SESSION FOUR

Investment Options: Negotiable Certificate of Deposits, Commercial Paper, Corporates, and Asset-backed Securities



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- Introduction to credit securities
- Basic information about the asset classes
 - Negotiable CDs
 - Medium-Term Notes
 - Commercial Paper
 - Asset-Backed Securities
- Utilizing credit securities in the portfolio context
- Review of pooled investments in an investment program
- Case Study: Ventura County

• Introduction to credit-related securities

Why Use Non-Governmental Securities?

- Enhance diversification
- Increase return potential
- Relative value can be found (spreads can shift)
- Risks:
 - Market and credit risk
 - Headline risk

CA Code In Perspective

		<u>Maturity</u>	Credit Quality	<u>Code Status</u>
	US Treasuries	0-5 Years	N/A	Allowed
	Federal Agencies	0-5 Years	N/A	Allowed
_	Municipal Bonds	0-5 Years	N/A	Allowed
rio me	Negotiable CDs	0-5+ Years	A-1/P-1 or A	Allowed
Short Duration Fixed Income	U.S. Corporate Bonds	0-5 Years	A or better	Allowed
걸	Commercial Paper & Other Money Market Securities	0-9 Months	A-1/P-1	Allowed
ort	Mortgage-Backed/Asset-Backed Securities	0-5 Years	AA or better	Allowed
Sh	Money Funds/Mutual Funds	N/A	AAA	Allowed
	Supranational Securities	0-5 Years	AA or better	Allowed
	US Treasuries	> 5 Years	N/A	Sometimes Allowed
	Federal Agencies	> 5 Years	N/A	Sometimes Allowed
D a	Municipal Bonds	> 5 Years	N/A	Sometimes Allowed
ži č	U.S. Corporate Bonds	> 5 Years	= < BBB	Prohibited
Core Fixed Income	Mortgage-Backed Securities	> 5 Years	= < BBB	Prohibited
<u></u>	Asset-Backed Securities	> 5 Years	= < BBB	Prohibited
	High Yield	N/A	= < BB	Prohibited
	Income Stocks	N/A	N/A	Prohibited
	Value Stocks	N/A	N/A	Prohibited
	Growth Stocks	N/A	N/A	Prohibited
	International Stocks	N/A	N/A	Prohibited
nts	Emerging Market Stocks	N/A	N/A	Prohibited
Пе	Real Estate	N/A	N/A	Prohibited
est	Commodities	N/A	N/A	Prohibited
Ž	Futures	N/A	N/A	Prohibited
Other Investments	Options	N/A	N/A	Prohibited
ţ	Precious Metals	N/A	N/A	Prohibited
0	Derivatives	N/A	N/A	Prohibited
	Hedge Funds	N/A	N/A	Prohibited

Agencies are limited to investing their surplus funds in high quality fixed income securities with a primary objective of principal preservation

Basic Asset Class Information

Medium-Term Corporate Notes

• **Definition**: Debt security issued by a corporation representing a contractual loan with stated interest rate and fixed payment due dates of interest and principal and whose claim to company assets is senior to equity holders

• **Issuer**: Domestic and foreign corporations

 Credit: Rated by NRSROs. Corporate bonds can be described as either investment grade (high grade) or non-investment grade (high yield or junk), as determined by the bond's associated credit rating

• Maturity: 1 year to Decades

MTN's Continued

• Liquidity: Widely held; moderate security

• **Yields**: Observed as higher than U.S. Treasuries and Federal Agency

obligations and based on credit quality

California Government Code limits:

- Minimum credit rating category of "A" or its equivalent or better
- Maximum allocation of 30%
- Maximum maturity of 5 years

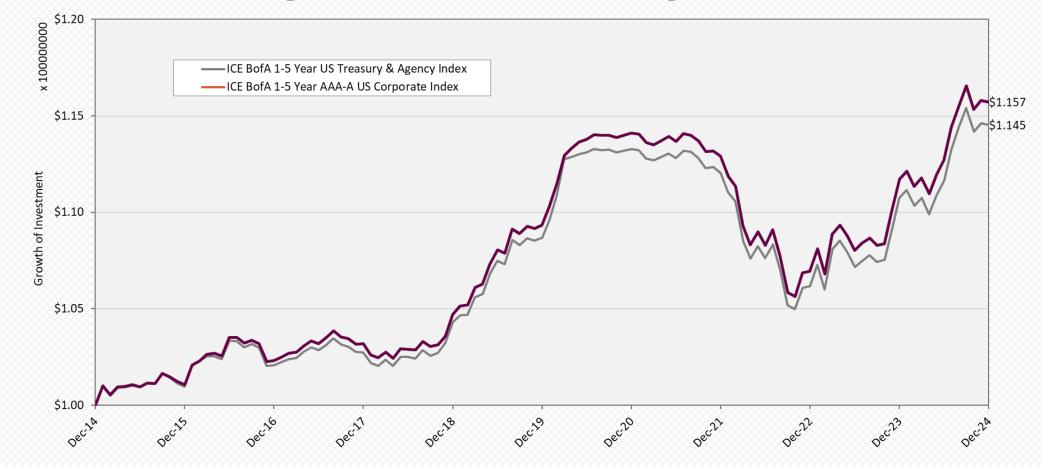
Who Is Issuing?

