



Right Sizing Your Investment Program for Your Agency

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Setting the stage

HOW DO I APPROACH THIS?

- Smaller programs have limited resources, staffing, knowledge base
- Larger programs may not be optimizing their investment program
- Multiple solutions are available—Which is the right one for us???



Setting the stage

IT ALL COMES DOWN TO RESOURCES

- Human capital
- Systems
- Knowledge Base



Setting the stage



Today's agenda

- Key elements of an investment program
- Managing risk
- Reporting
- Going it on your own vs. engaging professional help
- Commonly-encountered pitfalls

Section 1

Key elements of an investment program

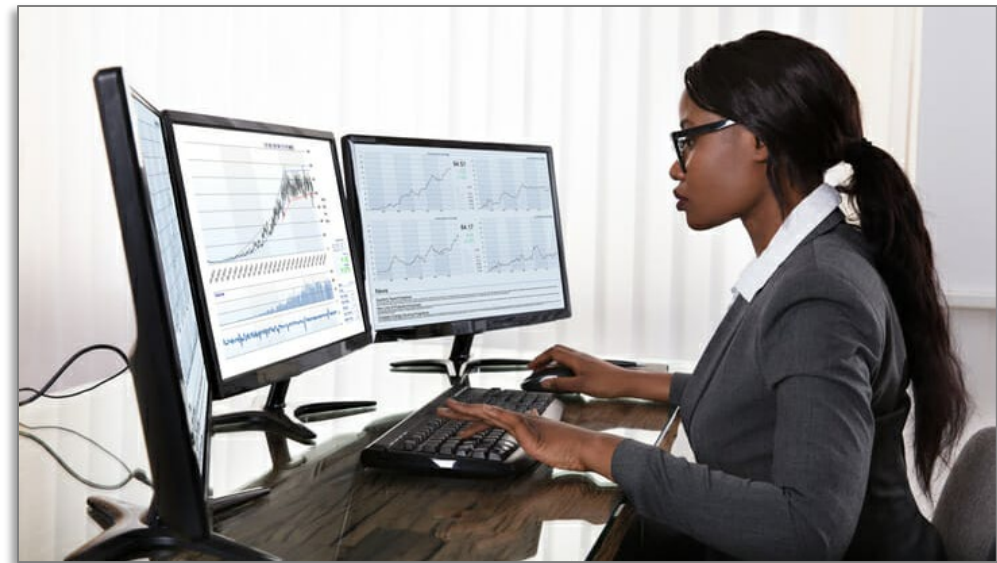
Leadership Team

- Someone needs to be responsible for:
 - Minding the minders
 - Verifying compliance with fiduciary duty
 - Confirming program meets financial goals of the agency
 - Protecting the public trust



Portfolio Management

- Someone to:
 - Determine appropriate strategy
 - Implement strategies to meet objectives
 - Apply risk management
 - Make investment decisions
 - Implement compliance
 - Rebalance



Access to the Markets

- How do I access the securities markets?
- Best practices:
 - Shop around
 - Use multiple brokers
 - Get help from an advisor
 - Tension between diversification and lumping trades for buying power



Accessing the Markets

	Local Governments with Limited Resources	Local Governments with Plentiful Resources
Leadership Team	<ul style="list-style-type: none"> • Finance director often wears all hats. • May include a finance committee but more often, there are less staff and stakeholders involved 	<ul style="list-style-type: none"> • May include finance director and sometimes separate treasurer and a finance committee.
Portfolio Management	<ul style="list-style-type: none"> • Staff self-manages 	<ul style="list-style-type: none"> • May self-manage and/or outsource
Accessing the Markets	<ul style="list-style-type: none"> • Utilizes brokers—<u>make sure you use/speak to lots of them</u> 	Utilizes brokers or investment advisor— <u>make sure advisor uses multiple brokers.</u>

Decision-Making Process



Analytics On External Factors

- **Economic environment**

- Expansion or contraction
- Employment
- Inflation
- Monetary policy
- Fiscal policy



- **Market environment**

- Yield curve dynamics
- Interest rate expectations
- Spread analysis

- **Global environment**

- Economic
- Markets
- Geopolitics

Decision-Making/Analytics

	Local Governments with Limited Resources	Local Governments with Plentiful Resources
Decision-Making	<ul style="list-style-type: none">• Should have robust process	<ul style="list-style-type: none">• Should have robust process
Analytics	<ul style="list-style-type: none">• Public resources include https://bloomberg.com https://home.treasury.gov https://www.stlouisfed.org	<ul style="list-style-type: none">• Resources include same as for smaller governments, but also include proprietary that an advisor may provide for you.

