



Best Practices in Public Entity Investing:
Investing for Small to Medium Sized Governments



PROMOTING EXCELLENCE IN GOVERNMENT



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- As a fixed-income short duration strategist, Garret specializes in short-term fixed income research and produces a daily publication as well as periodic publications specifically for short-term investors.
- *Daily Short Stuff* is an analytical rate sheet showing index and indicative levels for short-term instruments with commentary on important market movements, economic indicators and relevant news stories.
- Garret was a contributing author to the Frank Fabozzi textbook *Structured Products and Related Credit Derivatives*, and has been quoted in Bloomberg News, Reuters and The Washington Post. He has been a speaker at Crane's Money Fund Symposium and Money Fund University, at iMoneyNet's Money Market Expo and Money Fund Forum, at various GFOA and APT conferences.
- Garret earned his bachelor's degree in Finance and International Business from the University of Lethbridge in Alberta, Canada. He also earned his MBA in Finance from the Marriott School at Brigham Young University.
- Garret is a Chartered Financial Analyst and a member of the North Carolina Society of Financial Analysts and holds Series 7 and 63 licensures.



Learning Objectives

At the end of this session, you will be able to

- Recall investment policy considerations – safety, liquidity, return on investment
- Discuss various investment vehicles – money market mutual funds, investment pools, capital management trusts, certificates of deposit, and commercial paper
- Identify credit ratings as it pertains to investing
- Recall the importance of benchmarking and tracking performance



Investment Policy Considerations

You should consult your own internal investment personnel, municipal or investment advisers, legal counsel and other advisers regarding investment policy development, revision or interpretation.

WFS and its investment representatives do not act as Municipal Advisors and only provide investment advice or recommendations with respect to bond proceeds as permitted by available exemptions.

Poll Question

Does your government have an investment policy?

- A. Yes
- B. No



Investment Policy Considerations

Establishing the general purpose of the portfolio

- Why is the cash there in the first place? What is it used for?
 - It is the policy of "the city of Daveville" to invest funds in a manner that will...

Define the scope of the cash that you will be managing

- What pools of cash does the policy apply to?
 - This investment policy applies to all financial assets of the city of Daveville...
 - This investment policy applies to all short-term investments
 - ✓ *Cash for daily operating needs*
 - ✓ *Reserve cash portfolio*
 - ✓ *Strategic cash portfolio*

Source: Wells Fargo Securities, LLC



Investment Policy Considerations

Objective

- **Define the Objective of the Portfolio**
 - Pension fund portfolio is managed differently than an operating cash portfolio

- **The Trifecta**
 - **Safety** - Safety of principal is the foremost objective of the investment program. Investments of the (*entity*) shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. To attain this objective, the (*entity*) will diversify its investments by investing funds among a variety of securities offering independent returns and financial institutions.
 - **Liquidity** – the city of Daveville’s investment portfolio will remain sufficiently liquid to enable the company’s operating requirements which might be reasonably anticipated.
 - **Return on Investment** – the city of Daveville’s investment portfolio shall be designed with the objective of attaining a suitable rate of return, commensurate with the company’s investment risk constraints and the cash flow needs of the portfolio.

Source: Wells Fargo Securities, LLC



Investment Policy Considerations

Delegation of Authority

- Who does what?
 - Who approves the policy?
 - Who can trade on the account?
 - Are there varying levels of approval?
 - Can one person transact on the account or do multiple people need to sign off on investments?

Ethics

- Could the actions of an investing employee conflict with the desires of the firm?

Source: Wells Fargo Securities, LLC



Investment Policy Considerations

Authorization of Financial Institutions?

- Do you trade with everyone? Or a smaller list of approved institutions?
 - If a smaller group, what criteria do you use to set that smaller group? How often is this reviewed?
- Could be based on “primary dealer” status, banking relationship, credit quality, size, those that are registered with the SEC’s uniform net capital rule 15C3-1, or proof of FINRA certification, state registration, or other criteria.

