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# Efficient Administration of Money Positions

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# Agenda

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- Best Practices
  - Why follow best practices?
  - Areas of Focus
- Use of technology to implement best practices
- Example: Citibank Online Investments

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## Best Practices Results in Better Portfolio Return

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- There are several key activities that are critical to strong performance for a short-term asset portfolio:
  - Documentation of investment policies to manage risk
  - Forecasting of future cash needs and acting upon them
  - Comparing investment performance against external benchmarks
  
- In a survey conducted by Treasury Strategies, Inc., companies that followed these activities, especially the external benchmark review, earned a 50 bps improvement in yield on investments with maturities over three months.

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## Best Practices - Key Areas of Focus

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- Investment policy
- Cash flow forecasts
- Asset selection
- Benchmarks and monitoring
- Operating procedures

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## Best Practice -- Investment Policy Overview

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- First line of defense against negative surprises
  - Should be approved by Board of Directors
  - Should be as detailed as necessary to avoid interpretation
  - Should be in writing
- Policy should be appropriate to the company and its management
  - Too strict may limit opportunities
  - Too loose may encourage risk taking rather than investing
- Review and update periodically
  - Markets, investment opportunities and operating environment change, so the policy should evolve as well

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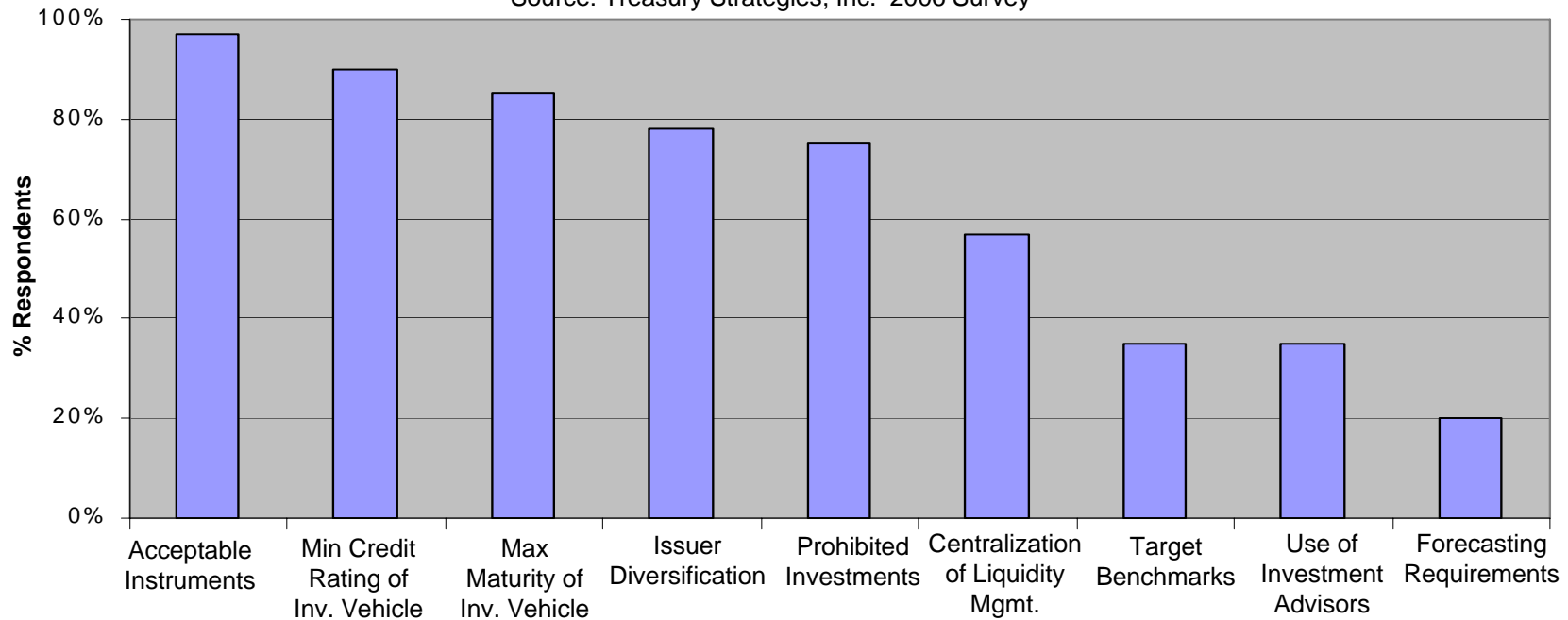
# Investment Policy Considerations

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- Policy components reflect the concern for capital preservation rather than capital optimization.