- Corporate bond issuers can be split into various sectors. The current Global Industry Classification Standards (GICS) classifications include:
 - Telecommunications
 - Consumer discretionary (Autos, Consumer Durables, Media, Retail)
 - Consumer staples (Food, Beverage, Household, Staples Retailing)
 - Energy
 - Financials (Banks, Diversified Financials, Insurance, Real Estate)
 - Healthcare (Equipment, Pharmaceuticals, Biotech, Life Sciences)
 - Industrials (Capital Goods, Comm & Prof. Services, Transportation)
 - Materials
 - Information Technology (Software, Hardware, Semiconductors)
 - Utilities

Make-Whole Call Provisions

- Bondholder "made-whole" if called
- Bond holder is paid a lump sum which equals present value of all payments that will not be made as a result of the call
 - Discount rate based on comparable U.S. Treasury + premium
 - Minimum = par value of bond
- Many corporate bonds are issued with make-whole call provisions

Advantage of Owning Corporates



			* * * * * * *			
Malua on	12/21	12021	FCIAN .	ممناانمم	invested	12/31/2014
value on	IZ/31	1 ZUZ4 U	ISTUU	пинон	Ilivestea	12/31/2014

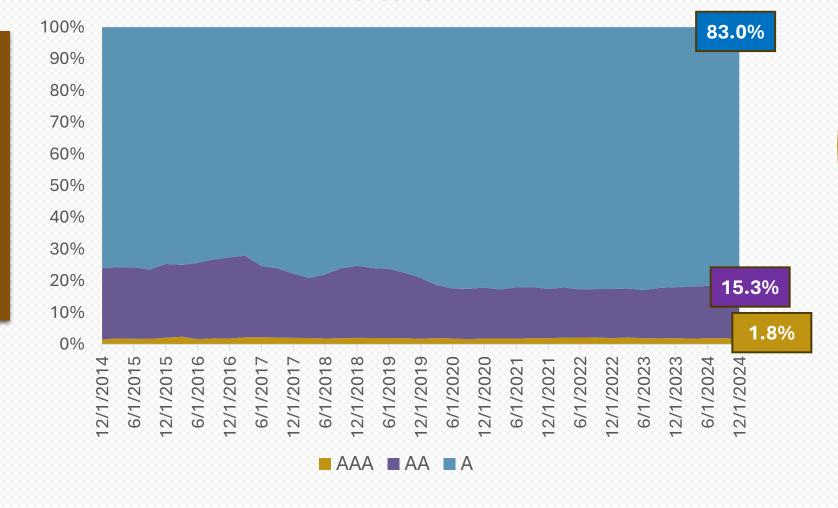
	12/31/2024	Annualized Return	Outperformance
ICE BofA 1-5 Year US Treasury & Agency Index	\$114,536,876	1.37%	
ICE BofA 1-5 Year AAA-A US Corporate Index	\$115,724,942	1.47%	\$ 1,188,066

Source: Bloomberg

Credits Eligible For Purchase By CA Local Governments

ICE BofA 1-5 Year AAA-A U.S. Corporate Index Credits

 Credits are slim for investors limited to rating category AA or higher!



Source: Bloomberg

Negotiable Certificates of Deposit

• **Definition:** Obligations of banks, savings and loans, and other financial institutions.

• **Issuer:** Issued by a nationally or state-chartered bank, a savings

association or a federal association, a state or federal credit

union, or by a federally licensed or state-licensed branch of

a foreign bank.

Credit: Based on bank rating

Maturity: Typically to 5 years

NCD's Continued

• Liquidity: Traded in large lots—money market mutual funds purchase

these but can also be purchased in smaller sizes.

