



Moody's Sector Outlook for Maryland Local Governments and General Obligation Methodology Update

Maryland GFOA – Summer 2017 Conference

Agenda

1. **Maryland Update and Outlook**
2. **General Obligation Bond Methodology Update**
3. **Updates: Tax Increment Financing (TIF)**
4. **Q and A**

Maryland Update & Outlook



MD Economy Continues to Grow

State economy is strengthened by federal, defense and healthcare sectors

Outlook

- *Demographics and industrial structure point to continued slow and steady growth in Maryland. Healthcare and the public sector have long been the state's bread and butter, but both tend to grow slowly. However, a skilled workforce and a high quality of life will prove lasting advantages, keeping income growth in line with the U.S. average even as job growth lags longer term.*

Recent Performance

- Year-over-year job growth in the first quarter the highest in more than a decade.
- Income growth has accelerated for two quarters and will track the long-term US avg
- Professional/technical services and the federal government accelerated through 2016. Healthcare employment is rising at a slower pace

Maryland Governor's Decision to Withhold Pension and School Funds Is Credit Negative for Counties

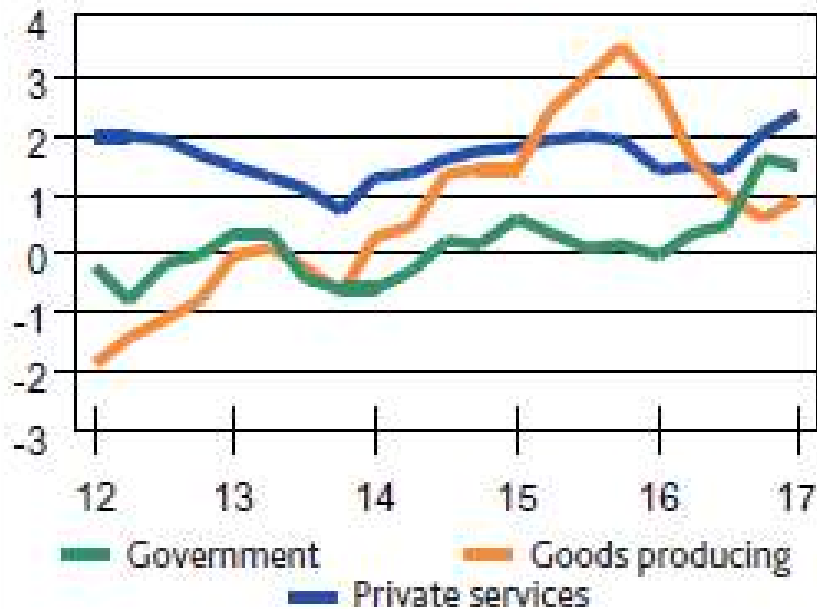
From [Credit Outlook](#)

On 3 August, [Maryland](#) (Aaa stable) Governor Larry Hogan announced his decision to withhold \$25 million in pension and school funding, affecting 21 counties and the [City of Baltimore](#) (Aa2 stable) because of lower state revenue forecasts. Mr. Hogan's decision to withhold funds for teacher pension contributions is credit negative for Maryland counties because the counties budgeted in fiscal 2017, ending 30 June 2017, to receive the \$25 million, including \$19 million in pension contributions.

MD's Job Recovery Accelerated in 2017

CURRENT EMPLOYMENT TRENDS

% CHANGE YR AGO



Sources: BLS, Moody's Analytics

% CHANGE YR AGO, 3-MO MA

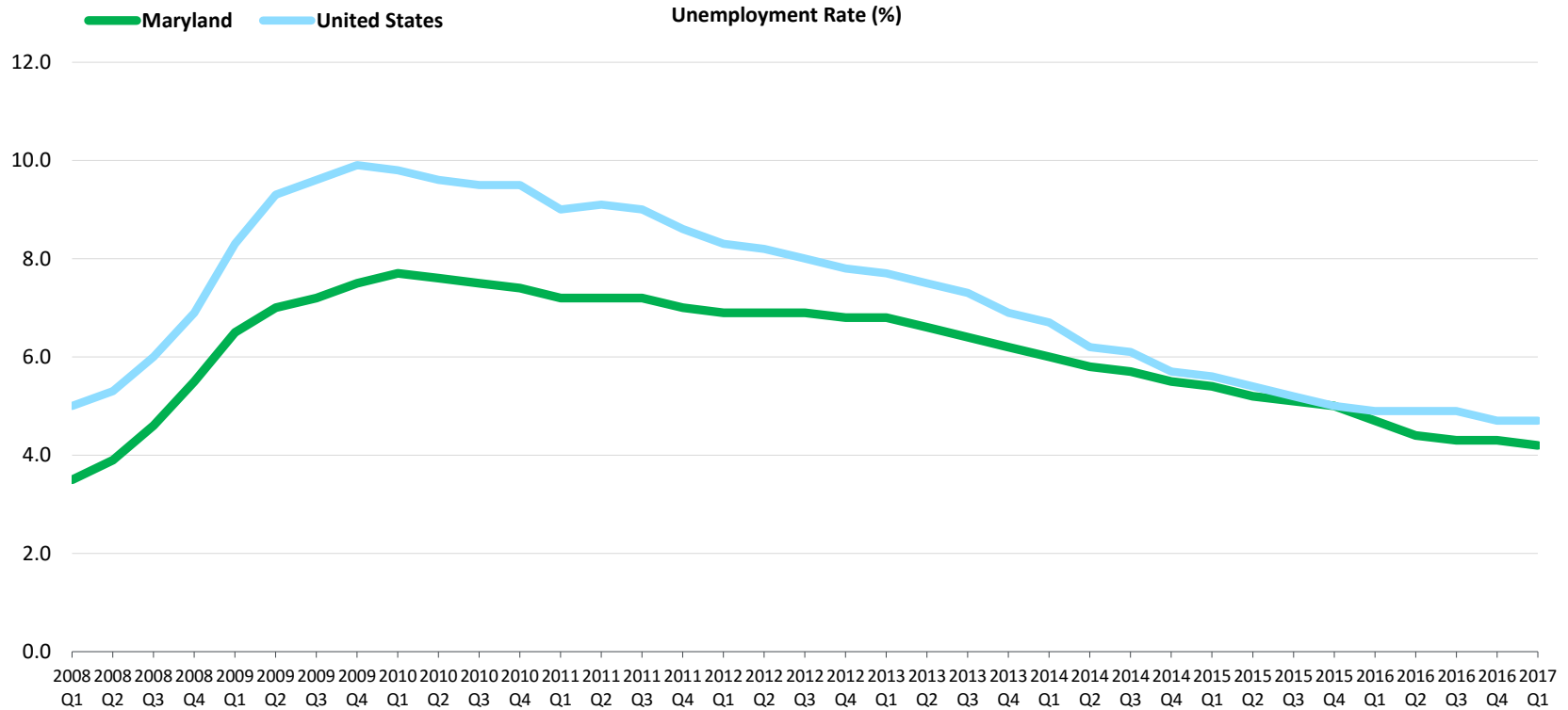
	Aug 16	Dec 16	Apr 17
Total	1.2	1.2	1.8
Mining	-11.3	-6.3	-4.2
Construction	4.2	1.9	0.5
Manufacturing	-1.2	-0.3	-0.5
Trade	0.2	-0.3	0.2
Trans/Utilities	2.1	2.9	1.4
Information	-0.9	-2.6	-2.8
Financial Activities	0.5	1.0	0.9
Prof & Business Svcs.	2.3	2.2	4.1
Edu & Health Svcs.	1.6	2.2	2.8
Leisure & Hospitality	1.1	-1.1	0.8
Other Services	1.3	2.2	3.3
Government	0.3	0.5	1.7

