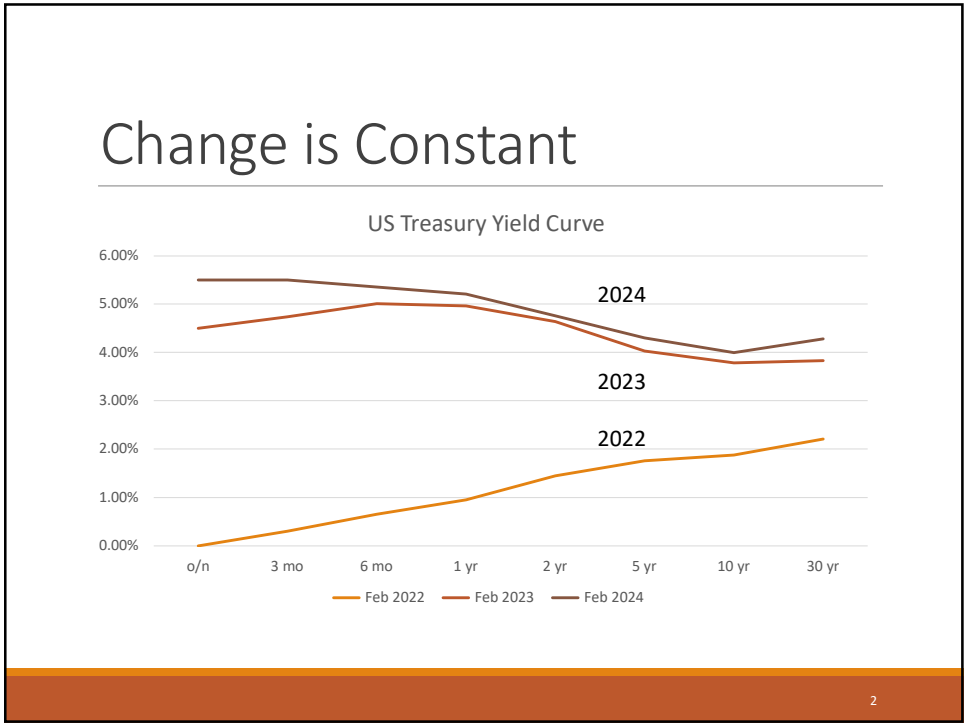


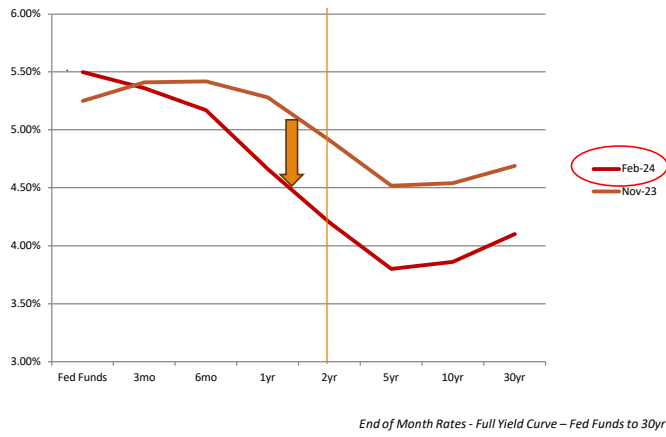


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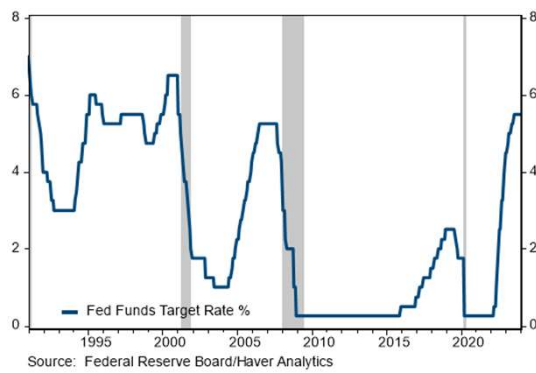


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Fed Dependent Now – But the Market Controls



3



- Fed is on hold for now
- Keys will be (1) inflation (2) employment
- They semi-achieved a soft landing
- They can't cut rates too soon with inflation high

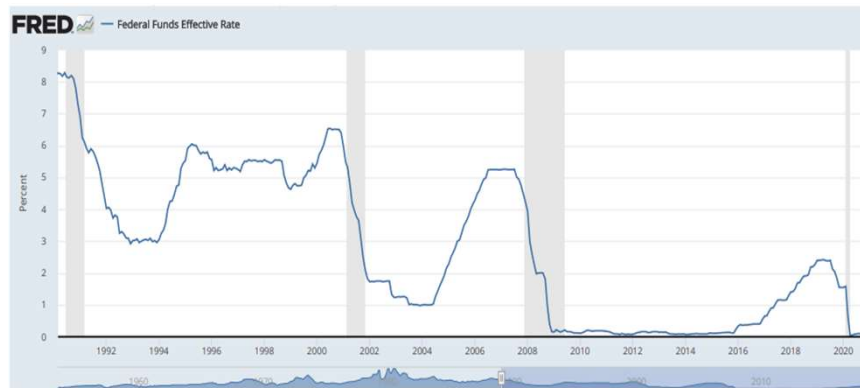
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The Economy Now

- Where are we now?
- What does that mean?
- Fed tightened 525 bps (5.25%) but is in holding pattern last 4 meetings
- Inflation remains – fell from 9.1% but still 3.9% - not at 2% target level
- Confidence slowing but consumers spend and dig themselves in debt
- Growth is *modest globally* but challenges by geo-politics
- Debt becomes a political game – a serious one – next stop January
- Why cut with a strong economy and lowering inflation?

5

5



When Rates Drop...

where should your portfolio be?

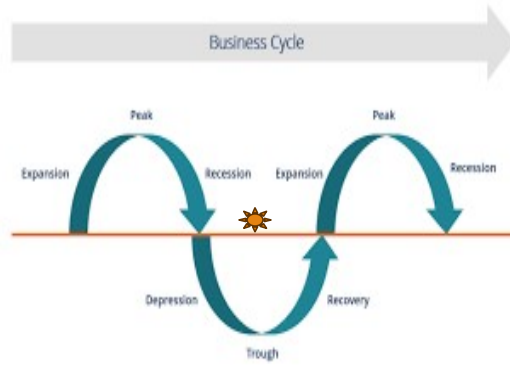
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Remember the Economic Cycles

We are seeing a *soft landing*

1. Expansion
2. Peak
3. Recession or contractions
4. Depression, trough
5. Recovery



7

ROLE OF CENTRAL BANKS

- Sovereign central banks control the flow of liquidity to control inflation
 - Central banks raise overnight interest rates to keep inflation in check but keeping them too high for too long may result in recession
 - Central banks lower rates to boost the economy but keeping them too low too long can cause deflation
 - Central banks provide liquidity and trading to market sectors
 - Central banks support and regulate (some) banks

8

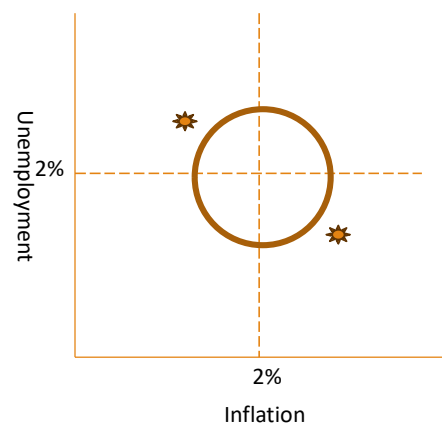
TOOLS OF MONETARY POLICY

- **Fed Funds and Fed Funds Rate**
 - Overnight trading rate between banks on excess cash from reserves
- **Discount Rate**
 - interest rate charged by the Federal Reserve to banks that borrow on short-term (usually overnight) basis
- **Reserve Requirements**
 - amount of money banks must keep on reserve at the Fed
- **Open Market Operations**
 - Buying and selling Treasury securities between the Fed and selected financial institutions in the open market
 - The most important tool; directed by the FOMC
 - Functions through the NY Fed
 - Creates the flow of funds in the system

9

WHAT IS THE FED LOOKING AT AND FOR?

- **Fed's Dual mandate Mandate**
 - Price stability
 - Maximum employment
- US Economic conditions
- International conditions
- Impact of policies



10

So why the bank failures in 2023?

- Rates skyrocketed and so prices of securities held fell
- Banks maintain large bond portfolios for themselves and collateral
- Basically an accounting situation in 2023
 - **Assets For Sale (AFS)**
 - **Assets Held-to-maturity (HTM)**
- Is this lapsing onto community banks
 - Do I need a plan?

11

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Key Issues for
You to Watch

Inflation

Employment

Central Bank Accommodation

Liquidity

Debt and Politics

12



So where do
you start?

13

13

Cash Flow is Always First



- Identifies when funds are needed
- Protects your liquidity
- Improves investment returns
- Establishes policy parameters
 - Maximum maturity
 - Maximum weighted average maturity
 - Risk benchmarks
- Promotes safe maturity extensions
- Defines your portfolio

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One Basic Evaluation

- Stay to the 80-20 % Rule
 - Limit the categories
- Look at each month not by expenditure
 - Find the net cash position
 - Fill the gaps with maturities
- Add year by year to get a solid average

15

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Building a Cash Flow

	Mo1	Mo2	Mo3	Mo4	Mo5	Mo6
REVENUES	8,000,000	9,000,000	3,000,000	2,000,000	7,000,000	5,000,000
EXPENSES	4,500,000	5,000,000	4,000,000	5,500,000	5,000,000	6,000,000
NET	3,500,000	4,000,000	-1,000,000	-3,500,000	2,000,000	-1,000,000

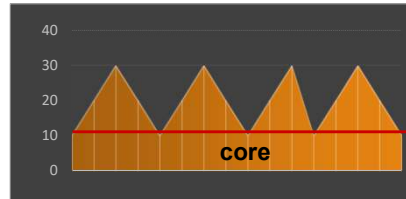
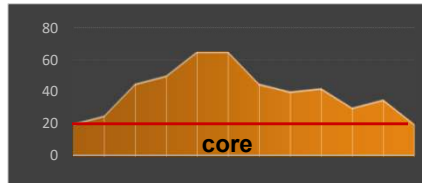
Look month-to-month focusing NET to invest to negative months.

16

16

Everyone has a CORE Portfolio

Measuring and Using the Core



What is the apparent maximum maturity and WAM of each of these?

A core is money you have not touched for an extended period

- allows you to extend the portfolio

If you have no core you have a maximum maturity of one year or less

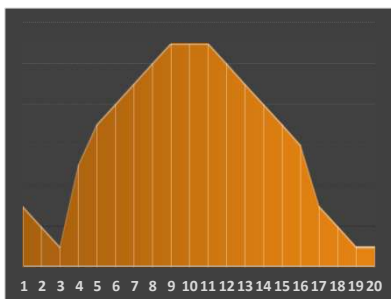
Your WAM should fit the cycles of your cash flow

Your WAM will set a benchmark to compare risk

17

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Strategies are a must on capital projects



- Slow start setting contracts
- Building takes place
- Building slows
- Funds live on.....

Often a large nonrecurring expenditure

- unique cash flow
- like projects can show trends

Preliminary work with departments

- Set expenditure plan before funds arrive
- Bond documents contain basic plans

Explain to generate support

- Impact of additional earnings
- Arbitrage impacts

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Think and build your portfolio around time horizons

Tax time you are flush with money – needs no maturities here

Summer is the low tide on money – needs to be planned for

Cash flow defines the portions of your portfolio
And from that the strategy for each

Cash flow allows you to act pro-actively¹⁹

Provides comfort that necessary funds are available

Allows some extension by recognizing future flows

Think Time Horizons



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Now Use It as an Investor

Focus on balances required to pay expenses

- Use historical needs to set investment requirements
- Keep a *small* liquidity buffer
(ex: 1-month normal expenditures)
- Ongoing use builds the traditional information

You can create the basic cash flow in your head


- How much is your payroll each month?
- How much is your accounts payable each month?
- When are your debt service payments? How much?



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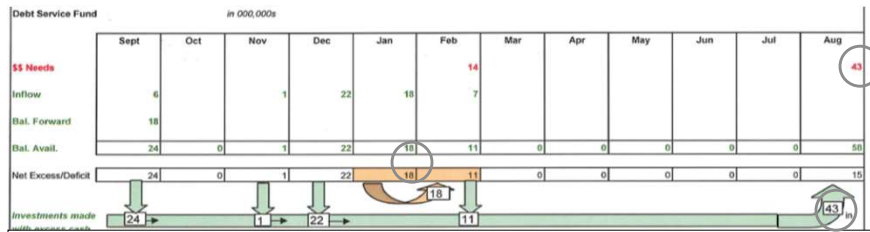
20

This city needs \$3 million each month
but only needs one investment

S	M	T	W	TH	F	S
1	2	3 	4 Payables \$250,000	5	6 Payroll \$1mm	7
8	9	10	11 Payables \$250,000	12	13	14
15	16	17	18 Payables \$250,000	19	20	21
22	23	24	25 Payables \$250,000	26	27 Payroll \$1mm	28

21

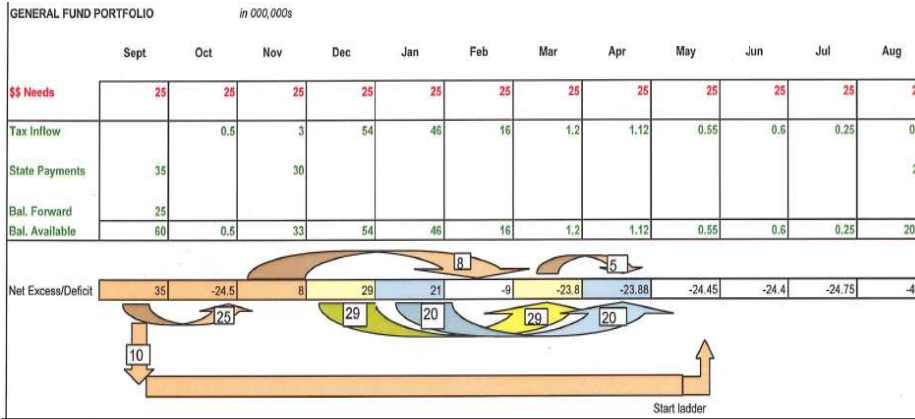
Making a Plan Using the Information – I&S



An overview of the cash flow needs allows the investor to look ahead.
The flow in Jan. alone covers the February payment.
The net balances of each other month can be invested 11, 9, 8 and 6 months.

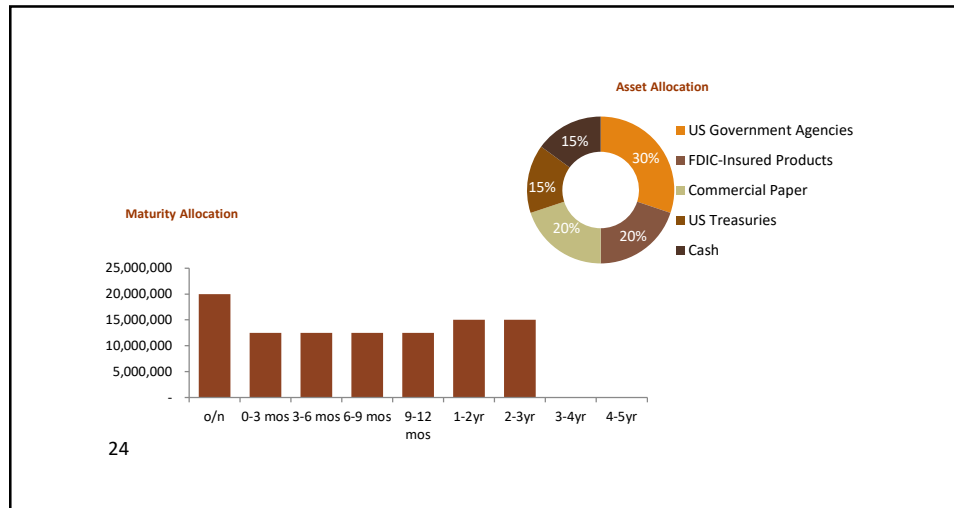
22

Using the Info A General Fund Sample



We use the excess balances not needed for the next month and extend.
 Three excess balances result in 3-month investments.
 The cash flow knowledge allows Sept. to be extended to 8-month investment.

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A Strategy Based on Cash Flow
Creates Diversification

24

Plan and execute with your tax dollars...

- Identify your core/reserves
- Identify your low months in coming fiscal year
- How much is needed in each of the low months
- Identify debt service payment amounts
- Invest the funds out to meet those needs
- Lock in rates while they are here
- Our horizon for falling rates may have lengthened **but they will fall**



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Next,
Of Course,
A Policy

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The Policy

- Who are you writing it for?
 - Keep it clear and concise
- Some policy sections can be backed up by procedures
- Strategies are broad in scope and usually in the policy
- Keep the policy and strategy in sync

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Key Policy Elements

- Scope
- Objectives
- Responsibilities
- Authorized Investments
- Maximum maturity
- Maximum weighted average maturity
- Controls and Procedures
- Collateral Policy
- Safekeeping
- Reporting requirements
- Annual adoption

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PFIA Specific Policy Requirements

Write and adopt a policy annually which must: (2256.005)

- Must be adopted by resolution
- The resolution must show any changes made

Be written

- Primarily emphasize safety and liquidity
- State the maximum stated maturity authorized
- Address diversification, yield, maturity & capability of officers
- List your authorized investments
- Include a procedure to monitor credit rating changes
- Set a maximum weighted average maturity (WAM)
- Method to monitor market prices
- Require delivery versus payment (DVP)
- Policy may 'un-authorize' any type investment

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Policy Elements

- Introduction
 - Emphasizing safety, compliance and reference to Acts
- Scope
 - *This investment policy applies to all financial assets of the City and any new funds created unless specifically exempted by the City Council and this Policy.*
- Objectives
 - Safety, liquidity, diversification and yield
 - State and define objectives
 - *It is the policy of the City that all funds shall be managed and invested with four primary objectives, listed in order of their priority: safety, liquidity, diversification and yield. Investments are to be chosen in a manner which promotes diversity.*

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Policy Elements

- **Delegation of Responsibilities**
 - Investment Officer duties and training
 - Governing body duties
 - *Broker/dealers requirements (separate section)*
 - Auditors
 - Advisers (if applicable)

- ***The City Council holds ultimate fiduciary responsibility for the portfolio. It will designate investment officer(s), receive and review quarterly reporting, approve and provide for investment officer training, annually approve broker/dealers, and annually review and adopt the Investment Policy and Strategy.***

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Prudence and Policy Control

- **Prudent Person Rule**
- **Internal Controls**
 - Cash flow analysis/plan
 - Control of collusion
 - Separation of authority and duties
 - Clear delegation of authority
 - Written confirmations and records for all transactions
 - Maintenance of security procedures
 - Safekeeping custody
 - DVP – Delivery versus Payment
 - Competitive bidding on all transactions
 - Monitoring credit rating on rated securities
 - Monitoring FDIC status on brokered CDs

- Annual requirement for a *compliance audit*

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Policy Elements

- Authorized investments – choose wisely for your needs
 - Define clearly and set maximum maturities (avoid legalese)
 - Define any credit rating required

Assets of the City may be invested only in the following instruments as further defined by the Act. If changes are made to the Act they will not be authorized until this Policy is modified and adopted by the City Council. All investment transactions will be made on a competitive basis.