Investment Policy and Procedures

- State Statutes Specify:
 - Investment types
 - Maximum maturity
 - Potential partners
 - Credit criteria
 - Reporting
- Your Policy Should:
 - Address all these
 - Address your specific risk culture
 - Address your organization-specific needs



Investment Policy Resources— Available to all



California Municipal
Treasurers Association



CALIFORNIA DEBT AND INVESTMENT
ADVISORY COMMISSION



How Are We Using Our Cash ?

- Bond proceeds, draw schedules
- Short-term liquidity needs
- Funds not needed for longer-term

Avoid not having enough liquidity!

Lessen opportunity costs!

Portfolio Strategy Segments— Regardless of Size



- ***Liquidity Funds Segment***

- Meets specific liquidity needs
- Invests in short-term securities
- Average maturity short
- Cash flow matching
- LGIPs, MMMFs and money market instruments

- ***Core/ Reserve Segment***

- Targeted to highest suitable duration
- Longer-term securities
- Normally not used for liquidity, but invested in highly marketable securities, in case
- Greater volatility

Documentation and Results— Regardless of size

- There should be a history of:
 - Decisions on a strategy level
 - Documented compliance with policy and laws
 - Performance outcomes measured against benchmarks
 - Earnings



Section 2

Managing Risk

Managing Risk

- Interest rate/market risk
 - Portfolio duration
 - Maturity structure
- Credit risk
 - Allocation limits to asset classes and issuers
 - Minimum credit ratings
 - Ongoing credit analysis and monitoring
- Liquidity risk



Market Risk, For Example...