Sources: BLS, Moody's Analytics

Source: U.S. Bureau of Labor Statistics (BLS), Moody's Analytics

MD Unemployment Rate Below US Rate

Unemployment rate has declined below the US unemployment rate



Source: U.S. Bureau of Labor Statistics (BLS), Moody's Analytics

Maryland Is the 4th Wealthiest State in the US By Capita Income

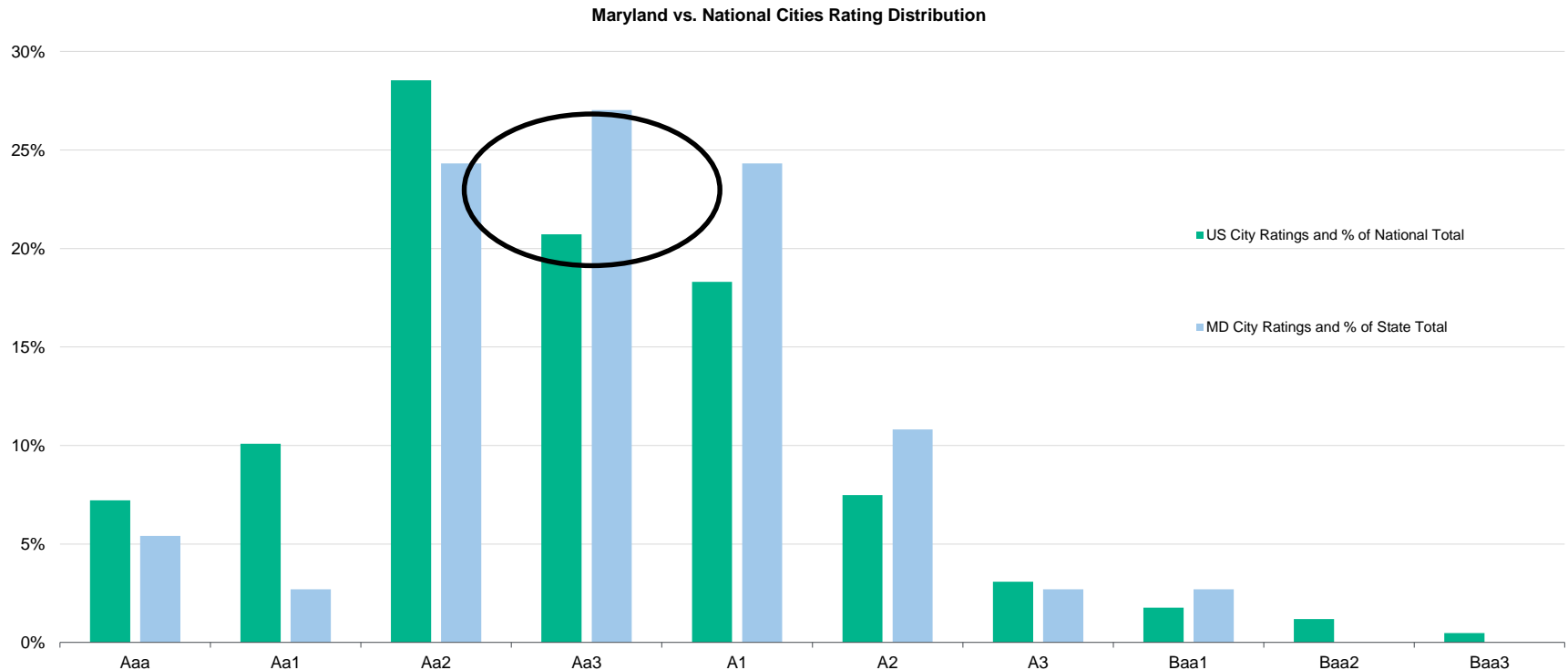


- MD Per Capita Income (\$57,936) is 116% of the US average
- MD Median Household Income (in 2015 dollars): \$73,594
- MD Poverty Rate: 10%

Source: U.S. Bureau of Economic Analysis (BEA), Moody's Analytics, Moody's Investors Service