- A. *Obligations of the United States Government, its agencies and instrumentalities with a maximum stated maturity of __ year, excluding mortgage-backed securities*
- B. *Fully insured or collateralized depository certificates of deposit from banks in Texas, with a stated maximum maturity of __ year insured by the Federal Deposit Insurance Corporation, or its successor, or collateralized in accordance with this Policy.*
- C. *Fully NCUSIF insured share certificates of Texas credit unions not to exceed __ years to stated maturity.*

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Basic Suggested Securities

US Treasuries, Agencies and Instrumentalities

Depository CD in TX banks

Local Government Investment Pools (\$1)

Money market mutual funds (\$1)

Demand deposits in TX banks

Brokered CD Securities

Commercial paper

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Legalese Can Be Confusing - Clarify the PFIA Language

- Sec. 2256.010 **Authorized Investments: Certificates of Deposit and Share Certificates.**
- (a) A certificate of deposit or share deposit is an authorized investment under this subchapter if the certificate is _____ issued by a depository institution that has its main office or a branch office in this state and is:
 - (1) guaranteed or insured by the Federal Deposit Insurance Corporation, or its successor or the National Credit Union Share Insurance Fund or its successor;
 - (2) secured by obligations that are described by Section 2256.009(a), including mortgage backed securities directly issued by a federal agency or instrumentality that have a market value of not less than the principal amount of the certificates, but excluding those mortgage-backed securities of the nature described by Section 2256.009(b); or
 - (3) secured in accordance with Chapter 2257 or in any other manner and amount provided by law for deposits of the investing entity.
- (b) In addition to the authority to invest funds in certificates of deposit under Subsection (a), an investment in certificates of deposit made in accordance with the following conditions is an authorized investment under this subchapter:
 - (1) the funds are invested by an investing entity through:
 - (A) a broker that has a main office or a branch office in this state and is selected from a list adopted by the investing entity as required by Section 2256.025; or
 - (B) a depository institution that has its main office or a branch office in this state and that is selected by the investing entity;
 - (2) the broker or the depository institution selected by the investing entity under Subdivision (1) arranges for the deposit of the funds in certificates of deposit in one or more federally insured depository institutions, wherever located, for the account of the investing entity;
 - (3) the full amount of the principal and accrued interest of each of the certificates of deposit is insured by the United States or an instrumentality of the United States; and
 - (4) the investing entity appoints the depository institution selected by the investing entity under Subdivision (1),
 - an entity described by Section 2257.041(d), or a clearing broker-dealer registered with the Securities and Exchange Commission operating pursuant to Securities and Exchange Commission Rule 15c3-3 (17 C.F.R. Section 240.15c3-3) as custodian for the investing entity with respect to the certificates of deposit issued for the account of the investing entity.

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Clarify Policy Language

TRANSLATES TO THIS >>>

Condensing and clarifying the legalese for everyone

Fully FDIC insured or collateralized depository certificates of deposit from banks doing business in Texas

Fully insured share certificates of credit unions doing business in Texas

Fully FDIC insured brokered certificate of deposit securities from any US state, delivered versus payment to the district's safekeeping

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Policy Elements

○ Reporting

- PFI requirements – can just be referenced but...

Quarterly Reporting

■ *The Investment Officers shall prepare and present a signed quarterly investment report to the City Manager and Council in accordance with the Act giving detail information on each portfolio and bank position and summary information to permit an informed outside reader to evaluate the performance of the investment program. The report will include the following at a minimum as of the end of the reporting period:*

- *A full description of each individual security or bank/pool position held*
- *the amortized book value and market value at the beginning and end of the period,*
- *Unrealized gains or losses (book value minus market value),*
- *Weighted average yield of the portfolio (and its applicable benchmarks,)*
- *Earnings for the period (accrued interest plus accretion minus amortization)*
- *Asset allocation analysis of the total portfolio by market sector and maturity, and*
- *Statement of compliance of the investment portfolio with the Act and the Investment Policy*
- *Market prices for the calculation of market value will be obtained from independent sources.*

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Policy Elements

○ Designated Banking Services Depository

- *At least every five years, a banking services depository shall be selected through a competitive RFP or bid in accordance with the Texas Government Code 105.*
- *In selecting a depository, the services, cost of services, credit worthiness, earnings potential, and collateralization by the institutions shall be considered. The depository contract will provide for collateral if balances exceed the FDIC insurance balance per tax identification number and be executed under FIRREA.*

○ Broker/Dealers

- *Broker/dealer requirements and broker list*
- *All financial institutions, and broker/dealers who desire to transact business with the City must supply the following documents to the Investments Officer(s).*
 - *Financial Industry Regulatory Authority (FINRA) certification and CRD #*
 - *Proof of Texas State Securities registration (if brokers)*
- *Each broker/dealer will be sent a copy of the City's investment policy. If material changes are made to the policy, the new policy will be sent to the entities.*

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Policy Elements

- Collateral Policy
 - For Time and Demand Deposits
 - *Time and Demand Deposits Pledged Collateral*
 - *All bank time and demand deposits shall be collateralized above the FDIC coverage by pledged collateral. In order to anticipate market changes and provide a level of security for all funds, collateral will be maintained and monitored by the pledging depository at a market value of **102%** of the total principal and accrued interest on the deposits. The bank shall monitor and maintain the margins on a daily basis.*
 - *Include what is authorized as collateral*
- Safekeeping
- Policy adoption by governing body
 - *The City's Investment Policy shall be reviewed and adopted by resolution of the City Council no less than annually. Any changes made to the Policy must be noted in the adopting resolution.*

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Policy Elements

- Security Safekeeping/Custody
 - If you buy marketable securities
 - *All purchased securities are to be cleared to the City's safekeeping agent/custodian on a delivery versus payment (DVP) basis.*
 - *All safekeeping relationships shall be approved by the Investment Officer and an agreement of the terms executed in writing.*
 - *The independent third-party safekeeping agent shall be required to report or issue safekeeping receipts to the City listing each specific security, rate, description, maturity, cusip number, and other pertinent information on a timely basis.*

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Then, the Strategy

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Macro Written Strategies

- Dependent on your cash flow and fund type
- Dependent on your risk tolerance
- Dependent on your policy limits
- Require some analysis
- Partially dependent on your economic view*
 - Will rates go up?
 - When will it go up?
 - How far will it go?

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PFIA Required Macro Strategy

Your Macro Strategy

- A statement on the passive to pro-active range
- Directed to or the whole portfolio or sub-portfolios – or both
- Must include a maximum WAM (overall or by sub-portfolio/fund)
- Requires annual review and adoption
- Must be flexible enough to adjust to market and internal conditions
- Included in your policy to keep both in sync
- Assure that resolution approves both policy and strategy (plus brokers??)

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A Macro Strategy?

Keep it simple

Not all fund/sub-portfolios are alike in cash flows

*The City may maintain one **commingled** portfolio (or not) for investment purposes which incorporates the specific uses and the unique characteristics of the funds in the portfolio.*

*The investment strategy has as its primary objective assurance that anticipated liabilities are matched and adequate liquidity provided. The City shall pursue a pro-active but conservative portfolio management strategy using a **buy-and-hold** strategy.*

This may be accomplished by creating a laddered maturity structure with some extension for yield enhancement.

The Strategy must be adopted annually. State approval in the resolution.

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Sample Strategy for a Short Conservative Portfolio

The primary objective is liquidity and reasonable yield.

Authorized securities or the pool used will be of the highest credit quality. When not matched to a liability it will be short term and liquid.

The portfolio will be diversified to avoid market and credit risk.

Diversification requirements can be met through a pool.

Maximum WAM is one year.

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Sample Strategy for a Short Conservative Pro-active Portfolio

The primary objective is to invest in accordance with cash flow needs to produce a market yield. All securities will be of the highest credit quality to manage risk.

The portfolio will be structured as a ladder to match known liabilities and providing for a reasonable liquidity buffer for unexpected needs. }

The portfolio will be diversified to avoid market and credit risk.

The maximum weighted average maturity will be one year.

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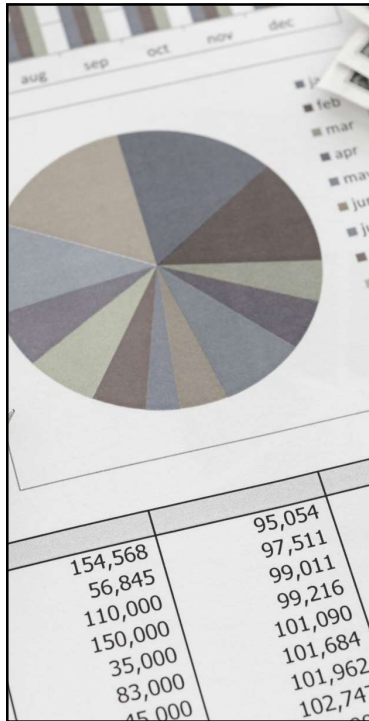
Why Different Strategies



- Strategies are dependent on
 - the use of the funds and
 - its cash flows

- What would differentiate the 'strategy' be for these?
 - Debt Service Fund?
 - Operating Fund?
 - Bond Proceeds?

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As a Strategy Public Funds are 90% Buy and Hold

- Securities are bought to match cash flow needs
- Assures funds availability and requires minimum time
- Works well with a laddered portfolio
- Effective when used in conjunction with a formal cash flow.
- Keeps transaction costs down

- Proven to outperform "active management" on a total cost basis.

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Common Macro Strategies

- **100% Cash**
 - (pools, bank deposits, money markets) - opportunity cost
- **Ladder**
 - Matching known liabilities with a liquidity buffer
- **Barbell**
 - Split maturities add capture yield – liquidity risk possibility
 - Could be used in a commingled portfolio effectively

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Strategy of Full Liquidity

- All funds held in fully liquid cash instruments
 - bank deposits, local government investment pools, money market funds

This strategy is beneficial when:

- Interest rates are rising quickly
- The yield curve is flat or inverted
- No clear understanding of cash flow

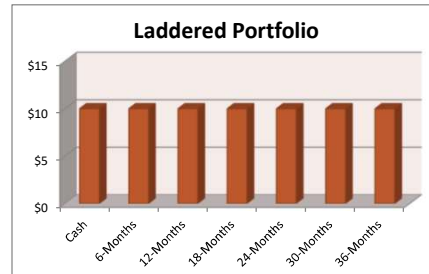
Disadvantages:

- Very low yields
- *Lacks diversification by market sector*
- *Left at mercy of rates if the market shifts directions and yields drop*

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A Ladder Strategy

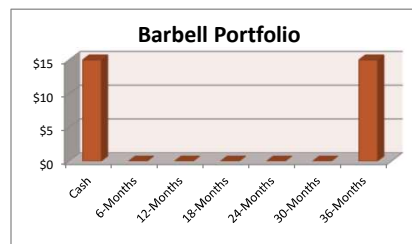
- In a laddered portfolio securities are positioned to match liabilities so maturities occur in regular intervals to provide a known stream of cash.
- The laddered portfolio may, or may not, correspond with expected future expenditures.
- Regardless of interest rates move, you will be reinvesting at the prevailing market yield.



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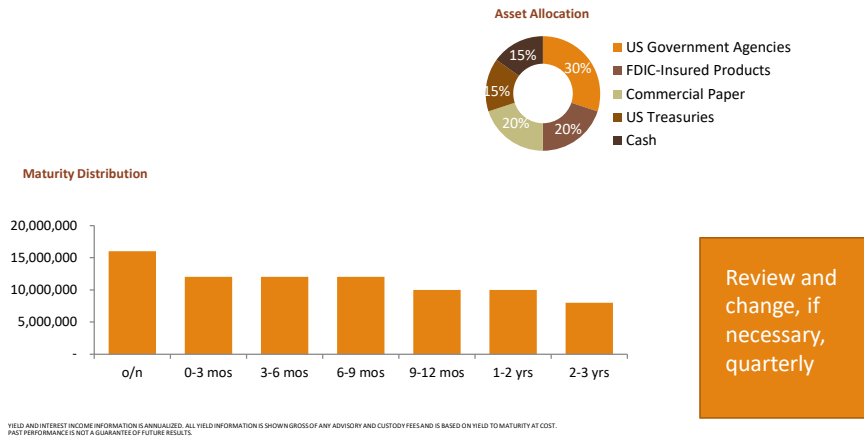
The Barbell Strategy

- A barbell maintains some of the portfolio in liquid deposits then invests a portion in longer, higher yielding securities (usually 18 to 36 months)
- **Disadvantage and Danger:**
- Rates will impact the portfolio directly and immediately.
- If rates fall longer end will support shorter.
- If rates rise liquidity has to cover all needs because long end will be at unrealized loss.



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A Strategy Plan Can Add Diversification, Flexibility, and Earnings



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The Strategy of Commingling

- Think through the portfolio structure
 - *Radically* different fund types need a separate policy
- Separate portfolios
 - Require separate accounting
 - May cause liquidity problems
 - Can reduce yield by requiring liquidity balances
- Commingled portfolios
 - Can still address unique needs of funds
 - Smaller liquidity needs may allow more extensions
 - Reporting is simpler



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Needed: A Collateral Policy



More than your banking services bank needs this information



Define your authorized collateral



Define terms and conditions



Define responsibilities

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Keys for Collateral

FDIC insurance cover by tax id and type of account

Collateral is pledged not owned

Set the margin at 102% to protect from price volatility

Establish independent custody

Require independent monthly reporting

- PFCA requires you request the monthly report

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Your Pledged Collateral Policy

Sample Collateral Policy:

The City requires pledged collateral with a market value of 102% market value of all time and demand deposits above the FDIC limit at all times.

Authorized collateral includes only:

- *Obligations of the US Government, its agencies and instruments including mortgage-backed securities,*
- *Obligations of any US state or subdivision with a rating of A or equivalent,*
- *Irrevocable letters of credit of a FHLB.*

Collateral shall be held by an independent custodian. Monthly reporting is required, preferably provided by the custodian. Substitution must be approved by the City.

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What about Substitute Collateral

- Many banks are changing to Bank of New York as custodian
 - More efficient for banks in transfers
 - Possible lower costs for banks
- Non-approval of substitution may be requested
- Beneficial move for daily inquiry access to market value

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Monthly Collateral Reports

- Investment officer’s responsibility to review
- The value you are watching is market value
- New bank moves to money center banks might add online daily inquiry
 - Adds inquiry and daily pricing for your control
 - May require blanket approval by the City

The Monthly Collateral Report

DATE COMPLETED: January 05, 2023 **COLLATERAL ANALYSIS AS OF:** December 31, 2022
CONTRA NUMBER: PL-0000725 **COLLATERAL ACCOUNT NUMBER:** WUJ2295
COLLATERAL WHEREHELD: Bank of New York Mellon

CUSIP	Description	CPN	Maturity Date	Original Face	Current Par	Market Value	Collateral Value
140XDN85	FN FMS414 3.500% 05/01/2047	3.50	5/1/2047	2,032,305.00	1,510,322.60	1,407,668.18	1,407,668.18
Total for Collateral Account Number: WUJ2295				\$2,032,305.00	\$1,510,322.60	\$1,407,668.18	\$1,407,668.18
Total for PL-0000725 :				\$2,032,305.00	\$1,510,322.60	\$1,407,668.18	\$1,407,668.18



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What is PFIA Designed to Do?

Guidelines	Flexibility	Application
<p>Provide guidelines for safety</p> <ul style="list-style-type: none"> • Highest credit quality limits • Requires controls (maximum maturity, maximum WAM, DVP) 	<p>Provide for flexibility to match individual needs</p> <ul style="list-style-type: none"> • Allow flexibility for entities to set their own parameters • Allow for adjustments to internal and external change 	<p>Applies to all entities regardless of size</p> <ul style="list-style-type: none"> • You tailor it to your situation and needs • The decisions are <u>yours</u> to make

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PFIA Policy Specific Requirements

Write and adopt a policy annually

- Must be adopted by resolution
 - The resolution must show any changes made
- Must set a maximum maturity
- Must set a maximum weighted average maturity (WAM)
- Must include DVP requirement



Write and adopt a strategy (2256.005)



Governing body must review and adopt the strategy annually



Strategy must be approved by resolution



Strategy must include the maximum weighted average maturity (WAM) by fund

PFIA Strategy Specific Requirement

Designated Investment Officers

- **Governing Body Designates Investment Officer(s) by rule, order ordinance or resolution** (2256.005)
 - Governing body may choose anyone as IO
 - IO is responsible for investment consistent with policy
 - A contracted adviser/entity can also be an IO
 - Effective until rescinded or terminated from employment
 - IO must follow Prudent Person Rule
 - Council must provide for the training of officers
 - No person can deposit, withdraw, transfer or manager unless authorized by law
 - Council has the option to chose officers (no necessary set position)
 - Regional Planning Commission can only serve Commission as IO
- **The governing body retains ultimate fiduciary responsibility by statute**

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PFIA Officer Training

Applicable to Treasurer and investment officer(s)

*and CFO (if Treasurer is not the CFO)

Must use an independent source approved by governing body or its designated investment committee

*This is not an annual designation

All officers take 10 hours within 12 months of taking position

All City and ISD officers take 8 hours each successive two *fiscal* years

*Fiscal year begins on first day of fiscal year

Training must include:

*IO Responsibilities, controls, security risks, strategy risks, market risks, diversification and compliance to Act

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Investment Officer Ethics

- IO must be a local and designated (and 'Treasurer' if there is one)
- Must disclose personal/business relationships by officer
 - Refers to personal business relationships
 - IO must file a statement disclosing the relationship
 - **If IO relationship is within two levels of blood or marriage and**
 1. If IO owns >10% of voting stock/shares or >\$5,000 in fair market value of firm
 2. If IO received >10% of IO's prior year income from the firm
 3. If IO received >\$2,500 in investments in prior year for his personal account
 - If these limits are met then file with the Texas Ethics Commission
- Specific income limits are set but full disclosure is safer/easier



TEXAS ETHICS COMMISSION
Promoting Public Confidence in Government

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PFIA Required Standard of Care

- Investments *shall* be made in accordance with the Standard
 - The Prudent Person Rule
- Investments are governed in order of priority by:
 - Preservation and safety of principal
 - Liquidity
 - yield
- Determination of prudence takes into consideration:
 - Investment of all funds – not a single investment
 - Whether the investment was consistent with the policy

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PFIA Standard of Care

▪The Prudent Person Rule is Our Standard

Investments shall be made with judgment and care under circumstances then prevailing that persons of prudence, discretion and intelligence exercise in the management of their own affairs not for speculation but for investment considering probable safety as well as probable income.

