

Investment Policy and Guideline Development

Key Strategy Inputs for Investment Policy Construction

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- ▶ Disciplined Approach
- ▶ Credit Research
- ▶ Risk Management
- ▶ Customized Portfolios
- ▶ Client Focus

An Investment Policy Statement Is Good Public Policy

Every organization with funds to manage should have in place a formal written investment policy statement. The benefits of having an investment policy statement are:

- The first and most important step in the investment process
- Satisfies an important fiduciary duty
- Guides the asset management process – no surprises
- Provides discipline to the process
- Effective risk management
- Designed to endure the ups and downs of market cycles
- Structured with a long-term focus that evolves over time
- Meets the “policy recommendation” of CA Government Code Section 53646

Understanding Your Organization

What are some unique investment guideline drivers:

- Asset/Liability Matching
- Liquidity Needs
- Cash Flow Schedule
- Gain/Loss Sensitivity
- Accounting/Financial Statement Implications
 - GASB 40
- Credit Rating Sensitivity
- Sensitivities and Expectations
- Unique Agency Risks and Biases

What Public Agency Officials Need to Know

Your Responsibilities

- ▼ **Public Agency officials are fiduciaries, subject to the ‘Prudent Investor Standard’**
 - When investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the agency, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency.

- ▼ **Because you are handling public funds, CA statute establishes the primary goals for investments, in the following priority order:**
 - **Safety** - the preservation of principal
 - **Liquidity** - the ability to access funds in the form of cash when and as needed to meet District financial obligations
 - **Yield** - a reasonable return on the investment of public funds, consistent with the emphasis on safety and liquidity

- ▼ **These three goals cannot be simultaneously maximized**
 - Prudent investment requires a **balancing act**, keeping in mind that safety and liquidity take precedence over yield

What Public Agency Officials Need to Know

Your Options

- **Are governed by the California Government Code and your District's Local Investment Policy**
- **The parameters for the investment of local agency cash reserves are laid out in CA Government Code Sections 53600, et seq.**

Section 53601 (and 53635 for counties and JPA pools):

- Enumerates the range of investment options available to local agencies for their cash reserves (other than bond proceeds, which are governed by covenants in the bond documents)
- Establishes the types of securities eligible for investment, and restrictions, such as:
 - maximum term to maturity (5-year maximum unless otherwise stated)
 - minimum credit criteria
 - maximum exposure to specific types of securities and individual issuers (concentration limits)
- **The Local Investment Policy, to be updated and adopted annually (to reflect changes to CA statute as well as changing circumstances in the District), may further restrict the District's investment authority**
 - May further limit or prohibit altogether certain types of securities, maximum maturities, minimum credit quality, establish tighter concentration limits, etc.

What Public Agency Officials Need to Know

Your Risks

- ▼ **There is no such thing as a truly ‘risk-free’ investment**
- ▼ **The key to successful public agency investing is risk management**
 - ▼ **Interest Rate Risk -- Market Risk**
 - The risk that changes in market interest rates will adversely affect the value of securities held in a portfolio
 - When interest rates go up, portfolio market values decrease; when rates decline, portfolio values increase
 - The simplest way to minimize interest rate risk (fluctuations in portfolio market values) is to invest in the shortest maturity securities available. The downside of this strategy, of course, is that you must accept lower returns over time -- possibly affecting your ability to meet future cash flow needs
 - ▼ **Credit Risk**
 - The risk that a security will not repay its principal upon maturity. The most risk-averse investors will stick to US treasury bonds and FDIC-insured CDs. These are considered as close to risk-free as possible, but offer lower returns
 - Corporate bonds are rated on their ability to service their debt on the basis of their cash flows, ranging from “AAA” (highest) to “BBB” (lowest ‘investment grade rating). Keep in mind that a high credit rating, by itself, is no guarantee of a corporate security’s safety. Think Enron, Countrywide, AIG, and on and on...
 - Credit risk can be managed by **concentration limits** – limiting the percentage of the portfolio which can be invested in specified types of securities, as well as percentage limits on securities of individual issuers

What Public Agency Officials Need to Know

Your Risks (cont.)

▼ Liquidity Risk

- ▶ The risk that the portfolio will be unable to meet future cash flow needs
- ▶ Liquidity risk can be managed by investing only in the shortest dated securities, but that will produce lower returns over time
- ▶ Alternatively, some agencies manage liquidity risk by employing a **'laddered portfolio'**; that is structuring the portfolio across a broad spectrum of maturities
- ▶ Over time, a more effective strategy is to utilize **'dual portfolios'** -- with a liquidity portfolio managed to meet cash flow needs and a core portfolio, which is focused more on growth opportunities and optimizing returns over time

▼ Reinvestment Risk

- ▶ The risk that cash (from interest payments, bond maturities, sales of securities) will need to be invested at a lower rate of return
- ▶ Again, the most effective strategy to manage reinvestment risk is to structure the portfolio across a broad range of maturities. In addition, reinvestment risk can be managed by minimizing the use of securities with uncertain cash flows, such as callable bonds and mortgage-backed securities

What Public Agency Officials Need to Know

Your Risks (cont.)