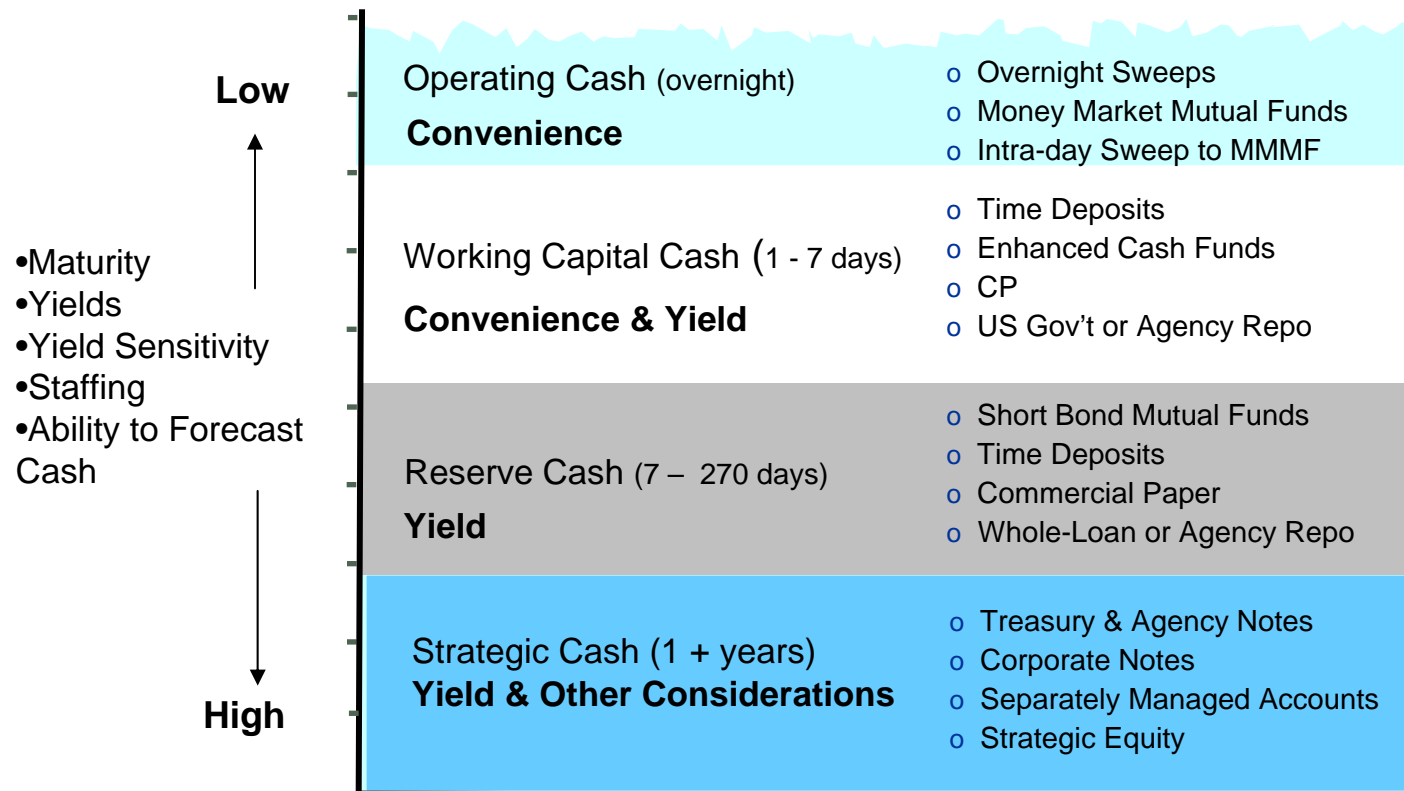
## Comparison of Short-Term Investment Policies

Source: Treasury Strategies, Inc. 2006 Survey



# Best Practice -- Cash Flow Forecast

- Bucketing cash is a simple form of “forecasting” that can identify amounts of cash that can be invested based on when the cash is needed



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## Best Practice -- Asset Selection

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- Diversify risks
  - Limit the risk of any one obligor, counterparty, industry, etc.
- Invest in instruments you understand or can analyze
  - Does your policy allow options or derivatives even if embedded or attached to an investment?
- Diversify across time
  - Laddering strategies can take advantage of better interest rates but also generate liquidity
- Certain mutual funds invest more aggressively than money market mutual funds
  - Enhanced cash funds also provide the benefit of professional management and asset diversification while seeking better yields