Most MD Cities are Highly Rated

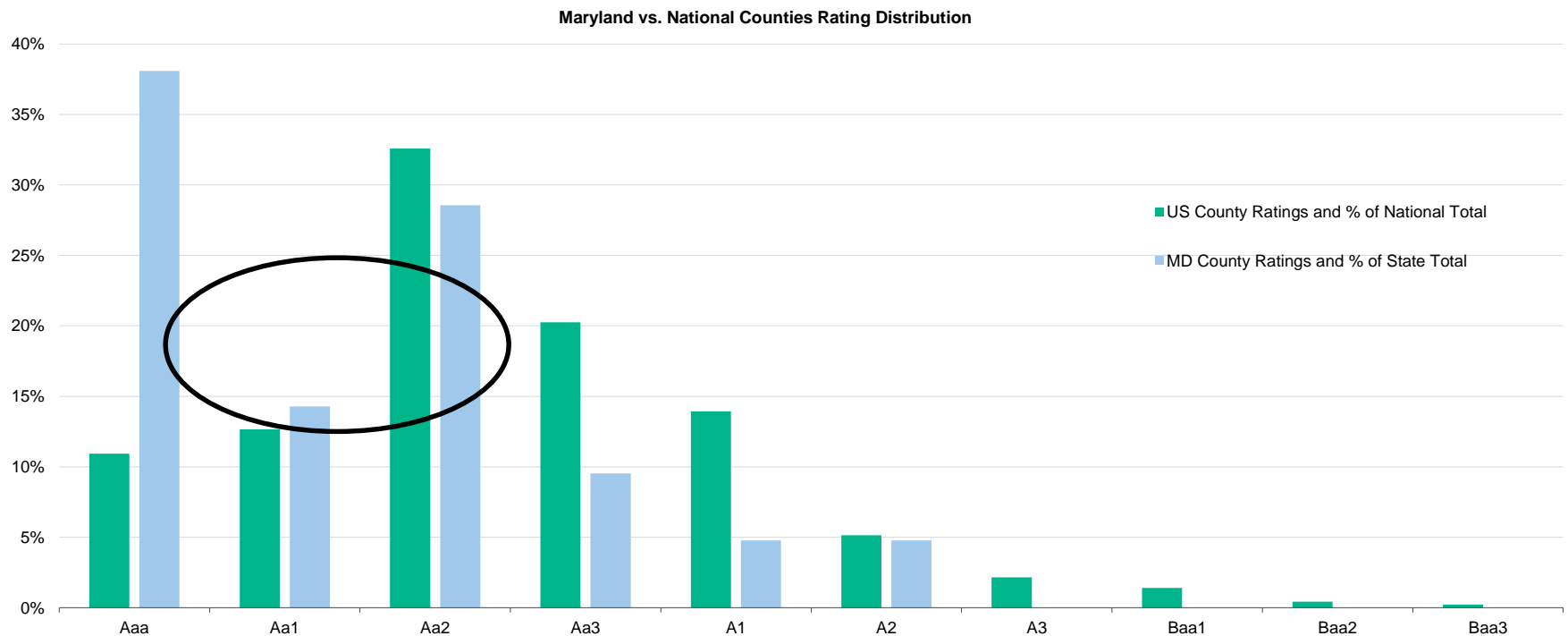
- 38 Total MD City Public and Internal Ratings (GO, GOLT, Issuer)
- Aa3 Median Rating for Both MD and US Cities



Source: Moody's Investors Service

Most MD Counties are Highly Rated

- 21 Total MD County Public and Internal Ratings (GO, Issuer)
- Aa1 Median Rating for MD Counties; 1-notch higher than the median rating for US counties



Source: Moody's Investors Service

Strengths and Weaknesses

STRENGTHS

- High per capita income
- Well-educated workforce
- Center for security and biomedical research

WEAKNESSES

- Exposure to federal government cost-cutting
- Relatively high business costs
- Below-average population growth



General Obligation Bond Methodology Update

Local Government GO Bonds Methodology

- GO is the most commonly used security by local governments in Maryland and throughout the US
 - We rate approximately 8,000 local government GO credits
- Focuses on local government ratings based on the “typical” general obligation unlimited tax (GOULT) security
 - Contractual full faith and credit pledge of unlimited ad valorem taxing power
 - Specific definitions may vary by state
- Strong sector due to potency of the ad valorem taxing power, amortizing debt structures and overall stable institutional frameworks
- Security pledge dictates methodological approach

GO Methodology Factors, Sub-factors and Weights

Factors & Sub-Factors	Weights
Factor 1: Economy/Tax Base	30%
Full Value (market value of taxable property)	10%
Full Value per Capita	10%
Median Family Income	10%
Factor 2: Finances	30%
Fund Balance as % of Operating Revenue	10%
5-Year Dollar Change in Fund Balance as % of Revenues	5%
Cash Balance as % of Revenues	10%
5-Year Dollar Change in Cash Balance as % of Revenues	5%
Factor 3: Management	20%
Institutional Framework	10%
Operating History: 5-Year Average of Operating Revenues / Operating Expenditures	10%
Factor 4: Debt/Pensions	20%
Net Direct Debt / Full Value	5%
Net Direct Debt / Operating Revenue	5%
3-Year Average of Moody's Adjusted Net Pension Liability / Full Value	5%
3-Year Average of Moody's Adjusted Net Pension Liability / Operating Revenues	5%

Methodology Scorecard

Purpose and Use of the Scorecard:

- Enhances the transparency of our rating process
- Captures the key considerations that correspond to particular rating categories
- Not an exhaustive list of factors that we consider in every local government rating
- Each subfactor is a quantitative metric that translates to a rating
- May notch up or down from scorecard-indicated rating based on additional factors
- Scorecard acts as a starting point for a more thorough and individualistic analysis
- Final rating is determined by a Rating Committee

