Regulatory Challenges: Treasury Management in a Changing Environment

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Treasury Top Priorities: What We Have Seen Through 2013…

1. Re-organize treasury structures for continued business growth in emerging markets

2. Optimize working capital funding strategies for subsidiaries, especially in regulated markets

3. Globalize operating liquidity management, including IHB models, to release excess cash

4. Prepare for impacts of global financial regulation (e.g. D-F), market infrastructure changes (e.g., SEPA) impacts, and deregulation in key growth markets (e.g., China)

5. Leverage converging banking industry standards and corporate systems investment to improve risk visibility

<table>
<thead>
<tr>
<th>Trends</th>
<th>Macro</th>
<th>Regulatory</th>
<th>Technology</th>
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<tr>
<td>Governance</td>
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<td>3</td>
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<td>Structure</td>
<td>1</td>
<td>4</td>
<td>3</td>
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<td>Cash &amp; Funding</td>
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<td>4</td>
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<tr>
<td>Risk</td>
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<td>Systems</td>
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1. Optimize working capital funding strategies for subsidiaries, especially in regulated markets
2. Globalize operating liquidity management, including IHB models, to release excess cash
3. Prepare for impacts of global financial regulation (e.g. D-F), market infrastructure changes (e.g., SEPA) impacts, and deregulation in key growth markets (e.g., China)
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Selected Updates

The current direction and magnitude of regulatory change – both micro and macro-prudential – runs the risk of balkanizing international banking as we know it today.

- **Basel III**
  - Capital Ratios on Risk Weighted Assets
  - Liquidity Coverage Ratio
  - Basel Supplementary Leverage Ratio
  - US Final Rules

- **“National Preference” Regulation**
  - Ring-fencing of local balance sheets
  - Depositor preference regime challenges

- **Bank Resolution Plans**
  - Filed by 11 US financial institutions, in compliance with Dodd-Frank
  - Intended to minimize impact to financial markets and clients

- **Money Fund Reform**
  - Proposals by the US (SEC) and EU
  - VNAV, redemption gates, capital and liquidity buffers

- **China Regulatory Reform**
  - Liberalization of RMB and cross-border intercompany lending
  - Shanghai FTZ
Current Trends & Predictions for the Future

1. **Market Pricing in “Unrealistic” Phase** – Asymmetric market response, with increased cost of capital not coming through on credit, but liquidity framework already impacting transaction banking and deposit strategies; unlikely to last.

2. **Leverage Ratio “Backstop” Becoming Binding Constraint** – Banks’ need to more closely manage both balance sheet growth and returns will change how they use balance sheets for client business.

3. **LCR Shifts Tradeoffs Between Deposit / Loan Spreads and Fees** – Change in ability to cross-subsidize will shift banks’ pricing models and business asks in relationship planning.

4. **Compliance Increasingly complex** – Costs for banks and companies is likely to increase.

5. **Industry Rationalization** – Banks are likely to refocus on core businesses where they have scale for long-term competitiveness; companies’ will revisit bank relationship management and wallet allocation strategies.
1. Trends – Market Pricing is Unrealistic

Range of Borrowing Rate assumes short-term transactions to top-tier banks with the low end of the range occurring in May 2013; rates have since bounced back slightly since then; 3 Month Libor is of 25bps is figured.

* Chile currency is pegged to USD - no actual USD deposit accounts exist in the local market so USD is around the Fed rate

At these rates, transactions can not meet a typical bank’s internal return hurdles

Glossary
- FI Borrowing Rate is the rate FI’s pay for Trade financing
- Liability Cost is the rate a bank pays to attract deposits
- Credit Default Swap (CDS) is the price of insurance against default of sovereign
2. Trends – Leverage Ratio Becomes the Constraint

Banks struggling to meet new higher non risk based “backstop” - likely to be the main constraint to asset growth

<table>
<thead>
<tr>
<th>Type of Transaction</th>
<th>Basel II Leverage Ratio Capital</th>
<th>Basel III – US NPR Leverage Ratio Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>$20M Trade LC</td>
<td>$20M x 20% CCF x 4% = $160,000</td>
<td>$20M x 100% CCF x 6% = $1.2M</td>
</tr>
<tr>
<td>$50M ECA financing</td>
<td>$50M x 0% CCF x 4% = $0</td>
<td>$50M x 100% CCF x 6% = $3M</td>
</tr>
<tr>
<td>$100M FI Trade Advance</td>
<td>$100M x 20% CCF x 4% = $800,000</td>
<td>$100M x 100% CCF x 6% = $6M</td>
</tr>
</tbody>
</table>

Under Basel III, significant increase in required capital and spread to meet hurdles. With “Book and Hold” approach to assets challenged, there will be a shift to “Originate to Distribute” strategies.

1 Supplementary Leverage Ratio of at 5% BHC and 6% Bank applies to the large US banks on a non risk adjusted basis; EU banks subject to 3% Leverage Ratio.

Source: Citigroup analysis; Reuters "Big banks face tougher lending rules than global rivals” published, Jul 9, 2013
3. Trends – LCR Shifts Tradeoffs within Banks

Change in ability to cross-subsidize will shift banks’ pricing models and business asks in relationship planning.