• **Yields:** Depends on environment; generally observed as higher than

U.S. Treasuries and Federal Agency obligations and based on

credit quality

California Government Code limits:

- No credit quality requirement
- Maximum allocation of 30%
- Maximum maturity of 5 years without pre-approval

Commercial Paper

• **Definition**: Unsecured, US Dollar denominated promissory notes issued by corporations and financial institutions to raise funds on a short-term basis

• **Issuer**: Domestic and foreign corporations organized and operating

in the United States

• Credit: Investment grade: A-1/A-1+, P1, F-1

• Maturity: 1 to 270 days generally

CP Continued

• Liquidity: Widely held but usually held to maturity

• **Yields**: Higher than U.S. Treasury and Federal Agency obligations

California Government Code limits:

- Minimum rating of "A-1" or "A" or its equivalent or better
- Maximum allocation of 25% OR 40% maximum if an entity has over \$100 million in AUM (Sunsets 01/01/2026)
- Maximum allocation of 40% for counties
- Maximum maturity of 270 days
- OID Security (Discounted)
- Additional issuer requirements apply for Asset-Backed Commercial Paper (ABCP)

Asset-Backed Commercial Paper

- A Type Of CP Where Repayment Is Based On the Cash Flows Of the Underlying Assets
- Special Purpose Entity (Conduit) Created To House the Assets and Issue the Commercial Paper
- Enhancements
 - Liquidity facilities provided by third party financial institutions

ABCP Continued

Collateral

Collateralized by a pool of assets such as credit card or trade receivables, or mortgages

Repayment

Cashflow from underlying assets and issuance of new ABCP make repayment

Liquidity Facilities

If there is a cashflow shortfall, conduit may use liquidity facilities to repay

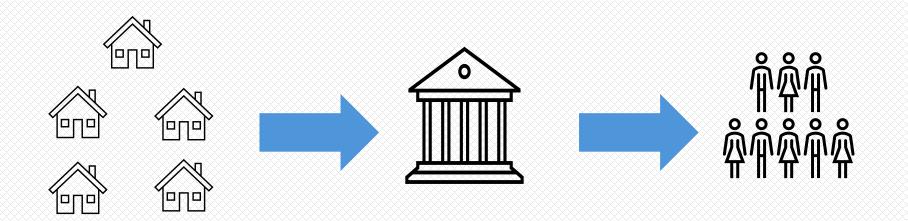
Benefits

- ABCP allows banks to use existing receivables to provide funding
- ABCP allows banks to remove assets from their balance sheet while retaining some economic interest

Risks

The composition of the underlying assets is important during market stress

Basics of Securitization



Groups of Underlying Assets

Securitization Into Passthrough Security

Security
Purchased by
Investors

Asset-Backed Securities

• **Definition**: Pools of receivables where bond holders are paid from debt service payments made by debtors in the pool.

• **Issuer**: Sponsoring company/trust

• Credit: Rated by NRSROs, often with credit enhancements like

subordination, credit tranching, overcollateralization,

reserve accounts, excess spread, letter of credit, and

insurance

• Maturity: Typically up to 10 years

ABS Continued

• Liquidity: Moderate

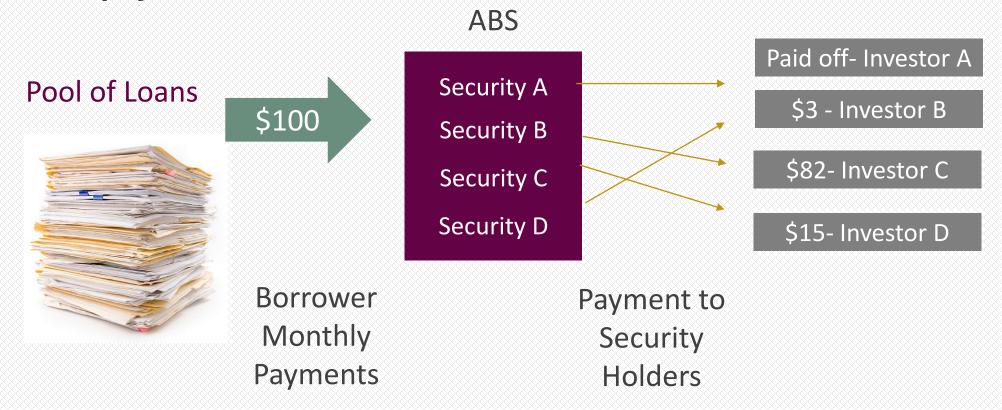
• Yields: Higher than U.S. Treasuries and Federal Agency obligations

California Government Code limits:

- Minimum credit rating of "AA" or its equivalent or better
- Maximum allocation of 20%
- Maximum remaining maturity of 5 years

Generic Structure of ABS

Flow of payments



Understanding ABS Risk

Prepayment risk - uncertainty around the timing of receiving interest and principal cash flows

- Extension risk receiving cash flows later than initially planned
- Contraction risk receiving cash flows earlier than initially planned

Default risk - the chance a borrow fails to pay interest and principal on their outstanding obligation

- Loss risk potential to experience a loss when liquidating distressed collateral
 - Severity the discount given to the value of liquidated collateral

Understanding ABS Risk Continued

Servicer/Sponsor risk - the chance the party who is involved with collecting funds from borrowers becomes financially or operationally compromised

If an issue arises there may be a disruption or difficulty collecting and processing payments

Liquidity risk - inability to sell a security at reasonable price

Regulatory risk - regulations may change altering performance of the security

Of the asset classes presented, California Government Code allows only one with maturities longer than 5 years. Which is it?