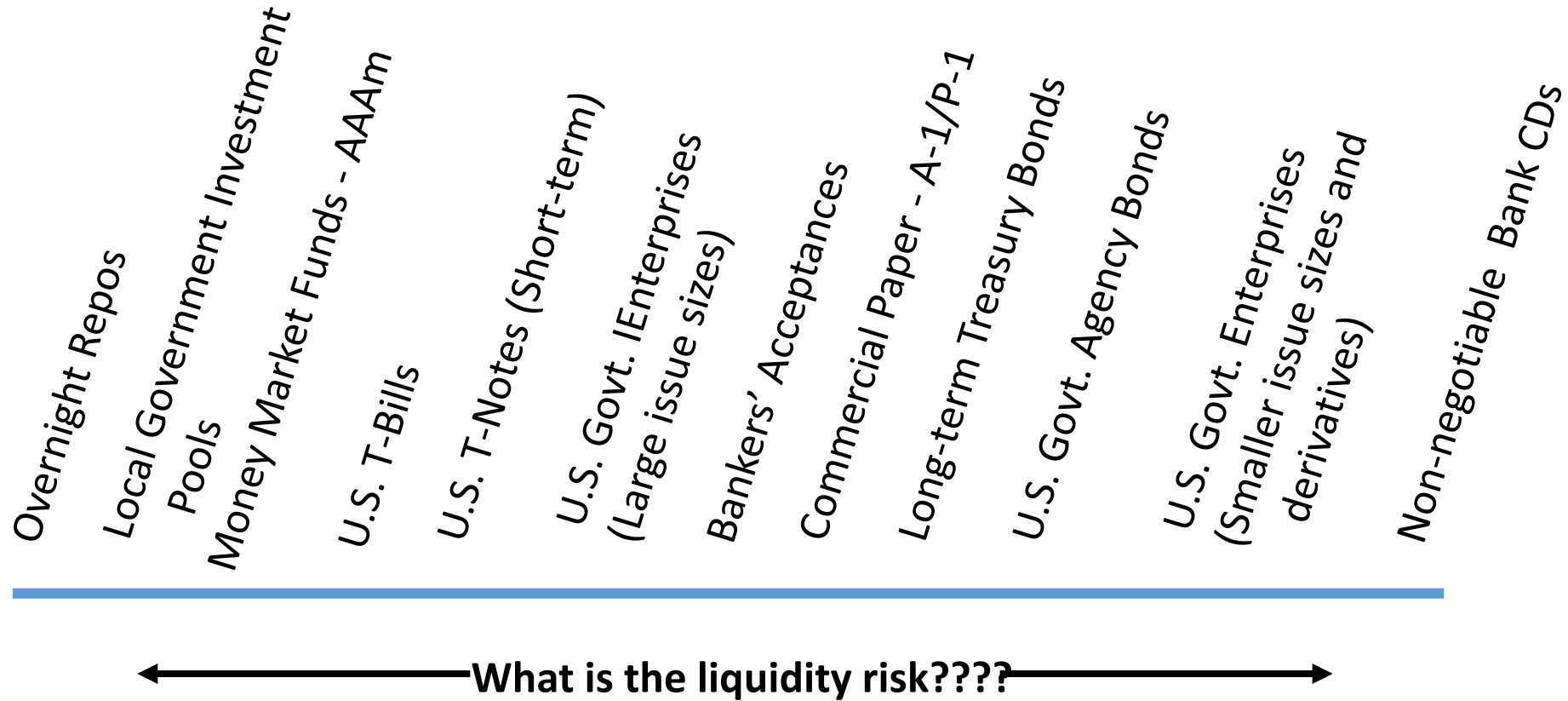


Credit Risk, For Example...

U.S. T-Bills
U.S. T-Notes and Bonds
Repos (102% Tsy & Agy & DVP)
U.S. Govt. Agencies
U.S. Govt. Enterprises
Municipal Bonds
Bank CDs (Insure & Collateral)
LGIPs & MMFs AAAM
Bankers' Acceptances
Commercial Paper - A-1/P-1
Corporate Bonds /ABS

← What is the credit risk???? →

Liquidity Risk, For Example...



Section 3

Reporting

Reporting—What Does Code Require?

- Some duties are optional and others required
- California Law addressed reporting last time in 2008
- SB 1124:
 - Repealed requirements to provide CDIAC annual investment policy statements.
 - Made quarterly



Reporting—Financial

Required:

California Government Code 53607

“...shall make a monthly report of those (sic) transactions to the legislative body.”

- What transactions?
- Monthly?

Optional:

California Government Code 53646

“...may render a quarterly report...”

- 45 days following quarter end
- State compliance
- Denote ability to meet expenditures
- Contain type of investment, issuer, maturity, par, and dollar amount

Reporting—Financial

- Financial reports
 - Security descriptions
 - Coupon, yield, maturity dates
 - Purchases, sales, maturities
 - Accruals
 - Purchases and sales of accrual
 - Amortization
 - Income earned/Interest payments and dividends
 - Par, book, and market values
- **Everything you need to book your holdings and earnings.**

Reporting—Stakeholders

- Stakeholder reports
 - Purchases, sales, maturities
 - Par, book, and market values
 - Holdings and maturities
 - History of balances and/or yields
 - Statements of compliance and liquidity
 - Commentary on earnings, yields, and/or the economy
- **Everything anyone needs to understand the investment program from a 40K foot view.**

Section 4

In-house vs hiring professionals

In-House vs. Professional Management

In-House Management

- Means you have to do it all
 - Reporting
 - Accounting
 - Analytics on opportunities and risk
 - Buy/sell decisions
 - Overall strategy
 - Rebalancing approach
- You will access the markets through brokers

Professional Management

- Means you have find a good partner
- Means you have to budget and procure for a partner
- Partner usually handles:
 - Reporting
 - Accounting
 - Analytics on opportunities and risk
 - Buy/sell decisions
 - Overall strategy
 - Rebalancing approach
- Partner accesses the markets on your behalf

Broker-Dealer Services

- Access to markets
- Market information & analysis
- Research reports
- Security analysis
- Credit research
- Investment ideas
- Portfolio evaluation
- Bond swap ideas
- Repos
- Reverse repos

Brokers are not fiduciaries but must meet a suitability standard

Broker-dealer Transaction Process

- Trade inquiries initiated by:
 - Investor
 - Offer (buying)
 - Bid (selling)
 - Broker
 - Calls with a trade or swap idea
 - Faxes, e-mails, posts on Web site inventory and trade ideas
- Always get competitive quotes

Investment Advisors

- Expertise/Experience
- Staff support
- Information
- Analytic tools
- Defined, disciplined process
- Continuity

*Advisors are fiduciaries and must place prioritize your
needs before their own*

Investment Advisors

- **Smaller Entities**

- \$10M and larger that do not have the internal expertise and time to develop and support a prudent investment program.