▪Addresses the cyclical nature of investing

▪Periodic required reviews/reports address changes



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Actions Required by the Act

▪Annually

- Governing body adoption of policy
- Governing body adoption of written macro strategy
- Adoption of broker list

▪Quarterly

- Quarterly reporting *presented* to governing board

▪One-time actions

- Designation of investment officers
- Approved training sources

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Ratings Requirements in the Act

Rating required

- Pools, Municipals, CP, BA

Insurance requirements


- Time and demand deposits
- Depository CDs
- Share certificates
- Brokered CDs
- FDIC or collateral on depository CDs

Change action required

- If a security loses its required credit rating you must liquidate it

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Procedural Requirements

- Securities that become “unauthorized” by law or policy
 - Need not be liquidated
 - Reinvestment must be as provided in policy
- Depository securities in mergers and acquisitions
 - Primarily brokered CDs
 - Also, depository CDs
- Securities that lose their required rating
 - Entity must take *prudent steps* to liquidate
 - Must be liquidated but no specific time period

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Specific Additional Investment Authorizations

Schools Districts are authorized to buy corporate notes if:

- It is rated no less than "AA-"
- It is not convertible to stock and is secured
- The District has an average of over 50,000 students

Cities are authorized to Hedge risk in several instances if:

- The hedge complies with CFTC (Commodities Futures Trading Commission)
- The hedge is segregated and accounted for separately on city books
- The city is an "eligible entity" and uses the hedge for "eligible projects"

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Required Quarterly Reporting

- Describes the investment position of the entity in **detail**
- Is prepared jointly by investment officers
- Is **signed** by each investment officer
- Is **presented** to governing body and chief executive quarterly
 - On a timely basis within a reasonable time (*usually 45 days is reasonable*)
- Contains **summary** information
 - Beginning and ending market value
 - Fully accrued interest (net earnings)
- **Details** each position by book/market, maturity date, fund
- States **compliance** with Policy and PFIA

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Audits Required by the Act

- External auditor
 - If you invest in other than CD and pools
 - Auditor must review the quarterly reports
- Internal Compliance audit
 - Compliance to your policy
 - Compliance to the PFIA

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PFIA Governing Body Duties

- **The Board**
 - retains ultimate fiduciary responsibility by law
 - designates the investment officers
 - reviews and approves policy annually
 - reviews and adopts strategy annually
 - receives quarterly reports
 - approves broker/dealer list annually
 - approves training sources
 - can designate an Investment Committees (optional)

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PFIA Investment Officers' Duties

Investment officers

- Must disclose any personal blood/money conflicts
- Must prepare and sign quarterly reports
- Must attend to training every 2 fiscal years
- Must comply with the Policy
- Must suggest and monitor broker/dealers and certification
- Must monitor credit ratings
- Must advise the Council
- Must do or arrange for an annual compliance review
- Must provide for documented competitive transactions

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Counter-party Duties

Pool Policy Certification

- “**Business Organizations**” are defined only as **pools** and ‘discretionary investment firms’
- These two must review and certify to the Policy

Auditors

- Must review the quarterly reports
 - If investments in more than CD and pools are made

RIA: Non-discretionary Investment advisors

- Should receive and certify to the Policy
- Can assume all investment officer responsibilities
 - May be designated as the entity’s investment officer
- Complies to a higher “prudent expert” standard

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PFIA Policy Certification Requirement

Pools Only

- The certificate effectively states:
 - Organization has implemented control procedures except where:
 - Policy requires an interpretation of subjective investment standards
 - Policy relates to funds not invested through the organization
- The certificate must be received before any transaction takes place
- Policy certification must be *acceptable* to both parties – language is not set by PFIA
 - Nothing relieves entity of responsibility to monitor investments
 - Pools now have standard certificates – use them

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PFIA Broker Requirements

- Broker/Dealers
 - Governing body must annually review, revise and adopt list of authorized broker/dealers
 - List is for broker/dealers only not banks
 - Can be approved by *governing body designated* investment committee (a committee established by the Council)
- Broker/Dealer policy certification is no longer required
 - Best practice is to send the policy to any broker/dealer

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Create your checklist for Compliance

TEXAS PUBLIC FUNDS INVESTMENT ACT COMPLIANCE ITEMS FOR LOCAL GOVERNMENTS 2022

Act Ref.	Compliance Point	Are you in compliance?		
		Yes	No	N/A
2256.004	Applicability does not apply to retirement funds, state funds, higher ed endowments over \$150 million, VLB, County registry funds, deferred compensation funds or specially donated funds			
2256.005(a)	Governing body shall adopt a written policy at least annually			
2256.005(b)	Investment policy must:			
	- be written			
	- primarily emphasize safety of principal and liquidity			
	- address diversification, yield, maturity			
	- address quality and capability of investment management (the IO's training)			
2256.005(b)	Investment policy must include:			
	- a list of authorized investments			
	- maximum allowable stated maturity of any investment (overall or by security type)			
	- maximum dollar-weighted average maturity authorized - based on stated maturity dates			
	- method to monitor market price ('independent pricing' required)			
	- requirement to settle all transaction (except pools/funds) delivery versus payment			
	- include a procedure to monitor credit rating changes			
2256.005(c)	Policy <u>may</u> provide for CD bids to be solicited orally, in writing, or electronically			
2256.005(d)	Governing body must adopt a strategy for each portfolio (called <i>pooled fund group</i> in Act)			
	Strategy must include a maximum WAM for each portfolio (<i>pooled fund group</i>)			
	Strategy must describe the objectives and how they will be met, in the following priority order:			
	- understanding the suitability of the investments to financial requirements of the entity			
	- preservation of principal			
	- liquidity			
	- marketability of the investment if liquidity needs arise			
	- diversification of the portfolio			
	- yield			
2256.005(e)	Governing body shall review and adopt by resolution policy and strategies not less than annually			
	Resolution adopting policy/strategy must show changes made to documents			

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Banking Changes

- Significant changes have occurred in banking
 - Particularly large national banks

- Bank regulations have been broadly applied
- Bank failures have shaken confidence
- Banks focus on services not deposits

- These directly affect public entities

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Translation for Public Entities

- Banks will try to reduce collateral
 - Use of letters of credit instead of securities
- Banks will add fees to address regulatory burden
 - Balance based fees
- Banks trade investment for service
 - Service not depository duty

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What is the impact?

- Public entities require banks to collateralize above FDIC insurance
- Collateral is normally securities owned by the bank
- Securities used for collateral reduce liquidity available to the bank
- Ownership is retained but securities are being leveraged
- Public entities decrease the liquidity ratio which is to be raised
- Public entities increase the leverage ratio which is to be lowered
- Public entities have wide swings in balances creating unstable deposits

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The Result

- Banks appetites for public funds has seriously diminished
- Banks have developed means to reduce the impact of collateral
 - Primarily through use of letters of credit
- Banks are not as aggressively bidding for public deposits

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Why Letters of Credit

- Many banks require use of LOC
- Cost differential for banks
 - Securities cost about 10-12 bps. and a LOC 5 bps.
- What is a LOC? How do I use it?
 - FHLB is a banker's bank owned by the member banks
 - Credit backing comes from the member banks
 - Time requirements for amount changes can be critical

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Balance Based Fee

Banks want to reduce balances

- Banks have too much liquidity
- Not all banks pass through – ask! - verify

Based on bank but basically 0.10% to 0.12%

- On \$5mm that's \$5,000 year

Higher balances hurt you if fee assessed

- Reduce balances through moving funds or sweeps

Look for your Balance Based Fee

Sample Account Analysis Detail

SUMMARY OF ACCOUNT SERVICES					
SERVICE DESCRIPTION	AFP CODE	VOLUME	UNIT PRICE	TOTAL PRICE	COLLECTED BALANCE REQUIRED
DEMAND DEPOSIT RELATED SERVICES					
ACCOUNT MAINTENANCE	01 00 00	7	4.9000	34.30	55,642.16
ACCOUNT BALANCE FEE	00 02 30	21,839	0.1420	3,101.14	5,030,731.33
REGULAR DEPOSIT TICKET	10 02 00	212	0.1750	37.10	61,156.36
DEPOSIT ITEMS-ON US(N)	10 02 20	25	0.0353	0.88	1,427.55
DEPOSITED ITEMS-TRANSIT	10 02 00	477	0.0420	20.03	32,493.07
PAID ITEMS	15 01 00	413	0.0630	26.02	42,210.17
RETURNS	10 04 00	5	2.4500	12.25	19,872.20
RECLEARS	10 04 02	6	2.5000	15.00	24,333.90
BLOCKED CHECKS	01 99 99	1	16.0000	16.00	25,955.52
				\$3,262.72	\$5,292,849.66

Use Different Bank Account Types

Non-interest bearing accounts

Interest Bearing Accounts

Money Market ACCOUNTS *

Sweeps to Money Market FUND

Spread Accounts

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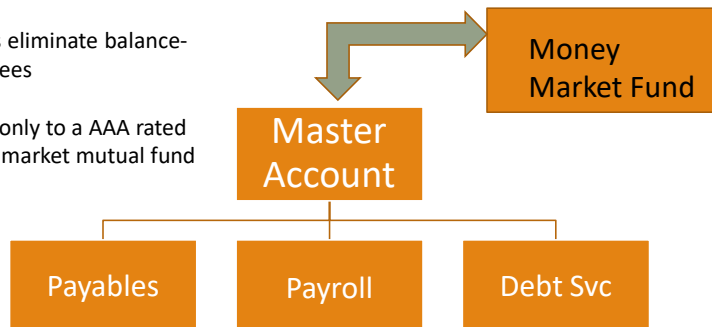
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Sweep Accounts

Sweeps usually have higher interest rates than bank

Sweeps eliminate balance-based fees

Sweep only to a AAA rated money market mutual fund



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How You Pay for Bank Services Must Depend on Rates

- The method hinges on investment rates
 - **Compensating balance basis**
 - Traditional for public entities
 - You leave money in bank which earns \$\$ and pays the bill
 - You never see the charge – it looks “free”
 - The cost is the use of your money and its potential earnings
 - **Fee Basis**
 - You pay the fees for the service by debit to the account

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Your Decision Hinges on Rates

- Do you use compensating balances?
- If so, compare your ECR to outside options
 - A 0.90% ECR on \$7 million balance will generate \$5,250/month
 - If rates outside give you 5.00% the same \$7 million generates \$ 29,166/ month
- Invest the funds outside
 - pay \$5,250 directly and keep \$ 23,916 (\$286,992/year)

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Different Rates Control

- Move to Fee Basis if rates outside better
 - Pay the bank and keep the earnings
 - Watch out for the “free services” and balance fee
- Use investment options through the bank
 - Sweeps take money out of bank
 - Eliminates regulatory fee
 - Does not require bank to hold collateral
- Use investment options outside the bank
 - Pools are just as liquid – transfer in as needed

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The Rates Say It All

	Comp Balance	Fee Basis	Fee Basis
ECR	0.40 %	0.40 %	0.40 %
Bal. Required	\$ 5,000,000	00	00
ECR Earnings	\$ 1,667	00	00
Sweep %	00	1.75 %	1.75 %
Sweep Amount	00	\$ 5,000,000	\$ 1,500,000
Sweep Earnings	00	\$ 7,292	\$ 2,188
Pool %	2.20 %	2.20 %	2.20 %
Pool Amount	00	00	\$ 3,500,000
Pool Earnings	00	00	\$ 6,416
Net to Bank (fee)	\$ 1,667	\$ 1,667	\$ 1,667
Net to You	00	\$ 5,625	\$ 8,604
Net Annual Earnings	00	\$ 67,500	\$ 103,248

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Then Add in a Balance Based Fee

	Comp Balance	Fee Basis	Fee Basis
ECR	0.40 %	0.40 %	0.40 %
Bal. Required	\$ 5,000,000	00	00
ECR Earnings	\$ 1,667	00	00
Balance Based fee	\$500	0	0
Sweep %	00	1.75 %	1.75 %
Sweep Amount	00	\$ 5,000,000	\$ 1,500,000
Sweep Earnings	00	\$ 7,292	\$ 2,188
Pool %	2.20 %	2.20 %	2.20 %
Pool Amount	00	00	\$ 3,500,000
Pool Earnings	00	00	\$ 6,416
Net to Bank (fee)	\$ 2,167	\$ 1,667	\$ 1,667
Net to You	00	\$ 5,625	\$ 8,604
Net Annual Earnings	00	\$ 67,500	\$ 103,248

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BALANCE INFORMATION

	\$15,781,757.58
	\$47,131.01
Average Collected Balance	\$15,734,626.57
Average Negative Collected Balance	\$0.00
Average Positive Collected Balance	\$15,734,626.56
Positive Collected Balance	\$15,734,626.56
Less Legal Reserve	\$1,573,462.66
Investible Balance for Earnings Allowance	\$14,161,163.90

EARNINGS ALLOWANCE INFORMATION

	Average Balances	Rate	Amount
Earnings Allowance on Positive Balance	\$14,161,163.90	0.3400%	\$4,078.13
Expenses on Negative Collected Balance	\$0.00	3.2500%	\$0.00
Net Earnings Allowance			\$4,078.13

ACCOUNT POSITION

Less Price of Services Used	\$2,569.42
Equalization Factor	\$0.00
Amount Due	\$0.00

The All-important
Account Analysis

Your invoice for service

City earned \$4,078 but
needed only \$ 2,569

Left \$1,509 behind

You can use 'carry-over'
to cure this – it's in your
RFP

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Carry-Over Management

- Managed by you and the bank monthly
 - Insist on quarterly/semi-annual carry-over
 - Adjust your balances monthly before close

- Managed by an automatic sweep
 - Sweep excess funds to a money market fund or account
 - Have the sweep set at either:
 - Compensating balance amount
 - Zero

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CURRENT MONTH'S EARNINGS CREDIT RATE = 0.35%		CURRENT MONTH'S MULTIPLE = \$3,476.19		
SERVICE	NUMBER OF UNITS	UNIT PRICE	SERVICE CHARGE	BALANCE REQUIRED
BALANCE RELATED SERVICES				
FDIC ASSESSMENT	531.494		57.70	200,576.19
DEPOSITORY SERVICES				
ACCOUNT MAINTENANCE	6	7.0000	42.00	146,000.00
VAULT DEPOSIT	178	.2500	44.50	154,490.47
ITEM PROCESSING DEPOSIT	3	.2500	.75	2,607.14
DEPOSIT CORRECTION-NON-CASH	4	3.0000	12.00	41,714.29
GENERAL CHECKS PAID TRUNCATED	172	.0700	12.04	41,055.53
DIRECT ODA STMT PER ACCT	10	.0000	.00	0.00
ZBA MASTER ACCOUNT MAINT	1	.0000	.00	0.00
ZBA SUBSIDIARY ACCOUNT MAINT	2	10.0000	20.00	69,523.81
RETURNS-CHARGEBACK	14	1.0000	14.00	48,666.66
RETURNS-RECLAR	22	1.0000	22.00	76,476.19
RETURNS-RECLAR SERVICES	4	.0000	.00	0.00
CKS DEP UN-ENCODED ITEMS	1,047	.0700	73.29	256,770.00
STOP PAY AUTOMATED<=12 MONTHS	1	3.0000	3.00	10,428.57
DEBITS POSTED-ELECTRONIC	79	.0500	3.95	13,730.95
CREDITS POSTED-ELECTRONIC	330	.0500	16.50	57,357.15
DEPOSIT ACCOUNT STATEMENTS	7	.0000	.00	0.00
GEN DISB CKS PD-IS FRONT IMG	30	.0700	2.10	7,300.00
IMAGE DEPOSIT	44	1.0000	44.00	152,952.38
IRD DEPOSITED ITEMS-ROSO	9	.0867	.78	2,711.43
IMAGE DEPOSITED ITEMS-ROSO	9,704	.0450	436.68	1,517,982.85
DIRECT ACCOUNT TRANSFER	5	.0000	.00	0.00
COMMERCIAL DEPS-CASH VAULT				
CURR/COIN DEP/100-VLT	2,366	.0500	118.30	411,233.34
COIN DEPOSIT-NON STD BAG-VLT	2	5.0000	10.00	34,761.91
DEPOSIT CORRECTION-CASH	1	3.0000	3.00	10,428.57
MAIL NOTIFICATION-DCN-VLT	1	.0000	.00	0.00
GENERAL ACH SERVICES				
ACH OPTIONAL RPTS-ELECTRONIC	7	1.0000	7.00	24,333.33
ACH RETURN ITEM	37	1.0000	37.00	128,619.05
ACH RECLEARS	31	1.0000	31.00	107,761.90

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Bank Safety is Founded on FIRREA

- **“Financial Institutions Resource, Recovery and Enforcement Act”**

- Regulation used by FDIC in bank closures
- Key components must be followed

- Requirements:

1. depository/collateral agreement be **in writing**
2. agreement be **approved by resolution** of the *Bank Board or Bank Loan Committee*
3. resolution must be **in ‘official’ bank records**
4. must not contain a list of specific securities pledged



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Use FDIC Coverage to your Advantage

- Based on type of account – a change in definitions

- All time and savings accounts = \$250,000
 - Includes *NOW* and money market accounts
- All demand accounts = \$250,000
 - Includes interest bearing and non-interest bearing

- Based on location of bank

- If the bank is outside the state all deposited are lumped together
- This has changed from ‘headquarters’



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IntraFi as an Option not a 'Sweep'


- IntraFi is the renamed Insured Cash Sweep
- Banks may 'present' ICS as a sweep, but:
 - ICS is a *money market account* with withdrawal limits
 - It does not give daily liquidity
- This is a *savings account* option - not a sweep

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Insured Cash Sweep

Your bank will either have it or not – it is bank controlled.



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Solutions / Depositors

Access multi-million-dollar FDIC insurance through one relationship.

IntraFi's network enables financial institutions to offer depositors access to FDIC insurance for their large-dollar deposits, all through a single financial relationship. This level of security is otherwise cumbersome of very costly to achieve.

[Find a Financial Institution](#)



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Repo Sweep Caution

- Repo Sweeps pose a unique risk – don't use them
 - Segregation of assets not a buy-sell transaction

- Collateral is *segregated* not bought and sold
 - As a sweep, repo must be established as buy-sell

- FDIC sweep construction by bank could cause loss
 - If agreement doesn't say 'buy-sell' do not use it

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Collateral Control

Remember:

- FDIC insurance covers by tax id and type of bank

- Collateral is pledged not owned


- Set the margin at 102% to protect from price volatility

- Establish independent custody

- Require independent monthly reporting and check the report!
 - PFCAs require you request the monthly report

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Monitor Your Bank

- Know your depository
- Understand the collateral terms and agreement
- Check collateral report monthly from custodian
- Take action if necessary

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Control the Banking Relationship

- Use the FDIC relationship
- Structure accounts to your advantage
- Always keep checking the fees and earnings rates

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■ RISKS

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MANAGING RISK

-  All investments involve risk
-  Risk cannot be avoided
-  Risk must be managed
-  You are the risk manager
-  A balance must be established between risk and return
-  There is minimal risk of losing money, but there is also risk of not earning all that you could.

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CREDIT RISK



The risk of value loss due to issuer default or delays on payment of interest or principal on a timely basis

Minimized by:

- Buying high credit quality securities
- Monitoring credit rating
- Diversifying between issuers
- Using investments and deposits that are collateralized
- Pre-qualifying the financial institutions and intermediaries

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LIQUIDITY RISK



The risk that the entity will need the money before the investment's maturity date restricting access to money.

Minimized by:

- Accurate cash flow projecting
- Laddering maturities
- Maintaining a small liquidity buffer for unanticipated needs

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COLLATERAL RISK

The risk of insufficient collateral to compensate the entity if a bank fails. The risk that ownership of collateral is not perfected or not available.

Minimized by:

- Requiring a minimum of 102% market security value
- Ensuring confirmation of the pledged collateral
- Ensuring security collateral is PFIA and policy authorized
- Monitoring the collateral at least monthly

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Money Center Custodians

- Many banks are moving to money center banks
 - Bank of New York as custodian
- Process and requirements remain the same
- Safeguards remain the same
 - Contractually controlled
 - Collateral management control groups in banks
- Right of approval of substitution may be waived
- Should offer you online access to monitor assets
- Pricing may be more frequent

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Banking Safety: Founded on FIRREA

▪ “Financial Institutions Resource, Recovery and Enforcement Act”

- Regulation used by FDIC in bank closures
- Key components must be followed

▪ Requirements:

1. depository/collateral agreement be **in writing**
2. agreement be **approved by resolution** of the *Bank Board or Bank Loan Committee*
3. resolution must be **in ‘official’ bank records**
4. must not contain a list of specific securities pledged



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Market Risks

Market Risk

- The risk that market prices will fall
- Lower prices threatens liquidity
 - If you can not sell at a loss
- If sold you might recognize a loss of principal
 - If not sold it is an “unrealized” loss and no threat

Volatility Risk (the “Fear Index”)

- The risk of significant changes in market prices
- Higher volatility = higher risk
- Volatility increases with longer maturities, low credit and structured securities



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The Rare Event Risk

Is the risk when markets move in unexpected directions

- An unforeseen event can cause markets to turn quickly
- Markets move especially with *uncertainty*
- Or, a risk at your bank!