<table>
<thead>
<tr>
<th>What It Is</th>
<th>Liquidity Coverage Ratio (LCR)</th>
<th>Net Stable Funding Ratio (NSFR)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stock of unencumbered high-quality liquid assets</td>
<td>Available amount of stable funding</td>
</tr>
<tr>
<td></td>
<td>Net Cash outflows over a 30-day time period</td>
<td>Required amount of stable funding per asset category</td>
</tr>
</tbody>
</table>

- **What It Is**
  - Ensure banks maintain adequate levels of unencumbered, high-quality liquid assets convertible into cash to meet liquidity needs over a 30 day horizon
  - Promote structural change in liquidity risk profiles away from short-term funding mismatches – minimum stable funding requirements based on liquidity characteristics of assets and liabilities over a one year horizon

**Impacts banks’ balance sheet appetite for assets and liabilities**

- Operating deposits – that required for clearing, custody and cash management – more attractive. Non-operating deposits less attractive.
- Trade assets deemed “illiquid”; a proportion of undrawn off b/s commitments (including liquidity & credit facilities) included in outflows
- Potential increased cost of funding as banks issue more term debt
4. Trends – Compliance Increasingly Complex

Continued strengthening of KYC, AML and other regulatory increase the time, cost and risk of Trade – investments in large scale technology to address compliance requirements is the only practical solution

Increasingly complex banking rules passed at an escalating pace…

<table>
<thead>
<tr>
<th>Bank</th>
<th>Date</th>
<th>Settlement ($ in MM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSBC</td>
<td>Dec-2012</td>
<td>$1,921</td>
</tr>
<tr>
<td>Standard Chartered</td>
<td>Aug/Dec 2012</td>
<td>667</td>
</tr>
<tr>
<td>ING</td>
<td>June 2012</td>
<td>619</td>
</tr>
<tr>
<td>RBS / ABN AMRO</td>
<td>May 2010</td>
<td>500</td>
</tr>
</tbody>
</table>

…with heavy fines for compliance errors

Compliance costs are increasing across the industry

(1) Compliance costs are represented as a percentage of average assets

5. Trends – Industry Rationalization

Banks are likely to refocus on core businesses where they have scale for long-term competitiveness; companies’ will revisit bank relationship management and wallet allocation strategies.

Drivers of Industry Consolidation
Banks are making portfolio choices on core businesses, driven by:

- Scale needed for cost efficiency
- Required continuing investment in technology
- Capacity to deal with regulatory complexity and capital rules
- Ability to access diversified deposit funding
- Access to global network to serve clients’ global supply chains

Drivers of Relationship Consolidation
Companies continue to rationalize relationships to:

- Centralize governance and control
- Improve liquidity access and management
- Reduce technology and process costs
- Ensure sustainable banking partnerships based on mutual alignment of goals

Source: Oliver Wyman report on Trade Market dynamics for market size; Top 10 Trade Bank size based on financial disclosures or estimates
Appendix

Case Studies
# Case Study: Local Currency Deposits

Country-focused regulatory regimes will limit international banks abilities to service local needs.

## Client Benefits

- Access LCY operating services within the global bank footprint
  - Provide consistency of service
  - Support treasury centralization/regionalization objectives
  - Incorporation into overlay and operating structures for funding and up-streaming of excess
- Support ongoing LCY working capital requirements
- Scope and scale economies
- Interest optimization
- Meeting local and global needs at the relationship level

## Challenges

- Ring-fencing of balance sheet at national level requires in-country matching of local assets with local liabilities
  - Caps intercompany flows
  - Limits fungibility of funding
  - Mismatch of tenors; funding gaps
- Availability of local assets, e.g. trade loans, consumer assets, sovereign securities
  - Limits on intercompany assets/liabilities reduce optionality in matching currencies and tenors
  - As with companies, sovereign risk concerns may constrain balance sheet growth
  - Creates trapped liquidity issues
- Without suitable local assets, bank appetite for local deposits is reduced
Case Study: Cross-border Cash Concentration

Cash concentration – a core part of the CTS liquidity management solutions – allows you to link pools of liquidity and greatly increase efficiency of cash utilization.

Client Benefits

- **Cross-border Cash Concentration through Clearing System**
  1. Source account holds client deposit liability
  2. Prior to clearing cut-off, position is transferred to target account through market clearing channels
  3. Target account now holds client deposit liability

- **Cross-border Cash Concentration on Bank Books**
  1. Source account holds client deposit liability
  2. Post close, and striking of final balance, the position is transferred to a target account within the bank network through intercompany accounts
  3. Target holds client deposit liability – offsetting Due To/From

Challenges

- Ring-fencing imposes a high degree of balance sheet self-sufficiency, limiting intercompany transactions
- Managing the source or target independently may give rise to duplicative funding actions
- Intraday transfers will not capture all transactions and may leave excess or unfunded positions behind
- Transfer restrictions and incremental cost could constrain availability of true end-of-day concentration services
Case Study: Curtailing Short Term Borrowing

Country imposed regulations that effectively curtail or effectively eliminate the ability to borrow short term.

Client Benefits

- The majority of Trade is denominated in USD
- Banks in non USD deposit markets need to fund their customers USD based trade business
- Historically banks, especially banks in emerging markets, borrow USD via Trade Advances against their underlying trade flows for periods of 90 days to 1 year
- Because the FI Trade Advances are short term and self liquidating they receive preferential pricing
- This allows local banks to fund their corporate customer’s dollar based trade flows at more attractive rates than other forms of lending

Challenges

- Countries, such as Peru, are putting up barriers to prevent money inflows into their economies to preserve their home currency exchange rates
  - Peruvian law now requires banks to deposit 60% of any proceeds from borrowings at the Central Bank for all loans < 3 years
  - The effect of this rule is that bank borrowing under 3 years is prohibitively expensive
- Net impact is to drive up the cost of Trade Advances given the increased risk from longer tenor and less supply of USD because not all local banks will be able to qualify for access to longer term funding and not all providers of Trade Advances have the appetite for longer term deals
- The ripple effect of this is then higher rates and less availability of Trade Finance for Corporates in these markets
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