Scorecard Factor 1: Economy/Tax Base – 30%

	<i>Very Strong</i>	<i>Strong</i>	<i>Moderate</i>	<i>Weak</i>	<i>Poor</i>	<i>Very Poor</i>	
	Aaa	Aa	A	Baa	Ba	B & Below	Weight
ECONOMY/TAX BASE (30%)							
Tax Base Size: Full Value	> \$12B	\$12B ≥ n > \$1.4B	\$1.4B ≥ n > \$240M	\$240M ≥ n > \$120M	\$120M ≥ n > \$60M	≤ \$60M	10%
Full Value Per Capita	> \$150,000	\$150,000 ≥ n > \$65,000	\$65,000 ≥ n > \$35,000	\$35,000 ≥ n > \$20,000	\$20,000 ≥ n > \$10,000	≤ \$10,000	10%
Socioeconomic Indices: MFI	> 150% of US median	150% to 90% of US median	90% to 75% of US median	75% to 50% of US median	50% to 40% of US median	≤ 40% of US median	10%

- The tax base is the source of most local government revenues
- Full Value (10%): The market value of taxable property accessible to the municipality
- Full Value Per Capita (10%): Scales tax base strength to the number of residents
- Median Family Income (MFI) (10%): Important measure of the strength and resiliency of the tax base

Scorecard Factor 2: Finances – 30%

	<i>Very Strong</i>	<i>Strong</i>	<i>Moderate</i>	<i>Weak</i>	<i>Poor</i>	<i>Very Poor</i>	Weight
	Aaa	Aa	A	Baa	Ba	B & Below	
FINANCES (30%)							
Fund Balance as % of Revenues	> 30.0% > 25.0% for School Districts	30.0% ≥ n > 15.0% 25.0% ≥ n > 10.0% for SD	15.0% ≥ n > 5.0% 10.0% ≥ n > 2.5% for SD	5.0% ≥ n > 0.0% 2.5% ≥ n > 0.0% for SD	0.0% ≥ n > -2.5% 0.0% ≥ n > -2.5% for SD	≤ -2.5% ≤ -2.5% for SD	10%
5-Year Dollar Change in Fund Balance as % of Revenues	> 25.0%	25.0% ≥ n > 10.0%	10.0% ≥ n > 0.0%	0.0% ≥ n > -10.0%	-10.0% ≥ n > -18.0%	≤ -18.0%	5%
Cash Balance as % of Revenues	> 25.0% > 10.0% for School Districts	25.0% ≥ n > 10.0% 10.0% ≥ n > 5.0% for SD	10.0% ≥ n > 5.0% 5.0% ≥ n > 2.5% for SD	5.0% ≥ n > 0.0% 2.5% ≥ n > 0.0% for SD	0.0% ≥ n > -2.5% 0.0% ≥ n > -2.5% for SD	≤ -2.5% ≤ -2.5% for SD	10%
5-Year Dollar Change in Cash Balance as % of Revenues	> 25.0%	25.0% ≥ n > 10.0%	10.0% ≥ n > 0.0%	0.0% ≥ n > -10.0%	-10.0% ≥ n > -18.0%	≤ -18.0%	5%

- Fund Balance (10%): The net financial resources available in the short-term
- Cash Balance (10%): The paramount liquid resource available; excludes accruals
- Five-year Dollar Change in Fund Balance and Cash Balance as Percentage of Revenues (Each 5%)
 - Incorporated to capture the trend information; avoids overweighting point-in-time data
 - The focus here is on whether financial reserves and liquidity are increasing in step with budgetary growth

Scorecard Factor 3: Management – 20%

	<i>Very Strong</i>	<i>Strong</i>	<i>Moderate</i>	<i>Weak</i>	<i>Poor</i>	<i>Very Poor</i>	
	Aaa	Aa	A	Baa	Ba	B & Below	Weight
MANAGEMENT (20%)							
Institutional Framework	Very strong legal ability to match resources with spending	Strong legal ability to match resources with spending	Moderate legal ability to match resources with spending	Limited legal ability to match resources with spending	Poor legal ability to match resources with spending	Very poor or no legal ability to match resources with spending	10%
Operating History: 5-Year Average of Operating Revenues / Operating Expenditures	> 1.05x	1.05x ≥ n > 1.02x	1.02x ≥ n > 0.98x	0.98x ≥ n > 0.95x	0.95x ≥ n > 0.92x	≤ 0.92x	10%

- Overall factor weight maintained at 20%
- Institutional Framework (10%): New factor for US Local Governments
- Operating History (10%)
 - Measures the degree that an issuer has demonstrated the practical ability and willingness to match revenues with expenditures
 - Input: Five-year average of the ratio of operating revenues to operating expenditures

Scorecard Factor 4: Debt/Pensions – 20%

	<i>Very Strong</i>	<i>Strong</i>	<i>Moderate</i>	<i>Weak</i>	<i>Poor</i>	<i>Very Poor</i>	
	Aaa	Aa	A	Baa	Ba	B & Below	Weight
DEBT/PENSIONS (20%)							
Net Direct Debt / Full Value	< 0.75%	0.75% ≤ n < 1.75%	1.75% ≤ n < 4%	4% ≤ n < 10%	10% ≤ n < 15%	> 15%	5%
Net Direct Debt / Operating Revenues	< 0.33x	0.33x ≤ n < 0.67x	0.67x ≤ n < 3x	3x ≤ n < 5x	5x ≤ n < 7x	> 7x	5%
3-Year Average of Moody's Adjusted Net Pension Liability / Full Value	< 0.9%	0.9% ≤ n < 2.1%	2.1% ≤ n < 4.8%	4.8% ≤ n < 12%	12% ≤ n < 18%	> 18%	5%
3-Year Average of Moody's Adjusted Net Pension Liability / Operating Revenues	< 0.4x	0.4x ≤ n < 0.8x	0.8x ≤ n < 3.6x	3.6x ≤ n < 6x	6x ≤ n < 8.4x	> 8.4x	5%

- Debt: Measures the magnitude of debt obligations relative to resources (using the tax base as a proxy) and operations (using operating revenues as proxy)
- Pensions: Utilize Moody's adjusted net pension liability metrics
- Three-year average is used to smooth the volatility inherent in the metric
- Debt breakpoints are more restrictive than pensions reflecting the fixed nature of debt obligations; pension measures are estimates, may be volatile across years and can be renegotiated and reduced