Source: Wells Fargo Securities, LLC



Investment Policy Considerations

Authorized Investments – Defines the general universe, not specific strategies

Investment Type	Asset Class Concentration	Issuer Concentration	Quality	Maximum Maturity
Certificates of deposit in amounts covered by FDIC	= <100%	= <100%	S & P ≥ A/A-2 Moody's ≥ A3/P-2 Fitch ≥ A/F2	3 Years
U.S. Treasury obligations	= <100%	= <100%	N/A	3 Years
U.S. government sponsored enterprises or agency obligations	= <50%	= <5%	N/A	2 Year
Commercial paper	= <40%	= <5%	S & P ≥ A-2 Moody's ≥ P-2 Fitch ≥ F2	Tier 1 <270 Days Tier 2 <270 Days
Money market mutual funds regulated by SEC rule 2a-7	= <100%	Treasury = <100% Prime = <60% Fund Assets = < 3%	S&P ≥ AAAm Moody's ≥ Aaamf Fitch ≥ AAAmmf	N/A
State or local government or public authority investment grade obligations	= <25%	= <5%	S & P ≥ AA/A-1 Moody's ≥ Aa2/P-1 Fitch ≥ AA/F1	1 Year
Repurchase agreements	= <100%	Government = <20% Non-Government = <10	S & P ≥ A/A-1 Moody's ≥ A/P-1 Fitch ≥ A/F1	Overnight
Corporate bonds	= <20%	= <5%	S & P ≥ AA/A-2 Moody's ≥ Aa1/P-1 Fitch ≥ AA/F1	1.5 Years

Source: Wells Fargo Securities, LLC

These tables are from Wells Fargo Securities sample investment policies which are available upon request



Investment Policy Considerations

Authorized Investments – Defines the general universe, not specific strategies

Investment Type	Tier 1 – First \$X Million	Tier 2 – Above First \$X Million up to \$Y Million	Tier 3 – Above \$Y Million
Certificates of deposit in amounts covered by FDIC	Yes Up to 3 Months	Yes Up to 2 Years	Yes Up to 2 Years
U.S. Treasury obligations	Yes Up to 3 Months	Yes Up to 3 Years	Yes Up to 3 Years
U.S. government sponsored enterprises or agency obligations		Yes Up to 2 Years	Yes Up to 2 Years
Commercial paper	Yes A1/P1 up to 90 Days	Yes A1/P1 up to 9 Months A2/P2 up to 6 Months	Yes A1/P1 up to 9 Months A2/P2 up to 6 Months
Money market mutual funds regulated by SEC rule 2a-7	Yes	Yes	Yes
State or local government or public authority investment grade obligations		Yes AA-/Aa3 up to 3 Years	Yes A-/A3 up to 3 Years
Repurchase agreements	Yes Treasuries, Agencies, Agency MBS		
Corporate bonds		Yes Up to 18 Months	Yes Up to 18 Months
Asset-backed Securities			Yes Consumer ABS Tranche A-/A3 Up to 3 Years

Ratings reference minimum accepted ratings
Source: Wells Fargo Securities, LLC

These tables are from Wells Fargo Securities sample investment policies which are available upon request



Investment Policy Considerations

Authorized Investments – Tiering method

Tier 1				
Investment Type	Concentration	Issuer Concentration	Quality	Maximum Maturity
U.S. Treasury obligations	= < 100%	N/A	N/A	3 months
Money market mutual funds regulated by SEC rule 2a-7	= < 100%	Treasury = < 10% Prime = < 6% Fund Assets = < 3%	S & P ≥ AAamf Moody's ≥ AAAMmf Fitch ≥ AAAmmf	N/A
Bank Deposits	= < 50%	= < 50%	S & P ≥ AA/A-2 Moody's ≥ Aa1/P-1 Fitch ≥ AA/F1	N/A
Repurchase agreements	= < 20%	= < 20%	S & P ≥ AA/A-2 Moody's ≥ Aa1/P-1 Fitch ≥ AA/F1	Overnight
Tier 2 (includes all Tier 1 Investments)				
Investment Type	Asset Class Concentration	Issuer Concentration	Quality	Maximum Maturity
U.S. Treasury obligations	= < 100%	N/A	N/A	2 Years
Agency Securities	= < 50%	= < 15%	N/A	2 Years
Commercial Paper	= < 50%	= < 5%	S&P ≥ A-2 Moody's ≥ P-2 Fitch ≥ F2	6 months
Corporate Bonds	= < 25%	= < 5%	S & P ≥ A-/A-2 Moody's ≥ A3/P-1 Fitch ≥ A-/F2	18 months
Municipal Securities	= < 20%	= < 5%	S & P ≥ AA/A-1 Moody's ≥ Aa2/P-1 Fitch ≥ AA/F1	18 months