Corporate Notes



Asset-Backed Securities



Negotiable Certificates of Deposit

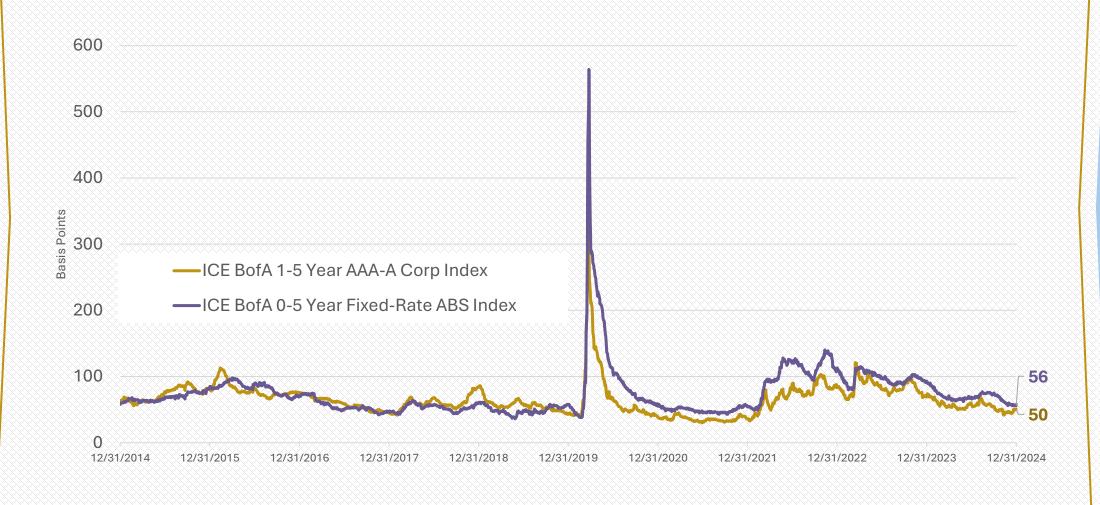
• Utilizing credit securities in the portfolio context

Buy-And-Hold: Insensitive to Interest Rate Changes



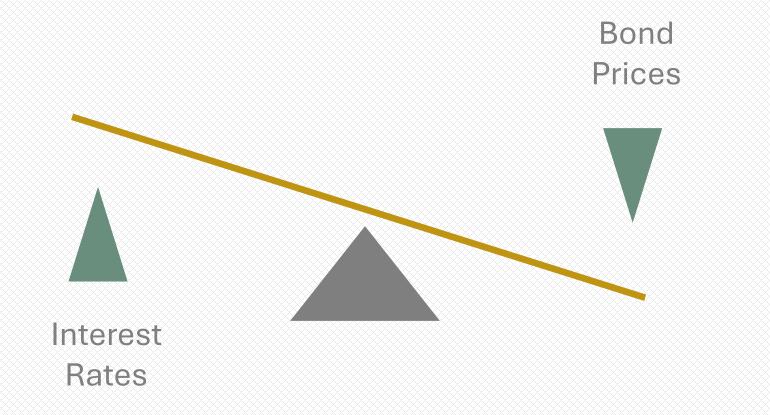


Historical Spreads to U.S. Treasuries



Prices and Rates Move Opposite One Another

Bond prices and interest rates have an inverse relationship



How Does This Work?

You purchase on 12/31/2024:

Par	Credit Quality	Coupon	Maturity	Income	Yield	Price
\$1 million	AAA	5%	12/31/2025	\$50,000	5%	100.000



How Does This Work?

Rates rise on 1/1/2025, and someone else purchases a newly-issued security similar to yours, but with a higher coupon:

Your Bond	Credit Quality	Coupon	Maturity	Income	Yield	Price
\$1 million	AAA	5%	12/31/2025	\$50,000	5%	100.000

Their Bond	Credit Quality	Coupon	Maturity	Income	Yield	Price
\$1 million	AAA	6%	12/31/2025	\$60,000	6%	100.000

Impact of Rising Rates

Here's some math to contemplate:

	Par	Income	Yield
Their Bond	\$1 million	\$60,000	6%
Your Bond	\$1 million	- \$50,000	5%
		= \$10,000	

Your security would have to be sold at approximately \$990K to make up for the rise in interest rates