Applying the Analytical Factors



- Analysts score each subfactor in the grid
- The weighted average of the analyst-assigned scores will determine a raw score that maps to Moody's rating scale → **the grid-indicated rating**
- Analyst and Rating Committee will determine any notching factors → **the adjusted scorecard rating**
- The final public rating may differ from the adjusted scorecard rating

GO Scorecard – Additional Considerations

Adjustments/Notching Factors	
<u>Description</u>	<u>Direction</u>
Economy/Tax Base	
Institutional presence	up
Regional economic center	up
Economic concentration	down
Outsized unemployment or poverty levels	down
Other analyst adjustment to Economy/Tax Base factor (specify)	up/down
Finances	
Outsized contingent liability risk	down
Unusually volatile revenue structure	down
Other analyst adjustment to Finances factor (specify)	up/down
Management	
State oversight or support	up/down
Unusually strong or weak budgetary management and planning	up/down
Other analyst adjustment to Management factor (specify)	up/down
Debt/Pensions	
Unusually strong or weak security features	up/down
Unusual risk posed by debt/pension structure	down
History of missed debt service payments	down
Other analyst adjustment to Debt/Pensions factor (specify)	up/down
Other	
Credit event/trend not yet reflected in existing data sets	up/down

Methodology Update: GO Limited Tax



US Local Government Limited Tax (GOLT)

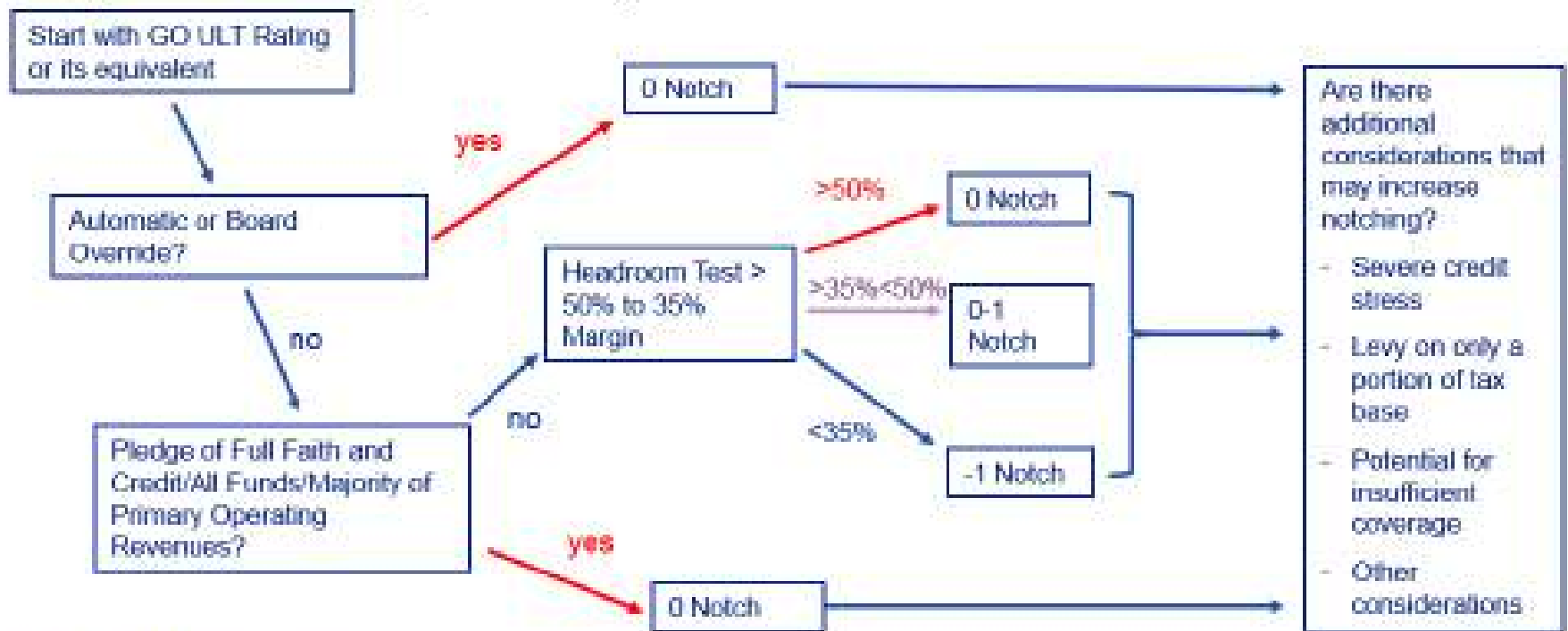
Update to Methodology

- Updated Methodology Released 12/16/16
 - Evaluation and incorporation of comments into final methodology
- GOLT credit quality is closely related to unlimited tax (GOULT) pledge
 - GOLT debt is rated no more than one notch below GOULT rating in most cases
- The relationship between GOULT pledge and GOLT pledge is defined by the degree to which the GOLT pledge is “limited” from both a legal and practical perspective
 - Limitations on the property tax rate
 - Limitations on the property tax levy dollar amount or tax yield
- Legal framework of tax limitation often do not result in a measurable credit risk difference between GOULT and GOLT debt
 - Override
 - Additional security of broad revenue pledge
 - Additional taxing margin

US Local Government Limited Tax (GOLT)

Assessing Notching From GOULT & GOLT

Summary of the Principal Factors in Assessing Whether the GOLT Rating is the Same as the GOULT Rating, One Notch Below, or Potentially Lower



Source: Moody's Investors Service

US Local Government Limited Tax (GOLT)

Assessing Notching From GOULT & GOLT

- Factor 1: Assessing Whether the GOLT Debt Issuer Has the Authority to Override the Limitation
 - Automatic overrides
 - Board overrides
 - Public votes to override

- Factor 2: Assessing Whether the GOLT Debt Carries a Broad Revenue Pledge
 - Full faith and credit or similar broad revenue pledge that includes property tax limitations
 - Dedicated, limited rate, tax levy without a full faith and credit or similar pledge

