Advanced Money Market Fund Due Diligence for Effective Enterprise Risk Management

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Money Fund Selection with Limited Treasury Resources

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Treasurer
Akamai Technologies
Akamai Makes the Internet Better for Business

Deliver on the Internet’s promise:

- Reach a broader audience anywhere, anytime, on any device, on any network, wired or wireless
- Support globalized business applications
- Enable new business channels and models

Faster.
More Reliable.
More Scalable.
More Secure.
More Intelligent.
The Akamai Global Network

The world’s largest on-demand, distributed computing platform delivers all forms of Web content and applications for over 3,400 customers and 130,000 domains

Resulting in daily traffic of:

4000+ Gbps
300+ billion hits
10+ million concurrent streams
30,000+ terabytes
15 - 30%+ of all Web Traffic
Akamai and Market Leaders

- One-third of the Global 500
- 29 of the top 30 global M&E companies
- All 20 top global eCommerce sites
- 90 of top 100 U.S. retailers
- All of the top anti-virus companies
- All major U.S. sports leagues
- All branches of U.S. military
- All of the top Internet portals
- 9 of the top 10 largest newspapers
- 8 of top 10 online publishers
- 9 out of 10 top social media sites
- 3 of the top 5 semiconductor companies
- 6 of the top 10 global banks
- 5 of the top 10 online brokerages
- 9 of the top 10 global Pharmaceutical companies
- 13 of the top 15 automakers
- 4 of the top 5 accounting firms
Serving the World’s Leading Businesses

<table>
<thead>
<tr>
<th>Media &amp; Entertainment</th>
<th>High-Tech</th>
<th>Commerce</th>
<th>Enterprise</th>
<th>Public Sector</th>
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<tbody>
<tr>
<td><strong>BBC</strong></td>
<td><strong>Trend Micro</strong></td>
<td><strong>Abercrombie &amp; Fitch</strong></td>
<td><strong>Standard Chartered</strong></td>
<td><strong>Smithsonian</strong></td>
</tr>
<tr>
<td><strong>Sony</strong></td>
<td><strong>Adobe</strong></td>
<td><strong>Louis Vuitton</strong></td>
<td><strong>Taleo</strong></td>
<td><strong>Department of Navy</strong></td>
</tr>
<tr>
<td><strong>ESPN</strong></td>
<td><strong>McAfee</strong></td>
<td><strong>Victoria’s Secret</strong></td>
<td><strong>ADiFY</strong></td>
<td><strong>Department of Justice</strong></td>
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<tr>
<td><strong>Starz!</strong></td>
<td><strong>EMC</strong></td>
<td><strong>Ross + Simmons</strong></td>
<td><strong>Bullhorn</strong></td>
<td><strong>Department of Homeland Security</strong></td>
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<tr>
<td><strong>Yahoo!</strong></td>
<td><strong>Hitachi</strong></td>
<td><strong>Best Buy</strong></td>
<td><strong>Skf</strong></td>
<td><strong>Federal Bureau of Investigation</strong></td>
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<td><strong>Fox</strong></td>
<td><strong>Philips</strong></td>
<td><strong>Logitech</strong></td>
<td><strong>Dyson</strong></td>
<td><strong>Department of Energy</strong></td>
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<tr>
<td><strong>Sky</strong></td>
<td><strong>Microsoft</strong></td>
<td><strong>Staples</strong></td>
<td><strong>InterContinental Hotels Group</strong></td>
<td><strong>National Park Service</strong></td>
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<tr>
<td><strong>Nintendo</strong></td>
<td><strong>SAP</strong></td>
<td><strong>Cathay Pacific</strong></td>
<td><strong>Toyota</strong></td>
<td><strong>Department of Transportation</strong></td>
</tr>
<tr>
<td><strong>Comcast</strong></td>
<td><strong>HP</strong></td>
<td><strong>Interglobe</strong></td>
<td><strong>BMW</strong></td>
<td><strong>Federal Drug Administration</strong></td>
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<tr>
<td><strong>Clear Channel</strong></td>
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</table>

**AFP® Annual Conference**
Financial Highlights

- ~$1B 2010 Revenue
- ~$5B Market Cap
- $1.3B Cash Q2 ’11
- Debt free
- FCF $346M 2010
- Sales outside North America
- ~30% of total revenue

Portfolio Strategy Overview

- Strategic Cash - $900 million
- Operating Cash - $200 million
- Offshore Cash - $70 million
- Failed ASR - $130 million

$1B invested in ST and LT investments using two investment managers
Treasury Organization

- CFO
- SVP Finance
- Treasurer
- Equity Admin
Money Market Fund Selection: Problem Statement

• Objective
  – Minimizing risk and preserving principal is the highest priority as stated in Investment Policy
  – Risk should be viewed by individual fund and across funds
  – Given low yield environment, cost management is critical

How to minimize risk across portfolio given limited internal resources?