▼ Concentration Risk -- Programmatic Risk

- The risk that an over-exposure to a single type of security, a single issuer or a single program will adversely affect portfolio liquidity or returns
- This is the classic ‘Don’t put all your eggs in one basket rule”
- A number of Florida local agencies received a ‘school of hard knocks’ lesson on this risk late in 2007, when the Florida Local Government Investment Pool suspended redemptions (froze the pool), following disclosure of major losses on mortgage-backed securities and a run on the pool’s assets. Many local agencies had all or nearly all their cash reserves in the pool; many others had relied on the pool for all of their liquidity
- CA statutes generally include concentration limits on types of securities that may be held and on securities of individual issuers, though not on investment programs, such as LAIF or CalTRUST because those programs themselves are highly diversified

What Public Agency Officials Need to Know

Your Risk Tolerance

- ▼ **There is no such thing as a truly ‘risk-free’ investment; therefore the key to successful public agency investing is risk management**
- ▼ **The three goals of safety, liquidity and yield cannot be simultaneously maximized. Prudent investment requires a balancing act, keeping in mind that safety and liquidity take precedence over yield**
- ▼ **Risk tolerance reflects this balancing act**
 - ▼ Considering cash flows, liquidity requirements, even political considerations, as an incident of loss in the District or a nearby agency may increase the ‘headline risk’ of certain investments or practices
- ▼ **Risk tolerance may differ for different portions of a District’s assets**
 - ▶ Safety and liquidity will trump the increased volatility that comes with increased market risk (and greater potential yield) for funds required for day-to-day cash flow needs
 - ▶ On the other hand, capital improvement funds and other special purpose reserves not required to meet daily cash obligations may assume greater market exposure in order to provide greater returns over time
- ▼ **Risk tolerances should be reflected in the investment policy, in the form of limits on exposure to certain instruments, maturities, and issuers**

What Public Agency Officials Need to Know

Your Cash Flows

- ▼ **The essential point in public cash management is to remain as invested as possible while simultaneously retaining sufficient cash balances to meet liquidity needs**

- ▼ **Cash flow forecasts are built upon**
 - Historical recurring revenues and expenses
 - Assumptions about how these recurring items are likely to change over a relevant time period (e.g. how will the housing slowdown affect property tax revenues or water hookups)
 - Information regarding expected non-recurring revenues or expenditures (e.g. how will the State allow local agencies to ‘share’ in the solution to the State budget crisis)

- ▼ **Cash flow forecasting enables a District to determine the amount of cash available for investment as well as the maximum advisable maturity ranges**

- ▼ **Non-existent or poor cash flow forecasts carry opportunity costs**
 - Investable cash sitting in non-interest bearing accounts or in lower-yielding overnight accounts rather than in higher-yielding longer-term investments
 - The need to sell securities (potentially into a bad market) to meet financial obligations, incurring transaction costs

What Public Agency Officials Need to Know

Four Mantras for Investing District Assets

- ▼ **Safety, Liquidity, then Yield**
 - These are public funds; the return on investment is secondary to safety and liquidity

- ▼ **Diversify, Diversify, Diversify**
 - Diversification across types of instruments and issuers can mitigate many of the risks inherent in the market
 - The public investment equivalent of “location, location, location” in real estate

- ▼ **Transparency**
 - Transparency is information; the more information you have and the more current it is, the better a District can accurately assess the risks in its portfolio
 - Real-time transparency eliminates the risk of ‘hidden surprises’ which only become apparent after most of the damage has been done

- ▼ **There Ain’t No Such Thing as a Free Lunch**
 - Be skeptical, or at least very inquisitive, of promises of high returns or dramatically better performance than most other agencies over time; this is a classic sign that there may be greater than risk in the portfolio than is acknowledged (or understood)



