require expertise outside the scope of current staff knowledge; leveraging local market experts and project management specialists may need to be considered.
- Centralized approach to policy definition and treasury processes is still required. However, existing processes may need to be modified to handle increased capacity and/or modified to accommodate local requirements.
- KPIs should be developed to track the success of changes implemented and identify opportunities for improvement.
- Existing technology infrastructure will need to be extended to include access to treasury professionals in new markets, as well as, visibility of new business activity.
- Implementation of in-house banking and netting programs, as well as, increasing volumes may require investment in technology and automation, where previously lower volumes and overall complexity did not.
Application of Enablers in Treasury Evolution

I. I/C Fixed Loans / Deposits
II. (Regional) Liquidity Management;
III. Cash Flow Forecasting / FX Risk Management
IV. External Deposits / Investments
V. Intercompany Netting Internal “Cashless”
VI. POBO / ROBO External

Centralization Phases of Evolution

<table>
<thead>
<tr>
<th>Intercompany Position</th>
<th>Liquidity Management</th>
<th>Shared Service Centers</th>
<th>In-house Banking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centralization impacts</td>
<td>▲ Standardized terms and rates ▲ KPIs that monitor size and exposure of all I/C transactions</td>
<td>▲ Global liquidity structures that automate predictable flows, supplemented by manual positioning ▲ Global cash forecasting – bottom up from business with top down overlay from treasury ▲ Centralized investment program to optimize cash returns</td>
<td>▲ Centralized FX and payment netting ▲ Policies, procedures, and bank interaction centrally controlled ▲ All LE’s interact with the IHB</td>
</tr>
<tr>
<td>Technology investments</td>
<td>▲ Centralized database of all loans ▲ Reporting tools for tracking cross-entity loans and deposits</td>
<td>▲ Automated account reporting for global visibility ▲ TWS or bank-provided liquidity management automation ▲ Cash flow forecasting system ▲ Investment portal to automate settlement</td>
<td>▲ TWS or bank-provided netting system ▲ File-based payment initiation from ERP/TWS to bank ▲ TWS, ERP module to run the in-house bank</td>
</tr>
</tbody>
</table>
Implementing the In House Bank

Technology is a key enabler of treasury evolution. Effective deployment will support visibility, risk management and cash positioning for better control and efficiency in the treasury organization.

1. Implement IHB and netting systems
2. Aggregate all bank account information from Citi and other third party banks
3. Customize reporting to match legal entity hierarchy globally
4. Provide direct access to reporting to business managers and local treasury operations
5. Implement system for visibility of cash pooling activity and perform detailed analysis of business impacts on funding
6. Consolidate I/C positions into a centralized repository to simplify initiation and settlement
7. Implement file based payment execution
8. Automate trading of time deposits, money market funds and other short-term fixed income using investment portal
Reporting and Metrics Support Management Visibility

KPIs and metrics are essential to effective management – synchronize reporting and metrics as your treasury evolves to ensure that ROI and other goals are met.

<table>
<thead>
<tr>
<th>Type</th>
<th>Components</th>
<th>Observations for Best in Class Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Statement</td>
<td>• Interest Income</td>
<td>• Reporting: Provide periodic reporting on at least a quarterly basis with monthly where possible</td>
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<tr>
<td></td>
<td>– ST Investment performance &amp; LT Investments</td>
<td>• Key metrics should include: Cash and Investments by entity/geography, counterparty risk, investment yield, debt cost and a CFOps/FCF metric along with any metrics tied to current strategic initiatives</td>
</tr>
<tr>
<td></td>
<td>• Interest Expense</td>
<td>– Prior period compares are key to identification of trends and measuring progress</td>
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<tr>
<td></td>
<td>– ST/LT Debt &amp; Weighted average cost of funding</td>
<td>• Dashboards: Updates should be more frequent than reporting and should be consistent with an emphasis on graphs and red/yellow/green status updates</td>
</tr>
<tr>
<td></td>
<td>• Bank Fees</td>
<td>• Dashboard metrics should be tied to KPI and/or initiatives. Can also include graphical depictions of metrics in reporting</td>
</tr>
<tr>
<td></td>
<td>• FX Gain/(Loss) vs. forecast</td>
<td></td>
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<tr>
<td>Balance Sheet</td>
<td>• Financing / Capital Structure</td>
<td></td>
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<tr>
<td></td>
<td>• Cash Capital Position</td>
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<tr>
<td></td>
<td>• Cash Efficiency Measures</td>
<td></td>
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<tr>
<td></td>
<td>• Bank lines &amp; overdrafts</td>
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<tr>
<td>Other Measures</td>
<td>• Counterparty exposures vs. limits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Bank credit lines utilized / available</td>
<td></td>
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<tr>
<td></td>
<td>• Internal Funding Vehicle financials</td>
<td></td>
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<td></td>
<td>• Special initiatives progress and results</td>
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Industry Best Practices Applying Technology in Treasury