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## Best Practice -- Benchmark and Monitoring

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- Benchmark must synchronize with investment policy
  - Define expectations for risks and returns
  - Policy will limit asset choices so the benchmark must include those limits
- Benchmark must be observable and objective
  - “Out perform the market” doesn’t provide clear guidance
  - Make sure each asset is valued consistently, e.g. quoted yields may not be equal because day bases differ or the securities are offered at a discount
- Monitor the benchmark and compliance with policy

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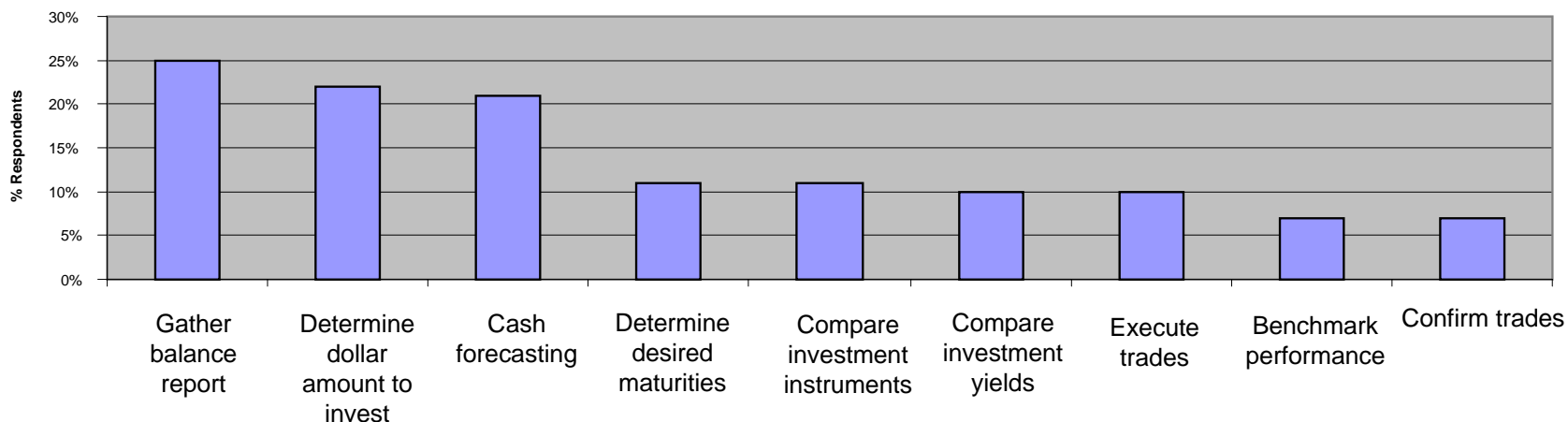
## Best Practice – Operating Procedures

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- Implement checks and balances
  - No one person can invest and monitor investments
- Dedicate sufficient resources when making direct investments
  - Need to perform credit analysis, maintain buy lists, monitor changes in investment ratings, etc.
- Use technology to improve investment efficiency
  - For active investments, online portal may offer significant processing and reporting benefits

# Indications that Technology is not Fully Leveraged

Percentage of Time Spent of Liquidity Management Processes



Limited Use of Technology for Investments

	Phone	Fax	E-Mail	Online	Spreadsheets	Workstation
Gather Balance Reports	10%	7%	12%	16%	18%	21%
Determine Dollar Amount to Invest	10%	3%	7%	25%	47%	21%
Cash Forecasting	4%	2%	6%	11%	68%	13%
Determine Desired Maturities	8%	2%	4%	12%	50%	9%
Compare Investment Instruments	18%	4%	10%	31%	25%	6%
Compare Investment Yields	17%	4%	10%	33%	27%	6%
Confirm Trades	31%	16%	24%	38%	3%	5%
Benchmark Performance	4%	2%	7%	24%	32%	5%
Execute Trade	29%	14%	17%	44%		3%