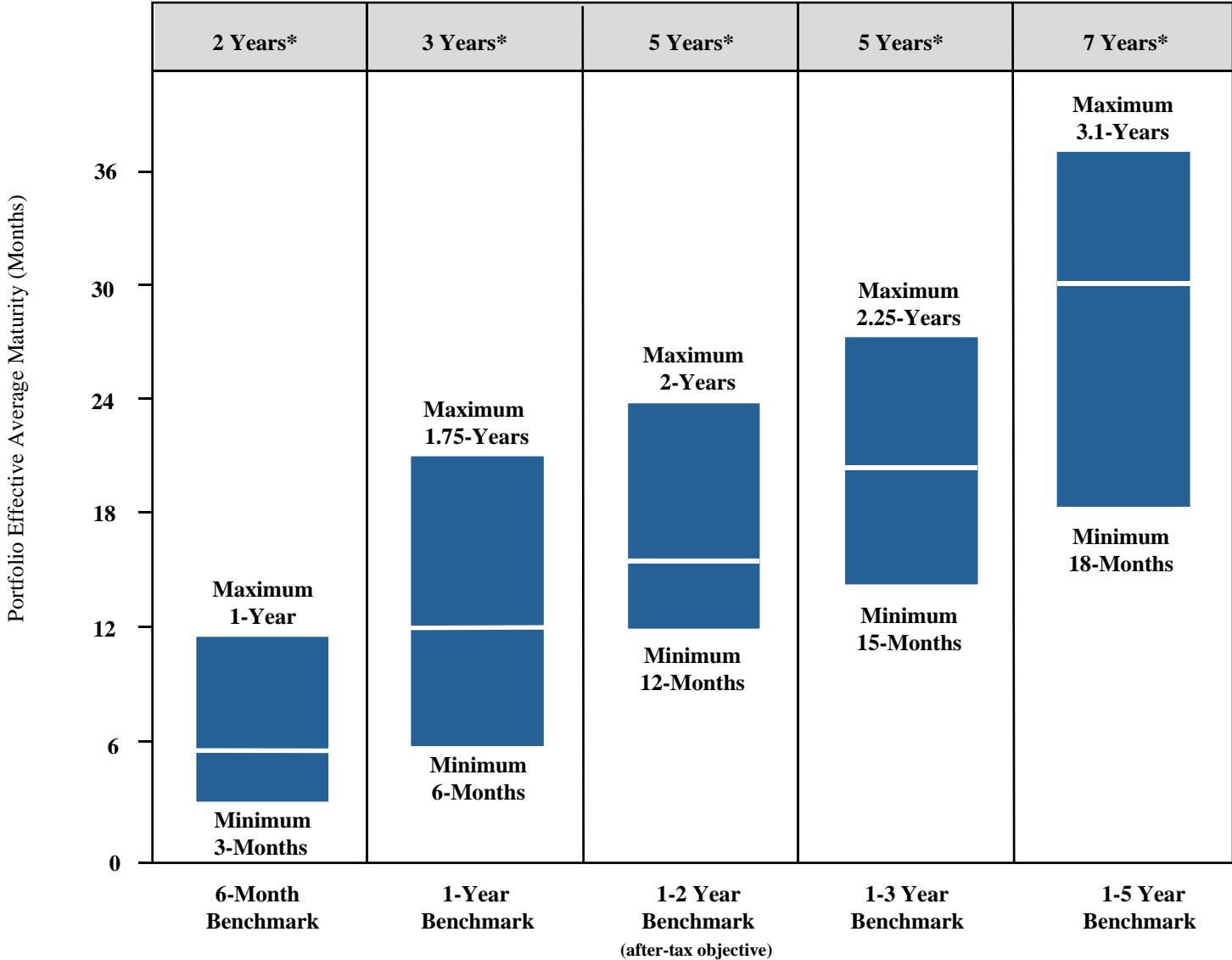
Duration, Maturity, Risk and Return

Duration

- ▶ “A measure of the approximate sensitivity of a bond’s value to rate changes. More specifically, it is the approximate percentage change in value for a 100 basis point change in rates.” (Fabozzi)
- ▶ A duration of 2.00 implies a negative price change of 2% for each 100 basis point increase in market interest rates; and similarly, an increase in price of 2% for each 100 basis point decrease in market interest rates.
- ▶ Effective duration also takes into consideration the impact on cash flows from changes in interest rates.
- ▶ Effective maturity and effective duration are closely aligned in the short-term part of the yield curve for securities that have regularly scheduled cash flows.