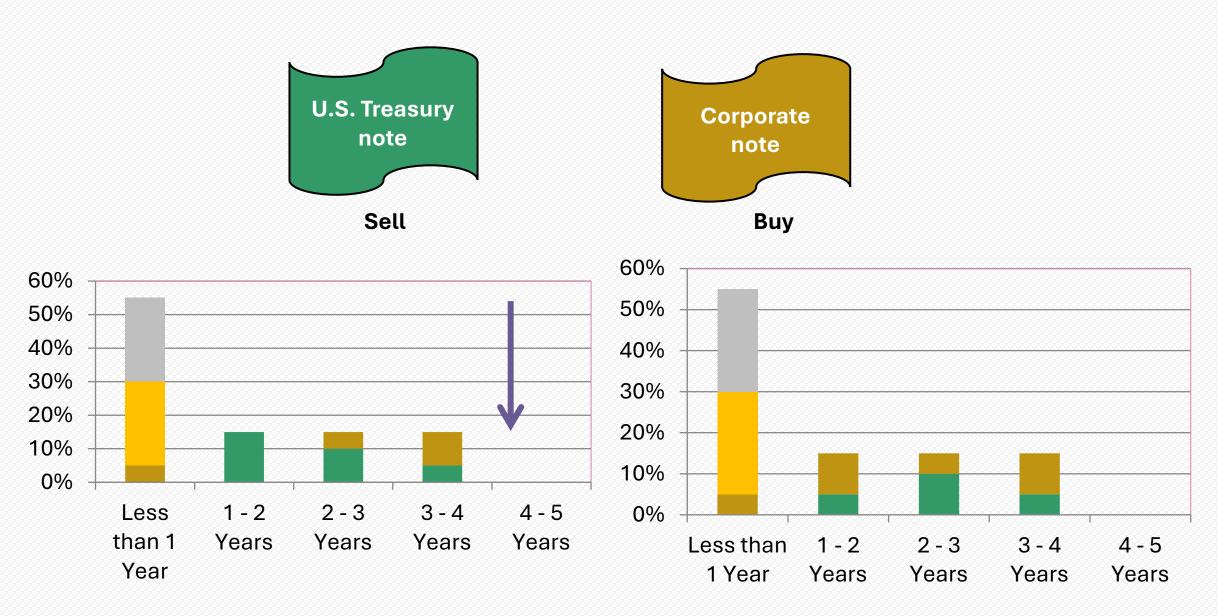


Active Management

- Buy with intent to hold to maturity
- May sell before maturity to
 - Enhance earnings/returns
 - Reduce risk
 - Adapt to changing cash flows or market conditions

- Active Strategies
 - Sector trades
 - Duration trades
 - Roll down

What is a Sector Trade?



Sample Sector Trade

Example

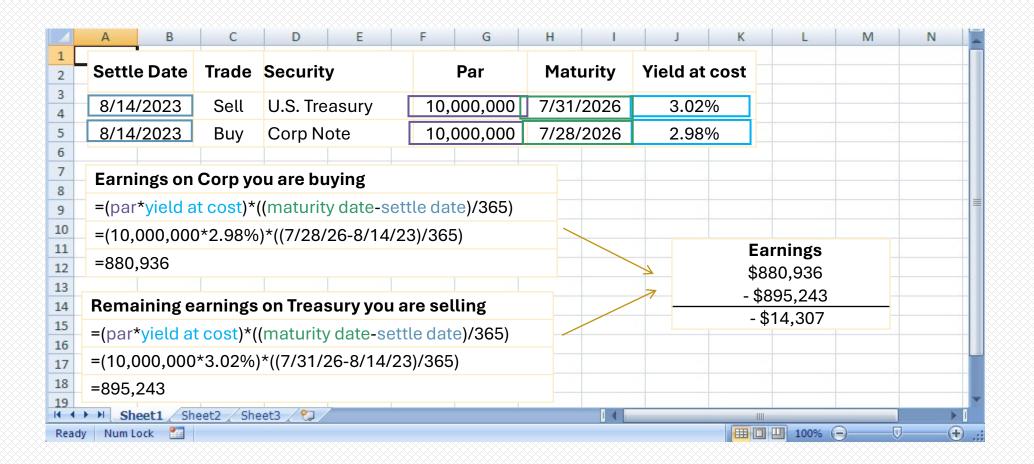
Sell 8/14/23 Treasury Notes AA+ \$10,000,000 7/31/26 3.02% 2.90% Buy 8/14/23 Corporate Issuer AA+ \$10,000,000 7/28/26 2.98% 2.98%	Trade Type	Date	Sector	Issuer	Credit Rating	Par	Maturity	Yield at cost	Yield at market
Buv 8/14/23 Corporate \ AA+ / \$10.000.000 \ //28/26 \/ 2.98% \/ 2.98%	Sell	8/14/23	Treasury	_	AA+	\$10,000,000	7/31/26	3.02%	2.90%
	Buy	8/14/23	Corporate		AA+	\$10,000,000	7/28/26	2.98%	2.98%

