

CMTA Conference

April 27, 2023



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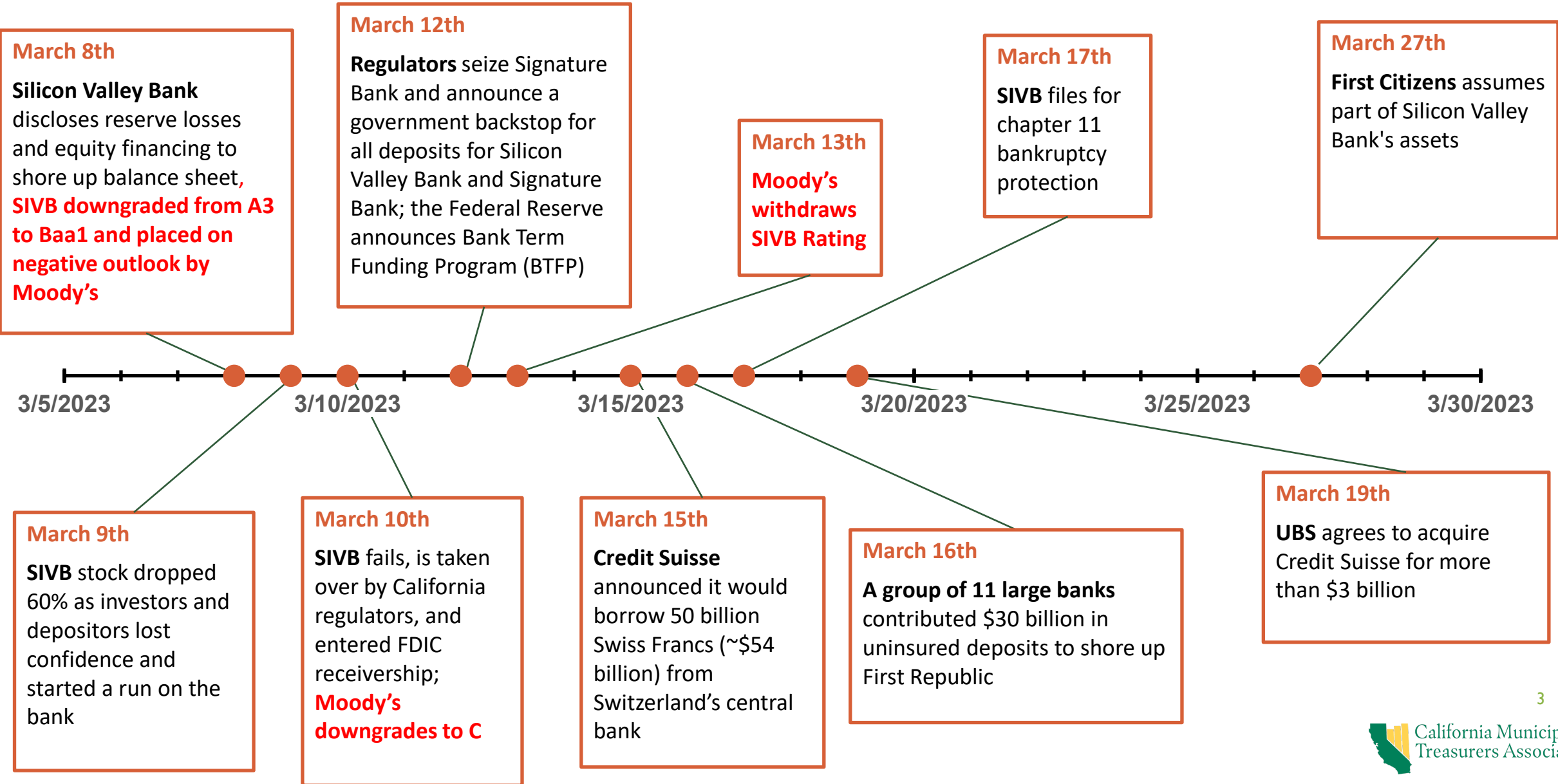
Alaynè Marie Sampson
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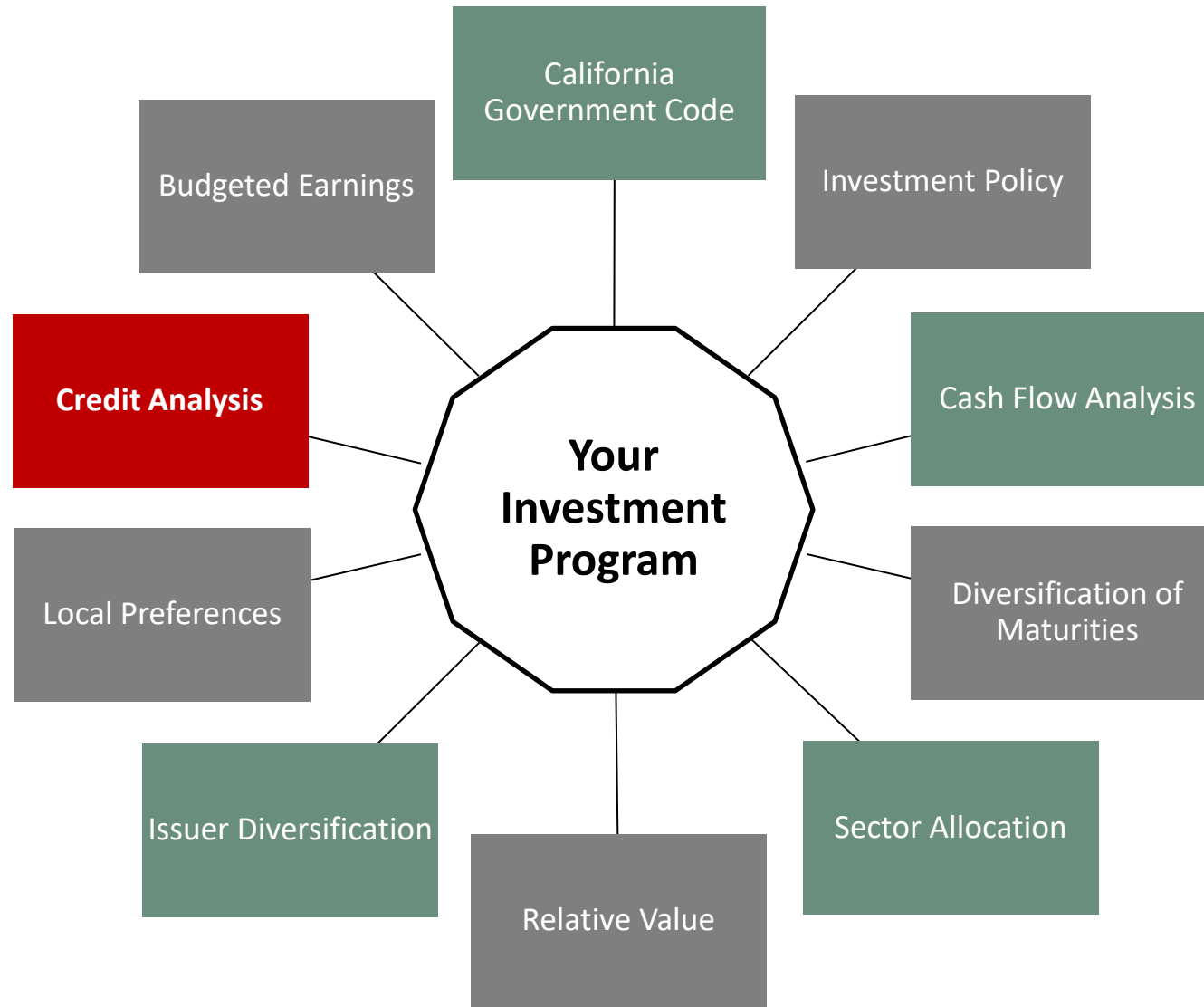
Liana Whyte, MPA
Budget and Treasury Manager

SECTION 1	Portfolio Management	Carlos
SECTION 2	Fundamentals of Credit Analysis	Alaynè Marie
SECTION 3	A Practitioner's Point of View	Liana
SECTION 4	Question and Answer	<i>Audience</i>

Timeline of a Bank Run: From Two Days to Two Weeks



Credit Analysis Is Part of Any Treasurer's Tool Box



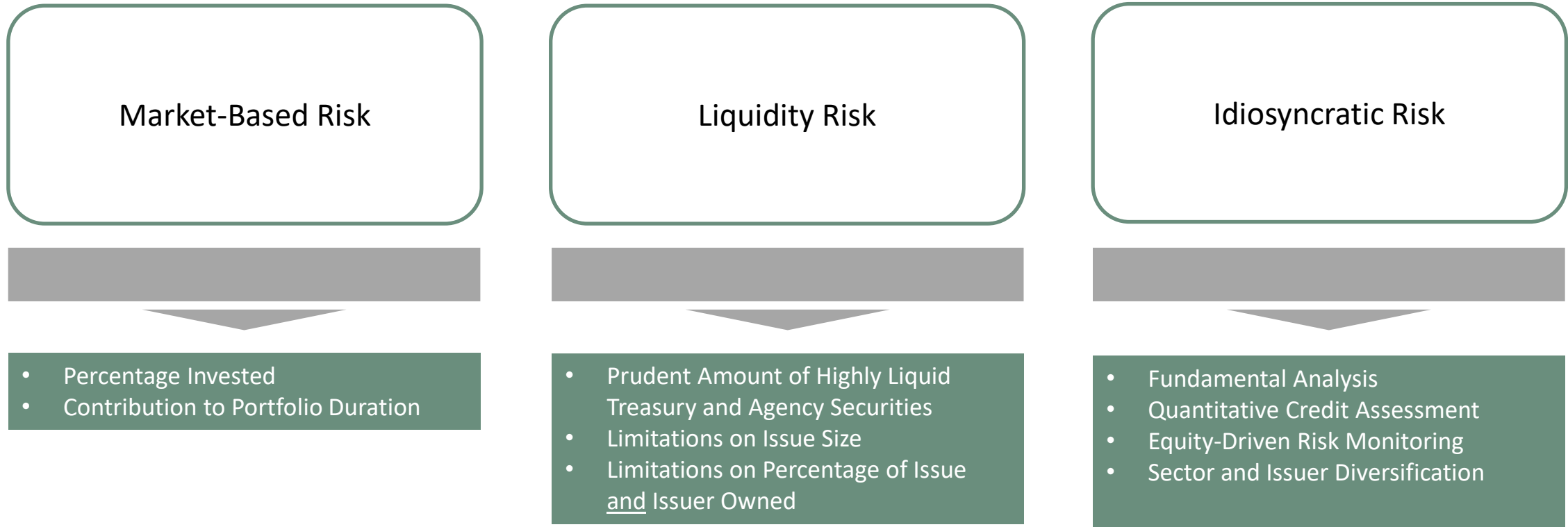
After completing this session, a successful learner will be able to:

1. Define the building blocks of credit analysis
2. Identify and mitigate risk associated with non-governmental securities
3. Apply the application of a credit process within the context of a public agency investment program

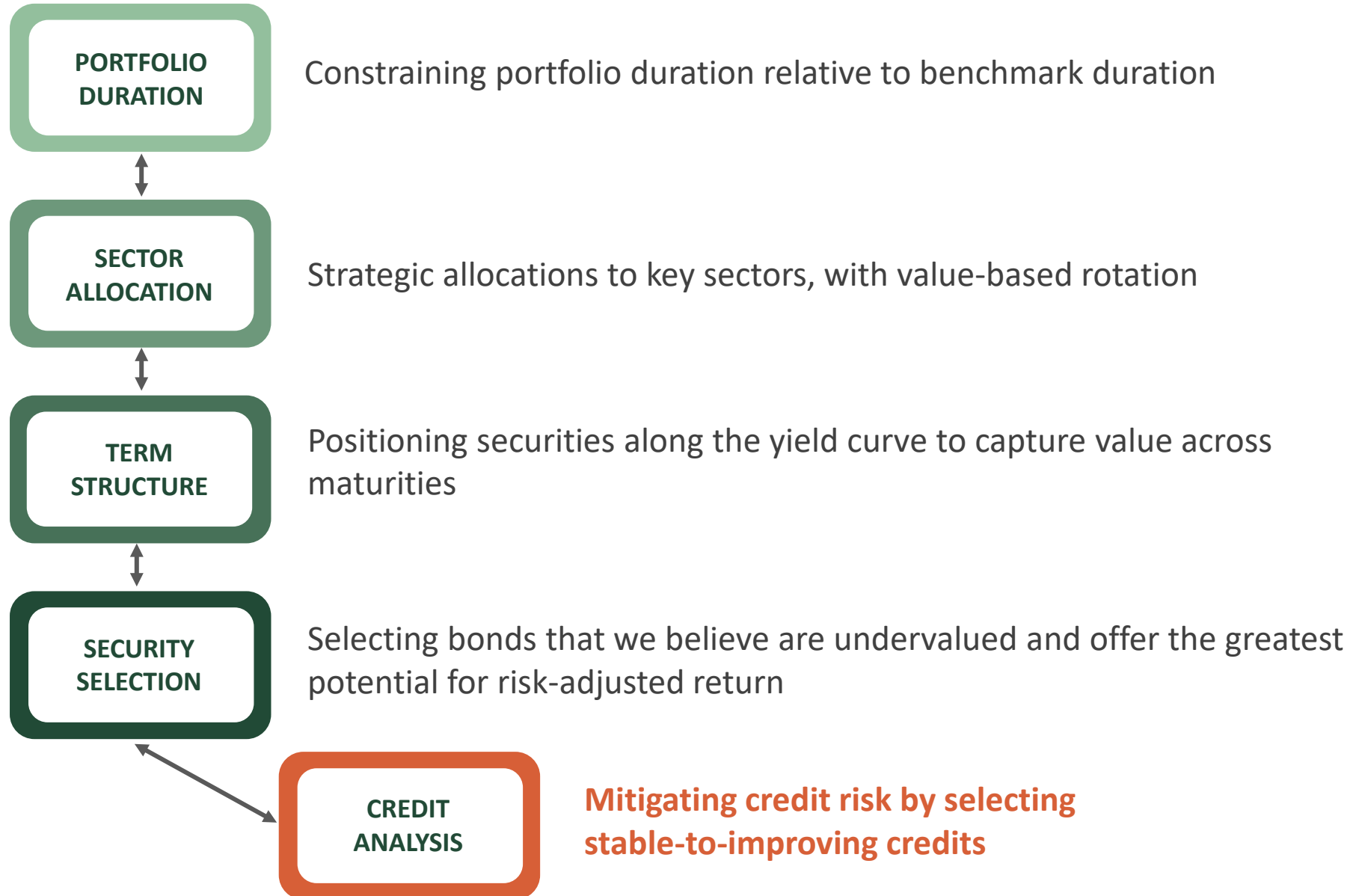
Section 1 | Portfolio Management

Focus on Risk Management

Three main types of risk and their mitigation strategies:

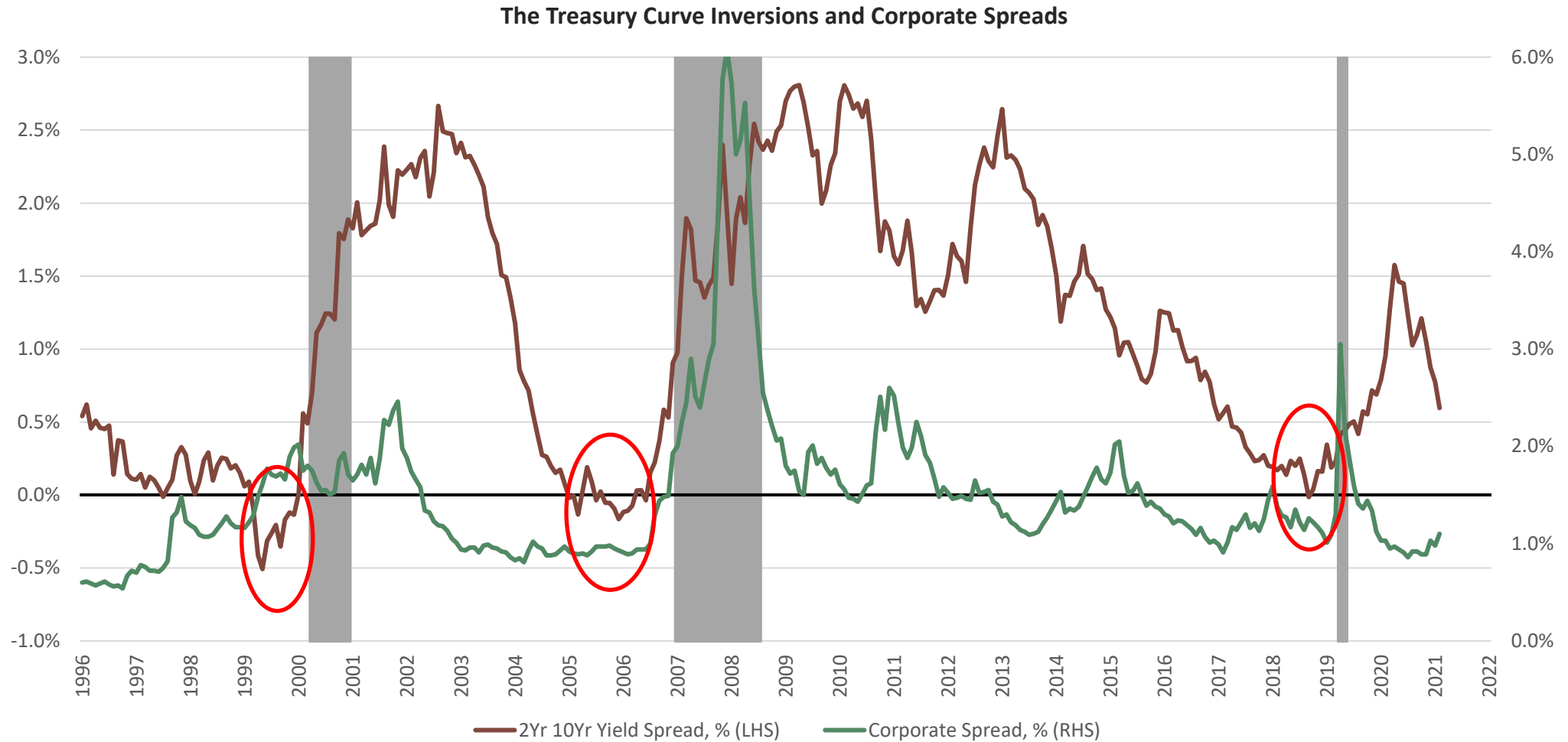


Key Elements to Build Portfolios



U.S. Treasury Yield Curve

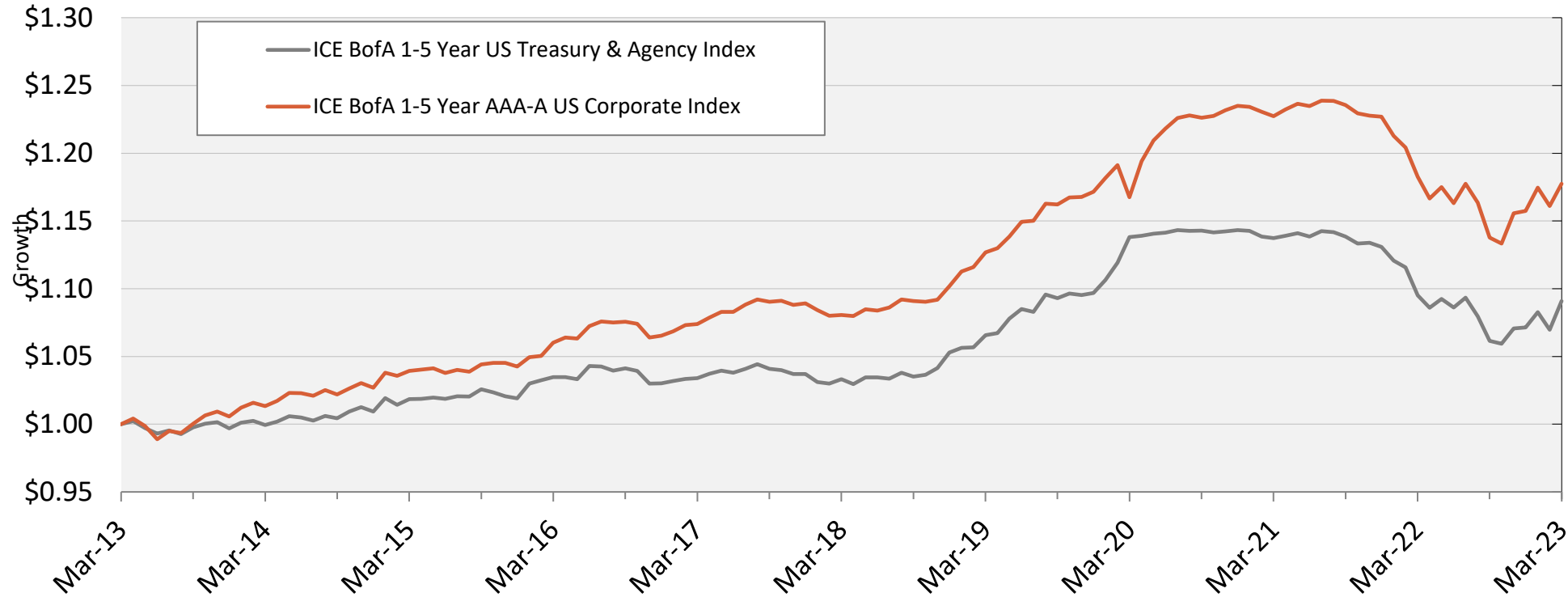
- Yield curve inversions typically lead to wider credit spreads and recessionary periods



Source: Bloomberg.

Hypothetical Example: Growth of \$100 Million Over 10 Years

Comparison of ICE BofA 1-5 Year US Treasury & Agency Index and ICE BofA 1-5 Year AAA-A US Corporate Index



Source: Bloomberg.
Please see GIPS important disclosures at the end of this presentation.

Value on 3/31/2023 of \$100 million invested 3/31/2013		
	3/31/2023	Annualized Return
ICE BofA 1-5 Year US Treasury & Agency Index	\$109,087,492	0.87%
ICE BofA 1-5 Year AAA-A US Corporate Index	\$117,756,044	1.65%

Credit Investments – the Opportunity

- Assuming additional credit risk may result in higher returns over time

	ICE BofA 1-5 Yr AAA-A US Corporate Index	ICE BofA 1-5 Yr US Treasury & Agency Index
Maturity Composition as of 12/31/2022		
0-6 months		0.01%
6-12 months		
1-3 years	54.55%	62.03%
3-5 years	45.45%	37.97%
5-10 years		
Asset Sector Distribution as of 12/31/2022		
Treasury		96.99%
Agency		3.01%
Corporate	100.00%	
Other		
Modified Duration 12/31/2022	2.60	2.48
Return Analysis as of 12/31/2022		
20 Year Annualized Total Return	2.86%	2.02%
20 Year Standard Deviation	3.92%	2.96%
Qualitative Risk Objective	12/31/2004 - 12/31/2022	12/31/2002 - 12/31/2022
Negative Quarterly Return Occurrences	21	21
2 Consecutive Negative Quarterly Return Occurrences	5	5
Negative Return For Year Occurrences	3	3
Worst Year Total Return	-5.67%	-5.25%

Source: ICE BofA Indices. Please see Benchmark disclosures; Past performance is not indicative of future results. All investment strategies have the potential for profit or loss. Market conditions or economic factors may alter the performance or characteristics of a portfolio.

- With a similar pattern of volatility of return

Corporate Credit

Annual Default Rate Statistics for Global Corporates (1981-2021):

	AAA	AA	A	BBB	BB	B	CCC/C
Minimum	0.00%	0.00%	0.00%	0.00%	0.00%	0.25%	0.00%
Maximum	0.00%	0.38%	0.39%	1.02%	4.24%	13.84%	49.46%
Weighted Long-Term Average	0.00%	0.02%	0.05%	0.15%	0.60%	3.18%	26.55%
Median	0.00%	0.00%	0.00%	0.06%	0.58%	3.40%	25.00%
Standard Deviation	0.00%	0.06%	0.10%	0.25%	0.99%	3.25%	11.86%
2008 Default Rates	0.00%	0.38%	0.39%	0.49%	0.81%	4.11%	27.27%
Latest Four Quarters (1Q21-4Q21)	0.00%	0.00%	0.00%	0.00%	0.00%	0.52%	10.99%

- The average annual default rate for an Investment Grade-rated issuer is around 0%
- Maximum annual default rates for A-AAA rated issuers are <0.50% (2008)

Three-Year Average Credit Rating Migration for Global Corporates (1981-2021):

From/To	AAA	AA	A	BBB	BB	B	CCC/C	D	Not Rated
AAA	65.54%	22.15%	2.32%	0.32%	0.26%	0.08%	0.11%	0.13%	9.08%
AA	1.11%	67.26%	18.04%	1.92%	0.32%	0.20%	0.03%	0.11%	11.01%
A	0.05%	3.67%	70.68%	11.14%	1.10%	0.38%	0.08%	0.22%	12.67%
BBB	0.02%	0.24%	7.90%	66.78%	6.71%	1.42%	0.25%	0.74%	15.93%
BB	0.01%	0.05%	0.43%	10.32%	49.13%	11.30%	1.15%	3.39%	24.23%
B	0.00%	0.02%	0.16%	0.63%	9.08%	42.39%	5.26%	11.56%	30.90%
CCC/C	0.00%	0.00%	0.11%	0.50%	1.51%	16.52%	9.73%	42.29%	29.35%

- A-AAA rated issuers have a lower risk of ratings migration to High Yield than BBB issuers

Source: Standard & Poor's 2021 Annual Global Corporate Default and Transition Study.

Average Cumulative Default Rates

Average Cumulative Default Rates For Corporates By Region (1981-2021)

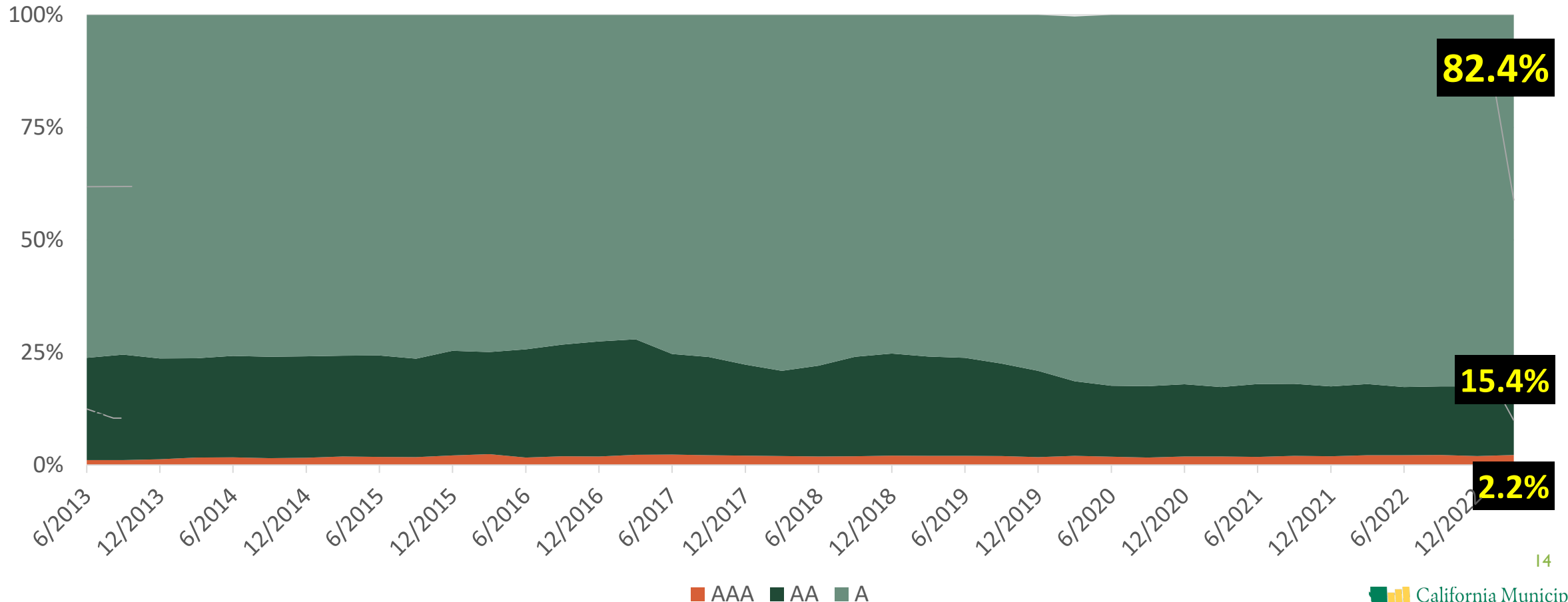
(%)	--Time horizon (years)--														
Rating	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
U.S.															
AAA	0.00	0.04	0.17	0.29	0.42	0.54	0.58	0.67	0.75	0.83	0.87	0.92	0.96	1.05	1.14
AA	0.03	0.08	0.16	0.29	0.41	0.55	0.68	0.79	0.88	0.98	1.07	1.15	1.23	1.29	1.38
A	0.07	0.19	0.33	0.49	0.66	0.85	1.06	1.26	1.47	1.69	1.88	2.06	2.24	2.39	2.56
BBB	0.19	0.51	0.87	1.33	1.83	2.32	2.76	3.19	3.61	4.01	4.40	4.69	4.96	5.26	5.57
BB	0.72	2.24	4.05	5.81	7.42	8.98	10.32	11.56	12.67	13.69	14.56	15.37	16.09	16.67	17.28
B	3.39	8.00	12.16	15.48	18.11	20.26	21.96	23.32	24.53	25.66	26.61	27.36	28.07	28.73	29.35
CCC/C	28.31	39.95	45.73	49.25	51.80	52.95	54.34	55.14	55.87	56.48	57.06	57.49	57.98	58.43	58.43
Investment-grade	0.11	0.29	0.51	0.79	1.08	1.37	1.65	1.92	2.18	2.44	2.68	2.87	3.06	3.24	3.44
Speculative-grade	4.04	7.90	11.26	13.98	16.21	18.06	19.59	20.86	22.00	23.04	23.93	24.68	25.38	25.98	26.55
All rated	1.83	3.60	5.16	6.48	7.57	8.51	9.29	9.96	10.56	11.12	11.61	12.00	12.37	12.71	13.03

Source: S&P 2021 Annual Global Corporate Default Study & Rating Transitions

Evolution of Credits Eligible For Purchase By California Local Governments

- Credits are slim for investors limited to AA or higher

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



Source: Bloomberg



Section 2 | Fundamentals of Credit

■ The 4 “C’s” of Credit Evaluation

- Capacity – ability to pay debt obligations
- Character – willingness to pay debt
- Collateral - assets that back the issuer’s debt
- Covenants – legal protections provided to bondholders

“GFOA...recommends the use of diversification in a portfolio as an important strategy for managing risk...Diversification is achieved by investing in a variety of securities with dissimilar risk characteristics that respond differently to changes in the market. Areas where diversification can be achieved include the maturity distribution in a portfolio (market and liquidity risk), sector allocation (credit risk), issuer allocation (credit risk), and the structures (non-callable vs. callable) of securities (market and liquidity risk).”