These tables are from Wells Fargo Securities sample investment policies which are available upon request



Investment Policy Considerations

- The Investment policy is not the playbook, it is the rulebook
- If in doubt...ask
- Document all transactions and keep a record
- Ensure that you have the authority as well as the responsibility
 - Understand the extent of your authority and how it was delegated to you

Does your policy protect you?:

- *"Investments shall be made with judgment and care—under circumstances then prevailing—which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived."*
- *The "prudent person" and/or "prudent investor" standard shall be applied in the context of managing the overall portfolio. Investment officers acting in accordance with written procedures and the investment policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.*



Knowledge Check

The foremost objective of an investment program is:

- A. Yield
- B. Liquidity
- C. Safety of principal
- D. Positive arbitrage



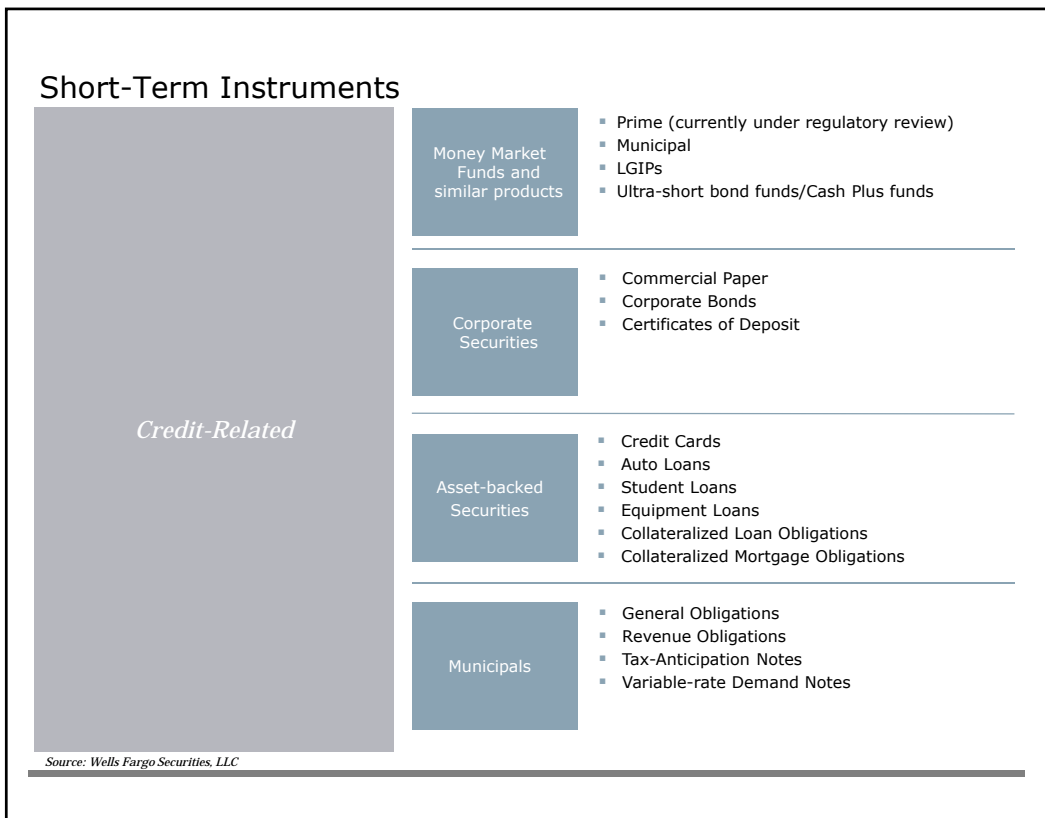
Short-term Instruments

Short-Term Instruments

Federal Government-Related

Government Money Market Funds and similar products	<ul style="list-style-type: none"> ▪ 100% Treasury ▪ Treasury/Repo ▪ Government ▪ LGIPs
Treasury	<ul style="list-style-type: none"> ▪ Treasury Bills: 1M, 3M, 6M, 12M ▪ Notes: 2Y, 3Y, 5Y, 7Y, 10Y ▪ Bonds: 30Y ▪ TIPS: 1Y, 2Y, 5Y, 10Y, 20Y, 30Y ▪ TLGP (discontinued)
The Big 4 GSEs (Agencies)	<ul style="list-style-type: none"> ▪ Fannie Mae ▪ Freddie Mac ▪ Federal Home Loan Banks (no state tax) ▪ Farm Credit (No state tax) <ul style="list-style-type: none"> ▪ Bullets (MTNs and Benchmarks) ▪ Callables, Discount Notes, Step ups
Other GSEs and Supranationals	<ul style="list-style-type: none"> ▪ Tennessee Valley Authority (no state tax) ▪ Farmer Mac (no state tax) ▪ PEFCO ▪ FICO (no state tax) ▪ US Postal Service (no state tax) ▪ World Bank, IFC, IADB