Benefit calculation

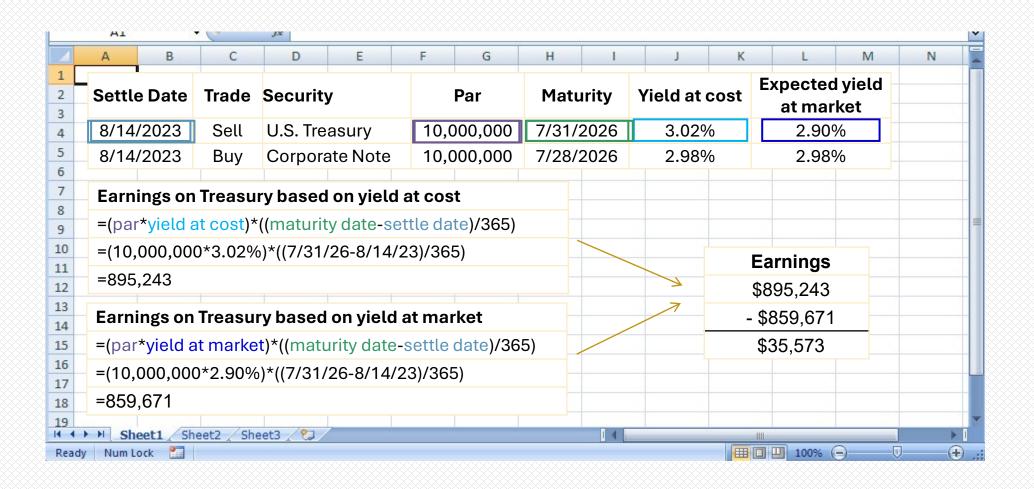
Earnings giving up	(\$895,243)
Earnings gaining	\$880,936
Gain on sale	<mark>\$35,573</mark>
Benefit of trade:	<mark>\$21,266</mark>

Trade will create incremental earnings of more than \$21,000 over the life of the bond.

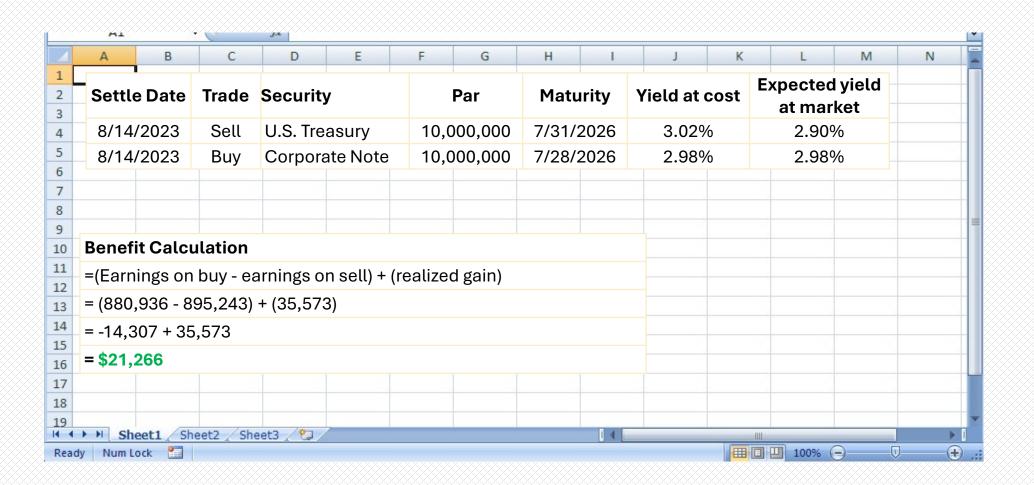
Benefit Calculation



Benefit Calculation (cont. 2 of 3)



Benefit Calculation (cont. 3 of 3)



True or False??



Values rise when rates rise



A sector trade is an example of active management



Active management is superior to buy-and-hold

Review of pooled investments in an investment program

Sample Investment Program Structure

Investment Program

Daily Liquidity

Checking Account

 Daily cash required for payroll, operational and other outgoing invoices

Less than 1 Year

Liquidity Portfolio

- Local Agency Investment Fund (LAIF)
- Local Government Investment Pools (LGIP)
- Government Money Market Funds
- Matching maturities to known expenditures

Greater than 1 Year

Reserve Portfolio

- Invest in longerduration, high-quality securities allowed by CA Government Code and the Investment Policy to enhance the potential to increase earnings
- Implement a book or total return objective

Dependent Upon Need

Customized Solutions

 Option for customized investment solutions for operating, project, and restricted bond reserves

Money Market Funds

• **Definition:** SEC-registered open-end investment company that

pools money from many investors and pools money in

short-term money market instruments

• Managed By: SEC-Registered Investment Advisor

• Credit: Generally, AAA equivalent

• Maturity: N/A

• Liquidity: Moderate to High

• Yields: Higher than U.S. Treasury and Federal Agency

obligations

Money Market Mutual Funds

- Money market mutual funds
 - 20% of investment program
 - AAA by 2+ NRSROs or Advisor requirements
 - Net asset value (NAV) vs. variable NAV

Local Government Investment Pools

• **Definition**: Funds created by pooling the assets of various local

governments to benefit from shared liquidity,

strategy and economies of scale.