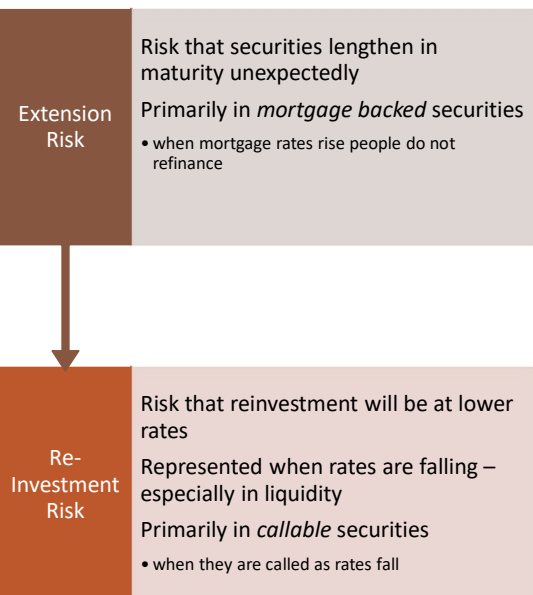
Minimized by:

- Diversification
- Remembering that you are a buy and hold portfolio
 - You are matching liabilities that do not change
- Your events risks are internal more often than not

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Security Structure Risk



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Technology's Risks

Employee controls

- Pin numbers and separation
- Limited access to applications
- Stand alone computer access


PCI control

Bank fraud controls

- Filters/blocks on ACH
- Payee positive pay

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Safekeeping and Custody Risk

Custody Risk

- Accompanied by high fiduciary responsibility
- Custody of pledged securities
- Risk to proof of the pledge
- Risk to control of the pledge

Safekeeping Risk

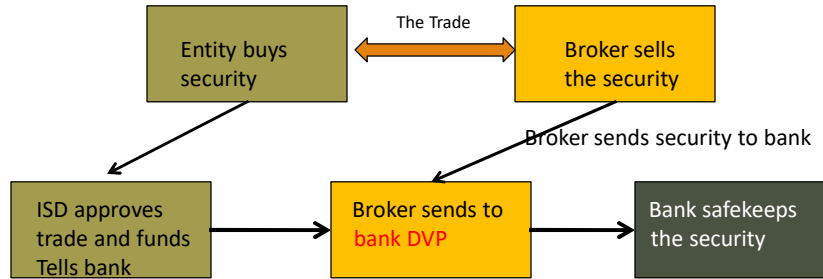
- Lower fiduciary responsibility
- Safekeeping of securities you own
- Risk to your proof of ownership
 - Proving your ownership

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What is Settlement and Safekeeping

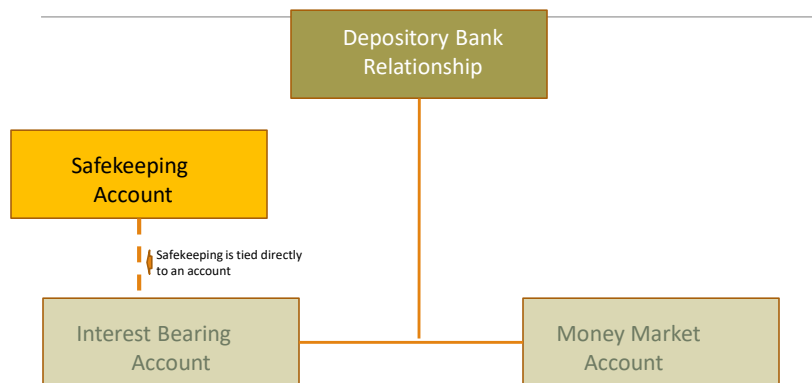
- An institution holding securities owned by you.



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Safekeeping Bank Accounts



Safekeeping accounts are not regular bank accounts but must be tied to a demand deposit account (DDA) so that money that buys a security can only flow back to the same account. These accounts are in the securities clearing section of the bank and assigned by name.

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Sample Safekeeping Fees

Account maintenance	\$10.00/month/account	✓
Safekeeping Online (Safekeeping Docs, Messenger, Safekeeping Extract)	\$50.00/month – 3 services \$10.00/month – basic service	
Per Item Charges		
Fixed income book entry per receipt	\$0.60	
Equity book entry per receipt	\$1.50	
Physical per receipt	\$2.00	
Book entry per \$10,000 at par at month-end	\$0.01/month	
Physical entry per \$10,000 of par at month-end	\$0.10/month	
Receipt Fees		
Security receipt and clearance fees	On-us Transactions	Not On-US Transactions
FRB non-ABS/MBS	-	\$20.00
FRB ABS/MBS	-	\$25.00
Non-FRB, non-ABS/MBS	-	\$30.00
Non-FRB, ABS/MBS	-	\$35.00
Physical items	-	\$75.00
Late delivery instructions	-	\$25.00
Change delivery instructions	-	\$25.00
Transactional Fees		
Interest payment – credit to account	\$1.00	
Principal payment – credit to account	\$8.00	
Called bond redemptions – credit to account	\$10.00	
Maturities – credit to account	\$10.00	
Wire fee	\$11.00	
Cashier's check	\$10.00	

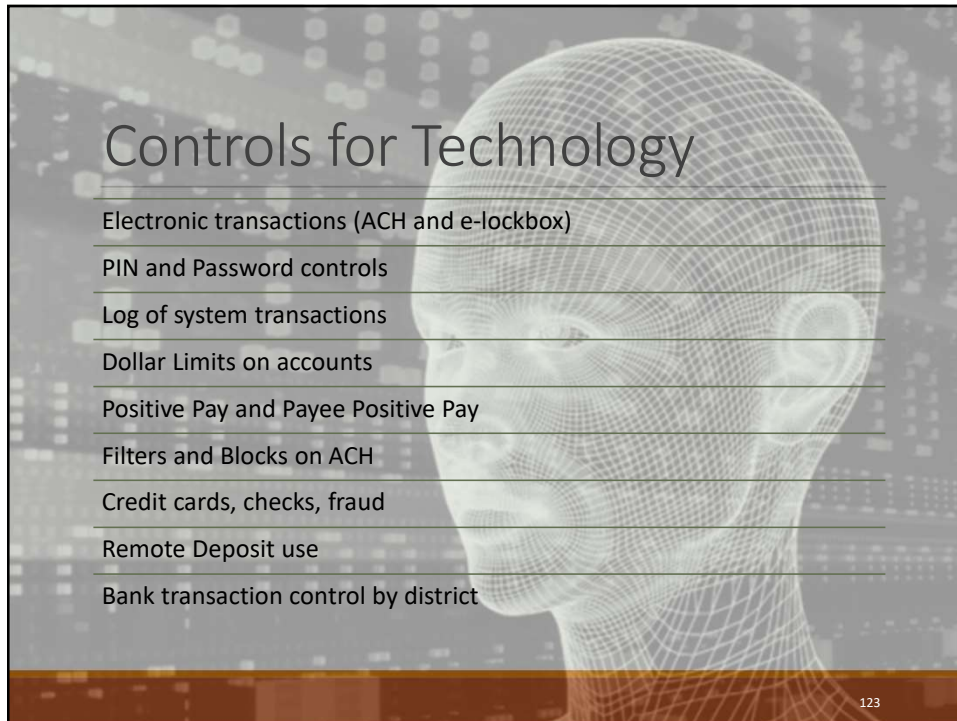
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Key Custody and Safekeeping Factors



- Custodian/safekeeper must be independent
- Custodian/safekeeper should report to you directly
- Custodian will verify authorized collateral and margin
- Custodians should mark-to-market
- Safekeeper will not be responsible past your request
- You chose your safekeeping agent
- You approve your custodian

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Controls for Technology

- Electronic transactions (ACH and e-lockbox)
- PIN and Password controls
- Log of system transactions
- Dollar Limits on accounts
- Positive Pay and Payee Positive Pay
- Filters and Blocks on ACH
- Credit cards, checks, fraud
- Remote Deposit use
- Bank transaction control by district

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The funds the investor lost because the best rates were not chosen.
The difference between current investment return and alternative investment offering a higher return.

An example would be purchasing US T-Bill yielding 4.00 % instead of commercial paper yielding 5.60%

- 1.60 % difference in yield is the opportunity cost
 - On \$1mm that's \$16,000/year!
- *Minimized by*
 - Diversification
 - Monitoring market sectors for the best rates
 - Competition

OPPORTUNITY COST RISK

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Non-Market Risks



Counterparty risk

- Check for FINRA registration (FINRA.org, broker check)
- Require independent safekeeping outside brokerage

Banking risks

- Reconcile within 30 days
- Verify availability of funds
- Monitor cost of services and account structure with account analysis

Employee risk

- Separation of duties
- Oversight and cross training
- Cash controls like numbered receipts, safes, assigned tills

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Risk, Return and Strategy Belong Together

Your strategy and opportunities will depend on:

- Your resources and risk tolerance
- Your cash flow
- The time you spend



You are basically a BUY AND HOLD portfolio

Controls can help minimize risks

You more on cash flow than economic or geo-political conditions

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Key Controls and Limits

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You Need Investment Controls

- Outline the controls you need
- Controls must be flexible to adapt to change
- Set short, concise controls and procedures

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Why Expand with Procedures

Written procedures can supplement policy

They provide room to explain rationale and define terms

They record online references and sign-ons, etc.

They provide continuity and safety

They don't have to go back to the governing body

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Procedure for Monitoring Brokered CDs

- Even more important than credit ratings
- Difference created by FDIC coverage limited to \$250,000
 - No reprieve for mergers and acquisitions
- *The Investment Officer shall monitor, on no less than a **weekly** basis, the status and ownership of all banks issuing **brokered CDs** owned based upon information from the **FDIC**. If any bank has been acquired or merged with another bank in which brokered CDs are owned, the Investment Officer shall **immediately liquidate** any brokered CD which exceeds the FDIC insurance level.*

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Procedure for Monitoring Credit

- Act requires a procedure to monitor ratings
 - PFIA: “an investment that requires a minimum rating...does not qualify during period without minimum rating...take all prudent measures to liquidate...”

- Monitoring credit on securities requiring rating
 - Commercial paper
 - Bankers Acceptances
 - State and Local government bonds
 - (Corporate bonds – only for higher education)
 - Pools

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Monitoring Credit with Analysis

- The Officer shall monitor on a monthly basis, the credit rating on all authorized investments requiring a rating based on independent information from a nationally recognized rating agency.

- If the security falls below the minimum rating, the Officer will notify----- of the loss of rating, conditions affecting the rating and possible loss of principal along with liquidation alternatives available for action within two weeks of the loss of rating.

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Monitoring Credit on Automatic Pilot

- The Officer, or adviser, shall monitor on a monthly basis, the credit rating on all authorized investments requiring a rating based on independent information from a nationally recognized rating agency.
- If the security falls below the minimum rating, the Investment Officer shall **immediately solicit bids for and sell** the security, if possible, regardless of loss of principal.

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Procedures for Banking Controls



Reconciliation



Account analysis review



Payment methodology according to rates



Timely Reporting



Independent safe-keeping

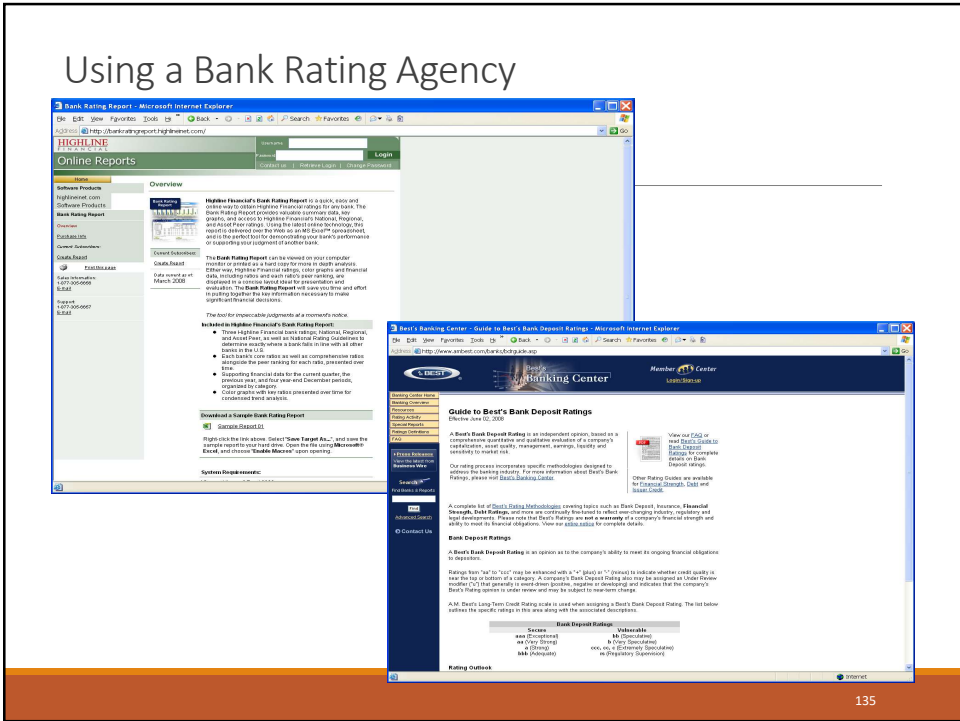


Written collateral agreement

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Using a Bank Rating Agency



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Safekeeping/Custody Control

- Safekeeping
- Must be **delivery versus payment**
 - Requires **independent** safekeeping away from the trade
 - No broker safekeeping

Securities owned by the District will be safe-kept at its banking services depository or an approved custodian and all security transactions will be made delivery versus payment.

The safekeeping bank/custodian will not be used as a broker.

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Investment Employee Controls

Separation of transaction authority

- Separate transaction, accounting, and recordkeeping

Delegation of authority

- Investment decision-making
- Subordinate staff limitations
- mandatory vacations/job rotation
- perform work during period

Get and match written confirmations on all transactions

Limit access to cash

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So How Do I
Reach My Policy
Objectives?

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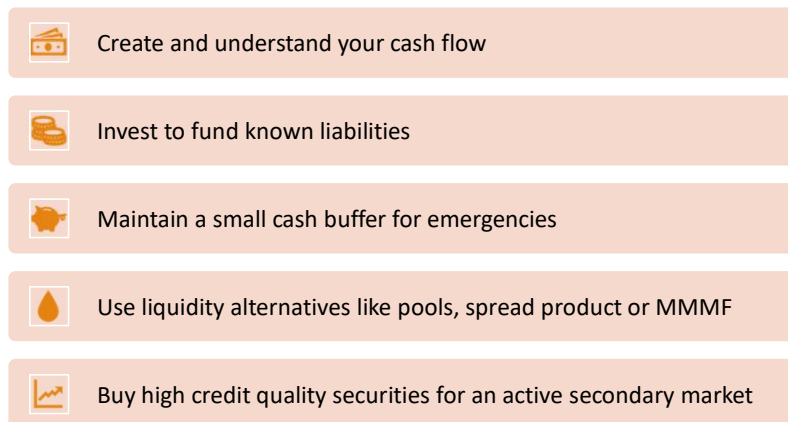
138

How do I achieve Safety?



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How do I achieve Liquidity?



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How do I achieve Diversification?

Create competition in every transaction

- Never rely on one institution or broker
- Do not allow a broker to do competitive bidding for you

Diversify by type of security

- Knowledge of the alternative securities
- Use securities that make sense for the period

Diversification maturity

- Create a ladder to meet your liabilities

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How do I achieve Yield?



Invest to your cash flow needs



Reduce lower yielding balances at bank



Know the securities and use appropriate ones



Assure there is always competition



Know, compare and use your alternatives



Monitor bank costs and structures

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A slide with a solid orange vertical bar on the left side. The text "Keys in Investment Reporting" is written in white on the orange bar. To the right, a list of six items is presented, each preceded by a horizontal line. The items are: Accuracy, Timeliness, Compliance, Risk Identification, Pricing and Value Representation, and Information at multiple levels. The slide has a solid orange footer bar.

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Purpose of Portfolio Reporting

Risk identification

- Show Gain/Loss (liquidity)
- Volatility risk (change in market value)

Provide accounting/archiving

- Detail for holdings
- Summarize for information

Illustrate compliance

- Compliance with policy parameters

Judge performance

- Yield
- Benchmark comparison

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Reports Reflect Policy Parameters



- Key report parameters reflect your policy compliance
 - Maximum maturity limitations
 - Maximum average maturity limitations
 - Diversification goals and limits
 - Performance benchmarks
 - Philosophy (Strategy) on the portfolio
 - Volatility (change in market value)
 - not required by PFIA as of 2011
- Reports reflect risk tolerance

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Two types of securities
 Discount securities
 Fixed income securities (with a coupon)

Two values
 Market value = price of you sell it
 Book value = your value net of amortization
 Each change daily

Three computations
 Interest accrual (coupons)
 Accretion (from a discount is earnings)
 Amortization (from a premium is an expense)

Accounting and Reporting

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Securities Earn Only Two Ways

Earnings come only from:

Principal

- The value of the principal increases

Interest

- A coupon accrued then pays on a schedule
- Rate accrues then pays on a fund/pool

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Funds in liquid or semi-liquid accounts earn each day at the set rate

Pools

Bank accounts

Money market funds

Earnings accrue each day the funds are held usually at a varying rate



Securities which carry a *coupon* also earn on the coupon rate

Any security originally set to mature over 1 year will have a coupon

The coupon rate will 'pay' accrued interest at that rate for the year

The accrual payments are made semi-annually

Your earnings accrue each day and are reported each month

Accrual

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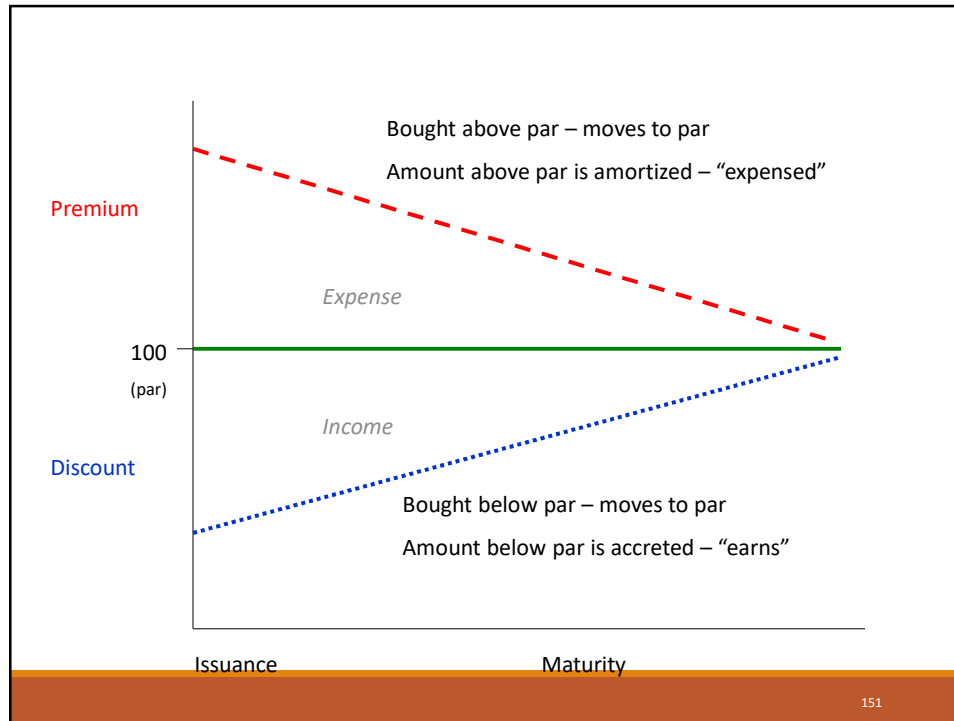
Principal Earnings or Expenses



- If a security is not bought at par (\$1 for each \$ face) the principal will change over time
- The rule is that at maturity the principal will equal par (100)
- If bought above par (price) the principal must be reduced – amortized
- If bought below par (price) the principal must be increased – accreted
- We amortize and accrete on a straight line basis across the time owned
- The change in the value of the principal is the **BOOK VALUE**

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So, What Does a Portfolio Earn?



- **Earnings = accrual + accretion - amortization**
 - Earnings do not reflect cash flows from coupons or maturities
 - Earnings happen everyday as principal and interest move
- Amortization from notes bought above par decreases earnings
- Accretion from notes bought below par increases earnings

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What is Yield?

- A common denominator for reflecting and measuring value.
- The income return on a bond if held to maturity
 - Expressed as annual rate
 - Includes coupons and original price calculation
- Yield incorporates coupon and price
 - It is what you ultimately earn
- Bonds have various types of yields – compare the same yields
 - Coupon, current, YTM and tax equivalent yields

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Market Yields Change –

Your
Purchase
Yield Does
Not

- Bonds are issued or auctioned at price of 100
- Bonds have a **coupon “fixed”** for life at issuance
- As markets change the market yield moves
- That move shows your unrealized gain/loss
- The rates reflect the market yield
- yields are going up now what did that do to your portfolio? To your securities?

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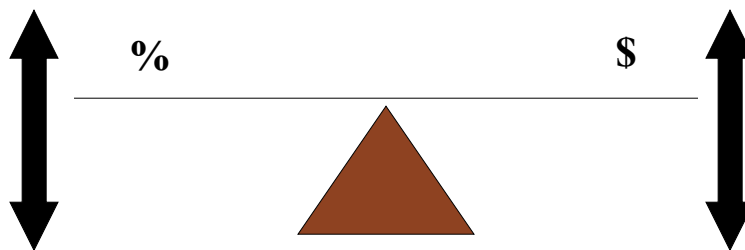
WHEN RATES MOVE

- If rates have been going UP market prices drop
 - Securities you hold will have an unrealized loss
 - It is only a loss if you take it – sell it –
 - But you are a buy-and-hold investor
- If rates have been going DOWN market prices drop
 - You will have an unrealized gain
 - If you take the gain you probably will have to re-invest at lower rates!