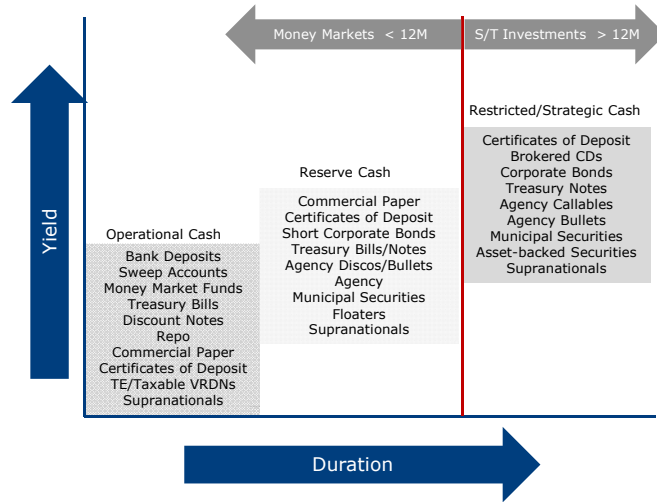
Source: Wells Fargo Securities, LLC



Placement of Short-term Instruments

Placing of Short- and Medium-Term Instruments

Product Segmentation Across Maturities



Source: Wells Fargo Securities, LLC

Credit Ratings...

Rating Agencies – S&P

Each agency has its own methodology and approach to credit analysis

LONG TERM

- **AAA** - An obligation rated 'AAA' has the highest rating assigned by Standard & Poor's. The obligor's capacity to meet its financial commitment on the obligation is **EXTREMELY STRONG**.
- **A** - An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still **STRONG**.

SHORT-TERM

- **A-1** - A short term obligation rated 'A-1' is rated in the highest category by Standard & Poor's. The obligor's capacity to meet its financial commitment on the obligation is strong. Within this category, certain obligations are designated with a plus sign (+). This indicates that the obligor's capacity to meet its financial commitment on the obligation is extremely strong.
- **A-2** - A short-term obligation rated 'A-2' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher rating categories. However, the obligor's capacity to meet its financial commitment on the obligation is satisfactory.

Source: Moody's Investors Service, Standard and Poor's, and Wells Fargo Securities, LLC

Rating Agencies – Moody's

Each agency has its own methodology and approach to credit analysis

LONG TERM

- **Aaa** - Obligations rated Aaa are judged to be of the highest quality, with minimal risk
- **Aa** - Obligors rated Aa are judged to be of high quality and are subject to very low default risk
- **A** - Obligations rated A are considered upper-medium grade and are subject to low credit risk