GFOA Best Practice – “Diversifying the Investment Portfolio”

Elements of Investing in Credit

- Exposure to non-governmental issuers
- Investors receive higher yields when they purchase securities from lower rated issuers
 - Agencies vs. Treasuries
 - Corporates vs. Agencies
 - “A” vs. AAA
- Credit ratings change over time
- Yield spreads among different quality sectors vary over time

Moody's		S&P		Fitch		Rating description	
Long-term	Short-term	Long-term	Short-term	Long-term	Short-term		
Aaa	P-1	AAA	A-1+	AAA	F1+	Prime	Investment-grade
Aa1		AA+		AA+		High grade	
Aa2		AA		AA			
Aa3		AA-		AA-			
A1	P-2	A+	A-1	A+	F1	Upper medium grade	
A2		A		A			
A3		A-	A-2	A-	F2		
Baa1	BBB+	BBB+					
Baa2	P-3	BBB	A-3	BBB	F3	Lower medium grade	
Baa3		BBB-		BBB-			

- Credit Outlook
 - Evaluates the financial condition of the issuer in relation to the economic environment

- Credit Watch
 - Formal warning of the possible deterioration or upgrade of the financial strength and ability of the issuer to meet their debt obligations

Examples

- Liquidity
- Solvency
- Leverage
- Profitability
- Operating Efficiency
- Industry Specific Ratios (e.g., reserve replacement ratio)

Compare:

- *Temporal trends*
- *Company trends compared to “industry” trends*

Sources for Financial Evaluation

- 10K/10Q/20F
 - Balance Sheet
 - Income Statement
 - Statement of Cash Flows
 - Statement of Shareholder’s Equity
 - Footnotes
 - Management Discussion and Analysis
 - Auditor’s Report / Opinion
- Bloomberg
- Factset
- Reuters
- Rating Agencies
- Industry Websites
- Company Websites

Market Risk

- Trade suspension or halted trading
- Spread widening to Treasury securities

Event Risk

- An unexpected event causes a sudden deterioration in an issuer's credit quality, and a concomitant instant decline in price
- NRSRO ratings do not and cannot predict event risk

Headline Risk

- Under a worst-case scenario, the county could lose up to \$8 million on just one investment.
- County officials have halted purchases of mortgage-backed "commercial paper" investments while an independent reviewer studies whether other investments are at risk.

“County could lose millions because of credit downgrade”

Other Risks to Manage

Collateral Risk

Define Acceptable Collateral

- * Define acceptable and authorized securities
- * Include in policy, RFPs, and contracts

Determine Levels of Required Collateral

- * Require margin of 102%
- * Require monthly market value reports

Confirm Collateral is Perfected

- * Registered in the agency's name
- * Require safekeeping receipts and reports

Reinvestment Risk

Reinvestment Risk: cash flows from bonds must be reinvested at the market rate at the time the cash flow occurs:

- * Interest payments
- * Pay downs from mortgage securities
- * Principal from called bonds

Special case

CALLABLES

- When interest rates **Fall**:
 - Callable bonds tend to be called away by the issuer resulting in reinvestment at lower interest rates
 - The effective duration of callable securities tends to decline
 - Negative convexity
 - Higher duration portfolios perform better in falling rate environments
- When interest rates **Rise**:
 - Callable securities are generally not called
 - The effective duration of callable bonds increases resulting in greater portfolio market value decline
 - Lower duration portfolios are preferred in a rising rate environments
- When interest rates Are **Stable**:
 - Callable bonds tend to outperform non-callable structures

Other Risks to Manage (Cont.)

Safekeeping Risk

- Independent third-party safekeeping
- Securities should be registered in entity's name
- Delivery-versus-Payment (DVP) requires simultaneous delivery and release of funds
- Check custody reports regularly

Resources One May Use for Investing in Corporate Bonds

Independent pricing source

Access to several corporate dealers for competitive transactions

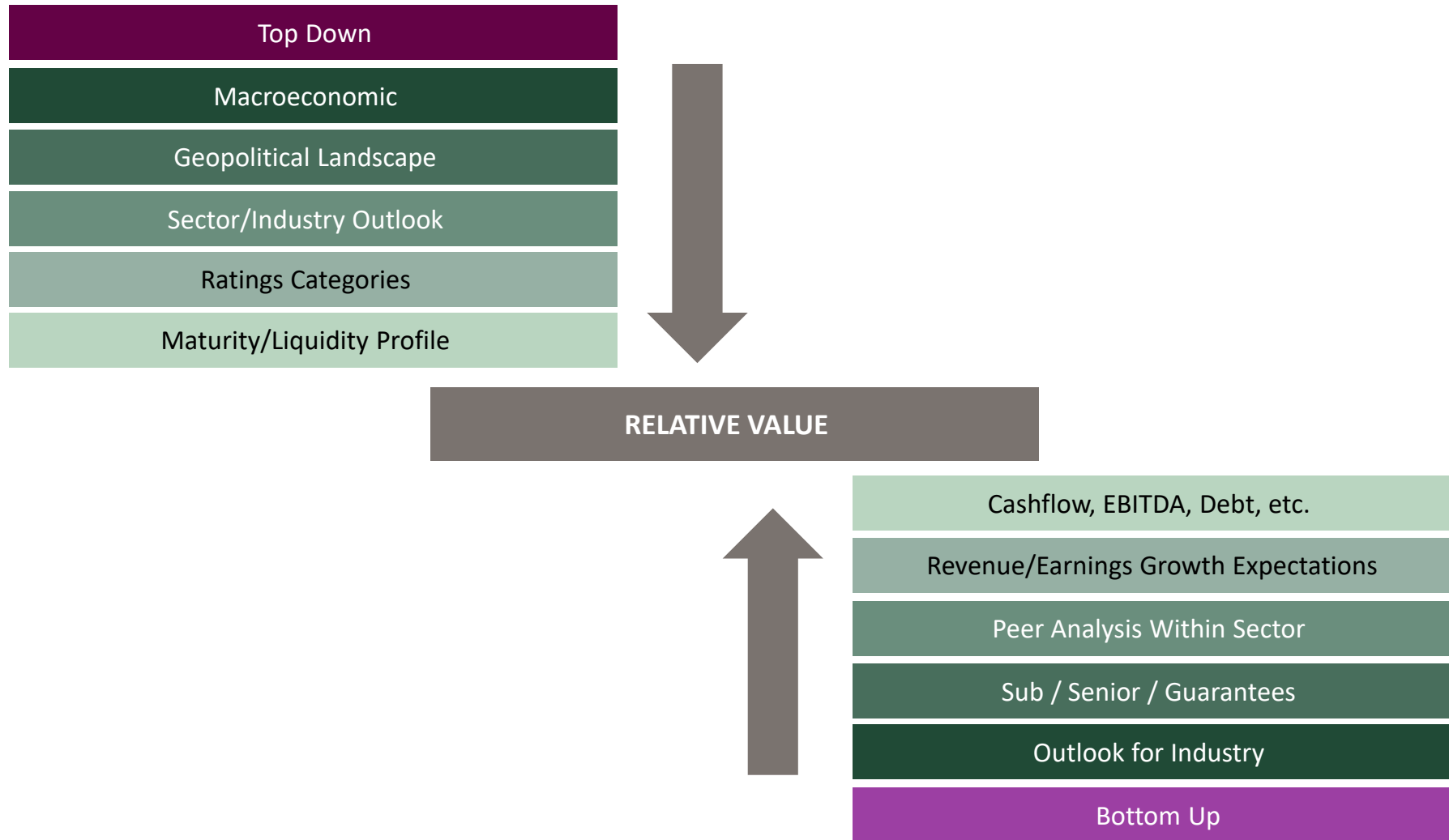
Timely, independent access to ratings and rating services actions