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Prices and Yields Move Inversely



A new bond is auctioned with a 5% coupon at par (100)

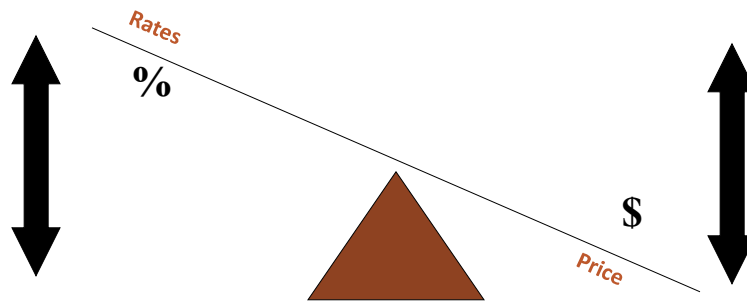
Coupon = 5%

Yield = 5%

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If Rates Go Up Accretion Kicks In



A 5% coupon is not worth as much. To get the 6% yield it is sold as a discount.

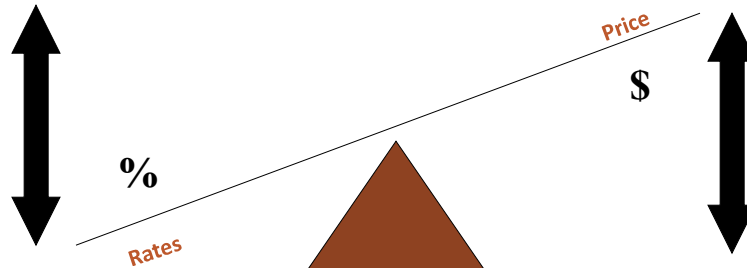
Coupon = 5 %

Yield = 6 %

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If Rates Go DOWN - Amortization



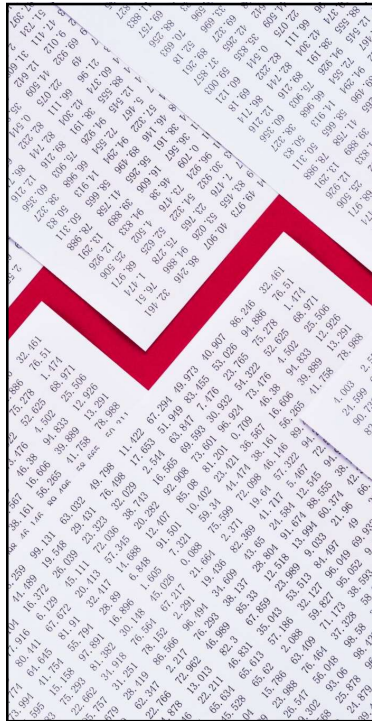
A 5% coupon is worth yield so the adjustment is to sell at a premium.

Coupon = 5 %

Yield = 4 %

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Who sets the coupon?

- The market sets the coupon which means investors do
- A guide would be the current yields for new bonds – the yield curve
- If rates had been high then coupons would be high –
 - As rates fall then? You will buy more as premiums
- If rates had been low then coupons were low –
 - As rates rise then? You will buy more as discounts

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Weighting Information is Key

To make stats into information

Different positions are weighted by book value

Weighting recognizes impact of

- size of position
- different maturities
- different yields

	Book Value	Days Remaining
	50,000	70
	1,000,000	14
	250,000	360
	3,000,000	1
	500,000	400
	2,500,000	180
	2,000,000	80
Weighted Avg		99 days

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Weighted Average Maturity

Multiply book value by days remaining to maturity

Book Value	Days Remaining	Book x Days
50,000	70	3,500,000
1,000,000	14	14,000,000
250,000	360	90,000,000
3,000,000	1	3,000,000
500,000	400	200,000,000
2,500,000	180	450,000,000
<u>2,000,000</u>	<u>80</u>	<u>160,000,000</u>
9,300,000		920,500,000
	=920,500,000/9,300,000	
Weighted Avg	99 days	

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Weighted Average Yield



- The weighted average yield describes the performance of the entire portfolio.
- Weighted yield is a measure to compare to your benchmark.
- This measure does not consider market value impact. It reflects yield if all securities are held to maturity.
- Calculation requires adjustment for days in month and year.

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Weighted Average Yield

Multiply book value by purchase yield

Book Value	Purchase Yield	Book x Yield
6,568,777	0.70%	45,981
3,211,222	1.40%	44,957
5,999,158	0.99%	59,392
1,425,654	1.25%	17,821
12,513,588	2.50%	312,840
2,000,000	1.50%	30,000
1,598,523	0.90%	14,387
Weighted Avg Yield	1.58%	

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How to Distribute Interest

- When funds are combined/commingled for investment purposes
- Total interest must be distributed

Use either month-end balance or average balance

Earnings here were \$10,000 total

Fund	Balance	% of Ptf	Distribution
Operating	12,541,799	48.34 %	4,834.61
Debt Service	575,123	2.21 %	221.70
Bond proceeds	9,258,951	35.69 %	3,569.13
Reserves	3,565,821	13.74 %	1,374.56

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Specific PFIA Report Requirements

Compliance statement and signatures

- Reports prepared in compliance with the PFIA and Investment Policy.
- Every Investment Officer is to sign report

Detail

- Each investment position (including bank accounts) with maturity date
- Book and market values of each position *at end of period*
- Portfolio/fund investment belongs to

Summary

- Beginning and ending book and market value of portfolio
- Earnings for the period (accrued + accretion – amortization)
- Market sector summaries

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What Constitutes A Portfolio Position

- Description of the key elements of the security
 - Type (T-Bill, T-Note, FNMA, CD Bank XX, etc.)
 - Par (face amount)
 - Coupon rate
 - Purchase yield and price
 - Purchase date
 - Maturity Date (and call date if applicable)
- The value at report date
 - Book value – amortized value of the security
 - Market value – price it could be sold
- The earnings for the period
 - Accrued + Net Accretion/Amortization

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Describing Your Overall Portfolio

- PFIA wants beginning and ending values to judge activity
- All Positions – liquid and securitized
 - Securities
 - Bank accounts and Compensating balances
 - Sub-totals
- Description and sub-totals for diversification identification
 - Market sector sub-totals

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Detailing a Position

Purchase Date	Security Type	Par	Coupon	Yield	Maturity Date	Call Date	Book Value	Market Value	Gain or <loss>
xx/xx/xx	T-Note	500,000	0.50 %	0.45 %	xx/xx/xx	-	501,123	502,100	977
xx/xx/xx	CD-Frost	245,000	0.60 %	0.60 %	xx/xx/xx	-	245,000	245,000	00
xx/xx/xx	T-Bill	750,000	0.00 %	0.35 %	xx/xx/xx	-	723,500	720,000	<3,500>
xx/xx/xx	FNMA	750,000	0.75 %	0.90 %	xx/xx/xx	xx/xx/xx	743,200	755,100	11,900
		2,245,000		0.58 %			2,212,823	2,222,200	9,377

From this information you can calculate the WAM and WAY

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Purchase Date	Security	Coupon	Maturity Date	Yield	Par Value	Beginning Book	Beginning Market	Ending Book	Ending Market
xx/xx/xx	T-Bill	-	xx/xx/xx	1.00 %	500,000	490,000	480,000	492,000	488,000
xx/xx/xx	T-Note	1.50 %	xx/xx/xx	1.45 %	500,000			501,000	505,000
xx/xx/xx	T-Note	0.90 %	xx/xx/xx	1.00 %	500,000	499,999	500,000		
	Subtotal				1,500,000	989,999	980,000	993,000	993,000
xx/xx/xx	FNDN	-	xx/xx/xx	1.15 %	650,000	640,000	643,000	642,000	643,000
xx/xx/xx	FHLB	1.25 %	xx/xx/xx	1.25 %	500,000	500,000	500,000	500,000	501,000
	Subtotal				1,150,000	1,140,000	1,143,000	1,142,000	1,144,000
xx/xx/xx	CD - Bank A	1.20 %	xx/xx/xx	1.20 %	750,000	750,000	750,000	750,000	750,000
xx/xx/xx	CD - Bank B	1.15 %	xx/xx/xx	1.15 %	500,000	500,000	500,000	500,000	500,000
	Subtotal				1,250,000	1,250,000	1,250,000	1,250,000	1,250,000
xx/xx/xx	TexPool	0.20 %	xx/xx/xx	0.20 %	1,234,567	1,234,567	1,234,567	1,444,567	1,444,567
xx/xx/xx	Logic	0.20 %	xx/xx/xx	0.20 %	1,765,432	1,765,432	1,765,432		
	Subtotal				3,199,999	3,199,999	3,199,999	1,444,567	1,444,567
xx/xx/xx	Int. Bearing	0.15 %	xx/xx/xx	0.15 %	450,000	450,000	450,000	410,111	410,111
xx/xx/xx	Comp Balance	0.50 %	xx/xx/xx	0.50 %	2,121,111	2,121,111	2,121,111	2,121,111	2,121,111
	Subtotal				2,571,111	2,571,111	2,571,111	2,531,222	2,531,222
	TOTAL			0.74 %		8,951,109	8,944,110	7,360,789	7,362,789

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Sector Analysis

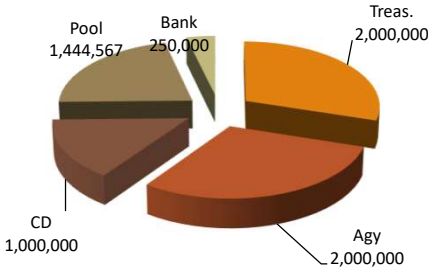
Allocation by Sector

Shows diversification

Shows competition

Add yields to explain value and decisions

Now Make it Information



Sector	Value
Treas.	2,000,000
Agy	2,000,000
CD	1,000,000
Pool	1,444,567
Bank	250,000

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What you learn from reports as the Investment Officer

Portfolio Management Portfolio Summary December 31, 2019

Investments	Par Value	Market Value	Book Value	% of Portfolio	Term	Days to Maturity	YTM 365 Equiv.
Commercial Paper Disc - Amortizing	6,500,000.00	6,480,766.66	6,480,766.66	6.12	85	55	1.989
Federal Agency Coupon Securities	17,000,000.00	16,987,389.10	16,999,627.74	16.05	435	288	2.076
Treasury Coupon Securities	11,900,000.00	11,931,461.46	11,932,869.45	11.26	332	319	1.635
Municipal Bonds	4,000,000.00	4,002,280.00	4,002,573.92	3.78	281	244	1.651
TexPool	30,962,686.66	30,962,686.66	30,962,686.66	28.85	1	1	1.623
Wells Fargo Bank	14,883,036.10	14,883,036.10	14,883,036.10	14.05	1	1	1.353
TexSTAR	3,953,845.37	3,953,845.37	3,953,845.37	3.73	1	1	1.564
CD's - Interest Monthly/Qty	17,093,513.30	17,093,513.30	17,093,513.30	16.14	332	64	2.558
MM Accounts	27,408.96	27,408.96	27,408.96	0.03	1	1	1.660
Investments	105,920,490.39	105,922,387.61	105,936,328.16	100.00%	177	106	1.631

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BENCHMARKS

Purpose

- Shows risk and performance
- It compares against the market not against another entity!

Choose the benchmark for

- Comparability
- Sector recognition
- Comparable treasury versus index

Normal benchmarks

- Comparable period Treasury security
- 3-month, 6-month, 1-year

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Pool/Fund Reporting

Pools and Funds price and value

- designed to show risk to investor

Constant dollar (money market equivalents)

- Price is always \$1
- Days-to-maturity is always 1 day



Mutual fund equivalents

- Price is the net asset value or share price that day
- Days to maturity is the WAM of the underlying portfolio

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GASB Annual Reporting

- GASB is looking for risk
 - Collateral risk
 - Credit risk
 - Safekeeping
 - Volatility
- Three statements for *annual* reporting
 - Only done on a annual basis
 - For Financial Statement reporting only – not ledger input

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GASB Statement 31

- Fair Market Evaluation
 - Designed to show change in market value (volatility)
 - Ledger entry if made is immediately reversed
 - Too much volatility indicates longer maturities or structured notes

- Discloses risk created by change of market price

- Only necessary if securities bought were > one year at purchase

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GASB 40 Reporting

- All areas are covered by PFIA and policy

- Reporting Credit Exposures:
 - All Agencies are AAA
 - Credit ratings critical on CP, BA, (Corporates)
 - Procedure to monitor credit in policies required

- Reporting Interest Rate Exposures:
 - Reporting any callables or other structured notes
 - Listing of these notes only

- Reporting Interest Rate Exposures:
 - Maximum Maturity set by policy/law
 - Weighted Average Maturity set by policy
 - Benchmarks (optional)

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GASB Statement 72

- Defines fair market value by level of *pricing risk*
- Most PFIA securities are LEVEL ONE
- Only commercial paper could be considered LEVEL 2

	Level 1	Level 2	Level 3	Total
US Agency Obligations	4,992,362.91	0.00	0.00	4,992,632.91
Municipal Obligations	5,154,594.00	0.00	0.00	5,154,594.00
Commercial Paper	0.00	3,988,988.89	0.00	3,988,988.89
Total Fair Value	10,146,956.91	3,988,988.89	0.00	14,135,945.80

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Choosing Investments

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Liquidity is a Key Investment

Every penny – every day is in your portfolio!

Liquid funds are:

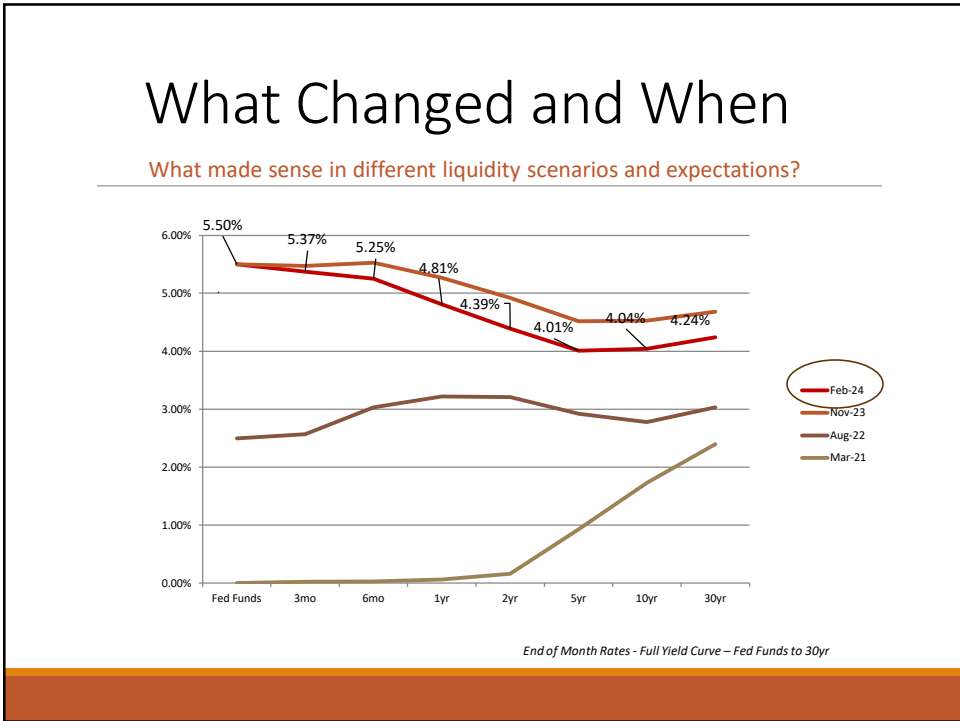
- A key portion of your portfolio - so rates are critical
- Designated to cover known very short term (one month)
 - Market conditions will control how much to keep liquid
- There to cover some level of unanticipated expenses

Liquid funds must:

- give a reasonable market return
- be easy to use
- give good, timely reporting
- give full information on rates and investments

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Bank Liquidity Choices

- Banks have a range of liquidity choices
 - non-interest bearing checking (target balance)
 - interest bearing checking
 - money market accounts *
 - NOW or savings accounts
 - Sweeps – MMMF and ICS

- Rates are different in each category
 - And will change

- Current best rates and opportunities...?

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Liquidity Choices

Accounts in any Texas bank

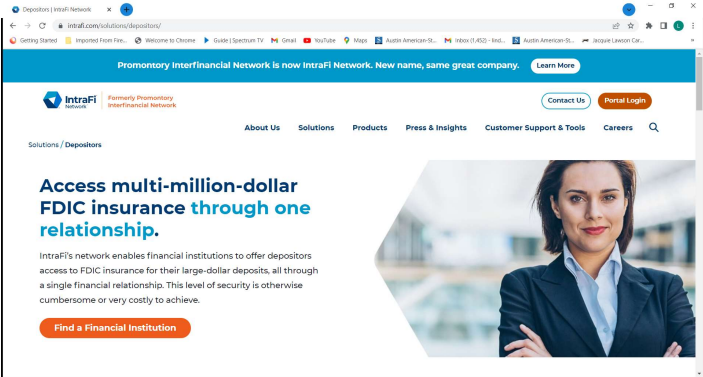
- Bank must be FDIC insured – or collateralized if > \$250,000
- Insurance is by tax id number not account
- The special case of development corporations

Account in any Texas credit union

- Credit union must be insured by National Credit Union Share Insurance Fund
- Credit unions will not provide collateral
- \$250,000 maximum by tax id

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IntraFi (Insured Cash Sweep)

A MONEY MARKET ACCOUNT ALTERNATIVE AS DEMAND ATTRIBUTES

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IntraFi

- National Promontory Network**
- Spreads funds to stay under FDIC
 - into **money market accounts or demand**
 - **Know the rules for transferring the funds**
- IF Limited Liquidity
 - **Only 6 draws per month**
- Staying under the FDIC insured by institution
- On your books it is one investment**
 - **Backup shows you all the banks**

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How to Use *IntraFi* to Your Benefit


- In operational bank or other Texas bank
- City deposits funds by wire or transfer in bank
- Bank places in ICS
- City receives a monthly statement
- Interest accrues
- Interest sent to DDA account or reinvested
- No collateral worries or costs
 - All FDIC insured

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ICS Statement

Best Deale Bank
123 Main Street
Anytown, US 12345



**Best Deale
Bank**

Contact Us
1-555-123-4567
contact@bestdealebank.com
www.bestdealebank.com

Sample School District
456 Main Street
Anytown, US 56789

Account
Sample School District

Date
01/31/2021

Page
1 of 3

IntraFi® Cash Service, or ICS®, Monthly Statement

The following information is a summary of activity in your account(s) for the month of January 2021 and the list of FDIC-insured institution(s) that hold your deposits as of the date indicated. These deposits have been placed by us, as your agent and custodian, in deposit accounts through ICS. Funds in your deposit accounts at the FDIC-insured institutions at which your funds have been placed will be "deposits," as defined by federal law.

Custom text may be added here.

Summary of Accounts

Account ID	Deposit Option	Interest Rate	Opening Balance	Ending Balance
*****123	Savings	0.15%	\$4,726,287.32	\$4,726,963.69
*****456	Demand	0.15%	1,738,049.65	1,738,345.38
TOTAL			\$6,464,336.97	\$6,465,309.07

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ICS Detail

DETAILED ACCOUNT OVERVIEW
 Account ID: *****123
 Account Title: Sample School District

Account Summary - Savings			
Statement Period	1/1-1/31/2021	Average Daily Balance	\$4,726,371.48
Previous Period Ending Balance	\$4,726,287.32	Interest Rate at End of Statement Period	0.15%
Total Program Deposits	74.33	Statement Period Yield	0.15%
Total Program Withdrawals	(0.00)	YTD Interest Paid	602.04
Interest Capitalized	602.04	YTD Taxes Withheld	0.00
Taxes Withheld	(0.00)		
Current Period Ending Balance	\$4,726,963.69		

Account Transaction Detail			
Date	Activity Type	Amount	Balance
01/05/2021	Deposit	574.33	\$4,726,361.65
01/29/2021	Interest Capitalization	602.04	4,726,963.69

Summary of Balances as of January 31, 2021			
FDIC-Insured Institution	City/State	FDIC Cert No.	Balance
Innerst Savings Bank	Tulsa, OK	**010	248,373.72
First Eagleville Bank	Syracuse, NY	**011	248,381.64
LockMand Bank	San Diego, CA	**012	248,378.59
Southstreet Community Bank	Boston, MA	**013	248,381.64
Winchester County Bank	Pasadena, CA	**014	248,381.64
Southeast Regional Bank	Atlanta, GA	**015	248,381.64
Loring Savings Bank	Lansing, PA	**016	248,366.78
Calera Bank	Clarksville, TN	**017	7,745.56
Fort Addison Bank	Lincolndale, MT	**018	248,381.64
Alpine National Bank and Trust	Dallas, TX	**019	248,381.64
First Bank of Ogdentown	Auburn Hills, NJ	**020	248,381.64

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Risk and return variations on each choice

- The essence of commingling/combining funds and its benefits

Local Pools striving to maintain \$1 NAV

“Money Market Mutual Funds” (MMMF) striving for \$1 NAV

Repurchase Agreements (larger entities)

Non-Bank Liquidity Choices


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Liquidity Choices How and When do You Chose?