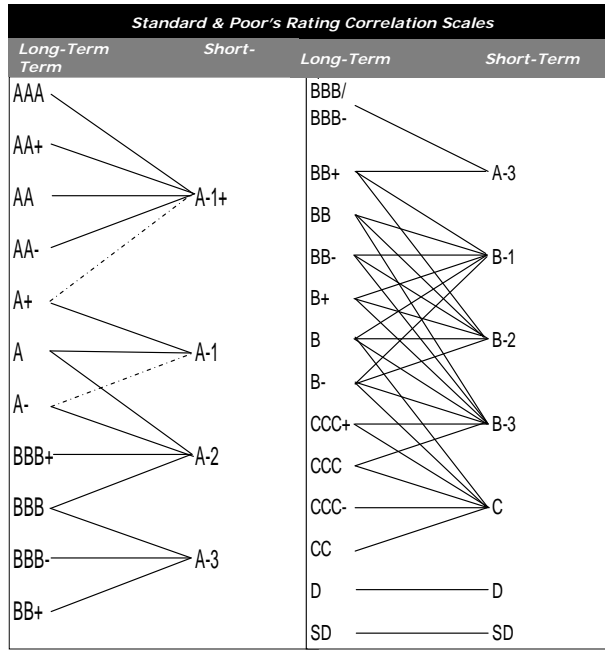
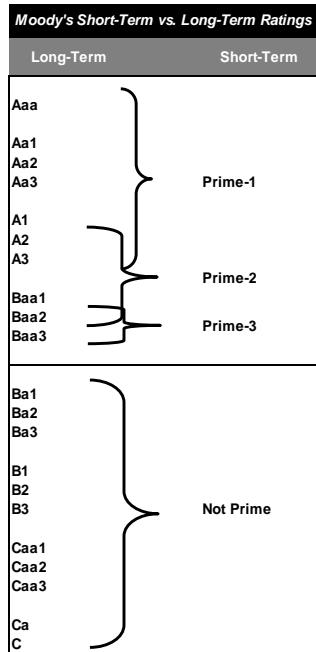
SHORT-TERM

- **Prime-1** Issuers (or supporting institutions) rated Prime-1 have a superior ability for repay short-term debt obligations.
- **Prime-2** Issuers (or supporting institutions) rated Prime-2 have a strong ability to repay short-term debt obligations.
- **Prime-3** Issuers (or supporting institutions) rated Prime-3 have an acceptable ability to repay short-term obligations.

Source: Moody's Investors Service, Standard and Poor's, and Wells Fargo Securities, LLC



Rating Agencies – Crossover Ratings



**Dotted lines indicate combinations that are highly unusual.*

Source: Moody's Investors Service, Standard and Poor's, and Wells Fargo Securities, LLC