- Factor 3: Assessing Whether the GOLT Debt Issuer Has Sufficient Taxing Headroom
 - Projected capacity to generate additional property tax revenue within the legal limitation
 - Taxing headroom = (projected maximum levy – amount of current levy used for debt service)/MADS

Update: Lease Methodology



Lease Methodology

- Our fundamental rating approach of notching downward from the GO rating, primarily considering the financed assets “essentiality” and degree of legal contingency incorporated into the financing’s legal structure
- Introduce a formal notching guide/scorecard

Essentiality Categories by Asset Type

More Essential to Government Operations	Less Essential to Government Operations
Affordable housing	Animal shelters
Continuing care centers/nursing homes	Community centers
Courthouses	Convention centers
Jails	Golf courses
Landfills	Hotels
Libraries	Ice rinks
Parking garages attached to essential facilities	Marinas
Parks	Miscellaneous economic development projects
Police and fire stations	Parking garages attached to non-essential facilities
Roads, streets, and interchanges	Sports stadiums
School buildings	Theaters and concert halls
Water and sewer system facilities	Undeveloped land

Lease Methodology Notching Guide

- The scoring of the weakest, key rating factor determines the notching guidance within the range established for each security (0-2 for lease-backed and AAOs; 2-4 for MOs)

Notching Guide for Lease, Appropriation, and Moral Obligations

Security Type	Lease-backed/Annual Appropriation			Moral Obligation			
Essentiality	More		Less	More			Less
Legal structure	Strong	Average	Weak	Strong	Average	Weak	
<i>Notches from GO rating:</i>							
Zero	X						
One		X					
Two			X	X			
Three					X		
Four						X	X

- Final rating outcome incorporates all additional considerations

Update: Tax Increment Debt



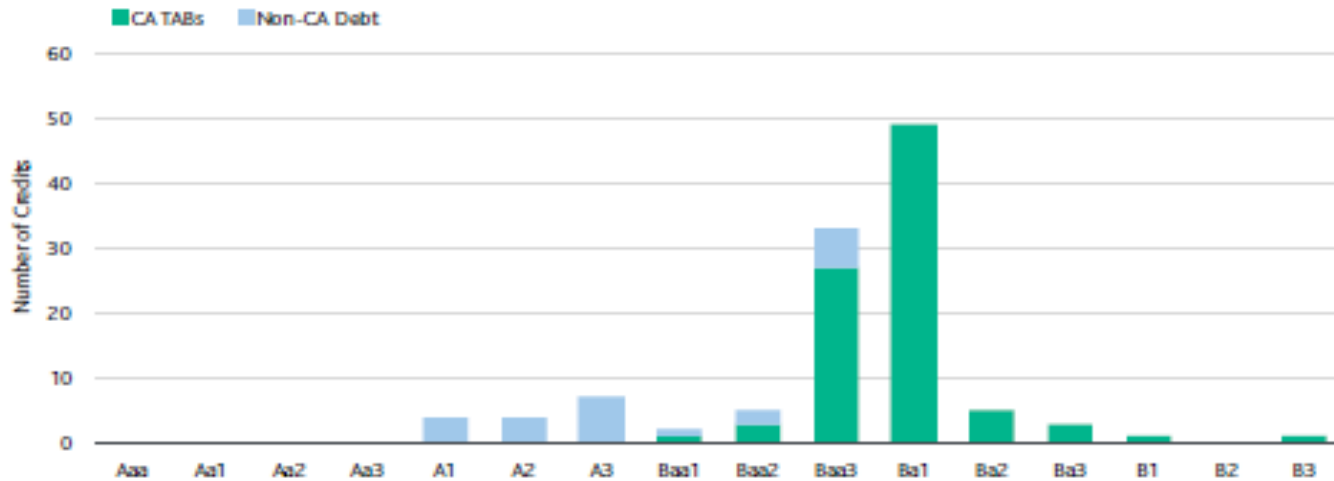
Tax Increment Debt

- Request for Comment period closed 6/24/15
- Evaluation and incorporation of comments into final methodology
- Covers debt secured by incremental property taxes over a base amount generated within a tax increment financing (TIF) district
- TIF districts encourage economic development by promoting redevelopment or remediation of blight, or even initial development of raw land.
- Primary factors considered in our analysis are
 - Project area characteristics / tax base
 - Financial strength
 - Legal structure/debt

Tax Increment Debt: Rated Universe

- We rate the debt of 60 redevelopment or economic development agencies, relating to over 105 unique TIF project areas. Tax increment bonds issued in California, known as tax allocation bonds, comprise 80% of the rated credits.

Moody's Rated Tax Increment Debt Universe



Source: Moody's Investors Service

- The median rating for the tax increment sector is lower than the median of other municipal sectors, but it still indicates a low risk of payment default
 - In the Moody's-rated universe, there is only one instance of a TIF issuer defaulting on debt

Tax Increment Debt: The Scorecard

- Our tax increment debt scorecard provides a composite score of the credit profile based on the weighted factors we consider most important, universal, and measurable

Scorecard Rating Factors- Standard Approach

Broad Factor	Factor Weighting	Subfactor	Measure	Subfactor Weighting
Project Area Characteristics / Tax Base	45%	Socioeconomic Context	Median Family Income as a % of US	5%
		Tax Base Size	Incremental AV	10%
		Economic Diversity	Top Ten Taxpayers' AV as a % of Incremental AV	15%
		Tax Base Volatility	Ratio of Incremental AV to Total AV	15%
Financial Strength	35%	Debt Service Coverage	MADS Coverage	25%
		Revenue Trend	3-Year CAGR of Tax Increment Revenue	10%
Legal Structure / Debt	20%	Additional Bonds Test		20%
Total	100%			100%

- Acts as a starting point for a more thorough and individualistic analysis

Tax Increment Debt: The Scorecard

Factor 1: Project Area Characteristics / Tax Base (45%)