Internal credit analysis capabilities

Independent sources for credit research

Policy regarding sales due to credit downgrades

Analyzing Corporate Bond

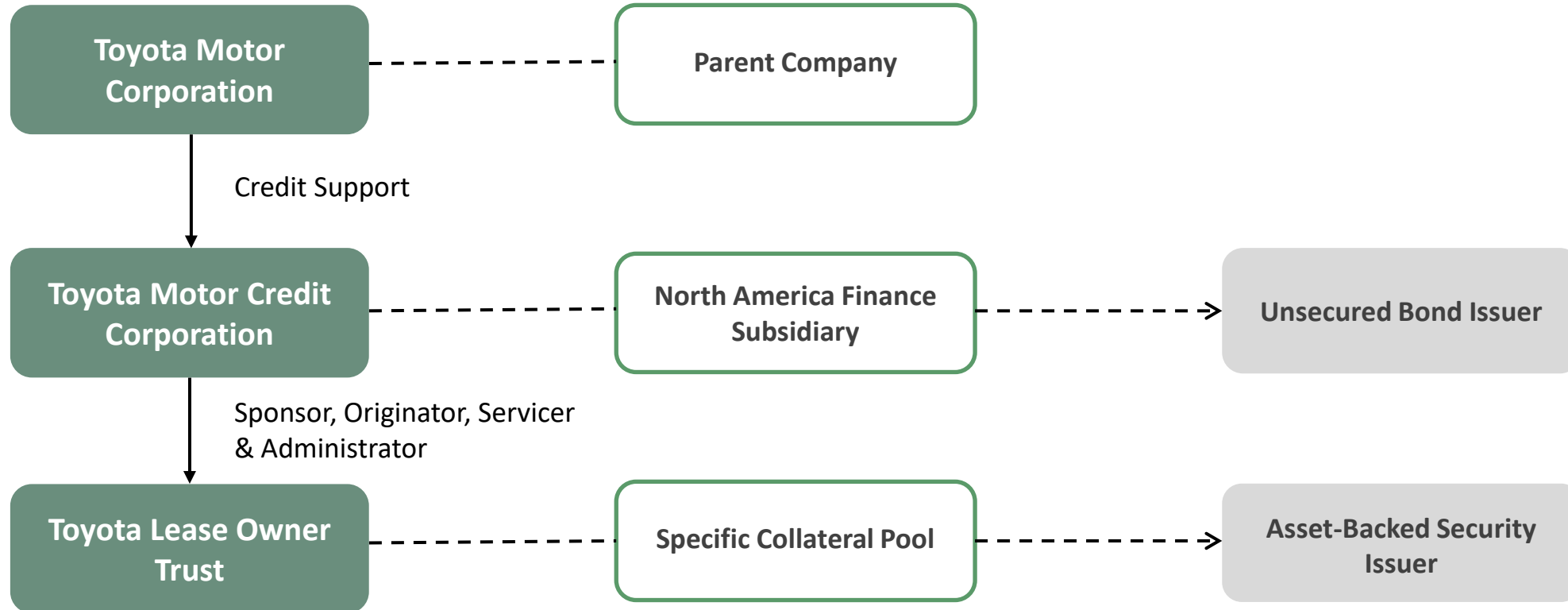




Section 2 |

Example Analysis: Toyota

- Founded over 85 years ago, Toyota Motor Corporation is the largest global auto manufacturer by sales
- The company sold around 10.5 million vehicles in calendar 2022 and generated over 270 billion US\$ equivalent in revenues
- Toyota sold around 2.1 million motor vehicles in North America last year
- The company is one of the largest automotive debt issuers
- Toyota carries the highest credit ratings of its peer group at A1/A+/A+



Toyota Motor Company (TMC)

Trend Over Time

Toyota Motor, \$mm equivalent	FY 3/18	FY 3/19	FY 3/20	FY 3/21	FY 3/22
Vehicle Sales (Thousands)	8,964	8,977	8,955	7,646	8,230
Revenues	265,175	272,642	274,736	256,718	279,454
Operating Profit	21,979	22,582	22,206	20,732	26,678
Operating Margin	8.3%	8.3%	8.1%	8.1%	9.5%
EBITDA	37,630	38,749	36,881	36,243	42,903
R&D Expenses	9,606	9,461	10,214	10,286	10,012
R&D % Revenues	3.6%	3.5%	3.7%	4.0%	3.6%
Cash & Equivalents*	88,182	85,282	79,698	104,583	93,587
Debt*	12,667	13,691	15,764	31,864	19,363
Debt/EBITDA*	0.3	0.4	0.4	0.9	0.5

Comparison to Peers

\$mm Equivalent, CY2022	Toyota	Volkswagen	General Motors	Mercedes-Benz	Honda
Vehicle Sales (Thous.)	8,624	8,263	5,939	2,456	2,344
Revenues	258,917	272,945	143,975	158,010	100,925
Operating Profit	26,503	23,431	10,315	19,366	7,759
Operating Margin	9.5%	9.4%	7.9%	9.4%	6.2%
EBITDA	42,904	53,187	21,922	26,234	13,201
R&D % Revenues	3.6%	4.2%	6.2%	3.9%	5.6%
Cash & Equivalents	70,919	83,148	31,303	29,695	30,231
Debt	217,969	219,774	115,665	127,561	69,277
Debt/EBITDA	5.1	4.1	5.3	4.9	5.2
Credit Ratings	A1/A+	A3/BBB+	Baa2/BBB	A2/A-	A3/A-

- Look for trends in key operating metrics and compare to industry peers
 - Profitability
 - Operating Efficiency
 - Liquidity
 - Solvency
 - Leverage
 - Industry Specific Ratios (e.g., US Light Vehicle SAARs, reserve replacement ratio)

Source: Bloomberg.

Equity Performance



- Equity performance can be a useful leading indicator of credit stress
- Toyota equity has performed well on both an absolute and relative basis in the past 5 years

Source: Bloomberg.

Toyota Motor Credit Corporation (TMCC)

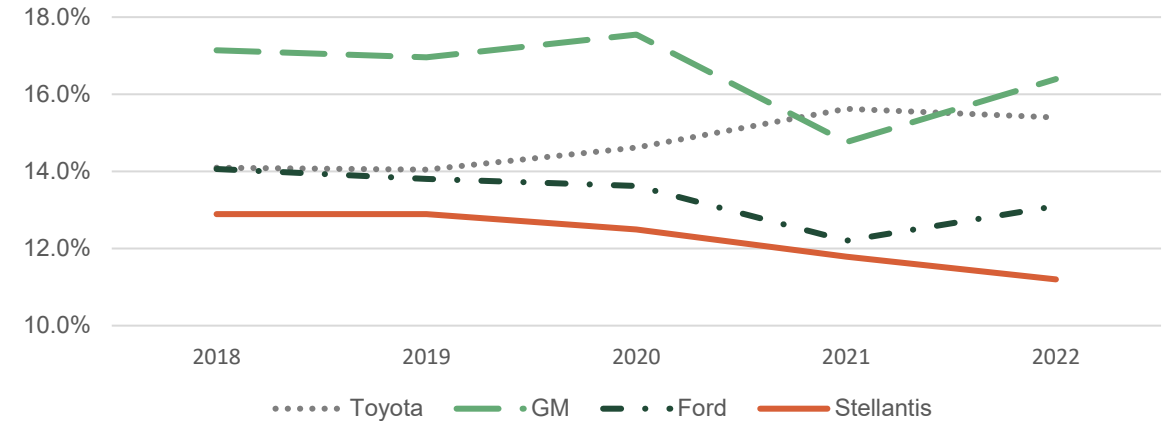
Key credit considerations:

- ✓ Profitable growth
- ✓ Strong balance sheet
- ✓ Credit risk management
- ✓ Access to funding

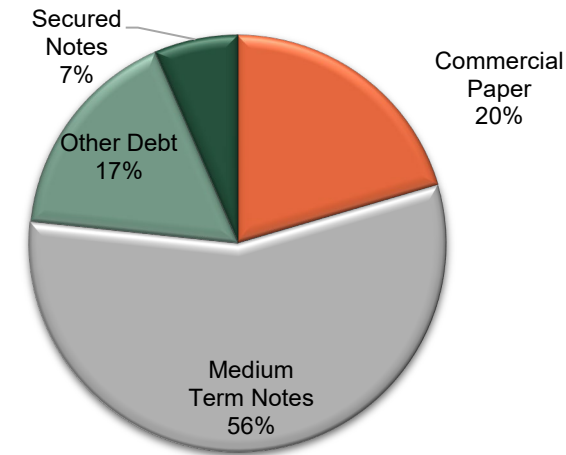
TMCC, \$mm	FY 3/18	FY 3/19	FY 3/20	FY 3/21	FY 3/22
Income Statement					
Financing Revenues	10,717	11,640	12,029	11,799	11,920
Financing Expenses	(8,892)	(9,656)	(9,654)	(8,234)	(7,247)
Net Financing Revenues	1,825	1,984	2,375	3,565	4,673
Other Income	1,139	1,196	1,255	1,366	989
Other Expenses	(2,183)	(2,203)	(2,606)	(2,282)	(2,338)
Pre-Tax Profit	781	977	1,024	2,649	3,324
Profit Margin	7.3%	8.4%	8.5%	22.5%	27.9%
Provision for Tax	2,629	(182)	(111)	(632)	(789)
Net Income	3,410	795	913	2,017	2,535
Balance Sheet					
Total Assets	120,546	116,516	125,555	133,728	135,041
Total Liabilities	107,666	102,938	111,052	118,133	116,940
Total Equity	12,880	13,578	14,503	15,595	18,101
Debt/Equity	8.4	7.6	7.7	7.6	6.5
ROA	2.8%	0.7%	0.7%	1.5%	1.9%
ROE	26.5%	5.9%	6.3%	12.9%	14.0%
Asset Quality					
>60 Day Delinquencies	0.30%	0.24%	0.41%	0.27%	0.43%
Allowance for Losses	0.55%	0.55%	0.73%	1.47%	1.49%
Net Credit Losses	0.34%	0.39%	0.44%	0.29%	0.22%

Source: Bloomberg, Company filings.

US Light Vehicle Sales, Market Share



TMCC Funding Mix as of 03/2022



Toyota Lease Owner Trust (Issued in July 2021)

Toyota Lease Owner Trust 2021-B									
	Class	Ratings	Initial Principal Amount (\$m)	Interest Rate	Final Scheduled Maturity Date	Expected Maturity Date	Original Average Life	Principal Pay Down	Loss Absorption
✓ Paid Off	A1	P-1/F1+	173,000	0.00%	8/22/2022	3/21/2022	0.36Yr	↓	↑
✓ Paid Off	A2	Aaa/AAA	498,500	0.25%	3/20/2024	6/20/2023	1.36Yr		
	A3	Aaa/AAA	498,500	0.42%	10/21/2024	1/22/2024	2.14Yr		
	A4	Aaa/AAA	130,000	0.45%	11/20/2025	3/20/2024	2.52Yr		
	Total		1,300,000						

Key credit considerations:

- Default risk
- Prepayment risk
- Sponsor risk
- Liquidity risk
- Regulatory risk

Protections:

- Credit enhancements
- Cash flow scenario analysis
- Sponsor and trust due diligence and ongoing monitoring
- Prudent position sizing

Relative value:

- Where in the capital structure offers the most optimal return vs risk?