- **Mid-Size Entities**

- \$50-\$75M plus that have the knowledge and understanding of what they would like to implement, but do not have the time or tools. They are finding that the investment advisor can provide resources at a more cost-effective manner.

- **Large Entities**

- Larger pools seeking consultative services to provide oversight and recommendations to portfolio management program.

Investment Advisory Services

- Investment advice & management services
- Review of policy and procedures
- Cash flow forecasting
- Strategy development
- Market research and credit analysis
- Market research and credit analysis
- Buy and sell securities
- Assist in trade settlement
- Accounting, portfolio activity, and performance reports
- Evaluation of safekeeping arrangements
- Broker/Dealer due diligence
- Training & education

Section 5

Commonly-encountered pitfalls

In-House vs. Professional Management Beware

- Investment advisors do a lot but tend to target larger programs
 - Marginal costs may be higher for smaller programs
 - There are cost-effective solutions out there—you have to find them!
- Brokers provide good advice but may not provide all the services you need
 - Strategy? Reporting? Compliance?
- Larger programs have greater needs
 - Larger base of assets = more assets to oversee, diversify, account for, comply on, etc.

Common Pitfalls—Small and Large Programs

- Asset-liability mismatch
- Keeping too much cash on hand
- Inadequate staffing allocations
- Mediocre reporting
- Not enough attention to credit risk
- No investment plan

Section 6

Practitioner perspective

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- ICE BofA 0-3 Treasury Index

The ICE BofA 0-3 Year US Treasury Index tracks the performance of US Dollar denominated Sovereign debt publicly issued by the US government in its domestic market with maturities less than three years. Qualifying securities must have at least 18 months to maturity at point of issuance, at least one month and less than three years remaining term to final maturity, a fixed coupon schedule and a minimum amount outstanding of \$1 billion. (Index: G1QA. Please visit www.mlindex.ml.com for more information).

- ICE BofA US 3-Month Treasury Bill Index

The ICE BofA US 3-Month Treasury Bill Index is comprised of a single issue purchased at the beginning of the month and held for a full month. At the end of the month that issue is sold and rolled into a newly selected issue. The issue selected at each month-end rebalancing is the outstanding Treasury Bill that matures closest to, but not beyond, three months from the rebalancing date.

- ICE Bank of America Merrill Lynch 0-5 Treasury Index

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- ICE Bank of America Merrill Lynch 1-3 Treasury Index

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- ICE BofA 1-3 Year US Treasury & Agency Index

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- ICE Bank of America Merrill Lynch 1-5 Treasury Index

The ICE BofA US 1-5 Year Treasury Index tracks the performance of US dollar denominated sovereign debt publicly issued by the US government in its domestic market. Qualifying securities must have at least one year remaining term to final maturity and less than five years remaining term to final maturity, a fixed coupon schedule and a minimum amount outstanding of \$1 billion. Qualifying securities must have at least 18 months to final maturity at the time of issuance. (Index: GVQ0. Please visit www.mlindex.ml.com for more information).

- ICE Bank of America Merrill Lynch 1-5 Year US Treasury & Agency Index

The ICE BofA 1-5 Year US Treasury & Agency Index tracks the performance of US dollar denominated US Treasury and nonsubordinated US agency debt issued in the US domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch). Qualifying securities must have at least one year remaining term to final maturity and less than five years remaining term to final maturity, at least 18 months to maturity at time of issuance, a fixed coupon schedule and a minimum amount outstanding of \$1 billion for sovereigns and \$250 million for agencies. (Index: GVA0. Please visit www.mlindex.ml.com for more information).

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