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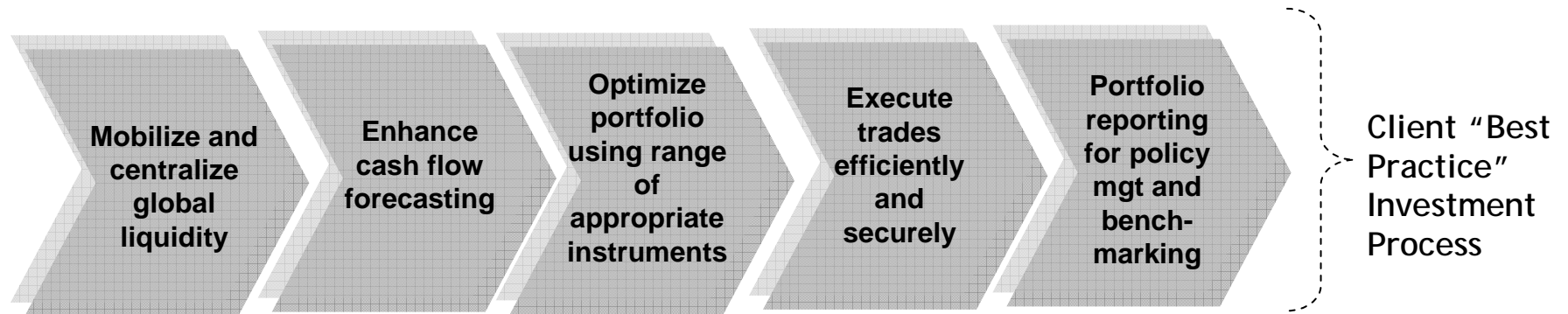
## Limited Use of Technology for Investments

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- A high percentage of companies still use spreadsheets to perform their liquidity management processes.
- The use of technology can mitigate time spent on manual processes such as trade execution, balance reporting and cash forecasting, providing more resources for strategic investment management.
- For international companies, the holy grail of cash flow management is the ability to manage and oversee all global flows on a truly centralised basis

Source: GtNews.com, "5 effective principles for GlobalCash Management" by Peter Knight

# Turning Best Practice Into Reality: Citi's Approach



Advice, Trade Servicing

Online, Self-Directed Trades



Citibank Investment Desk Network

Citibank Online Investments

TreasuryVision, CitiDirect

Citi Channels

- Local, regional and global account structures
- Follow-the-sun and Against-the-sun global cash concentration
- Multi currency notional pooling

- Real-time global cash positions
- Analytics on global cash, investments and debt
- Cash flow forecasting workflow

- Money market funds
- Time deposits
- CP, CD, Repo
- Money Mkt Deposit Accts

- Automated, "closed-loop" settlement
- Online user entitlements
- Online maker / checker functions

- Consolidated trade history
- Instrument utilization
- Integration with Investment Analytics

Citi Integrated Global Liquidity & Investment Services

# Citibank Online Investments

## Global, internet-based trade execution and settlement system – providing investors with access to multiple short-term investment options

- **Integration**
  - Modular component within an open architecture framework
  - May be accessed via CitiDirect Online Banking or the Citi TreasuryVision Portal
  - Linkages to real-time balance reporting, treasury analytics, liquidity products and services
- **Global Reach**
  - Currently available in 19 countries and over 15 currencies
- **Breadth of Investment Alternatives**
  - Products include Money Funds, Time Deposits, CP, Repo, MMDA
  - Partner with best-in-class providers
- **STP/Execution**
  - Automatic settlement minimizes operating costs, enhances control, maximizes funds availability

The screenshot displays the Citibank Online Investments interface. At the top, there's a navigation bar with links for Home, Deal Entry, Trade Approvals, Rollover, Rate Info, Fund Info, Reports, Account Mgmt, Message Mgmt, and Administration. Below this is a 'Deal Entry' section with a search bar and a 'Trade' button. The middle section shows an 'Account Summary' for a 'Citibank Client' with a 'Total Holdings' of 39,929,954.20. To the right is a 'Product Summary' pie chart showing four segments: 13.4%, 28.7%, 10.0%, and 48.0%. Below the pie chart is a table for 'Money Market Mutual Funds' with columns for Fund Name, Account #, Account Name, Total Position, 1-Day, 7-Day Effective, Daily, Cut-off Time, and Trade. The table lists five accounts with their respective details. At the bottom, there are sections for 'Money Market Deposit Accounts' and 'Term Products'. The footer includes the Citigroup logo, copyright information (© 2006 Citigroup), and a link to get quotes.