TOYOTA 0 1/2 06/18/24 Actions Settings Page 1/12 Security Description:

94 No Notes 95 Buy 96 Sell

Pages	25 Bond Description	26 Issuer Description	Identifiers
11	Bond Info	Name TOYOTA MOTOR CREDIT CORP	FIGI BBG011FH4W34
12	Addtl Info	Industry Automotive (BCLASS)	CUSIP 89236TJH9
13	Reg/Tax	Security Information	ISIN US89236TJH95
14	Covenants	Mkt Iss DOMESTIC MTN	Bond Ratings
15	Guarantors	Ctry/Reg US Currency USD	Moody's A1
16	Bond Ratings	Rank Sr Unsecured Series MTN	S&P A+
17	Identifiers	Coupon 0.500000 Type Fixed	Fitch A+
18	Exchanges	Cpn Freq S/A	Composite A+
19	Inv Parties	Day Cnt 30/360 Iss Price 99.88100	Issuance & Trading
20	Fees, Restrict	Maturity 06/18/2024	Amt Issued/Outstanding
21	Schedules	BULLET	USD 850,000.00 (M) /
22	Coupons	Quick Links	USD 850,000.00 (M)
32	ALLQ Pricing	Iss Sprd +20.00bp vs T 0 1/4 06/15/24	Min Piece/Increment
33	QRD Qt Recap	Calc Type (1)STREET CONVENTION	2,000.00/ 1,000.00
34	TDH Trade Hist	Pricing Date 06/15/2021	Par Amount 1,000.00
35	CACS Corp Action	Interest Accrual Date 06/18/2021	Book Runner JOINT LEADS
36	CF Prospectus	1st Settle Date 06/18/2021	Reporting TRACE
37	CN Sec News	1st Coupon Date 12/18/2021	
38	HDS Holders		

Disclosures

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Fixed Income investments are subject to interest, credit and market risk. Interest rate risk: the value of fixed income investments will decline as interest rates rise. Credit risk: the possibility that the borrower may not be able to repay interest and principal. Low rated bonds generally must pay higher interest rates to attract investors willing to take on greater risk. Market risk: the bond market in general could decline due to economic conditions, especially during periods of rising interest rates.

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ICE BofA 1-3 Year US Treasury & Agency Index

The ICE BofA 1-3 Year US Treasury & Agency Index tracks the performance of US dollar denominated US Treasury and nonsubordinated US agency debt issued in the US domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch). Qualifying securities must have at least one year remaining term to final maturity and less than three years remaining term to final maturity, at least 18 months to maturity at time of issuance, a fixed coupon schedule, and a minimum amount outstanding of \$1 billion for sovereigns and \$250 million for agencies.

ICE BofA 1-3 Year AAA-A US Corporate Index

The ICE BofA 1-3 Year AAA-A US Corporate Index tracks the performance of US dollar denominated investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must be rated AAA through A3 (based on an average of Moody's, S&P and Fitch). In addition, qualifying securities must have at least one year remaining term to final maturity and less than three years remaining term to final maturity, at least 18 months to final maturity at the time of issuance, a fixed coupon schedule, and a minimum amount outstanding of \$250 million.

ICE BofA 0-3 Year US Treasury & Agency Index

ICE BofA 0-3 Year US Treasury & Agency Index tracks the performance of US dollar denominated US Treasury and nonsubordinated US agency debt issued in the US domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch). In addition, qualifying securities must have a remaining term to final maturity less than 3 years, at least 18 months to maturity at time of issuance, a fixed coupon schedule and a minimum amount outstanding of \$1 billion for sovereigns and \$250 million for agencies. "Global" securities (debt issued simultaneously in the eurobond and US domestic markets) and 144a securities qualify for inclusion in the Index. Subordinated US agency securities are excluded from the index. Callable perpetual securities qualify provided they are at least one year from the first call date. Fixed-to-floating rate securities also qualify provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Bills, inflation-linked debt and strips are also excluded from the Index; however, original issue zero coupon bonds are included in the Index and the amounts outstanding of qualifying coupon securities are not reduced by any portions that have been stripped.

ICE BofA 1-3 Year US Treasury Index

The ICE BofA 1-3 Year US Treasury Index tracks the performance of US dollar-denominated sovereign debt publicly issued by the US government in its domestic market. Qualifying securities must have at least one year remaining term to final maturity and less than three years remaining term to final maturity, a fixed coupon schedule, and a minimum amount outstanding of \$1 billion. Qualifying securities must have at least 18 months to final maturity at the time of issuance.

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 US Treasury and nonsubordinated US agency debt issued in the US domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch). Qualifying securities must have at least one year remaining term to final maturity and less than five years remaining term to final maturity, at least 18 months to maturity at time of issuance, a fixed coupon schedule and a minimum amount outstanding of \$1 billion for sovereigns and \$250 million for agencies.

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

The ICE BofA 1-5 Year AAA-A US Corporate & Government Index tracks the performance of US dollar denominated investment grade debt publicly issued in the US domestic market, including US Treasury, US agency, foreign government, supranational, and corporate securities. Qualifying securities must be rated AAA through A3 (based on an average of Moody's, S&P and Fitch). In addition, qualifying securities must have at least one year remaining term to final maturity and less than five years remaining term to final maturity, at least 18 months to final maturity at point of issuance, a fixed coupon schedule, and a minimum amount outstanding of \$1 billion for US Treasuries and \$250 million for all other securities.

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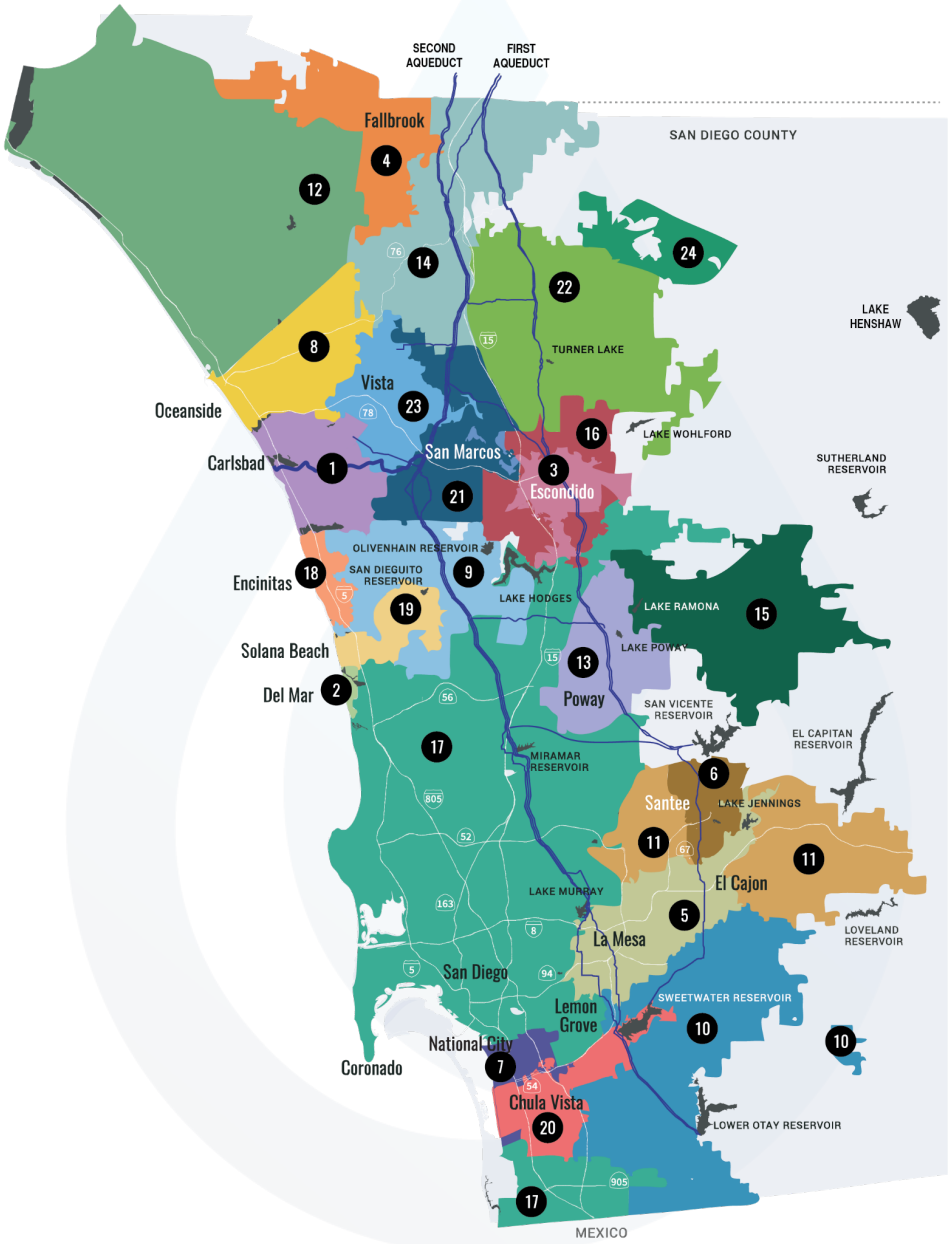
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Section 3:

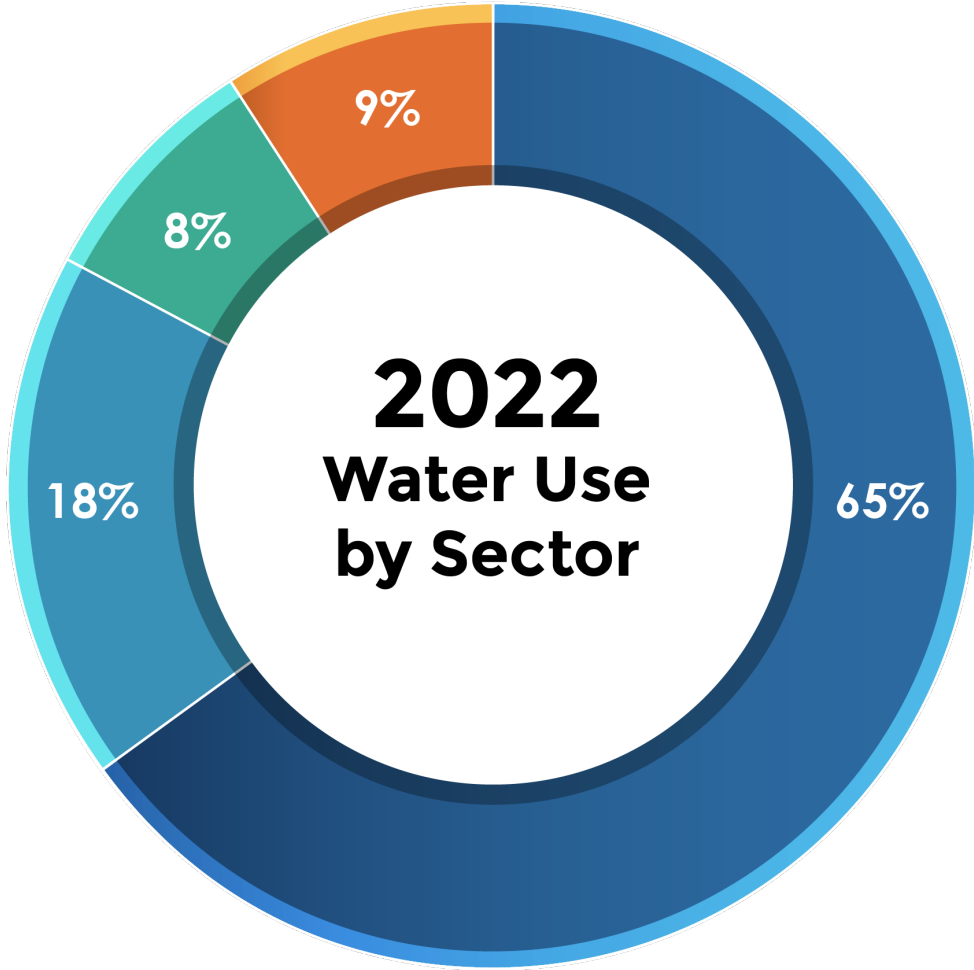
Practitioner's Point of View

Serving a Vibrant Region

Established in 1944
24 member agencies
3.3 million people
\$240 billion economy



FY 2022 Water Use by Sector



- Residential**
(319,559 AF)
- Commercial & Industrial**
(87,433 AF)
- Agricultural**
(38,619 AF)
- Public & Other**
(47,360 AF)

Note: Figures are rounded.
(AF = Acre-Feet)

Diversifying Our Water Supply

Reducing Dependence on Imported Water

26%
Local Water Supply

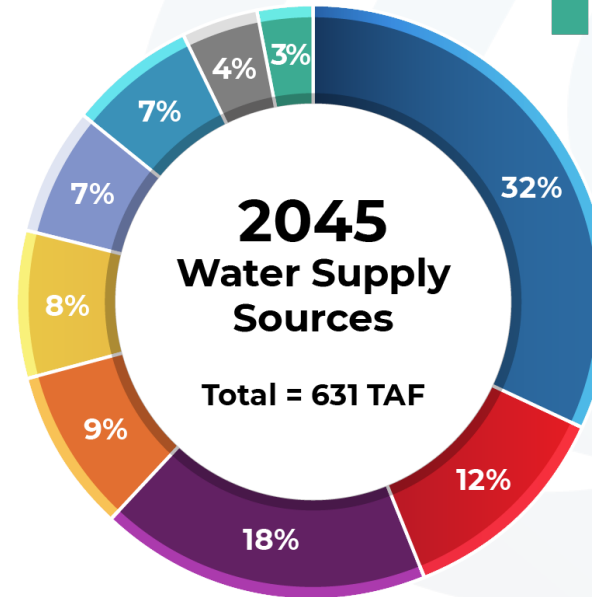
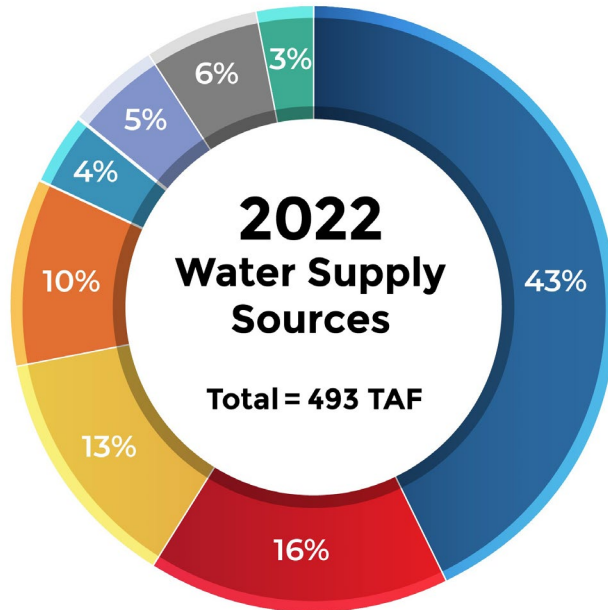
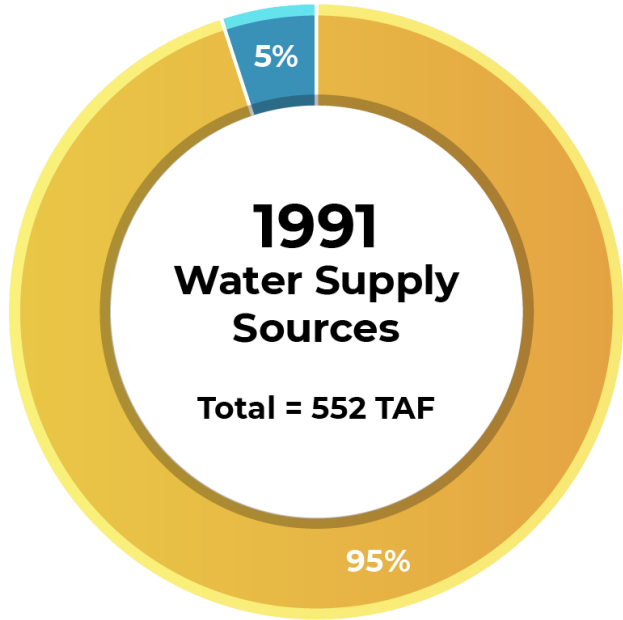
74%
Colorado River

<1%
State Water Project



*Data based on 2022 water supply

Results of Supply Diversification



- Conserved Water/IID
- Conserved Water/Canal Lining
- Potable Reuse
- Seawater Desalination
- Metropolitan Water District
- Recycled Water
- Local Surface Water
- Groundwater
- San Luis Rey Water Transfer

Strategic Investments in Supply Reliability



Local Surface Water Storage
\$1 billion



Carlsbad Seawater Desalination
\$1 billion



QSA Water Transfer & Canal Linings
Hundreds of Millions \$



Pipeline Relining
\$493 million



**Potable Water Reuse
& Purple Pipe**
Hundreds of Millions \$



**Twin Oaks Valley Water
Treatment Plant**
\$179 million



**Water Use-Efficiency
Investments**
Hundreds of Millions \$

Portfolio Characteristics

Management & Oversight

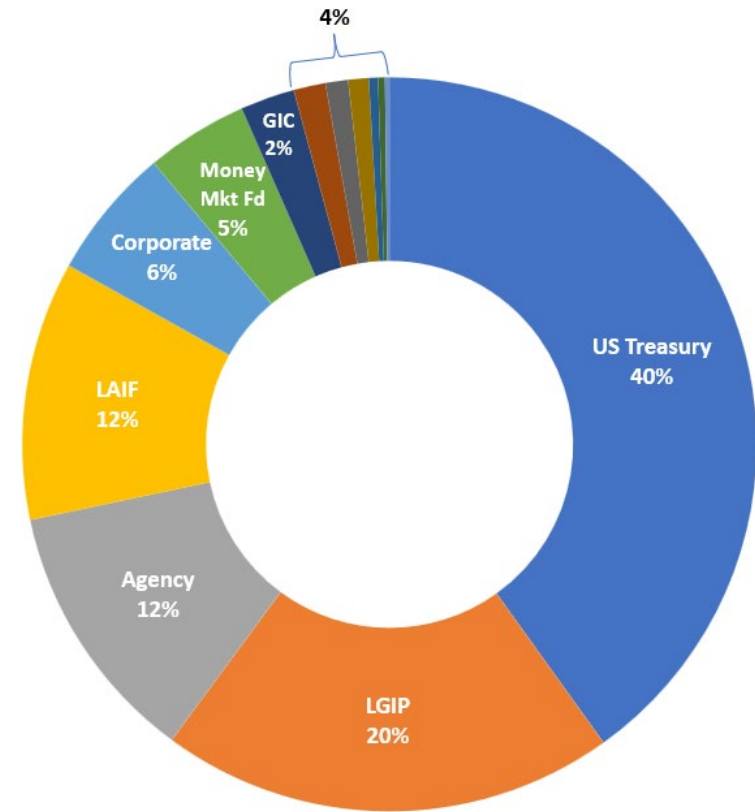
- Delegation to Director of Finance/Treasurer
- Internal and External Management
- Monthly reporting on investments
- Annual Statement of Investment Policy
 - Safety
 - Liquidity
 - Return on Investment
 - Public Trust