• Maximize access to information
  – Leverage outside resources as much as possible
  – Choose advisers and portals that provide quality data and analysis
  – Distribute funds among advisers to solicit a variety of viewpoints
  – Find the right people and keep them engaged
Money Market Fund Selection: Considerations

• Iterative Process
  – Internal changes can lead to change in policy
  – External changes can create or highlight risks and opportunities
  – Portfolio and tools should be flexible enough to move on opportunities/away from risks as soon as they are identified

• Investment Policy Compliance
  – Asset Selection
  – Credit Quality
  – Tenor & Liquidity
  – Concentration Issues

• Regulatory Changes
  – New rules authorize fund’s Board to suspend redemptions; formerly required an SEC order
  – Shadow NAV disclosure may not be actionable – half of portfolio is likely to have matured by the time of disclosure to the investors
Money Market Fund Selection: Fund Evaluation

• Initial Screen
  – High-level sponsor review
  – High-level review of holdings
  – Fund size
  – Management
  – Relationship with channel
  – Yield outliers

• Deeper Dive
  – Credit review of holdings
  – Cross-holdings review
  – WAM/SWAM
  – Deep sponsor review
  – Shareholder risk
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Disclosure Statement

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Founded in 1991, Capital Advisors Group is an SEC-registered investment advisor based in Newton, MA.

CAG provides fee-based, separate account cash investment management for corporate treasury functions and other institutional accounts.

Approximately $7 billion assets under management and 217 institutional clients nationwide.

* Client statistics as of 7/31/11
A Fresh Perspective on Money Funds

• An investment pool exposed to credit and liquidity uncertainties
  – Risk opacity

• A vehicle for maturity and credit transformation
  – Susceptibility to confidence

• Promise of fixed net asset value (NAV) and penalty-free redemption
  – Conflicting objectives (rational irrationality)

• A deposit substitute without FDIC insurance
  – Competitive obstacles
Fundamental Risks of Money Funds

Credit Risk: Fund Price < $1.00/share
- Rising interest rates
- Credit losses
- Expenses exceed income
- Large redemptions/runs

Liquidity Risk: Halted Redemption
- Cash-outs > Cash-ins
- Net cash-outs > Available cash
- Can’t sell assets to satisfy shortfalls in time without losses
Recent Challenges - Regulatory

Revised Rule 2a-7
- Daily/weekly liquidity, WAM, WAL, repo collateral, disclosures, etc.
- De-risking resulted in lower yield potential

Dodd-Frank Act and Basel III Accord
- Funding gap, interest on DDAs, FDIC insurance, higher bank capital/liquidity costs, potential SIFI designation
- De-risking results in lower yield potential

PWG/FSOC Proposal
- Floating NAV – fundamental threat to business model
- Capital/reserve buffer – reduced investor/sponsor incentive
- Redemption fees/restrictions – reduced investor incentive
- De-risking may result in still lower yield potential
Recent Challenges – Low Yield

Data source: iMoneyNet, Bloomberg
## Recent Challenges – Euro Debt Crisis

### Top 10 Holdings of FundIQ® Prime Institutional MMF Peer Group *

<table>
<thead>
<tr>
<th>I_TICKER</th>
<th>Total</th>
<th>I_TICKER</th>
<th>Total</th>
<th>I_TICKER</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>BNP</td>
<td>4.39%</td>
<td>UST</td>
<td>4.23%</td>
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<tr>
<td>RBS</td>
<td>3.89%</td>
<td>RABO</td>
<td>3.81%</td>
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<tr>
<td>BANK</td>
<td>3.60%</td>
<td>BARC</td>
<td>3.72%</td>
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<tr>
<td>SG</td>
<td>3.56%</td>
<td>ACAFP</td>
<td>3.70%</td>
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<tr>
<td>FHLB</td>
<td>3.53%</td>
<td>BNP</td>
<td>3.66%</td>
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<tr>
<td>ACAFP</td>
<td>3.52%</td>
<td>DB</td>
<td>3.64%</td>
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<tr>
<td>RABO</td>
<td>3.50%</td>
<td>BAC</td>
<td>3.45%</td>
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<tr>
<td>BAC</td>
<td>3.49%</td>
<td>SG</td>
<td>3.37%</td>
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<tr>
<td>BARC</td>
<td>3.42%</td>
<td>LLOYDS</td>
<td>2.99%</td>
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<tr>
<td>LLOYDS</td>
<td>3.26%</td>
<td>RBS</td>
<td>2.86%</td>
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<tr>
<td>Grand Total</td>
<td>36.15%</td>
<td>Grand Total</td>
<td>35.43%</td>
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</table>

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<th>Total</th>
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<tbody>
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<td>DB</td>
<td>4.86%</td>
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<tr>
<td>BNP</td>
<td>4.80%</td>
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<tr>
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<tr>
<td>BAC</td>
<td>2.98%</td>
<td>JPM</td>
<td>2.80%</td>
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<tr>
<td>CS</td>
<td>2.76%</td>
<td></td>
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<tr>
<td>Grand Total</td>
<td>39.60%</td>
<td>Grand Total</td>
<td>39.60%</td>
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</tbody>
</table>