Fund Name	Account #	Account Name	Total Position	1-Day	7-Day Effective	Daily	Cut-off Time	Trade
Prime_Cash	14890008	Account #1	4,402,459.85	5.16%	5.29%	0.00014	08:30 PM	
Institutional_C	13700004	Account #2	2,001,141.92	5.23%	5.23%	0.00043	09:30 PM	
Institutional_C	13700005	Account #3	2,000,000.00	5.23%	5.23%	0.00043	09:30 PM	
Prime_Money_Mark	204900004	Account #4	1,010,917.45	5.19%	5.20%	0.00014	04:30 PM	
Prime_Money_Mark	26500002	Account #5	12,065,434.98	5.25%	5.26%	0.00014	08:30 PM	
<b>Total</b>			<b>21,479,954.20</b>					<b>Trade</b>

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# Citibank Online Investments – Key Features and Benefits

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## Research

- **Comparative rate screen allows you to easily compare the investment options you are entitled to.**
- **Indicative rate screen provides you with the rates for a particular investment option across each tenor.**
- **Money Market Fund Info screen presents key data elements, such as yield and rating. Additionally, a Fund Fact Card provides links to the prospectus and annual statement.**



## Trading

- **Real-time executable rates allows you to make a decision immediately.**
- **Automated settlement to your Citibank account eliminates the need to process an additional wire, reducing costs and errors.**
- **Maker – Checker Authorization allows you to set up 2-levels of approvers based on defined threshold amounts.**



## Reporting

- **Trade History allows you to perform an ad-hoc query of the executed trades, based on user, date or product.**
- **Open Contract Report provides your fixed maturity investments (i.e. TDs, CP) that have been executed, but not yet matured.**
- **Account Posting Report provides the balance each day for your balance-based investments (i.e. MMMFs, MMDA)**

# Citibank Online Investments – Current Product Offering

## ASIA

Account Location	Product Offering
Australia	Time Deposit: AUD
China	Time Deposit: CNY, USD
Hong Kong	Time Deposit: HKD, USD
New Zealand	Time Deposit: NZD
Singapore	Time Deposit: SGD, USD
Sri Lanka	Time Deposit: LKR, USD
Vietnam	Time Deposit: VND Cert of Deposit: USD CitiNote: EUR
United States	Time Deposit: USD <b>(1)</b>

## EUROPE

Account Location	Product Offering
Austria Belgium France Greece Netherlands Portugal Spain	Time Deposit: EUR, GBP, USD
United Kingdom	Time Deposit: CHF, DKK, EUR, GBP, USD, NOK, SEK

## LATIN AMERICA / MEXICO

Account Location	Product Offering
U.S. Account Only: - LATAM: ALL - Mexico	Cert of Deposit: USD Commercial Paper: USD <b>(2)</b> Money Market Deposit Account: USD Money Market Fund - Offshore: USD <b>(3)</b> Time Deposit: USD

## NORTH AMERICA

Account Location	Product Offering
Canada	Time Deposit: CAD, USD
United States	Cert of Deposit: USD Commercial Paper: USD <b>(2)</b> Money Market Deposit Account: USD Money Market Fund - Domestic: USD <b>(4)</b> Money Market Funds - Offshore: USD <b>(3)</b> Time Deposit: USD

Footnotes:

- 1) Available during the Singapore time zone.
- 2) Commercial Paper available from American Express Credit Corp, Citigroup Funding, General Electric Credit Corp and Prudential Funding.
- 3) Offshore Funds available from CitiFunds (Cayman) and Goldman Sachs Asset Management (Dublin)
- 4) Domestic Funds available from AIM Investments, American Beacon Funds, Barclays Global Investors Funds, CitiFunds, Columbia Funds, The Dreyfus Corporation, Federated Investors, Goldman Sachs Asset Mgmt, JPMorgan Asset Mgmt, Putnam Investments.

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# Citibank Online Investments - The Future

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- **Continue global geographic rollout...**
  - Expansion to 31 countries across Asia, Europe and Latin America by end 2007
- **Expand investment choices...**
  - Continue to add new products and partners – domestic and offshore/global
- **Lead in online investment functionality...**
  - Value-added services such as alerts, investment policy checking, refinements to user experience, enhanced analytics
- **Deliver on our end-to-end, full-service proposition**
  - Maintain integration into Citi's global cash and liquidity management tools and services .....
  - While retaining the benefits of a modular, open-architecture platform with standalone capabilities



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# Demo

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## Mutual Fund Disclosures

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- **An investment in a money market portfolio is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although a money market portfolio seeks to preserve the value of an investment at \$1.00 per share, it is possible to lose money by investing in a money market portfolio.**
  
- **Investors should consider a fund's objectives, risks, and charges and expenses, and read the prospectus carefully before investing or sending money. The prospectus contains this and other information about the Funds.**

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- CIB will not vary the price or other terms of any Citibank product or service based on the condition that you purchase any particular product or service from Citibank or any Citigroup affiliate, unless we are authorized to do so under an exception to the Anti-tying Rules.
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