Dealing with Dealers

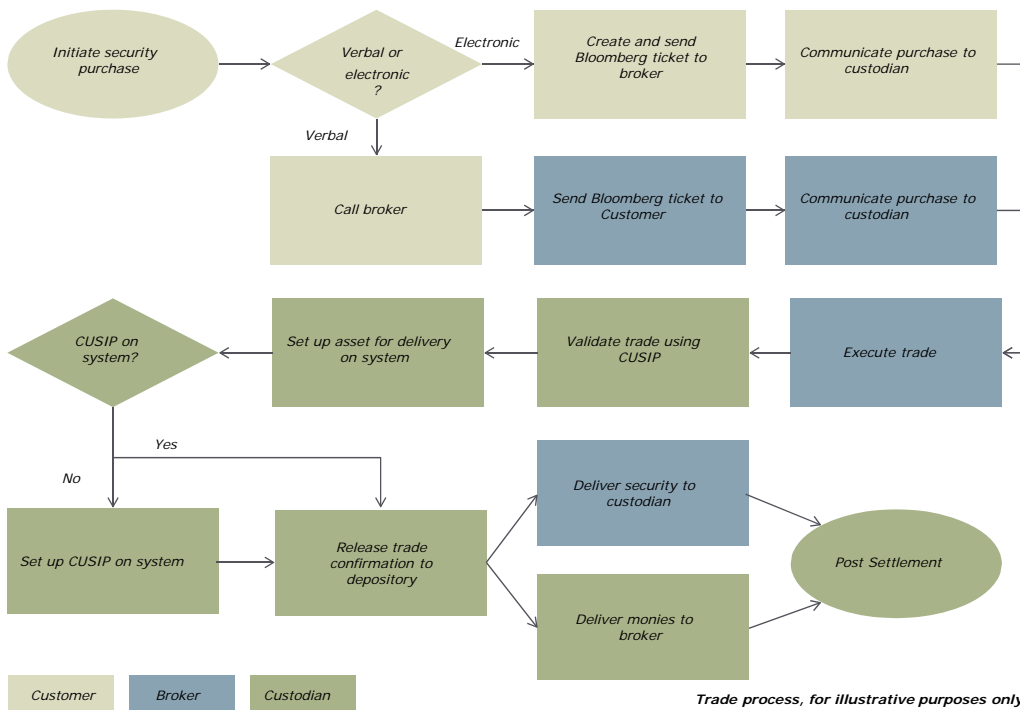
Dealing with Dealers

- You cannot talk to everyone...but you should talk to more than one
- Sales people are paid based on the amount of product they sell
- Developing trust with a sales person takes time, but having a good relationship with a few brokers is very important
- Each dealer may have access to different products that another dealer may not
- Dealers provide you with liquidity when you need it, they are more willing to provide it to those with whom they have a strong business relationship

Source: Wells Fargo Securities, LLC



A Day in the Life of a Trade



Tracking and Benchmarking

Portfolio Tracking

- Benchmarks are fine but should not dictate investment decisions in corporate portfolios. Why?
 - Cash flow management is the primary purpose of the corporate or public entity portfolio, not beating the benchmark

- Periodic portfolio reporting is important (monthly/quarterly)
 - Ask your dealers if they provide this
 - Accounting
 - Weighted average credit rating
 - Credit deterioration trends
 - Portfolio scenario analysis
 - Liquidity needs: are maturities/coupons still in line with my cash flow needs?
 - Swappportunities?

Source: Wells Fargo Securities, LLC



Lessons from the Recession

- Liquidity is there...until it isn't
 - Always understand your source of repayment and how it could go away

- Beware Geeks bearing models – *Warren Buffett*
 - Highly structured or engineered products are generally less liquid

- Flight-to-Quality market movements are often fast and violent

- Diversification of the portfolio is as important as credit quality
 - A-2/P-2 Commercial paper suffered fewer losses than A-1/P-1 CP

- Don't be a follower
 - Just because someone else is buying it does not mean you should buy it...
 - ...but don't close yourself to new ideas, always look to educate yourself on new products



Knowledge Check

Benchmarks should be used to dictate investment decisions in public portfolios.

- A. True
- B. False

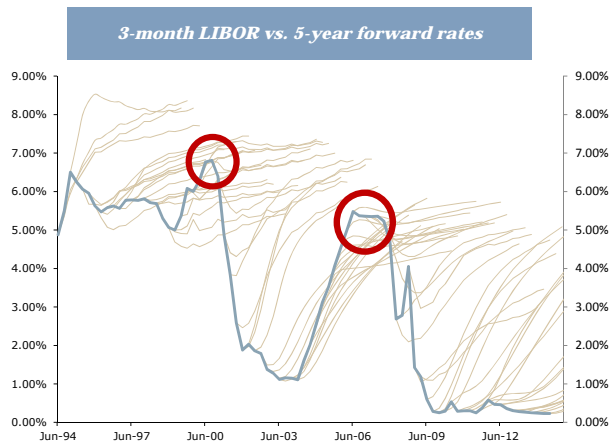


Positioning on the Curve when rates rise?

Does it make sense to move to floaters in a rising rate environment? *It depends...*

History shows that forward rates frequently overshoot actual movements in short-term rates, making a case for not being heavily underweight duration just because rates are rising.

If investors move from fixed to floating and actual floating rates stay lower than forward rates, the floating rate position underperforms the fixed-rate alternative



○ Approximated points where 3-month LIBOR exceeded forward rate expectations

Source: ICE, Bloomberg, and Wells Fargo Securities, LLC

Cost of Waiting

- Portfolio price volatility is a reality of fixed income investing, but there is also a cost to over-weighting cash.