Portfolio Characteristics

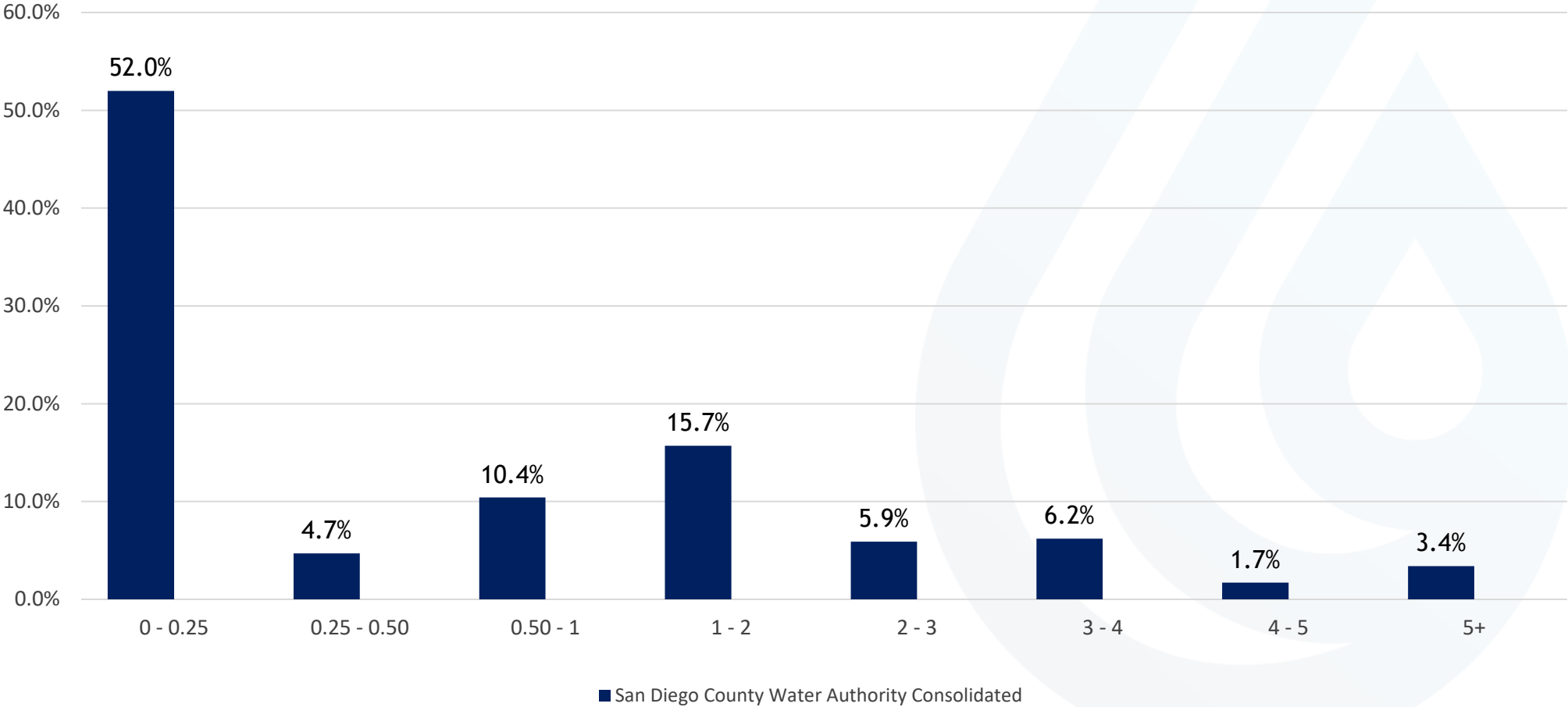
Investments

- \$500 million portfolio – Pooled and Bonds
- More than half in Treasuries and Agencies
- Actively managed portfolio – can easily reposition the portfolio



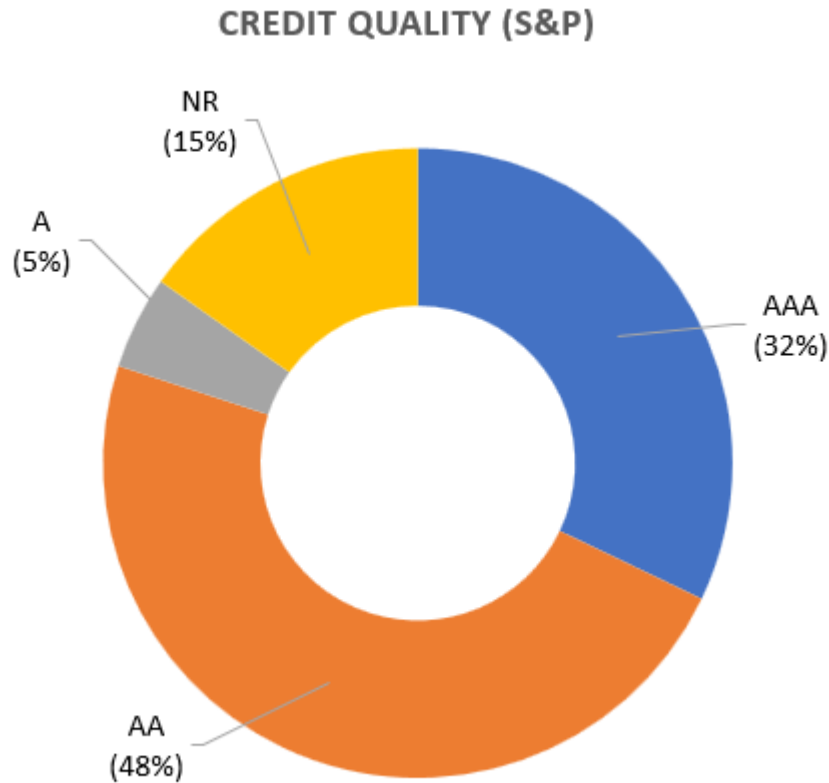
Portfolio Characteristics

Current Investment Strategy - Liquidity to meet anticipated cashflow needs



Portfolio Characteristics

Credit Quality Based on Policy Limits



- Minimum Rating outlined in Annual Statement of Investment Policy
- Lowest allowed A or A-1 by one NRSRO
- No Rating Required – US Treasury, Federal Agency Obligations, LAIF, and CDARS

Portfolio Characteristics

Mitigating Credit Risk

- Investment Policy defines credit risk and strategies for mitigation

“...the risk that a security or a portfolio will lose some or all of its value due to a real or perceived change in the ability of the issuer to repay its debt.”

“No more than 5 percent of the total portfolio may be deposited with or invested in securities issued by any single issuer unless otherwise specified...”

“...diversification requirements included...are designed to mitigate credit risk in the portfolio.”

Investment Management

Internal and External

Internal portfolio management

- Oversight of external manager
- Liquid portfolio management
- Monthly reporting

External portfolio management

- Non-discretionary management of portfolio
- Policy compliance
- Timely economic updates
- Education and training

Systemic Risk

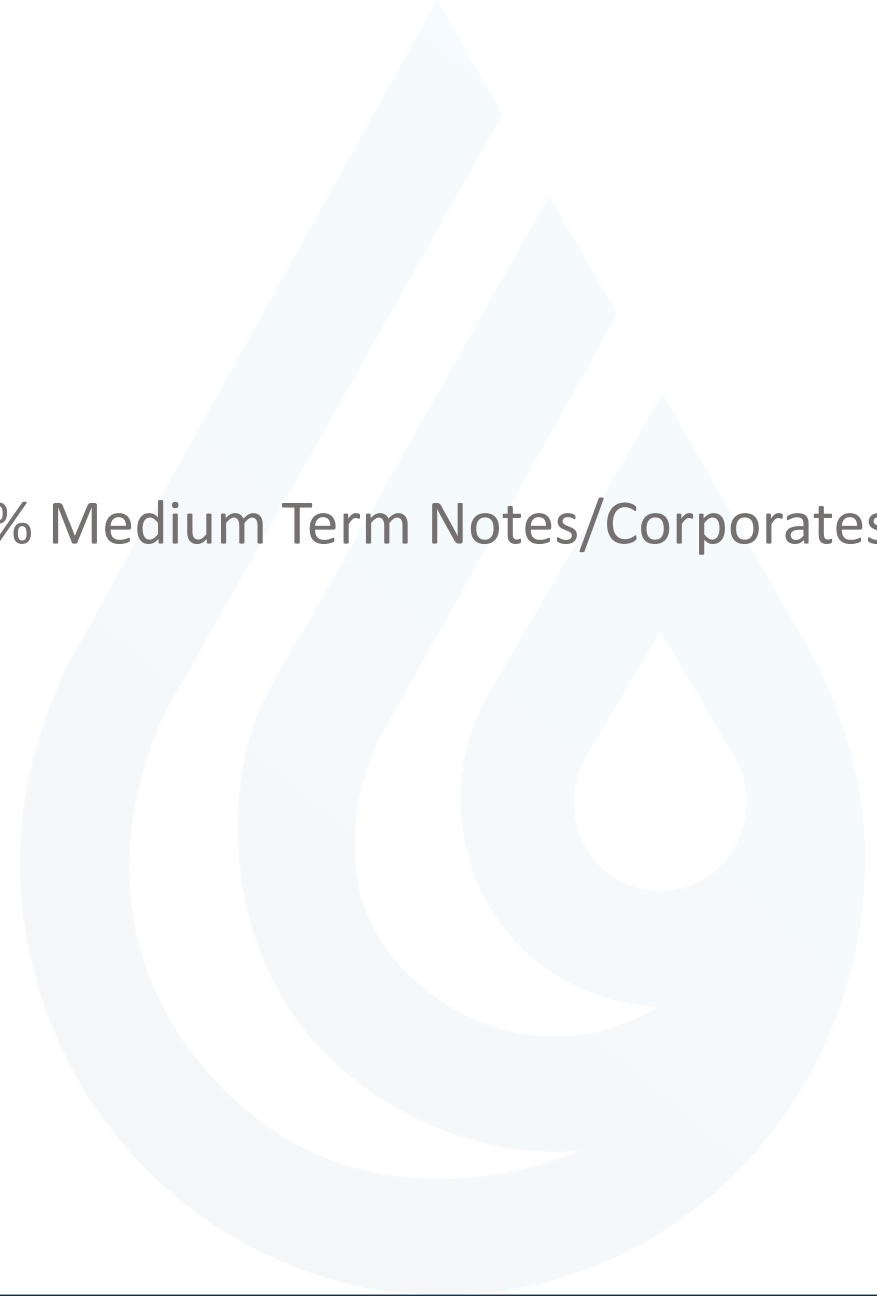
2008 Financial Crisis

2008 Organization Portfolio

- Safety, liquidity, yield
- Investments – 70% Treasuries and Agencies, <3% Medium Term Notes/Corporates

2008 financial crisis highlighted importance

- Due diligence
- Balancing risk and reward



Responding to Default and Credit Changes

Reporting to governing body at earliest opportunity

Evaluate impact

- Size of investment related to portfolio

- Liquidity impact to portfolio

- Income

Evaluate options

- Divest or Divest gradually

- Hold

- Depends on maturity