- Which alternative do you chose today and why?
- How much do you keep liquid *now*?

▪ MMMF	5.25 %
▪ LGIF (\$1 NAV))	5.50 %
▪ IntraFi	5.50 %
▪ Bank checking	2.00 %
▪ Bank money market <i>account</i>	2.75 %
▪ Bank sweep to MMMF	5.00 %
▪ ECR	0.90%



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Commingled Investments

- Local Government Pools
- Money Market Mutual Funds
- Mutual Funds
- All provide:

- Economy of scale
- Diversification
- Some extension with total liquidity
- Reporting
- Equal ownership of shares

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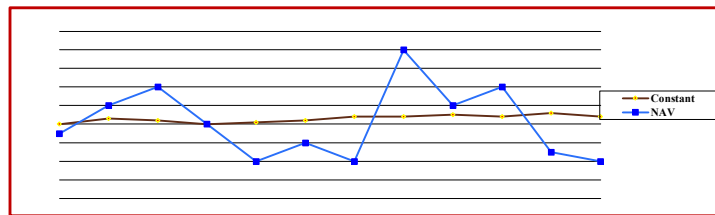
Two Fund/Pool Types

Constant dollar funds/pools

- Money market funds or pool equivalents
- Strive to maintain \$1 asset (share) value – built for liquidity

Net asset value funds/pools

- Mutual funds or pool equivalents – built for yield
- Share value fluctuates on market price
- Potential loss of principal
- Not eligible for bond funds



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Alike but Not Identical

\$1 NAV Pools

Based on ILCA*

Require resolution by governing body
Rated AAA

Unregulated

All types

Money Market Funds

It's a security
SEC oversight & regulation
Make it AAA-rated by policy
Strict regulations
Prospectus

No resolution required
List as investment in policy
Require NAV of \$1

* *Interlocal Cooperation Act*

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Two Types of Money Market Mutual Funds

- Know and define what you authorize:
 - MMMF which *strive to maintain a \$1 NAV* (net asset value – share price)
 - Treasury funds only invest in US Treasuries
 - Government funds invest in US treasuries and agencies
 - Enhanced government (prime) also invest in commercial paper
- **Short Duration Money Market Funds**
 - These are *mutual funds* – not built for liquidity
 - The share value will fluctuate with market rates
 - These represent considerable risk
 - Also known as short duration money market funds

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Ultra Short Term Bond Funds

What Role Could/Should They Play?

- No bond proceeds allowed in these
- These are NOT money market funds as you know them
 - They are **mutual** funds (volatility)
 - They are not built for liquidity
- PFIA requirements
 - With a WAM of 1 year or more invested in only Act authorized investments, or
 - With a WAM of 1 year or less and limited to *investment grade securities*
 - Must exclude asset-backed securities
- You can lose principal dependent on:
 - Credit quality
 - Maturity dates
 - Sensitivity to rates

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Policy Pool and Fund Language

- **Pool**
 - AAA-rated Texas local government investment pool which strives to maintain a \$1 net asset value.

- **Money Market Mutual Fund**
 - AAA-rated, SEC registered money market mutual fund which strives to maintain a \$1 net asset value.

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Rate Information

	TexPool As of Apr 06, 2015	TexPool Prime As of Apr 06, 2015
Current Rate (3)	0.0536%	0.0934%
Allocation Factor:	0.000001441	0.000002560
7 Day Net Yield:	05%	1%
Current Balance:	\$15,071,460,779.41	\$1,514,616,470.32
Weighted Average Maturity (1):	48 Days	42 Days
Weighted Average Maturity (2):	72 Days	45 Days
Market Value Per Share:	1.00004	1.00002
Rates as of close of business for date specified.	* Daily History * Monthly History	* Daily History * Monthly History

Performance data quoted represents past performance which is no guarantee of future results. Investment return will fluctuate. The value of an investment when redeemed may be worth more or less than the original cost. Current performance may be higher or lower than performance stated.

For more information, see the TexPool Information Statement available on this web site. You should consider the investment objectives, risks, charges, and expenses carefully before you invest. Information about these and other important subjects is in the Information Statement which you should read carefully before investing.

An investment in the security is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Although the issuer seeks to preserve the value of an investment at \$1.00 per share, it is possible to lose money by investing in the security.

(1) "WAM Days" is the mean average of the periods of time remaining until the securities held in

What do these figures tell you?

Know how to read the facts about your pool(s).

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TEXPOOL

Print

Overview
Performance
Characteristics
Documents

Performance

Print Section

DAILY PERFORMANCE
AS OF 02-01-2024 [View Historical Daily Performance](#)

Daily Net Yield	5.3322%	NAV	\$1.00000
Dividend Factor	0.000146089	Daily Assets	\$36,671,069,323.27
7 Day Net Yield	5.35%		

MONTHLY AVERAGE PERFORMANCE
AS OF 01-31-2024 [View Historical Monthly Average Performance](#)

Average Daily Net Yield	5.3455%	Average WAM	35 Days
Average Dividend Factor	0.000146451	Average WAL	88 Days

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TEXPOOL

Print

Overview
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ASSETS

MONTHLY as of 01-31-2024

Portfolio	\$35,746,685,549
-----------	------------------

PORTFOLIO PROFILE

MONTHLY as of 01-31-2024

Portfolio	\$36,671,069,323
Weighted Average Maturity	30 Days
Weighted Average Life	85 Days

PORTFOLIO COMPOSITION

MONTHLY as of 12-31-2023

Treasuries	36.8	DAILY	
Agencies	30.6	Weighted Average Maturity	30 Days
Repurchase Agreements	25.3	Weighted Average Life	81 Days
Money Market Funds	7.3		
Other	0.0		
Total % of Portfolio:	100.0		

LIQUIDITY [View 6-Month History](#)

Daily	42.77%
Weekly	74.49%

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Can You use this “Pool”? What is it?

These are brokered CDs bought and held by a broker/pool
Your policy should authorize brokered CDs if used

Bid#: _____ Date: 07/30/2012 12:40PM

Bank Name(City,State,FDIC#)	Principal Amount	# of Days	Gross Rate	Net Rate	Settlement	Maturity	Advisory Fee(\$)	Advisory Fee(Base)	Gross Int.@mat.	Gross Maturity Value	Status
Bank Of East Asia Ltd. (The), New York,NY-(33646)	\$248,000.00	182	0.600%	0.450%	07/30/2012	01/28/2013	\$185.49	0.15%	\$741.96	\$248,741.96	
Bank Of The Ozarks, Little Rock,AR-(110)	\$248,000.00	182	0.450%	0.300%	07/30/2012	01/28/2013	\$185.49	0.15%	\$556.47	\$248,556.47	
Onwest Bank, Fsb, Pasadena,CA-(56978)	\$248,000.00	182	0.450%	0.300%	07/30/2012	01/28/2013	\$185.49	0.15%	\$556.47	\$248,556.47	
Bank Of The West, San Francisco,CA-(3514)	\$248,000.00	182	0.450%	0.300%	07/30/2012	01/28/2013	\$185.49	0.15%	\$556.47	\$248,556.47	
Bank Of China, New York,NY-(33653)	\$248,000.00	182	0.450%	0.300%	07/30/2012	01/28/2013	\$185.49	0.15%	\$556.47	\$248,556.47	
Privatebank & Trust Co (The) (Acqd Privatebank, Bloomfield Hills, MI), Chicago,IL-(33306)	\$248,000.00	182	0.400%	0.250%	07/30/2012	01/28/2013	\$185.49	0.15%	\$494.64	\$248,494.64	
Sterling National Bank, New York,NY-(7220)	\$248,000.00	182	0.380%	0.230%	07/30/2012	01/28/2013	\$185.49	0.15%	\$469.91	\$248,469.91	
Israel Discount Bank Of New York, New York,NY-(19977)	\$248,000.00	182	0.350%	0.200%	07/30/2012	01/28/2013	\$185.49	0.15%	\$432.81	\$248,432.81	
Merchants Bank Of Indiana, Lynn,IN-(8056)	\$248,000.00	182	0.350%	0.200%	07/30/2012	01/28/2013	\$185.49	0.15%	\$432.81	\$248,432.81	
TOTALS:	\$2,232,000.00						\$1,669.41		\$4,798.01	\$2,236,798.01	
Gross Weighted Avg.Rate(182 Days)											0.43%
Net Weighted Avg.Rate(182 Days)											0.28%
GRAND TOTAL :	\$2,232,000.00						\$1,669.41		\$4,798.01	\$2,236,798.01	

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The Ubiquitous Repo is Liquidity

Primarily for larger entities except for “flex”

Simultaneous “Buy-Sell” Transactions

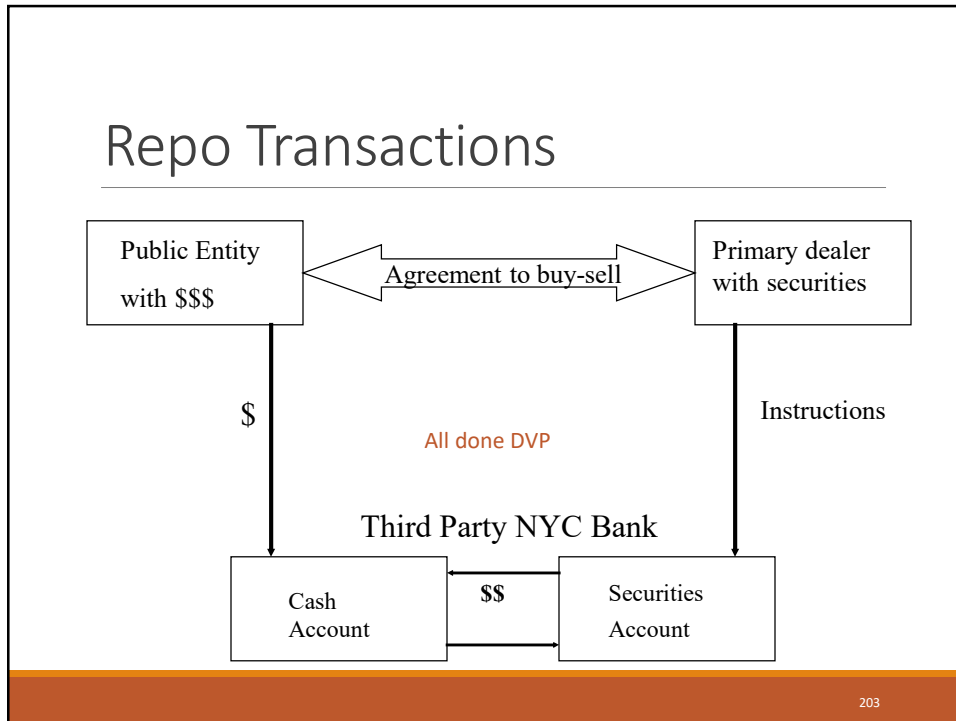
- Allows full liquidity at market rates
- Uses DVP and independent custody
- Margins (102%) monitored constantly
- Various types include overnight, open & term

“Flex” is designed for capital projects

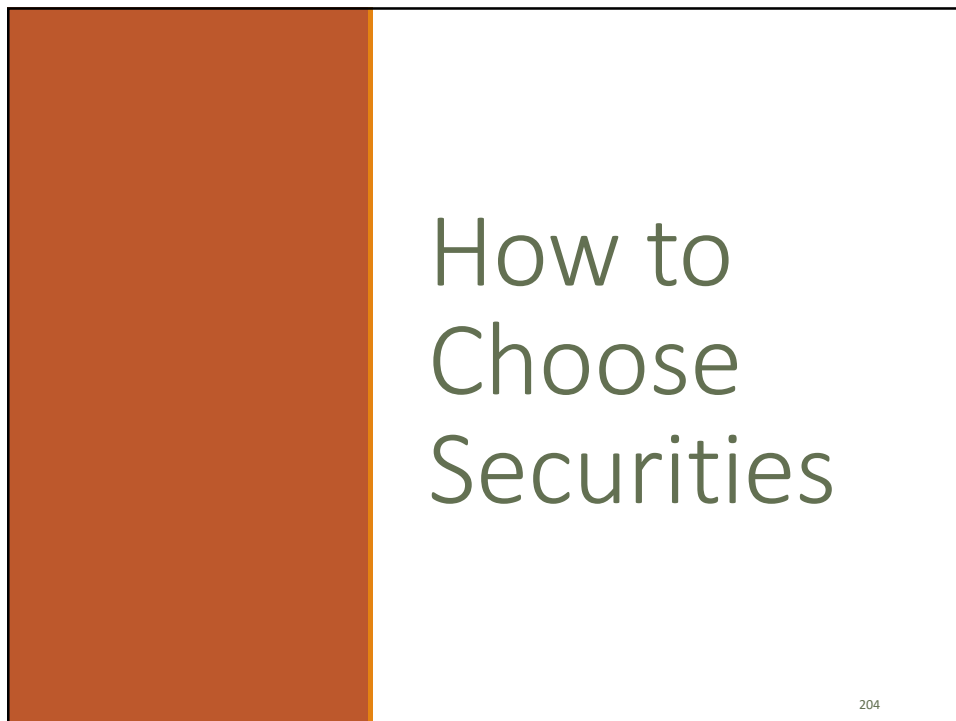
- Established for the entire expenditure period
- Rate is fixed and normally above issue rate
- Flexibility on draws with xx/month
- Interest on semi-annual basis

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Beyond Liquidity are Securities

Short-term,
longer-term and
core investments

Requires purchase
of securities

Requires
safekeeping for
your securities

All securities need
to be safekept but
never by a broker

Only depository
CDs eliminate
safekeeping

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Your Market Strategy



Dependent on your cash flow

Dependent on your risk tolerance

Dependent on your policy limits

Dependent on your time availability

Dependent on your understanding of the securities

Partially dependent on your economic view

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Market Sector Analysis

- Market sectors are the different types of securities
 - Treasuries, agencies, CP, CD, pools
 - Comparing yields on different type securities/liquidity
- Sectors differentiated by risk and issuer credit
 - US treasuries
 - agencies and new agency issues
 - commercial paper
 - municipals
- Evaluating sectors requires information on that sector
 - Understanding of the securities
 - credit decisions for risks
 - historical spread analysis

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Sector Value Analysis

When do you need/want the maturity?
 Compare the current rates.
 What the rates are going to do counts?
 You are comparing at the same maturity point.

	6 month	Rate
Pool	n/a	5.50%
CD	Yes	5.00%
Treasury	Yes	5.40%
Agencies	Yes	5.60%
CP	yes	5.86%

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Spread Analysis



Spread means **difference**

- Difference in rates between securities or whole market sectors

Spreads are **dynamic**

- Anticipated spreads on credit
- Current spreads
- Historical spreads
- Volume spreads

Spread analysis basically means comparing rates

You must check the rates at that maturity in various sectors – **everytime!**

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Yield Curve Analysis

Yield curves depict the market conditions and anticipated moves

- The curve tells a story and tries to predict the future
- The curve illustrates the best current value
- The curve must be read in light of current conditions

Pick the best place on the curve

- Your portion of the curve is restricted by policy
- Your portion is restricted by risk tolerance and cash flow

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YIELD CURVES

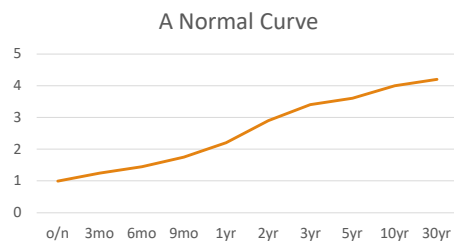
- Why market decisions i.e. prices generate the 'yield curve'
 - Acting on investor *expectations*
- Long and short-term rates generally behave independently
 - Short-term rates are primarily driven by Federal Reserve policy and the Federal Funds rate – but also market flows
 - Long-term rates are driven by longer run growth and inflation expectations – but also supply
- Yield curve is a reliable indicator of economic trends and future growth
 - A “compilation of expectations” and expectations drive investors

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A NORMAL YIELD CURVE

- Long-term rates higher than short-term
 - Produces an upwardly sloping curve
- Indicates expectation of normal positive economic growth
- We measure the 'spread' of the rates at certain key points
- Probably 90% of the time

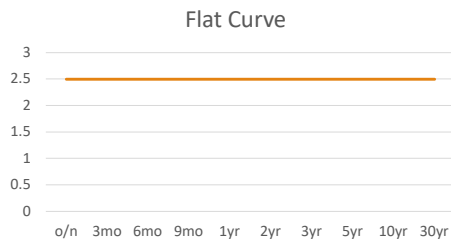


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A FLAT YIELD CURVE

- Short and Long ends are relatively the same indicating lower expectation of economic expansion and growth
- Short end 'catches up' due to Fed action as long end escapes positions
- Could predict inverted curve
- Lock in rates!

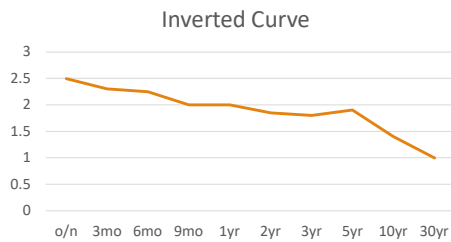


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AN INVERTED YIELD CURVE

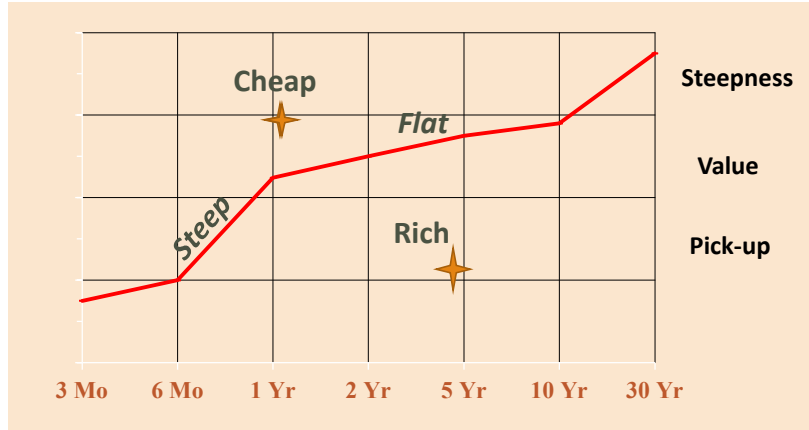
- Short end outperforms the long end
- Long end has anticipated slow down and lower rates
- Sometimes the market gets ahead of itself



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What does this Yield Curve Say to You



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Check the web for market information.

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Choosing Investments



- Every penny requires an investment decision
 - Investing is liquidity, short and long term

- Cash flow needs always control your choice
 - Put money out where you need it
 - Usually ladder to fit municipal needs

- Market conditions also control
 - Current conditions limit extensions
 - Current conditions favor what?