Break-even Analysis, 3-year Agency at 1.207%

Time in Cash	Remaining Time	Income Forgone	Break-even Rate Over Remaining Term
6 months	2.5 years	\$55,100	1.363%
12 months	2 years	\$110,200	1.695%
18 months	1.5 years	\$165,300	2.250%

Break-even Analysis, 5-year investment at 1.827%

Time in Cash	Remaining Time	Income Forgone	Break-even Rate Over Remaining Term
6 months	4.5 years	\$83,000	1.885%
12 months	4 years	\$166,000	2.117%
18 months	3.5 years	\$249,000	2.416%
24 months	3 years	\$332,000	2.814%

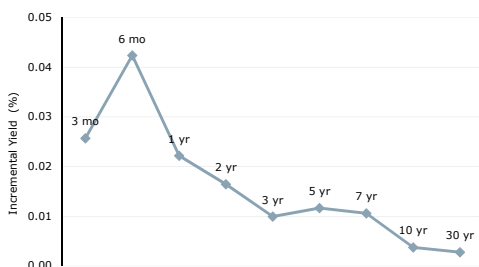
Amount invested: \$10M
Cash investment rate: 0.04%

Source: Wells Fargo Securities, LLC

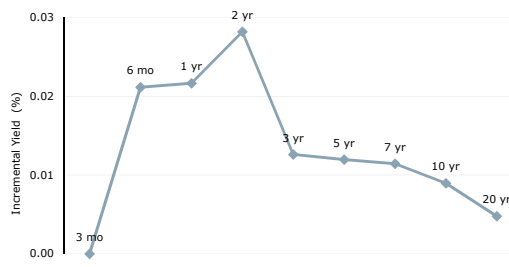
Assessing Yield Curve Steepness – Incremental Yield Per Month

From an incremental yield-per-month perspective, the 2-year maturity is currently the steepest part of the U.S. Agency yield curve and the 6-month maturity is the steepest part of the U.S. Treasury yield curve.

U.S. Treasury Curve Incremental Yield Per Month



U.S. Agency Curve Incremental Yield Per Month



Source: Bloomberg, Wells Fargo Securities, LLC

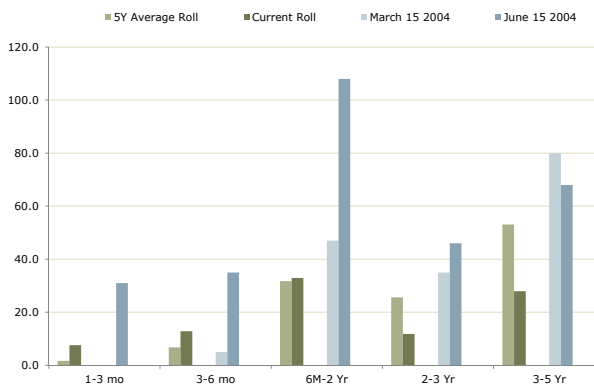


Short-Term Rates

The Treasury curve has steepened recently between 6-months and 2-years, but in the 3-5-year space the curve has flattened relative to historical averages.

However, comparing the current steepness to the historical steepness at the point of the last rate tightening cycle suggests that the curve could steepen significantly between 2s and 5s.

Current Curve Steepness vs. 5-Year Average and 2004 Cycle



Source: Bloomberg, Wells Fargo Securities, LLC

Take Away

- *The money market investment universe we are accustomed to is changing. Do not be afraid of the changes, but educate yourself to be able to maximize your opportunities.*
- *Money market fund reform is accelerating the time frame for challenges and opportunities over the next two years.*
- *Do not be overwhelmed by the available alternatives. Take steps into new product categories one step at a time, and limit the scope of your investment choices to your available resources.*

Source: Wells Fargo Securities, LLC



Questions



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- *Daily Short Stuff* – garret.sloan@wellsfargo.com, vanessa.hubbard@wellsfargo.com
- *Instruments of the Money Markets*:
http://www.richmondfed.org/publications/research/special_reports/instruments_of_the_money_market/
- *Stigum's Money Market 4th Edition*. Marcia Stigum and Anthony Crescenzi
- *The Politics of Public Entity Investing*. Ben Finkelstein
- *Cash Management: Products and Strategies*. Edited by Frank Fabozzi
- *Investing Public Funds 2nd Edition*. Girard Miller, Corrine Larson, Paul Zorn.
- *The Financial Times*
- *The Wall Street Journal*

Source: Wells Fargo Securities, LLC



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Disclosure Appendix

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