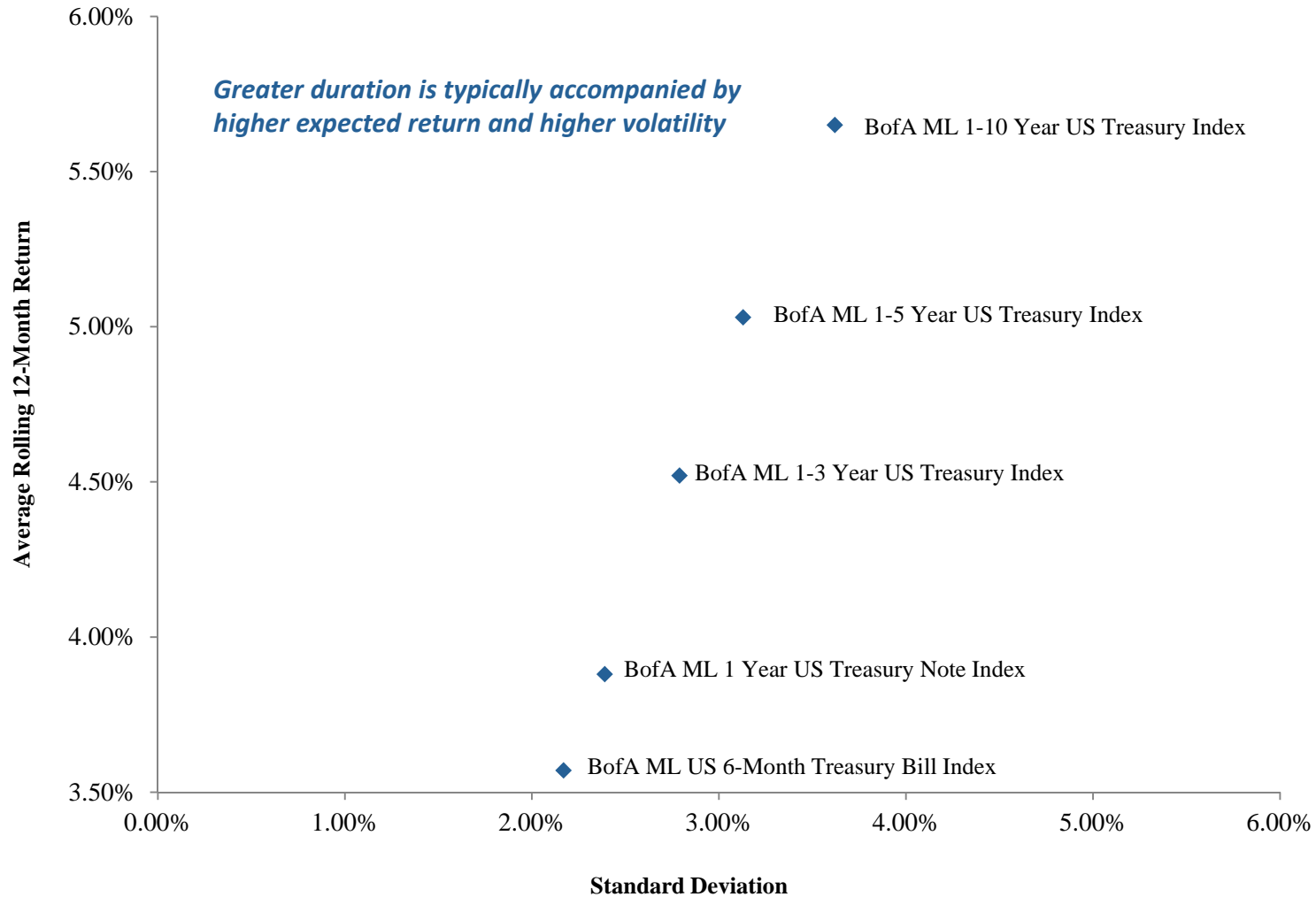
Maturity Constraints



*Maximum individual maturity

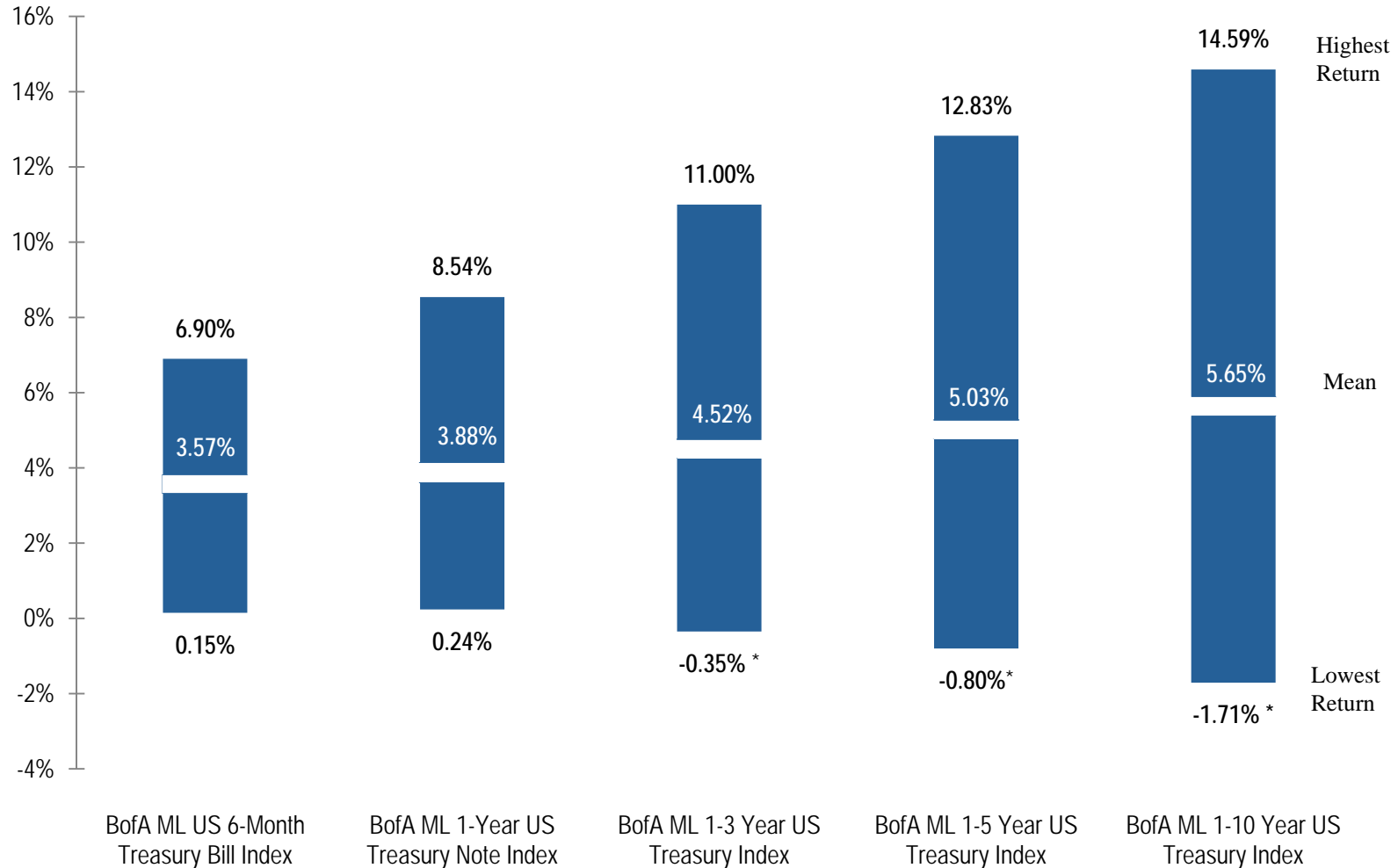
Maturity Risk-Return

1994-2012 Rolling 12-Month Returns At Each Quarter-End



Total Return For One Year Holding Periods

Rolling 12-Month Returns At Each Quarter-End
January 1994- December 2012

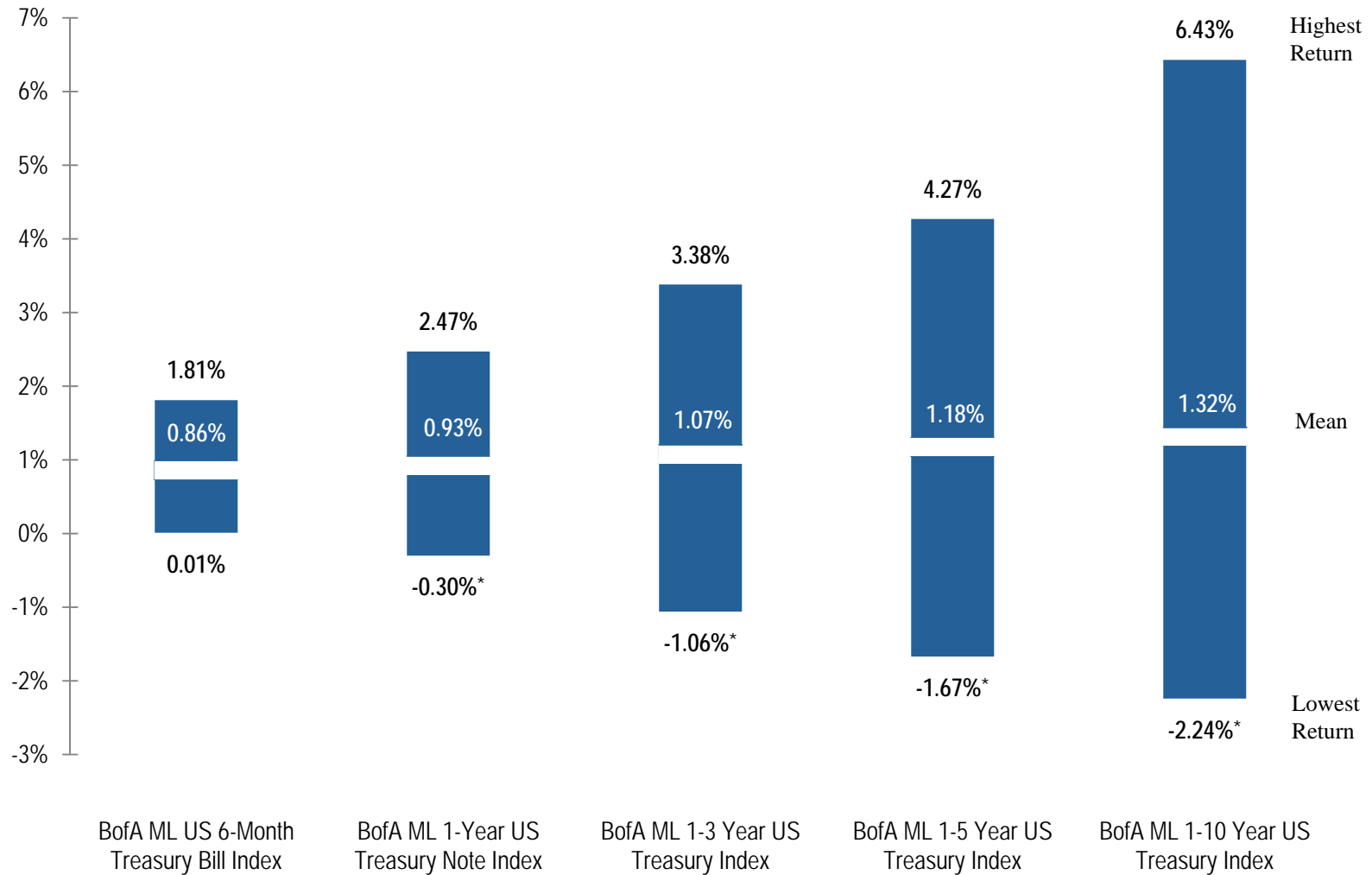


*The 1994-2012 period includes one negative return period for the 1-3 Year Index, two negative return periods for the 1-5 Year Index, and five negative return periods for the 1-10 Year Index.
Source: Bloomberg



Total Return For Quarterly Holding Periods

January 1994 - December 2012



*The 1994-2012 period includes four negative return periods for the 1 Year Index, seven negative return periods for the 1-3 Year Index, sixteen negative return periods for the 1-5 Year Index, and twenty-two negative return periods for the 1-10 Year Index.

Source: Bloomberg





Allowable Securities

Allowable Securities Per CA Government Code

- **Bonds issued by the Local Agency, or any other California local agency.**
- **U.S. Treasury Bill, Notes, and Bonds:** U.S. government guaranteed securities. Represent the most liquid and creditworthy securities in the domestic market.
- **U.S. Federal Agency Securities (GSE, Government-Sponsored Enterprise):** Debt obligations issued by agencies of the U.S. government such as the Federal National Mortgage Association (FNMA) and the Federal Farm Credit Bank (FFCB). While not explicitly guaranteed by the government, the securities are generally traded with an “implied” guarantee.
- **Bonds issued by the State of California, or any of the other 49 states.**