* Based on Capital Advisors Group Inc.’s proprietary research. Capital Advisors Group rates 15 of the largest AAA-rated institutional prime money market funds. These funds are not necessarily the largest funds within this category rather they are funds that we believe are representative of the AAA-rated institutional prime fund market. For a description of the FundIQ® peer group, please refer to our website www.capitaladvisors.com.
Recent Challenges – Euro Debt Crisis

Data source: Bloomberg
Credit Ratings Tolerate Significant Dispersion in Fund Styles

Characteristics of 15 of the largest AAA-rated prime institutional money market funds:

<table>
<thead>
<tr>
<th>Portfolio Characteristics</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted Average Maturity</td>
<td>9 days</td>
<td>49 days</td>
</tr>
<tr>
<td>Weighted Average Life</td>
<td>33 days</td>
<td>96 days</td>
</tr>
<tr>
<td>Overnight Liquidity (% of portfolio)</td>
<td>17%</td>
<td>47%</td>
</tr>
<tr>
<td>7-day Liquidity (% of portfolio)</td>
<td>29%</td>
<td>69%</td>
</tr>
<tr>
<td>Asset-backed Exposure (% of portfolio)</td>
<td>0%</td>
<td>27%</td>
</tr>
<tr>
<td>Floating Rate Notes (% of portfolio)</td>
<td>0%</td>
<td>43%</td>
</tr>
<tr>
<td>Non-traditional Repos (% of portfolio)</td>
<td>0%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Data source: Capital Advisors Group proprietary research as of 7/31/2011
Conventional Due Diligence Overlooks Major Risk Categories
Scoring Process: How We Do It

Risk Categories of Each Fund

- **Portfolio** (21 Variables)
  - Ex: Spread WAM
- **Sponsor** (7 Variables)
  - Ex: Firm Credit Strength
- **Advisor/Mgmt** (6 Variables)
  - Ex: Manager Tenure
- **Shareholder** (8 Variables)
  - Ex: Distribution Channels
- **Systemic/Macro** (8 Variables)
  - Ex: Fund Family Assets

**Historical Analysis, Scenario Analysis, Peer Group Comparison, Subjective Assessment**

- **Portfolio** A-
- **Sponsor** A
- **Advisor/Mgmt** A-
- **Shareholder** B-
- **Systemic/Macro** B-

**Fund Grade: B+**
# Portfolio – Maturity/Liquidity

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stated &amp; final maturities</td>
<td>Reset, effective &amp; final</td>
</tr>
<tr>
<td>Daily/weekly liquidity</td>
<td>Organic (excl. GSE)</td>
</tr>
<tr>
<td>Repo &gt; 7 days = illiquid</td>
<td>Repo &gt; 1 day = illiquid</td>
</tr>
<tr>
<td>Time Deposits = illiquid</td>
<td>TD &gt; 1 day = illiquid</td>
</tr>
</tbody>
</table>
# Portfolio – Issuer Concentration

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP/CD/notes</td>
<td>Parent</td>
</tr>
<tr>
<td>USCP by subs</td>
<td>Parent Domicile</td>
</tr>
<tr>
<td>ABCP/SPV</td>
<td>Parent</td>
</tr>
<tr>
<td>Muni LOC</td>
<td>Liquidity bank</td>
</tr>
<tr>
<td>Repo counter-party</td>
<td>Parent</td>
</tr>
</tbody>
</table>
Non-Portfolio Factors

- **Sponsor** – Economic linkage, systemic status, regulatory hurdles
- **Advisor** – Track record, resources
- **Shareholder** – Fund flows, distribution channels, incentive programs
- **Macro** – Regulatory tendencies, investor confidence, risk premium
## Dispersion Revealed by Research

### Sample Scores of Large AAA-rated Prime Money Market Funds *

<table>
<thead>
<tr>
<th>Description</th>
<th>Fund A</th>
<th>Fund B</th>
<th>Fund C</th>
<th>Fund D</th>
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<tbody>
<tr>
<td>Description</td>
<td>Bank Sponsored</td>
<td>Bank Sponsored</td>
<td>Bank Sponsored</td>
<td>Bank Sponsored</td>
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<tr>
<td>WAL</td>
<td>B+</td>
<td>A-</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Repo Risk</td>
<td>A-</td>
<td>D</td>
<td>A-</td>
<td>A-</td>
</tr>
<tr>
<td>Structure</td>
<td>B+</td>
<td>B-</td>
<td>C+</td>
<td>A-</td>
</tr>
<tr>
<td>Management</td>
<td>A-</td>
<td>B-</td>
<td>B+</td>
<td>B</td>
</tr>
<tr>
<td>Shareholder</td>
<td>B-</td>
<td>B-</td>
<td>C+</td>
<td>A-</td>
</tr>
<tr>
<td><strong>Overall Score</strong></td>
<td><strong>B+</strong></td>
<td><strong>B</strong></td>
<td><strong>B-</strong></td>
<td><strong>A-</strong></td>
</tr>
</tbody>
</table>

* For illustration purposes
Conclusion: Going Beyond Ratings and Due Diligence

- Understand fundamental risks of MMFs
- Understand challenges to MMFs
- Understand the MMF ecosystem and develop a plan accordingly
- Go beyond fund ratings and due diligence
Q & A

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