EXHIBIT 4

Subfactor	Measure	Weight	Aaa	Aa	A	Baa	Ba	B
Socioeconomic Context	Median Family Income as a % of US	5%	> 150% of US level	150% to 90% of US level	90% to 75% of US level	75% to 50% of US level	50% to 40% of US level	< 40% of US level
Size	Incremental AV	10%	> \$12B	\$12B ≥ n > \$1.4B	\$1.4B ≥ n > \$240M	\$240M ≥ n > \$120M	\$120M ≥ n ≥ \$60M	< \$60M
Economic Diversity	Taxpayer Concentration (Top Ten Taxpayers' AV as % of Incremental AV)	15%	< 2%	2% ≤ n < 5%	5% ≤ n < 10%	10% ≤ n < 20%	20% ≤ n ≤ 35%	> 35%
Tax Base Volatility	Ratio of Incremental AV to Total AV	15%	> 95%	95% ≥ n > 90%	90% ≥ n > 85%	85% ≥ n > 80%	80% ≥ n ≥ 60%	< 60%

- Median family income is the best proxy for economic strength of local population
- A larger incremental valuation generally provides a broader and more diverse pool of property taxpayers with greater stability.
- Project areas with diverse taxpayers tend to exhibit more stability and resilience
- The relative risk of tax base contraction in any one project area depends primarily on the ratio of incremental to total AV

Tax Increment Debt: The Scorecard

Factor 2: Financial Strength (35%)

EXHIBIT 6

SubFactor	Measure	Weight	Aaa	Aa	A	Baa	Ba	B	Caa
Debt Service Coverage	MADS Coverage (Standard Approach)	25%	> 4.0x	4.0x ≥ n > 3.0x	3.0x ≥ n > 2.0x	2.0x ≥ n > 1.3x	1.3x ≥ n ≥ 1.0x	< 1.0x	
	MADS Coverage (CA TABs Approach)		> 6.0x	6.0x ≥ n > 4.0x	4.0x ≥ n > 3.0x	3.0x ≥ n > 2.0x	2.0x ≥ n > 1.3x	1.3x ≥ n ≥ 1.0x	< 1.0x
Revenue Trend	3-year Compound Annual Growth Rate (CAGR) of Tax Increment Revenues	10%	> 10%	10% ≥ n > 5%	5% ≥ n > 0%	0% ≥ n > -2%	-2% ≥ n ≥ -5%	< -5%	

- Higher coverage provides a greater buffer against swings in incremental valuations and the associated revenues
- Three-year metric works to smooth potentially volatile annual fluctuations in tax revenues of one project area relative to revenues of another

Tax Increment Debt: The Scorecard

Factor 3: Legal Structure / Debt (20%)

EXHIBIT 7

Subfactor	Weight	Aaa	Aa	A	Baa	Ba	B
Additional Bonds Test (Standard Approach Only)	20%	> 3.0x OR closed lien	3.0x to 1.76x	1.75x to 1.26x	1.25x to 1.0x		No limit
California Legal Structure (CA TABs Approach Only)	20%	—	—	—	California Legal Structure	—	—

- Strong additional bonds test is intended to maintain a defined, minimum level of coverage protection over the life of the bonds

Tax Increment Debt: SAMPLE CREDIT

OVERVIEW:

- Moodysville, MD needs \$68 million in new money to revitalize parks in the center of the city and surrounding developments in Tax Increment District
 - Issuance will also include \$12 million for refunding Series 2007
- Tax Allocation District (TAD) is located in the in the heart of downtown Moodysville and composes 9% of the city's total land area, or 6,600 acres
- Redevelopment is mixed-use: public space, residential (multi-fam, single-fam, condos)
- Park Revitalization Inc, is economic development arm of the city and is tasked with developing the TAD, funded with TAD proceeds and other city revenue sources
- The primary taxing jurisdictions in the TAD are the City of Moodysville (Aa1 stable), Moodysville Public School (Aa2), and Moodys County (Aa1 stable), which levy property taxes at 7.11 mills, 19.64 mills, and 8.5 mills, respectively

Tax Increment Debt: SAMPLE CREDIT

DEBT AND LEGAL COVENANTS

- Series 2007, \$12 million outstanding
- Series 2017, \$80 million
 - New trails, revitalization of blighted buildings surrounding the park
 - Refunding of series 2007 for NPV savings of 15.9% of refunded bonds
- Bonds are secured by a first lien pledge on ad valorem tax increment revenues received from the Moodysville Tax Allocation District
- 1,25X additional bonds test, 3-Prong Test, DSRF funded with cash
- City transfers all tax increments to Trustee on first of month, which is used to pay all P&I

Tax Increment Debt: SAMPLE CREDIT

TAX BASE

- Strong AV growth in recent years
- Growth is driven by residential, with commercial lagging behind,
 - 7.2% increase in residential construction permits,

Moodysville Tax Allocation District

Fiscal Year	TAD Assessed Value (\$000)	% Change	5-year average	Incremental Growth	% Growth over Base Value	Incremental AV to Total AV
2007 (Base Year)	608,012			\$ -		
2008	1,081,648	77.9%		\$ 473,636	77.9%	43.8%
2009	1,201,503	11.1%		\$ 593,491	97.6%	49.4%
2010	1,268,966	5.6%		\$ 660,954	108.7%	52.1%
2011	1,255,006	-1.1%		\$ 646,995	106.4%	51.6%
2012	1,299,815	3.6%	22.8%	\$ 691,803	113.8%	53.2%
2013	1,278,832	-1.6%	3.6%	\$ 670,820	110.3%	52.5%
2014	1,175,229	-8.1%	-0.4%	\$ 567,217	93.3%	48.3%
2015	1,271,127	8.2%	0.0%	\$ 663,115	109.1%	52.2%
2016	1,553,532	22.2%	4.8%	\$ 945,520	155.5%	60.9%
2016	1,611,089	3.7%	23.9%	\$ 1,003,077	165.0%	62.3%

Tax Increment Debt: SAMPLE CREDIT

TAX BASE (cont'd)

- Top 10 taxpayers account for 27.5% of 2017 AV

Top 10 Taxpayers	FY17 AV (\$000)	% of Total
Moody's Investors Service	72,898	4.5%
Moody's County School District	44,354	2.8%
Development Authority of Moody's County	22,116	1.4%
Sample 1	24,555	1.5%
Sample 2	19,390	1.2%
Sample 3	18,390	1.1%
Sample 4	17,715	1.1%
Sample 4	22,101	1.4%
Sample 5	18,270	1.1%
Sample 6	15,732	1.0%
Total	275,521	27.5%

Tax Increment Debt: SAMPLE CREDIT

DEBT SERVICE COVERAGE

- Over the last five years, annual debt service coverage has averaged a healthy 3.13 times. In fiscal 2015 total coverage was 3.07 times with MADS coverage of 2.58 times.