Managed By: State/County or Professional Money Manager in

accordance with local permitted investment statutes

• **Issuer**: Holds securities of various issuers, depending on

stated investment strategy

Credit: May or may not be rated

Local Government Investment Pools Continued

Maturity: Generally same day liquidity

• Liquidity: Very high

• Yields: Depending on permitted investments and investment

strategy, can be similar to money market funds

- California Government Code limits:
 - Advisor requirements
 - Underlying investments must be same as Code

Practitioner Perspective

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Local Agency Investment Fund (LAIF)

The California State Local Agency Investment Fund (LAIF) is an investment portfolio managed by the State Treasury and Agencies, Corporate debt, Certificates of Deposit, Mortgage Backed Securities and certain loans to the State and state agencies. The average maturity of the Fund will be between 120 days and 18 months.

ICE BofA 1-5 Year US Treasury & Agency Index

The ICE BofA 1-5 Year US Treasury & Agency Index tracks the performance of US dollar-denominated sovereign debt publicly issued by the US government and government sponsored enterprises in its domestic market. Qualifying securities must have at least one year remaining term to final maturity, a fixed coupon schedule, and a minimum amount outstanding of \$1 billion. Qualifying securities must have at least 18 months to final maturity at the time of issuance.

ICE BofA 1-5 Year AAA-A US Corporate Index

ICE BofA US Corporate Index tracks the performance of US dollar denominated investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of \$250 million.

ICE BofA 0-5 Year AAA US Fixed Rate Asset Backed Securities Index

ICE BofA US Fixed Rate Asset Backed Securities Index tracks the performance of US dollar denominated investment grade fixed rate asset backed securities publicly issued in the US domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch). In addition, qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch). In addition, qualifying securities must have a fixed rate coupon (including callable fixed-to-floating rate securities), at least one year remaining term to the last expected case flow, an original deal size for the collateral group greater than or equal to 10% of the original deal size and a minimum outstanding tranches size of \$50 million for mezzanine and subordinated tranches.

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County of Ventura Investment Pool



Ventura County TTC

- Elected Official Sue Horgan
- Investment Structure
 - -TTC is the de facto CIO
 - Investment resides in Treasury not separate
 - Investment tasks are performed by TTC, ATTC, Treasury
 Manager, Supervisor, and Senior Accounting Technician
 - Assessing the current structure

Ventura County Investment Pool

- Standard & Poor's highest rating AAAf/S1+
- 50/50 Ventura County and Schools/Colleges
- Treasury Oversight Committee
 - Meet twice a year
 - Review Investment pool performance and IPS
 - Members TTC, ACO, BOS, Deputy School Superintendent

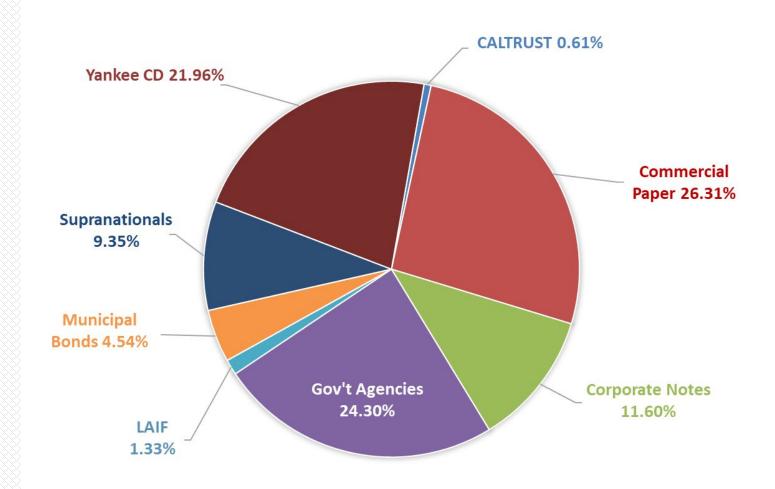
Ventura County Investment Pool (cont. 2 of 2)

- Size of Pool
 - -\$2B in 2011 to \$4.8B as of 1/10/25
 - Increase due to higher tax collections, state apportionments and grants, and investment earnings
- Buy and hold approach
- Focus on shorter term for liquidity
 - Average days to maturity 326 days. Max is 375 days
- No more than three-year maturity
- Use of approved issuer list