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The Investment Decision

- Where do I need money? (cash flow)
- What can I buy? (authorized securities)
- Am I diversified? (policy)

- Where is the market and yield curve?
- Do I have a view of future events?
- Where might rates going?
- What has the best yield? (relative value)

- **Relative Value Analysis is Comparative Shopping**



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US Treasuries	Brokered CD Securities
US Agencies	Money Market Funds
Commercial Paper	Mutual Funds
Bankers Acceptances	GICs
Repurchase Agreements	State of Israel bonds
Investment Pools	Municipal Obligations
Certificates of Deposit	Corporate bonds (limited ISDs)

Authorized PFIA Securities

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Why Being a Depositor Matters

- Depository certificates of deposit
 - Insured or collateralized

- Share certificates of credit unions
 - Insured only

- **Depository relationships provide protection**

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PFIA Language on CDs

(a) Depository Texas CD

- Insured by FDIC or
- Collateralized per PFCA
 - including authorized mortgage-backed securities in PFIA
 - Agreement is executed under the terms of FIRREA
- Includes CDARS spread program

(b) Brokered CD

- Invest through Texas bank or Texas broker (on broker list)
- Fully insured by US or its instrumentality
- Limited to \$250,000 per bank
- Broker *can custody* ---conflict with DVP

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Depository agreements

- This is a direct bank relationship
- Includes only Texas banks
- Requires paperwork to create a deposit
- Funds are left in the bank as a deposit

All MUST BE Insured by FDIC or collateralized

- Above \$250,000 requires agreement and collateral
- Texas collateral rules protect you under PFCA
- Different collateral types are legal
- Controlled by PFIA and depository law (Local Gov't Code Ch.105)

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DEPOSITORY Certificates of Deposit

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- Fully insured or collateralized depository certificates of deposit of banks doing business in Texas, with a maximum maturity of ----- years guaranteed or insured by the Federal Deposit Insurance Corporation, or its successor, or collateralized in accordance with this Policy.
- Collateralized CD will be created under a written collateral agreement in accordance with FIRREA.

Policy Language Authorizing Depository CDs

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Brokered CDs



This is a security
not a deposit

You have no
relationship to the
bank
It has little or no
secondary market
once bought



Built from one large CD



Broken into smaller CD
securities by a broker



Sold on the *secondary* market

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Policy Language Authorizing Brokered CDs

- FDIC insured brokered certificate of deposit security from banks in any US state, delivered versus payment to the entity's safekeeping depository, and not to exceed one year to maturity.
- Before purchase the Investment Office must verify that the bank is FDIC insured on www.fdic.gov

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Controls on Brokered CDs

- The investment officer must monitor
 - On no less than a weekly basis
 - Status and ownership of the issuing bank based on FDIC information
- If the bank has merged or been acquired where other deposits exist
 - Investment Officer shall immediately liquidate any brokered CD which places the city above the FDIC insurance coverage

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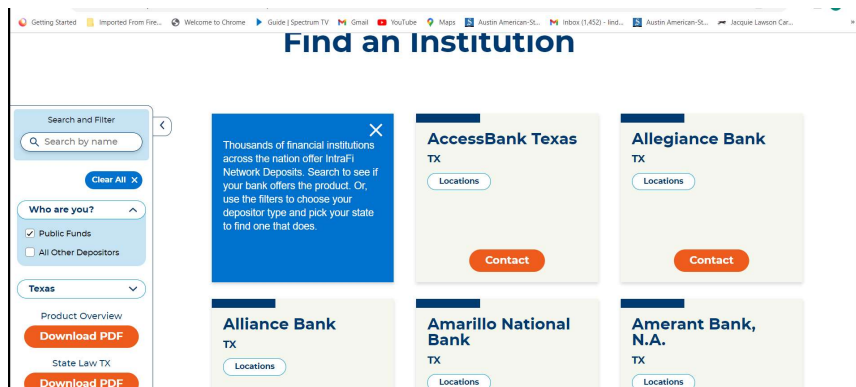
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IntraFI CD

CDARS is now under the IntraFi promontory network with ICS

<p>Check for CDARS banks in Texas at CDARS.com</p> <ul style="list-style-type: none"> • Currently up to \$50 million at \$10mm per week 	<p>Maturities set at 3, 6, and 12 months and settling Thursdays</p> <ul style="list-style-type: none"> • Don't create an uncollateralized situation at the initiating bank 	<p>Phone or email several banks for the rates</p> <ul style="list-style-type: none"> • Get all in APY (annual percentage yield) • Records will show all banks – you report one combined CD 	<p>Chose the best rate and notify the banks</p> <ul style="list-style-type: none"> • Get instructions to send money • Standard CDARS Deposit Placement Agreement • Send money on settlement date
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You chose the bank competitors

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CDARS Monthly Report

Best Deale Bank
123 Main Street
Anytown, US 12345

000000



Contact Us
1-555-123-4567
contact@bestdealebank.com
www.bestdealebank.com



SAMPLE CITY
456 Main Street
Anytown, US 56789

Account
SAMPLE CITY
Date
01/29/2021
Page
1 of 4

CDARS® Customer Statement

The following information is a summary of activity in your CD account(s) and the list of FDIC insured institution(s) that hold your deposits as of the date indicated. These deposits have been placed by us, as your agent and custodian, in deposit accounts through CDARS.

Custom text may be added here.

Summary of Accounts

Account ID	Effective Date	Maturity Date	Interest Rate	Opening Balance	Ending Balance
*****234	08/20/2020	02/18/2021	0.25%	\$5,270,609.65	\$5,271,728.75
TOTAL				\$5,270,609.65	\$5,271,728.75

CDARS Monthly Detail

DETAILED ACCOUNT OVERVIEW


Account ID: *****234
Account Title: SAMPLE CITY

Account Summary - CD

Product Term	26-Week Public Fund 365 CD	Effective Date	08/20/2020
Interest Rate	0.25%	Maturity Date	02/18/2021
Account Balance	\$5,271,728.75	YTD Interest Paid	\$1,119.10
Annual Percentage Yield	0.25%	Interest Earned Since Last Statement	1,119.10

CD Issued by

America West Regional United Savings Bank FDIC Cert. **001				
YTD Interest Paid	\$52.28	01/01/2021	Opening Balance	\$246,225.87
Int Earned Since Last Statement	52.28	01/29/2021	Interest Payment	52.28
		01/29/2021	Ending Balance	246,278.15
Bank of Hudsonville FDIC Cert. **002				
YTD Interest Paid	\$18.73	01/01/2021	Opening Balance	\$88,230.29
Int Earned Since Last Statement	18.73	01/29/2021	Interest Payment	18.73
		01/29/2021	Ending Balance	88,249.02
Bear County Community Bank FDIC Cert. **003				
YTD Interest Paid	\$51.42	01/01/2021	Opening Balance	\$242,168.29
Int Earned Since Last Statement	51.42	01/29/2021	Interest Payment	51.42
		01/29/2021	Ending Balance	242,219.71
Calera Bank FDIC Cert. **004				
YTD Interest Paid	\$52.28	01/01/2021	Opening Balance	\$246,225.87
Int Earned Since Last Statement	52.28	01/29/2021	Interest Payment	52.28
		01/29/2021	Ending Balance	246,278.15




Credit Union

Credit Unions

- These are 'Share Certificates'
- National Credit Union Share Insurance Fund insurance
 - \$250,000 per tax id
- Can not be collateralized
- CU must be in Texas

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What If there is a Default??

- A *default situation* is identified
- The bank has 3 days to *cure*
- After 3 days City notifies custodian of collateral of default
- Custodian holds collateral now under City control
- If not resolved City sells collateral and receives funds
 - Plus any expenses incurred due to the default
- Regulators will normally sell, merge or bridge bank and it reopens
- IF they do not reopen – you need access to funds and ACH quickly

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Two Basic Types of Securities

▪ **Money market = < 1 year**

- | | | |
|----------------|--------------------|--------------------------|
| ▪ US Gov't | > T-Bills | } All are discount notes |
| ▪ Agencies | > Discount Notes | |
| ▪ Local Gov't | > BANs, TRANs | |
| ▪ Corporations | > Commercial Paper | |

▪ **Fixed income = > 1 year**

- | | | |
|----------------|-----------------------|---------------------|
| ▪ Gov't | > Treasury Notes/Bond | } All have a coupon |
| ▪ Agencies | > Agency Notes | |
| ▪ Local Gov't | > Long-term Bonds | |
| ▪ Corporations | > Corporate Notes | |

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Discount Securities

▪ All securities with original maturities < 1 year

- Treasury bills
- Agency discount notes
- Commercial paper

▪ Quoted at a discount

- Often close to yield
- Ask to be quoted yield for comparison purposes

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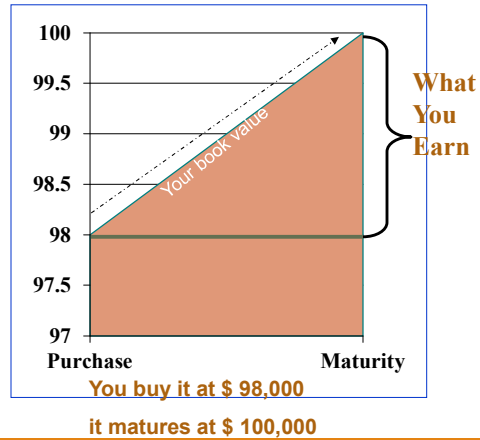
Discount Securities Have No Coupon Accrete Value Over Life

Always bought at a price less than 100

Earn daily and only through **accretion**

Buying a \$100,000 T-Bill

- Price = \$ 98,000
- You own it 200 days until maturity
- Discount/# of days
- 2,000/200 days= \$ 10 / day



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Discount Security Choice

- Get a yield quote not the 'discount' for comparison
- Check the only two things that matter to you
 - (a) the date for cash flow
 - (b) the yield

Mat 6/15/xx	Bid 99.5	Asked 99.6	Chg -.1	Yield 2.15
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CHG – change in price from prior day close

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Daily Accretion

You purchased a T-Bill 8/6/xx at a 4.21% yield:

◦ Par	\$1,000,000.00	
◦ Principal	\$ 997,695.69	(book value day 1)
◦ Discount	\$ 2,304.40	
◦ Days-to-Maturity	356 days	
◦ Daily Accretion	\$ 6.47	(2,304.40/356)
◦ Earnings from Accretion only		
◦ Booked monthly		

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- Any security with original maturity > 1 year
- All will have a coupon because investors want ongoing income
- It will “coupon” i.e. “pay” every 6 months
 - Coupon rate x par amount = annual income
 - Pay will be half of annual income
 - \$1,000,000 1.50% = \$15,000/year = \$7,500/six months

Security ‘Notes’

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Notes Bought at Par

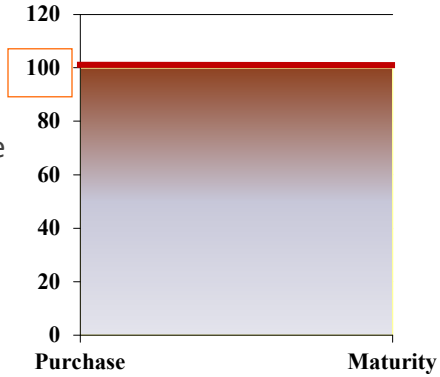
Buying at par

- \$1 for each dollar face amount

Principal stays the same through life

Earnings only through coupons

- Coupons accrue earnings



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Notes Bought at a Premium

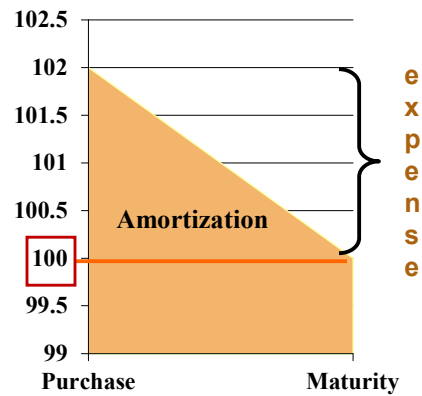
Buying above par (\$1=\$1)

Market adjusting coupons to lower yields

Daily amortization is an expense

- Book value decreases each day

Premium of \$20,000 for 180 days
is an expense of \$111.11/day



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Sometimes Mostly Premium Bonds

Simply put you might have too – rates have risen

If coupons are set by current yields

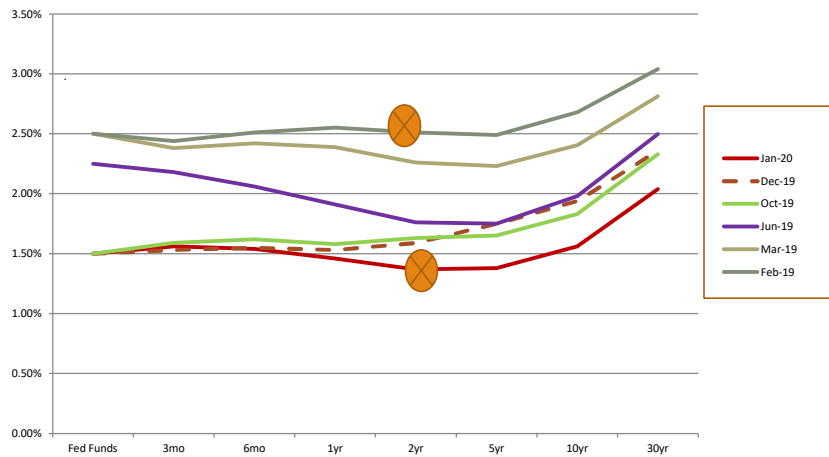
When rates have been high – coupons will be high

When rates have been low – coupons will be low

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Coupons set by market rates

They Simply Do Not Matter to Your Choice



End of Month Rates - Full Yield Curve - Fed Funds to 30yr

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Notes have Fixed Coupons

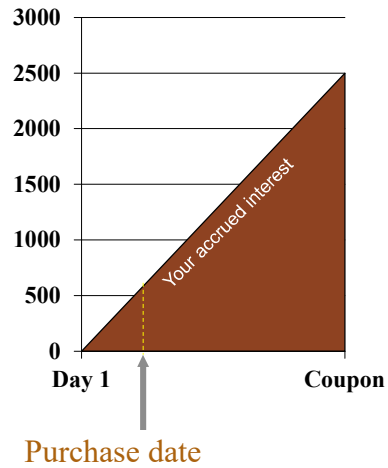
Coupons accrue daily and pays semi-annually

\$1 million 5% Note = \$50,000/yr

- Pays \$50,000/year
- Paid in 2 payments of \$ 25,000

At Purchase you buy any accrued:

- Accrued interest purchased \$1,000



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Your Trade Looks Like:

	Description		Settlement
Market Sector	T-Note	Par	1,000,000.00
Maturity Date	11/30/xx	Discount	5,000.00
CUSIP	912828TT3	Principal	995,000.00
Price	@ 99.5	Accrued Interest	138.88
Call?	Non-call	Net Settlement	<u>995,138.88</u>
Trade Date	12/10/xx		
Settlement Date	12/11/xx		



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Choosing a Note

- Your two considerations:
 - Yield to compare to other securities
 - Maturity date to match your cash flow needs
- **Ignore Coupons and Price**
 - The yield reflects both
 - All costs are net in yield

Coupon	Maturity	Bid	Asked	Yield
2.20	11/15/xx	100.00	100.03	2.18

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US Treasury Securities

- US Treasury obligations
- Full faith and credit of the US
- Auctioned by the Treasury on a set schedule by maturity
- **T-Bills** - 1 year and under maturities and all discount structures
 - 3month, 6month, and 1 year maturities
- **T-Notes** – 2 year and over maturities, all carry a coupon
 - 2year, 3 year, 5year, 10year, and 30 year – occasional changes

- | |
|---|
| <ul style="list-style-type: none"> ▪ Advantage – risk free, regular supply ▪ Disadvantage – low rates because of safety |
|---|

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US Treasuries

- Designed and marketed to reduce uncertainty and competitiveness

- Treasury Bills
 - 3mo, 6mo, and 1yr maturities
 - Auctioned weekly
 - Always mature on Thursdays
 - Quoted on yield or *discount price*

- Treasury Notes (and Bond)
 - Maturities in 2, 3, 5, 10 and 30 years
 - All have coupons
 - The longest currently being sold is known as the “bond”
 - All mature on the 15th or last day of the month
 - Quoted as *yield* and priced as *% of par*



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Bloomberg.com or TreasuryDirect are good sources of information

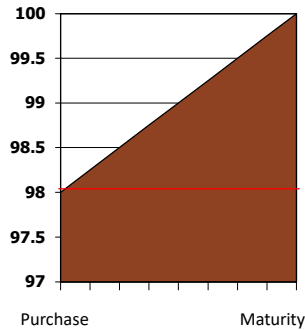
The screenshot shows the Bloomberg website interface. At the top, there's a navigation bar with 'Bloomberg' logo, 'US Edition', 'Sign In', and 'Subscribe'. Below that, a menu lists various market categories. The main content area is titled 'United States Rates & Bonds' with sub-tabs for 'Overview', 'Indices', 'U.S.', 'U.K.', 'Germany', 'Japan', and 'Australia'. The 'U.S.' tab is selected, and a yellow arrow points to the 'Treasury Yields' section. To the left, there's an advertisement for Target's 'Get Muscle Milk & Evolve protein items with Drive Up' and a 'Quote Search' box. The 'Treasury Yields' table is as follows:

NAME	COUPON	PRICE	YIELD	1 MONTH	1 YEAR	TIME (EST)
GB3.GOV 3 Month	0.00	4.64	4.75%	+17	+439	2:09 PM
GB6.GOV 6 Month	0.00	4.75	5.01%	+23	+428	2:09 PM
GB12.GOV 12 Month	0.00	4.74	4.97%	+30	+390	2:09 PM
GT2.GOV 2 Year	4.13	99.08	4.62%	+38	+304	2:10 PM
GT5.GOV 5 Year	3.50	97.72	4.01%	+40	+210	2:10 PM
GT10.GOV 10 Year	3.50	97.80	3.77%	+26	+176	2:10 PM
GT30.GOV 30 Year	3.63	95.77	3.81%	+19	+151	2:10 PM

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Treasury Bills



No surprises

Always sold at a discount

Always mature Thursday

Earn on principal only – no coupon

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Other Treasury Structures

- Callables
 - Treasury has a right to issue them but rarely does
- Floating Rate (FRN) since 2014
 - 2-year notes with floating interest rates
- Strips (US Government securities)
 - *Separate Trading of Registered Interest & Principal*
 - zero coupon, wireable, like a long T-Bill
- TIPS (Treasury Inflation Protected Securities)
 - Adjusts with CPI inflation but adjustment is on principal



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US Agencies and Instrumentalities

Take advantages of lower credit with little or no risk.

- Treasuries give markets standardization
- Agencies are *usually* higher yielding and give structural choices
 - Reflective of higher **implied** risk
 - FNMA and FHLMC are currently full faith and credit of the US
- All 'good day' maturities
- Flexible maturity date choices on short term
- Flexible structures using puts/calls



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Agencies/Instrumentalities

Higher yields
 High liquidity
 Steady supply
 Issued not auctioned
 Date tailored
 Non-standard coupons
 No bad end date

Many varieties:

- Bullets
- Callables
- Floaters
- Strips
- Variable Rate
- Step-Ups

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Instrumentalities

- An instrumentality is a non-governmental agency that acts independently but whose obligations are backed by the government because of its role in providing a public services
- qualified and can obtain tax benefits
- FNMA, GNMA, FHLMC and SLMA are instrumentalities
 - They were created to serve a public service
 - Much like a local library, hospitals or school may be considered an instrumentality

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Most Common Market Agencies

- FNMA and FHLMC are currently full faith and credit of the US
 - Conservatorship status under court direction
- These agencies are in the market most of the time with large issues/auctions.
- FHLMC “Freddie Mac” Federal Home Loan Mortgage Corp
- FNMA “Fannie Mae” Federal National Mortgage Assoc.
- FHLB “Home Loan” Federal Home Loan Bank
- FARMAC Farmer Mac
- FFCB “Farm Credit” Federal Farm Credit Bank
- *Others issue/auction less regularly because of lesser funding requirement*

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Agencies Come in Varieties

Clarify and differentiate in your policy to include/exclude

- *Obligations of the US Government, its agencies and instrumentalities, excluding mortgage backed securities*

Agency Notes

- **debentures** of the agency
- backed by the credit of the agency

Mortgage Backed Agencies

- **backed by mortgages**
- affected by interest rates and mortgage pay-downs

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Agency “Derivatives”

A “derivative” is any security “derived” from a basic security

- Not all derivatives are bad or are based on mortgages
- Agencies create derivatives to add value
- Options (puts/calls) are *embedded* in the security to create structures

Simple structure derivatives

- Callables
 - have a call option allowing the issuer to refinance at lower rates
- Floaters
 - *float* with some defined index
- Indexed
 - are priced according to some defined index (like T-Bill auctions)

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Callable Structures

Critical factors for callables

- Lock-out period when the agency is prohibited to call the bond
 - A 3/1 would be a stated maturity of 3 years with a one year option to call
- Call dates and frequencies will vary dependent on structure
- Almost always called at par (100)

Various common structures – 2/1; 3/1; 5/2; 10/3

- European – one-time call
- Bermuda – “Discrete call”, callable only on interest payment dates
- American – “Continuous call”, callable anytime with # of days notice
- Step-up callables
 - Fixed coupon to next call date
 - At call bonds either called or coupon “steps up”/increases
 - Multiple steps

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Floating-Rate Notes

- “Floaters” reset rates periodically
 - Treasuries and agencies issue floaters
 - Tied to an Index (like T-Bill auction)
 - Often priced on a specific spread
- Advantages
 - Good when rates are increasing
 - You get paid for the risk you are taking
- Disadvantages
 - Bad when rates are dropping
- Consider:
 - Reset Periods
 - Day Count Periods
 - Payment Periods
 - Maturity
 - Valuation

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Municipal Obligations

State and local obligations

- Most are callable

Sometimes offer super value over other securities

- Taxable and non-taxable issuers
- In any US state
- Rated A or above (you may want higher!)