Processes Supported by Treasury Technology

- Cash Operations/Liquidity Management: 84%
- Short-term Borrowing/Financing: 73%
- Treasury Controls and Accounting: 70%
- Intercompany Loan Administration/In-house Banking: 70%
- Investing: 68%
- Financial Risk Management - FX, IR, Commodity (Deal Execution/Implementation): 67%
- Cash Forecasting/Planning: 41%
- Supplier Payments: 34%
- Financial Risk Management - FX, IR, Commodity (Identification and Mitigation Decision): 34%
- Bank Relationship Management: 21%
- Trade/Bank Guarantee Issuance: 14%

Significant room for improvement

Good, but could be better

17 Source: Citi Treasury Diagnostics Service, as of March 2011
## Supporting Growth: 2011 and Beyond Execution Imperatives

### Keep abreast of changing market conditions
- Continued volatile market conditions and evolving regulations require real-time information management and improved monitoring and reporting capabilities
- Maintain financial, process and supply chain flexibility to respond to changing conditions

### Implement robust control processes to monitor operational & financial risks that come with growth
- Close coordination with businesses, regions and partners to identify issues and mitigants
- Implement functionally centralized policies and controls
- Establish governance framework, KPI’s and alerts
- Ensure ability to monitor

### Technology and Infrastructure Investment to support global complexity
- Industrialize global reparative processes through deployment of technology to support working capital management
- Increase ability to generate actionable information, risk management and analytics from global business flows
- Streamline connectivity to suppliers, customers and banking partners to minimize cost and maintenance

### Think strategically of treasury transformation opportunities
- Company-wide cash and liquidity management programs are a must
- Rethink trading models; legal and tax structures
- “Piggyback” treasury objectives on organization-wide technology/process initiatives to help drive the business case

### Reassess banking relationships with a view towards future growth strategies and plans
- Long-term view of requirements across a broader network
- Rationalize providers to improve operating and cost efficiency

### Continuous Process Improvement
- Implement structures and processes to continuously align business, capital and liquidity requirements
- Mitigate risk through centrally administered processes and policies
- Streamline and standardize; eliminate repetitive and parallel processing
**Treasurer’s Decision Support from Citi**

### Market Regulatory Guides
- Quick reference guide for regulations impacting in-country treasury decisions

### Deloitte Tax guides
- Comprehensive guide for treasurers to cash and notional pooling considerations in major concentration centers
- Developed in partnership with Deloitte

### Citi Treasury Diagnostics Service
- Representative output from Citi Treasury Diagnostics Service

### Pooling Analysis
- Representative output from Citi Pooling Benefit calculators
Poll Questions

To what degree have you automated your cash flow forecasting process?

A. There is one centralized process that is automated end-to-end
B. There is one centralized process and more than 50% of the input is automated
C. There are multiple processes with different degrees of automation
D. It is a manual process
Poll Questions

How frequently do you report operating metrics?

A. Daily dashboard and monthly management reports
B. Weekly dashboard and monthly management reports
C. Monthly management reports
D. Less frequent than monthly
Poll Questions

Which of these initiatives is most important in your planning for 2011-2012?

A. Rationalize bank accounts and bank relationships
B. Review of all policies and procedures
C. Review and update liquidity structures
D. Technology investment in TWS or other desktop analytical tools
E. Investment in people, either to grow the treasury staff or bring in new expertise
Questions and Answers

- Today’s Presenters
  - Cindy Gerhard cindy.gerhard@citi.com +1 (212) 816-4844 (New York)
  - Michael Botek michael.botek@citi.com +1 (212) 816-0283 (New York)

Future Webinars

- Essentials of Managing Corporate Cash and Investments
  - When: June 28th, 2011 (4:00 p.m. BST, 11:00 a.m. EDT)
  - Speakers:
    - Michael Berkowitz – NA Market Management Head, Liquidity, Investments & Information Services
    - Mali Bartlett - Global Product Management Head, Citibank Online Investments

- Register at: http://www.transactionservices.citigroup.com/transactionservices/home/corporations/calendar.jsp
In January 2007, Citi released a Climate Change Position Statement, the first US financial institution to do so. As a sustainability leader in the financial sector, Citi has taken concrete steps to address this important issue of climate change by: (a) targeting $50 billion over 10 years to address global climate change: includes significant increases in investment and financing of alternative energy, clean technology, and other carbon-emission reduction activities; (b) committing to reduce GHG emissions of all Citi owned and leased properties around the world by 10% by 2011; (c) purchasing more than 52,000 MWh of green (carbon neutral) power for our operations in 2006; (d) creating Sustainable Development Investments (SDI) that makes private equity investments in renewable energy and clean technologies; (e) providing lending and investing services to clients for renewable energy development and projects; (f) producing equity research related to climate issues that helps to inform investors on risks and opportunities associated with the issue; and (g) engaging with a broad range of stakeholders on the issue of climate change to help advance understanding and solutions.

Citi works with its clients in greenhouse gas intensive industries to evaluate emerging risks from climate change and, where appropriate, to mitigate those risks.