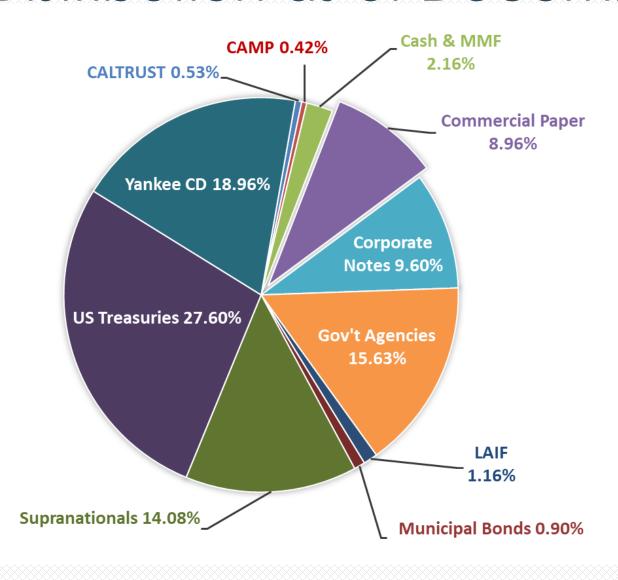
Ventura County Investment Pool Recent Changes Since January 2023

- Allspring 100% Treasury MMF
- US Treasuries
- Buy larger deals/issuances
- Reduce concentration limit to 5% except Treasuries, Supras, and GSEs
- Reduce GSEs callable bonds
- Invest in longer maturities

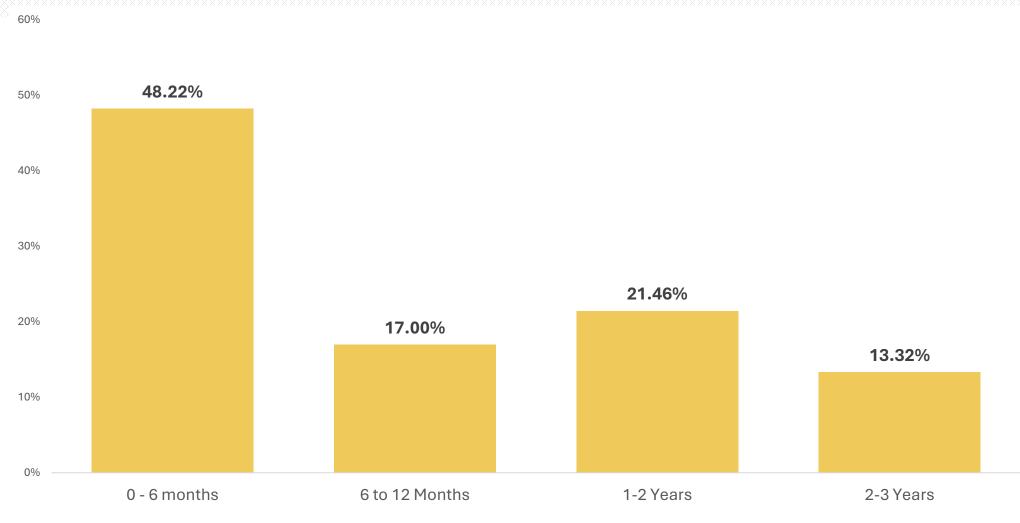
Ventura County Investment Pool Sector Distribution as of December 2022



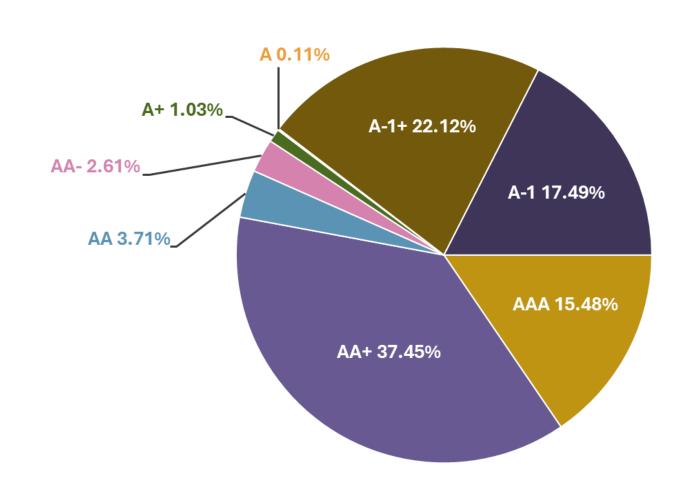
Ventura County Investment Pool Sector Distribution as of December 2024



Ventura County Investment Pool Maturity Distribution as of December 2024



Ventura County Investment Pool S&P Ratings as of December 2024



Summary

- Focus on diversification
- Implemented changes in how we invest
- Room to grow and improve it only gets better!
 - Area of focus



QUESTIONS?



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