Compare various issuance types

- General Obligations or Revenue bonds have different risks

Some represent credit and liquidity issues

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Commercial Paper

Commercial Paper

- High quality and good short-term investment option
- Unsecured promissory notes of a company or non-commercial banks
- A1/P1 or equivalent rating required
- Defined as 270 days maximum maturity
- Secondary market usually or directly placed paper

Points to ponder:

- Liquidity risk
- Credit monitoring critical
- Spread off treasury bills/notes or agency discount notes
- Stick to known names and investigate
- Diversify
- Set a maximum % of portfolio by policy – perhaps 20%

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Private Placement CP is available but represents more risk

- Maturities from 271-365 days **not liquid** - not a company's credit
- The issuer is financing 'non-current' transactions
- Sold to 'accredited investors' only
- Not intention to resell the security (or sell in 'exempt transaction')

Asset backed CP Caution

- Based on underlying securities or assets - not a company's credit
- Know what backed the securities
- Currently \$717.3 B outstanding (55% of all CP outstanding)
- high concentrations have threatened funds/pools in the past

Dangerous CP Variations

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Bankers Acceptances


Bankers Acceptances

- A promised future payment by a bank
- International trade primarily
- Structure reduces credit to all parties and therefore lower yield
- Defined as 270 maximum maturity
- Around since the 12th century!!

Points to ponder:


- Illiquid and a relatively small supply
- Measure spread vs CP
- Credit issues
- Foreign versus domestic names

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Israeli Bonds



Issued, assumed or guaranteed
by the State of Israel
Assumed backing by US

Denominated in US dollars
Longer term shortest is 2 years
Illiquid
Currently 2yr 4.57 %, 3yr 4.66 %
Feb 2023

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Bond Mutual Funds

The structure is key – not liquid securities

- Moves on market prices of security holdings
- Under the Act must have a maximum WAM of 2 years
- Not permitted by law for bond funds because of risk
- Little reason to use
 - Potential of principal loss

Check for fees

Use **no-load funds** (load = fees)

Know the **earnings history**

Read the prospectus

- Size
- Goals and policy restraints

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PFIA Bond Fund Restrictions for Your Safety

- Must be NO-load
- Must be registered with the SEC
- Must provide a prospectus – read it
- Must have a WAM less than 2 years
- Restrictions on entity fund types
 - Not more than 15% of monthly average fund balance
 - without bond proceeds, reserves, debt services
 - NO investment with bond proceeds, debt service funds or reserve funds
- Short Duration Fund Restrictions from the Acct
 - If duration > 1 year must invest in PFIA authorized securities
 - If duration < 1 year is limited to *investment grade* securities

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Mortgage-Backed Securities

- Built from pools of home mortgages
 - “Pass-through” securities
 - Passes through P&I from homeowner
- Various reporting ‘maturities’
 - Stated maturity and expected maturity
- Performance of pool
 - dependent on mortgage payments
 - Dependent upon interest rates
- Subjective pricing so priced on rate assumptions

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Mortgage-backed Securities

- Agencies buy mortgages and put like mortgages together in a pool
- As mortgagee pays monthly the funds flow through the pool
- The owner of the security gets monthly payments of P&I

- Because these are mortgages, they change *markedly* with rates

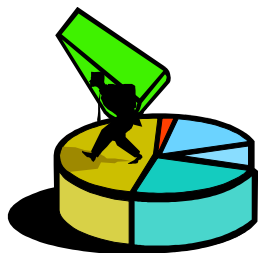
- If rates fall, then people will re-finance and funds increase to owner
- If rates increase, people hold the mortgage and your security extends

- As a result, you have a *stated* maturity and an *expected* maturity

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A Special Mortgage



- Collateralized mortgage Obligations or CMO
 - Created for investors clamoring for more yield and accepting more risk

- The original pool of mortgages is divided
 - Each piece (tranche) is structured differently
 - Some tranches carry more risk
 - All have the monthly cashflow which banks like

- CMO differ in risk
 - TAC, PAC, Jump-Z, Inverses
 - As collateral the PFIA restricts riskier tranches

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Limited-Use Securities in the Act

- **GIC**
 - Guaranteed Investment Contracts
 - Basically insurance contracts
 - Sold on a GIC platform and carries a hefty fee by brokers

- **Specialized funds [IRS Code Sec 501(f)]**
 - Like a national investment pool for institutions of higher education

- **Municipal Utilities Hedging Contracts**
 - Distributors of electricity or natural gas only
 - Hedging contracts traded on unique exchange under CFTC

- **City Mineral Rights Funds**
 - Funds received for mineral rights (primarily oil and gas)
 - Directed for reserves and open for investment under the *Trust Code*

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Making a Purchase Decision

- **Need:** \$500,000 payroll out 9 months
- **Choices:** Treasuries, CD, Agency, Pool
- **Curve:** Stable and normal upward slope
No big news or change anticipated

- **Yields:**

▪ CD	4.70 %
▪ T-Bill	5.40 %
▪ FNMA DN	5.45 %
▪ Pool	5.45 %

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Making a Purchase Decision

- Need: \$500,000 payroll out 9 months
- Choices: Treasuries, CD, Agency, Pool
- Curve: Stable and normal upward slope
Economy is very strong and inflation is growing
- Yields:

▪ CD	4.70 %
▪ T-Bill	5.40 %
▪ FNMA DN	5.45 %
▪ Pool	5.45 %

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Making a Purchase Decision

- Need: \$500,000 payroll out 9 months
- Choices: Treasuries, CD, Agency, Pool
- Curve: Stable and normal upward slope
Economy is weakening with little inflation
- Yields:

▪ CD	4.70 %
▪ T-Bill	5.40 %
▪ FNMA DN	5.45 %
▪ Pool	5.45 %

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Which do you choose? And Why?

<u>Rate</u>	<u>Maturity</u>	<u>Bid</u>	<u>Asked</u>	<u>Yield</u>
5 3/4	May 20	97:16	97:18	6.61
10 3/4	May 20	111:14	111:16	6.61

Real Value

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Buy the discount

5 3/4 Apr xx

Price	97/16
Yield	6.61 %
PAR	1,000,000
Prin	975,625
Acc	19,271

Settlement 994,896 *

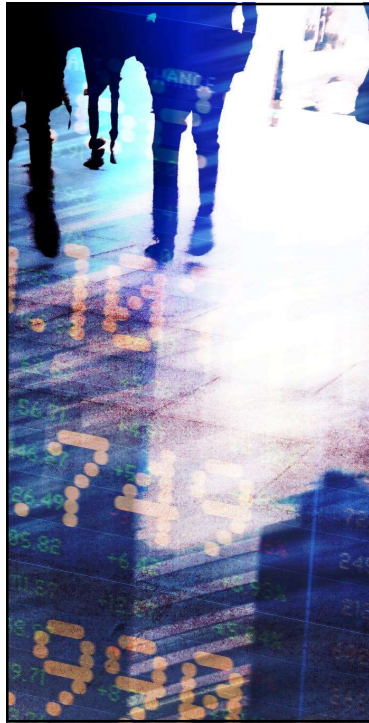
10 3/4 Apr xx

Price	111/14
Yield	6.61 %
PAR	1,000,000
Prin	1,116,875
Acc	31,600

Settlement 1,148,145

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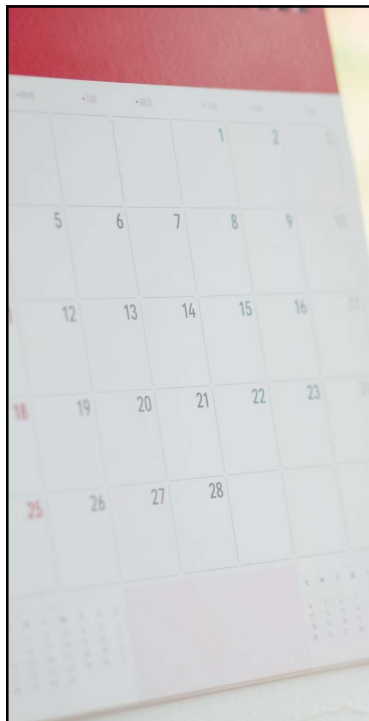
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The Trade

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All Trades Need Preparation

- Do cash flow to know when you need a maturity.
 - Set your time horizon, i.e. when you need the money.
 - Unless you need a specific date say "not past xx/xx/xxxx"
 - Decide how much you need at maturity
- A security needs safekeeping
 - Know your delivery instructions (give to all brokers)
 - Do DVP delivery

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You

- The authorized investment officer makes the decision
- The decision is based on when you need funds
- The decision is based on how much you need to mature on that date
- You will decide and monitor clearing and settlement

Your bank safekeeping or your custodian

- The custodian will take delivery and confirm settlement

A broker/dealer (or bank for a CD)

- The broker will do research for best current value
- The broker will offer you a selection for your decision
- The broker will arrange for delivery to your custodian

The Trade: Who is Involved?

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Trade Procedures

```

graph TD
    A[Do your prep] --> B[Contact B/D]
    B --> C[Receive offers]
    C --> D[Evaluate offers]
    D --> E[Award the offer]
    E --> F[Inform losers]
    F --> G[Prepare documents - file]
    F --> D
  
```


The trade requires preparatory work as well as timely, clear and concise communications.

The preparation will take more time than the trade itself

Act in a timely manner!

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Evaluating the Offer

- Does it fit my **policy** restraints?
- Do I understand **what it is**?
- Does it fit my maturity need (time horizon)?
- Compare the **YIELD**
- Sample CD offers for "not past November 2025"

Maturity	Coupon	Yield
11/01/25	4.50 %	4.50 %
08/22/25	4.75 %	4.75 %

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The Beauty of YIELD

- Yield is the common denominator of all securities
 - With yield we can compare any securities
- Use the yield to determine the highest return
 - Yield captures the effect of coupons and price
 - Never look at the coupon – it is affected by price
- Our offers:

	Maturity	Price	Coupon	Yield
T-Bill	11/15/xx	99.5	0.00 %	4.40 %
FNMA	11/01/xx	100.6	1.50 %	4.25 %
CD	11/09/xx	100.4	1.40 %	3.95 %
FHLMC/C	11/11/xx	99.9	1.50%	4.70 %

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Award the Offer

Make your evaluation quickly – time is of the essence

Respond to the winner quickly

Tell him you will buy it (he must already have delivery instructions)

He will call or email you with “the numbers”

He is going to tell his “trader” that it is done

- The trader may have to then go buy the security

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Inform the Losers

- Professional courtesy
- Brokers want to know the competition
- Knowing what you bought helps for next time
- Call the losers to let them know
 - “Sorry, I bought a ----- at 5.45%”
 - That’s all they need to know
 - Don’t make it a long conversation
 - Time is money for you both

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The Trade Documentation

- The broker will 'work up the numbers' for the confirmation of the trade
 - Usually emails the information breakdown

- There will never be a broker fee of any kind
 - You are an institutional account, so all is net in the yield

- You need a document
 - To document the trade fully – all details
 - To alert your safekeeping agent/custodian
 - To verify that the trade is as your required

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Trade Ticket Information

- Trade Information matches your confirm
 - Security description (type, cusip, settlement date, maturity date)
 - Fund for which it was bought

- Accounting Information
 - Par amount
 - Premium or discount amount
 - Principal
 - Accrued interest purchased
 - Net settlement amount
 - Trade and settlement dates

- Competitive bidding documentation
 - Three offers and the offer yields for each



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Reading a Broker Confirmation

Broker Firm

Trade Confirmation

Page Number: 3 of 4
Account Number:
Financial Adviser:

Phone:
Office:

**Your address
And account**

Trade Date	Security Description	Cusip/Sec. No.	Qty Bought	Price
01/08/2015	MISSISSIPPI DEV BK OBLIG RANKIN CNTY PUB IMPT REV AMBAC B/E OID@99.570 3.8 CPN 3.750% DUE 07/01/15 DTD 01/26/05 FC 01/01/06	60534PR39	100,000	101.56000
Principal:				\$101,560.00
Accrued Interest:				\$125.00
Net Amount:				\$101,685.00

Settlement Date: 01/13/2015
Account Type: CASH ACCOUNT
Transaction Type: 01 (See enclosed)

Special Remarks for this transaction:
BOOK ENTRY ONLY
SPECIAL MANDATORY REDEMPTION
NON-CALLABLE
AMBAC INSURED
ORIGINAL ISSUE DISCOUNT
OFFERING DOCUMENTS AND MATERIAL EVENTS ARE AVAILABLE AT
WWW.FDIA.MSER.ORG. PRINTED OFFERING DOCUMENTS ARE
AVAILABLE UPON REQUEST.
0.600% YIELD TO MATURITY
SEC IPO PRICE \$99.57000
RATINGS: MOODY'S NR AND S&P A

It must never show a transaction fee!!

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Language of the Trade

- Settlement types
 - Cash – settlement on same day as trade (must be an early trade)
 - Regular – settles the next day from the trade
 - Skip – settles out on a agreed to date (helpful when \$ comes from pool)
 - WI – when issued – buying before the security is actually on market
- Bid - ask for it if you are selling a security SELLING
- Offer – ask for it if you are buying a security BUYING

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Selecting a Broker

- Determined by portfolio needs and types of securities
- Institutional versus retail
- Institutional will rarely be local
- Primary versus secondary
- Banks are used only for CDs (they may have a brokerage)
- How many brokers do you need for competition?
- What is my initial due diligence?

NEVER use broker safekeeping

- move securities to your bank safekeeping/custodian

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How to Use a Broker

Only broker/dealers get you market access

To make an investment

- Set your time horizon
 - Set the maximum maturity date
- Tell **multiple** brokers what you need/want
 - "I need the best rate not past xx/xx/xx in an agency or treasury"
- Wait for them to do the research and respond with options
 - They will bring back alternatives for you to chose from
- **You** compare and make the decision
 - Inform them all what you bought (the "cover")
 - Feedback is important

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Broker/Dealers

Services

- Access to markets
- Market analysis
- Security analysis
- Credit research

Risks

- Default of firm – **not with DVP**
- Transaction time
- Safekeeping by broker is not safe
- Safekeeping by broker **loses control**

The brokers job is to SELL you not advise you.

Only advisers are registered to give advice.

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Broker or Dealers

Broker

- No inventory
- Transaction based
- FINRA Regulation
- Capitalization
- Retail -Institutional

The difference is in the coverage and maybe the price – you can do business with any if registered in Texas.

Dealer

- Maintains inventory
- FINRA Regulation

Primary Dealer

- Reports to NY Fed
- Capital monitored
- Open market trading for NY Fed
- Liquidity provider
- FINRA

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Primary Dealer List

Currently 22

Primary Dealers - Federal Reserve

newyorkfed.org/markets/primarydealers

home > markets & policy implementation > counterparties >

Primary Dealers

Primary dealers are trading counterparties of the New York Fed in its implementation of monetary policy. They are also expected to make markets for the New York Fed on behalf of its official accountholders as needed, and to bid on a pro-rata basis in all Treasury auctions at reasonably competitive prices.

LIST OF PRIMARY DEALERS

CURRENT LIST, ADDITIONS, REMOVALS & NAME CHANGES

PRIMARY DEALERS | ADDITIONS AND REMOVALS | NAME CHANGES

Primary Dealers

- Amberton Pipetop Securities LLC
- ASL Capital Markets Inc.
- Bank of Montreal, Chicago Branch
- Bank of Nova Scotia, New York Agency
- BNP Paribas Securities Corp.
- Barclays Capital Inc.
- BoFA Securities, Inc.
- Center Fitzgerald & Co.
- Citigroup Global Markets Inc.
- Credit Suisse AG, New York Branch
- Daiwa Capital Markets America Inc.
- Deutsche Bank Securities Inc.
- Goldman Sachs & Co. LLC

Announcements

Leslie Logan on Desk Operations: The New Normal
2021 Primary Dealers Meeting, April 8, 2021
Agenda for the Annual Meeting with Primary Dealers - PDF
April 8, 2021

Data

Weekly Positions, Transactions & Financing
Quarterly Market Share Data of Transactions [EXCEL](#)
Year-to-date Market Share Data of Transactions [EXCEL](#)
Historical Data Search

Primary Dealer Surveys

January 2022 Survey Results
See all primary dealer surveys

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RELATED NEW YORK FED CONTENT
RELATED EXTERNAL CONTENT

List is found at newyorkfed.org/markets/primarydealers

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Document the Broker for Your Files

- FINRA registration
 - Central Registration Depository Number (CRD#) then look up the details yourself
- Texas Registration – State Securities Board
- Annual Financial Statement
- Short questionnaire information – backup, contacts, delivery instructions
- You do not need a 1295 nor certification
- Send them your policy as due diligence
- You do not use an RFP for brokers

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Check Brokers on FINRA finra.org

Google Calendar - July 2020 x | Inbox - lindaxl879@gmail.co... x | 20 Best Summer Salads | The... x | Calendars - About ESC 20 - E... x | Images for thanks - Google S... x | BrokerCheck - Find a broker... x

brokercheck.finra.org

FEEDBACK | BrokerCheck Help Line (800) 289-9999 | FINRA Home

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[Why Use BrokerCheck?](#)

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Your Trade Protection

- Review and Approve Broker/dealer list annually
 - Broker/dealers only on list not banks or pools
 - Add or subtract ones that are working well for you
- Peer Experience and References
- SIPC ONLY APPLIES TO BROKER HELD SECURITIES –not applicable here
- FINRA (Financial Industry Regulatory Authority) get the skinny from the regulators

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Your job as an investment officer

- Meet known asset/liability requirements.
- Prepare for unexpected liabilities with buffer.
- Balance yield with liquidity and flexibility.
- Read *major* market trends for applicability.
- Read the curve and markets for rate direction.
- Enhance yield.
- Protect principal
- Have a strategy and act on it.

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REMEMBER INVESTING
IS RISK MANAGEMENT!

MANAGE THE RISKS AND GET
STARTED.

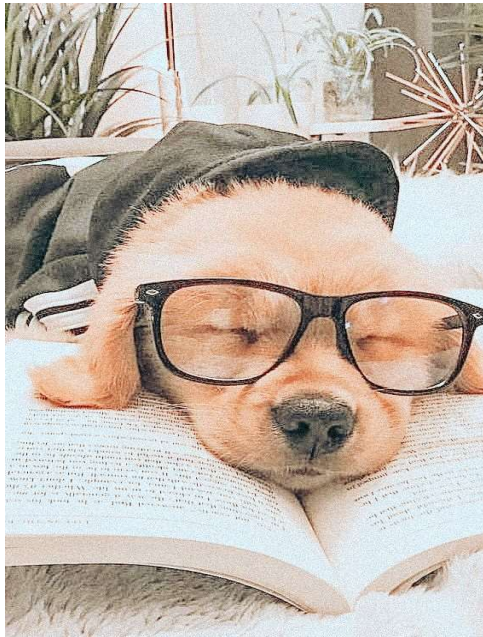
LINDA PATTERSON
MEEDER INVESTMENT
LPATTERSON@MEEDERINVESTMENT.COM

512-230-1336

512-415-0945

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Relax – we're
done...

Thanks!

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