- **Bankers acceptances (bills of exchange), drawn on and accepted by commercial banks:** not to exceed 180 days or more than 40 percent of the total portfolio; and no more than 30 percent of the portfolio in bankers’ acceptances of any one commercial bank.
- **Prime Commercial Paper (foreign and domestic issues):** An unsecured promissory note (maturities 1-270 days) issued by banks, corporations, and finance companies. Statute requires the highest rating by at least one rating agency; no more than 25 percent of total portfolio may be invested in Prime CP (up to 40 percent for county treasury pools and JPA investment pools such as CalTRUST), with no more than 10 percent in any one issuer.
- **Negotiable Certificates of Deposit:** A marketable receipt for funds deposited in a bank or thrift institution for a specific time period at a stated rate of interest. Limited to no more than 30 percent of the portfolio.
- **Repurchase Agreements:** Standardized, simultaneous purchase and sale of the same security between a local agency and approved government broker/dealers (a counterparty). Repurchase agreements, are, in effect, short-term (overnight) loans collateralized by securities.
- **Corporate Notes and Bonds (Medium-Term Notes):** Corporate and depository institution debt instruments. California statute limits local agency investment in corporate notes to maturities of five years or less. Statute further requires that the notes be rated “A” or better; and limits investment to no more than 30 percent of the portfolio.
- **SEC-registered Money Market Funds:** Sweep vehicle to invest excess funds. Statute requires that the money market fund be “AAA” rated by at least two rating agencies. Furthermore, statute permits no more than 20 percent of the portfolio be invested in money market funds.