- Post offering, annual debt service coverage is expected to be level with estimated MADS (2018) coverage of 1.82 times.

- Projections are conservative and based on zero growth in increment revenues.
 - Assuming 2% annual revenue growth through maturity, debt service coverage is stronger and increases to over 4.0 times in the later years.

Tax Increment Debt: SAMPLE CREDIT

		Numerical Score						Input	Score	Weight
		0.50-1.50	1.50-2.50	2.50-3.50	3.50-4.50	4.50-5.50	5.50-6.50			
		Aaa	Aa	A	Baa	Ba	B			
Project Area Characteristics / Tax Base (45%)										
Socioeconomic Context	MFI as % of US	> 15% of US level	15% to 9% of US level	9% to 7% of US level	7% to 5% of US level	5% to 4% of US level	< 4% of US level	87.1%	3.53	5%
Size	Incremental AV (\$000s)	> \$12B	\$12B ≥ n > \$1.4B	\$1.4B ≥ n > \$240M	\$240M ≥ n > \$120M	\$120M ≥ n > \$60M	< \$60M	\$1,003,077	3.84	10%
Economic Diversity	Taxpayer Concentration (Top Ten as % of Incremental AV)	< 2%	2% ≤ n < 5%	5% ≤ n < 10%	10% ≤ n < 20%	20% ≤ n < 35%	> 35%	27.5%	3.88	15%
Tax Base Volatility	Ratio of Incremental AV to Total AV	> 95%	95% ≥ n > 90%	90% ≥ n > 85%	85% ≥ n > 80%	80% ≥ n > 60%	< 60%	62.3%	3.53	15%
Financial Strength (35%)										
Debt Service Coverage	Maximum Annual Debt Service Coverage	> 4.0x	4.0x ≥ n > 3.0x	3.0x ≥ n > 2.0x	2.0x ≥ n > 1.3x	1.3x ≥ n > 1.0x	< 1.0x	1.84	3.73	25%
Revenue Trend	3-year Compound Annual Growth Rate (CAGR) of Tax Increment Revenue <small>(from CMW Calculator worksheet)</small>	> 10%	10% ≥ n > 5%	5% ≥ n > 0%	0% ≥ n > -2%	-2% ≥ n > -5%	< -5%	4.1%	3.53	10%
Legal Structure / Debt (20%)										
Additional Bonds Test	Additional Bonds Test	> 3.0x OR a closed line	3.0x to 1.75x	1.75x to 1.35x	1.35x to 1.0x	No Limit	Open Line	1.25	3.58	20%

Total Score 3.88

Unadjusted Rating Baa2

Tax Increment Debt: SAMPLE CREDIT

Rating Scorecard	
<i>Factor</i>	<i>Score</i>
Project Area Characteristics / Tax Base (45%)	1.98
Financial Strength (35%)	1.20
Legal Structure / Debt (20%)	0.70
<i>Unadjusted Score</i>	<i>3.88</i>
<i>Unadjusted Rating</i>	Baa2
ADDITIONAL CONSIDERATIONS	
Debt Service Reserve Fund Analysis	
Is there a debt service reserve fund requirement? (Y/N)	Yes
If yes, what is the funding requirement? (MADs, 3 Prong, Less than 3 Prong, Other)	MADS
Is it cash funded or by a surety provider or both? (Cash funded, surety, combination of both)	Cash funded
If surety provider, specify name of entity?	
Specify rating of surety provider?	
Does presence of or lack of DSRF materially affect OVERALL credit quality (as indicated in the above the line score)? (Y/N)	No
Impact on credit quality ? (+1, +.5, 0, -.5, -1 notches)	0.0

Tax Increment Debt: SAMPLE CREDIT

Other Considerations:			
<i>Description</i>	<i># of notches</i>	<i>Direction</i>	Comments
Project Area Characteristics / Tax Base			
Additional local economy strengths and weaknesses not captured in the grid (including other wealth/income indicators and labor and housing market metrics)	1.0	up/down	Regional Economic Center
Level and potential for development	1.0	up/down	Availability of Developable land
Risks posed by small geographical size		down	
Characteristics of largest taxpayers (sector concentration / credit quality)		up/down	
Land use composition and tax status		up/down	
Institutional presence		up	
Historical incremental and total tax base value trends		up/down	
Inflationary Base AV (or other growth requirement for base AV)		down	
Other analyst adjustment to Project Area Characteristics / Tax base factor (Specify)		up/down	
Financial Strength			
Tax increment revenue limit caps		down	
Property tax appeals		down	
Changes in tax rates impacting revenues		up/down	
Reserves	0.5	up	Unrestricted reserves kept while other TIF's don't have a balance
Other analyst adjustment to Financial Strength factor(Specify)		up/down	
Legal Structure / Debt			
Debt issuance limitations		up/down	
Exposure to variable rate debt and/or swaps, or other unusual debt structure		down	
Other analyst adjustment to Legal Structure / Debt factor(Specify)		up/down	
Other			
Governance / TIF legislative framework	0.5	up/down	Management team is strong
Management		up/down	
Linkage to related distressed overlapping taxing entity		down	
Litigation		up/down	
Credit event / trend not yet reflected in existing data set		up/down	
Total Adjustments (DSRF + Other Considerations)	3.0		
Adjusted Score	2.88		
Adjusted Rating	A2		

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QUESTIONS?

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