Allowable Securities Per CA Government Code

- ▶ **Asset-Backed Securities, Mortgage-Backed Securities and Collateralized Mortgage Obligations:** Asset-backed securities (ABS) are pass-through securities backed by loans, leases, credit card receivables or installment contracts. Asset-backed securities have final maturities ranging from three to five years at the time of issue with the average time to receipt of principal (average life) ranging from one to three years. Mortgage-backed securities (MBS) are instruments which represent ownership of an undivided interest in a group of mortgages. Collateralized mortgage obligations (CMOs) are securities backed by a pool of pass-through's or a pool of mortgage loans. The prepayments of a CMO are segmented to allow for more predictable cash flows. Must be rated "AA" or higher by at least one rating agency; and the issuers debt must be rated "A" or better. May not exceed five years term to maturity; and may not exceed 20 percent of total portfolio.
- ▶ **Local Agency Investment Fund (LAIF):** A pooled investment fund managed by the California State Treasurer for California local agencies. LAIF policy limits local agency investments to a maximum of \$50 million.
- ▶ **Joint Powers Authority (JPA) Investment Pools (such as CalTRUST):** Statute requires that the JPA pool may invest only in the types of securities eligible for direct investment by California local agencies. The same credit criteria, maturity limitations and concentration limits which apply to direct local agency investment also apply to the investments of JPA pools. In addition, the JPA must retain an investment advisor that:
 - a. Is registered with the SEC, or is exempt from registration by SEC rule;
 - b. Has not less than five years experience investing in the types of securities eligible for local agency investment; and
 - c. Has assets under management in excess of \$500 million.



Sector Selection



Table of Short Duration Returns: A Case For Diversification

Annual Returns for Key Sector Indices

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
1	U.S. Corporates, 1-3 Years 5.33%	Mortgages 0-3 Years WAL 2.80%	Asset Backed Securities, 0-3 Years 2.60%	Asset Backed Securities, 0-3 Years 4.73%	U.S. Treasuries, 1-3 Years 7.32%	U.S. Agencies, 1-3 Years 7.05%	U.S. Corporates, 1-3 Years 14.69%	Mortgages 0-3 Years WAL 5.42%	Mortgages 0-3 Years WAL 3.15%	U.S. Corporates, 1-3 Years 4.49%
2	Asset Backed Securities, 0-3 Years 2.74%	Asset Backed Securities, 0-3 Years 2.16%	Mortgages 0-3 Years WAL 2.15%	U.S. Corporates, 1-3 Years 4.71%	Mortgages 0-3 Years WAL 6.95%	U.S. Treasuries, 1-3 Years 6.61%	Asset Backed Securities, 0-3 Years 13.80%	U.S. Corporates, 1-3 Years 4.86%	Municipals 1-3 Years 2.37%	Asset Backed Securities, 0-3 Years 1.88%
3	U.S. Agencies, 1-3 Years 2.18%	U.S. Corporates, 1-3 Years 1.82%	U.S. Corporates, 1-3 Years 1.89%	Mortgages 0-3 Years WAL 4.64%	U.S. Agencies, 1-3 Years 6.74%	Mortgages 0-3 Years WAL 5.27%	Mortgages 0-3 Years WAL 5.98%	Asset Backed Securities, 0-3 Years 3.35%	U.S. Corporates, 1-3 Years 1.76%	Mortgages 0-3 Years WAL 1.61%
4	Municipals 1-3 Years 2.08%	Municipals 1-3 Years 1.28%	U.S. Agencies, 1-3 Years 1.77%	U.S. Agencies, 1-3 Years 4.52%	U.S. Corporates, 1-3 Years 5.67%	Municipals 1-3 Years 5.16%	Municipals 1-3 Years 4.21%	U.S. Treasuries, 1-3 Years 2.35%	U.S. Treasuries, 1-3 Years 1.55%	Municipals 1-3 Years 1.03%
5	U.S. Treasuries, 1-3 Years 1.90%	U.S. Agencies, 1-3 Years 1.18%	U.S. Treasuries, 1-3 Years 1.67%	U.S. Treasuries, 1-3 Years 3.96%	Asset Backed Securities, 0-3 Years 4.84%	Asset Backed Securities, 0-3 Years -1.22%	U.S. Agencies, 1-3 Years 2.17%	U.S. Agencies, 1-3 Years 2.32%	U.S. Agencies, 1-3 Years 1.53%	U.S. Agencies, 1-3 Years 0.85%
6	Mortgages 0-3 Years WAL 1.83%	U.S. Treasuries, 1-3 Years 0.91%	Municipals 1-3 Years 1.41%	Municipals 1-3 Years 3.25%	Municipals 1-3 Years 4.70%	U.S. Corporates, 1-3 Years -2.68%	U.S. Treasuries, 1-3 Years 0.79%	Municipals 1-3 Years 1.29%	Asset Backed Securities, 0-3 Years 1.49%	U.S. Treasuries, 1-3 Years 0.43%

Source: Bloomberg

Returns shown are the annual total returns of select Bank of America Merrill Lynch indices. This Table of Short Duration Returns is a comprehensive representation of relative sector performance for a 10-year period through 12/31/2012. This material is offered compliments of Wells Capital Management to its clients. It is for your own personal information and we are not soliciting an action based upon it. Past performance is not indicative of future results.



The Importance of Diversification

Internal Diversification Limits	
▪ Commercial Paper:A-1/P-1	3% per issuer
▪ Commercial Paper:A-2/P-2	2% per issuer
▪ Corporates :AAA/AA	3% per issuer
▪ Corporates:A	2% per issuer
▪ Municipals:AAA	5% per issuer
▪ Municipals:AA	4% per issuer
▪ Municipals:A	2.5% per issuer
▪ Asset-Backed:AAA	3% per issuer





Benchmark Selection



Performance Benchmark

A performance benchmark should reflect:

- Organization's goals and objectives
- Risk tolerance
- Return expectations over the long run

Performance benchmark should be:

- Representative of the portfolio's duration/time horizon
- A meaningful measurement of investment performance vs. the market and/or alternative solutions
- Consistent across all managers with similar mandates
- Consistently calculated and obtained from a third party

Total Return Versus Book Return

Determination of Total Return vs. Book Return is Dependent Upon:

- Accounting considerations
- Cash flow projections
- Loss constraints
- Risk assessment

Total Return – based on interest earnings, realized gains/losses and unrealized gains/losses

- Stable, core funds
- Longer maturity parameters
- Few, if any, loss constraints
- Total return performance benchmark

Book Return – based on interest earnings and realized gains/losses

- Hold to maturity accounting classification
- Heavy cash flow
- Shorter maturity parameters
- Loss sensitive
- Money market benchmark

Benchmarks

Book Return

Taxable Indices

- Lipper Institutional Money Market Fund Index
 - 13 month maximum
 - 60 day maximum average

Total Return

Taxable Indices

- BofA ML US 6-Month Treasury Bill Index
- BofA ML 1-Year US Treasury Note Index
- BofA ML 1-3 Year US Treasury Index
- BofA ML 1-3 Year US Corp & Govt Index
- BofA ML 1-5 Year US Treasury Index
- BofA ML 1-5 Year US Corp & Govt Index



Credit Quality

Credit Quality – Standard & Poor’s

Long-Term Ratings

Rating	Definition
AAA	Highest rating; extremely strong capacity to pay interest and repay principal.
AA	Very strong capacity; differs from AAA in only a small degree.
A	Strong capacity but more susceptible to adverse economic effects than higher-rated categories.
BBB	Adequate capacity, but adverse economic conditions more likely to weaken capacity.
BB	Lowest degree of speculation; risk exposure.
B	Speculative; risk exposure.
CCC	Vulnerable to nonpayment; Speculative; major risk exposure.
CC	Highly vulnerable to nonpayment; Speculative.
C	Highly vulnerable to nonpayment, but currently paying interest.
D	Bonds in default with interest and/or repayment of principal in arrears.

Short-Term Taxable Ratings

Rating	Definition
A-1+	Highest degree of safety.
A-1	Strong degree of safety.
A-2	Satisfactory degree of safety.
A-3	Adequate degree of safety.

Short-Term Municipal Ratings

Rating	Definition
SP-1	Very strong capacity to pay principal and interest; those issues determined to possess over-whelming safety characteristics will be given a plus (+) designation.
SP-2	Satisfactory capacity to pay principal and interest.
SP-3	Speculative capacity to pay principal and interest.

The ratings from “AA” to “B” may be modified by the addition of a plus or minus sign to show relative standings within the major rating categories.

Credit Quality – Moody’s

Long-Term Ratings

Rating	Definition
Aaa	Best quality; the smallest degree of investment risk.
Aa	High quality; margins of protection not quite as large as Aaa bonds.
A	Upper to medium investment-grade; security adequate but could be susceptible to impairment.
Baa	Medium investment-grade; neither highly protected nor poorly secured; lack outstanding investment characteristics and sensitive to changes in economic circumstances.
Ba	Speculative; protection is very moderate.
B	Not a desirable investment; sensitive to day-to-day economic circumstances.
Caa	Poor standing; may be in default but with a workout plan.
Ca	Highly speculative; often in default or have other marked shortcomings.
C	Lowest rated class. Regarded as having extremely poor prospects of ever attaining any real investment standing.

Short-Term Taxable Ratings

Rating	Definition
Prime 1 (P-1)	Superior capacity for repayment.
Prime 2 (P-2)	Strong capacity for repayment.
Prime 3 (P-3)	Acceptable capacity for repayment.

Short-Term Municipal Ratings

Rating	Definition
VMIG 1	Superior Credit Quality
VMIG 2	Strong Credit Quality
VMIG 3	Acceptable Credit Quality
SG	Speculative Grade

Credit Quality – Fitch

Long-Term Ratings

Rating	Definition
AAA	Highest credit quality; lowest expectation of credit risk; unlikely to be adversely affected by foreseeable events.
AA	Very high credit quality; low expectation of credit risk; not significantly vulnerable to foreseeable events.
A	High credit quality; low expectation of credit risk; more vulnerable to changes in circumstances or economic conditions than higher ratings.
BBB	Good credit quality; low expectation of credit risk.
BB	Speculative; possibility of credit risk developing.
B	Highly speculative; significant credit risk is present, but a limited margin of safety remains.
CCC	High default risk.
CC	Indicates default possible.
C	Signals imminent default.
DDD	Default; D, DD, DDD represent varying degrees of ability to achieve partial or full recovery in a reorganization or liquidation
DD	
D	

Short-Term Taxable Ratings

Rating	Definition
F-1	Highest credit quality; indicates the strongest capacity for timely payment of financial commitments; may have an added “+” to denote an exceptionally strong credit feature.
F-2	Good credit quality; a satisfactory capacity for timely payment of financial commitments, but the margin of safety is not as great as in the case of higher ratings.
F-3	Fair credit quality; capacity of timely payment of financial commitments is adequate.
B	Speculative; minimal capacity for timely payment of financial commitments, plus vulnerability to near-term adverse changes in financial and economic conditions.
C	High default risk; default is a real possibility; capacity for meeting financial commitments is solely reliant upon a sustained, favorable business and economic environment.
D	Default; denotes actual or imminent payment default.



Sample Investment Policy

Key Elements of an Investment Policy

Investment Objectives

- Preservation of principal
- High degree of liquidity
- Maximize book (yield) or total return

Acceptable Investments (U.S. Dollar-Denominated Only)^{1,2}

- | | | |
|------------------------------------|-----------------------------------------|--------------------------------------|
| ➤ U.S. Treasury Securities | ➤ Money Market Funds/Sweep Vehicle | ➤ Municipal Notes/Bonds |
| ➤ Federal Agency Securities (GSEs) | ➤ Mortgage-Backed Securities | ➤ Municipal Variable Rate Securities |
| ➤ FDIC-Guaranteed Securities | ➤ Collateralized Mortgage Obligations | ➤ Pre-refunded bonds |
| ➤ Repurchase Agreements | ➤ Commercial Mortgage-Backed Securities | ➤ Tax-Exempt Commercial Paper |
| ➤ Commercial Paper | ➤ Taxable Short-Term Municipal Debt | ➤ Asset-Backed Securities |
| ➤ Corporate Notes/Bonds | ➤ Certificates of Deposit | |

Benchmark

Maturity Parameters

- Maximum Maturity/Demand Feature/Average Life:
- Maximum Average Maturity Deviation From Benchmark:

Concentration and Diversification

- No more than 5% in any single issue/issuer at the time of purchase (except U.S. Treasury and Agency securities).
- No more than 50% of the portfolio shall be invested in any single GSE/Federal Agency at the time of purchase.

Minimum Acceptable Credit Quality

- The obligor must be rated in the rating category as indicated below by at least two of the Nationally Recognized Statistical Rating Organizations (NRSRO).

	<u>S&P</u>	<u>Moody's</u>	<u>Fitch</u>
Minimum Short-Term Rating	A-1	P-1	F-1
Minimum Long-Term Rating	[A-]	[A3]	[A-]



¹Non-rated and non-rerated, pre-refunded issues may be purchased (collateralized by U.S. Treasuries and Agencies).

²Tax Status: 35% Federal Tax Rate; Securities subject to the Alternative Minimum Tax (AMT) may be purchased.

Key Terms

NAV

- In the context of mutual funds and many Local Government Investment Pools (LGIPs) such as CalTRUST, NAV per share is computed once a day based on the closing market prices of the securities in the fund's portfolio. All of the funds' buy and sell orders are processed at the NAV of the trade date. However, investors must wait until the following day to get the trade price.

Mutual funds pay out virtually all of their income and capital gains. As a result, changes in NAV are not the best gauge of mutual fund performance, which is best measured by annual total return.

Total Return

- The total return calculation is based on interest earnings, realized gains/losses and unrealized gains/losses.

Book Return

- Book return looks at only interest earnings and any realized gains or losses. It does not take into fluctuations in market prices.

Duration

- A measure of sensitivity of a bond's market value to changes in interest rates. Duration is expressed as the approximate percentage change in value for a 100 basis point (1%) change in rates.

Maturity

- In simplest terms, maturity means the date on which a bond becomes due for payment. The final maturity date represents the contractual date that all principal and remaining interest payments become due.
- Effective maturity date takes into account the impact of cash flows from changes in interest rates.

Key Terms

Yield to Maturity

- Yield to Maturity (YTM) is most commonly used to reference yield. YTM is a more advanced yield calculation that shows you the total return you will receive if you hold the bond to maturity.
 - It equals all the interest payments you will receive (and assumes reinvesting payments at the same rate as the current yield on the bond) plus any gain (if you purchased at a discount) or loss (if you purchased at a premium).
 - Allows you to compare bonds with different maturities and coupons.

Purchase Yield

- Purchase yield is simply the yield to maturity on a bond at the time of purchase.

Standard Deviation

Standard deviation may be thought of as a measure of uncertainty. It is a measure of the dispersion of a set of data from its mean. The more spread apart the data, the higher the deviation. In fixed income, standard deviation is way to measure portfolio volatility.

