Municipal Bond Monthly

NORTH AMERICA

MATTHEW GASTALL

Executive Director
Morgan Stanley Wealth Management
Matthew.Gastall@morganstanley.com
+1 212 296-2602

Strategy:

- Stay Cautious
- Favor High-Quality, Short/Neutral Duration
- Strengthen Portfolio Structure

Credit Quality: High

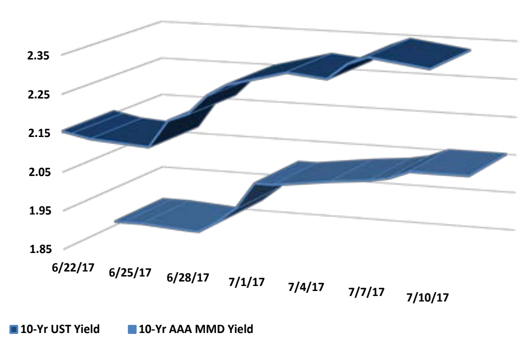
Favored Sectors: Please see our Sector Outlooks Table

Duration: Short-to-Neutral Duration Bond Ladder

Coupon Structure: Above Market (4.5% or Higher)

Monthly Credit Spotlight: *California*

Fig 1. Sudden Rate Rise On "Hawk Talk"



Source: Morgan Stanley Wealth Management Municipal Research & Strategy, Bloomberg, TM3 as of 7/11/17

The Heat Is On

Not so fast…Just when we thought we could turn our attention toward baseball, beaches, fireworks, and barbecues, the market reminded us we always need to keep our focus. After listing some of our concerns for the second half of the year last month, it felt as if everything was going according to plan—bond redemptions were healthy, demand was strong, interest rates were range bound, and issuers were completing their annual "supply push" to raise capital before the summer. In fact, we hoped an appropriate title for this month's publication would be "A Welcome Respite" following this year's eventful beginning, but some of our previously discussed concerns turned the heat on early, forcing us to redirect our focus. The question now is whether this heat continues or if we can enjoy a more mild and manageable summer…

As discussed last month in our Midyear Outlook, the first half of this year was a good one for municipal bond market performance, with the Bloomberg Barclays Municipal Bond Index posting a 3.56% total return. Not only did yield levels, credit spreads, and relative-value ratios all hover near post-election lows, but proposed tax reform and central bank monetary policy suggested the bond market was vulnerable to weakness in the second half of this year. Two weeks after we put pen to paper, European Central Bank President Mario Draghi delivered a forum speech viewed by many as a seminal shift in monetary policy. This "hawk talk" symbolized the possibility that waning central bank asset purchases may lessen the demand for fixed-income securities and encourage interest rates to rise. Consequently, global fixed-income markets experienced significant weakness and yield levels on the 10-year US Treasury and 10-year AAA MMD rose by 26 and 20 basis points, respectively. These developments are harbingers of what investors must remain cognizant of moving forward. If the broader rate environment continues to experience weakness, it will likely bring tax-exempt securities along with it.

Turning our focus toward municipals, the seasonal backdrop is changing and the market is currently influenced by dynamics that may mitigate this impact. On the demand front, IDC data exhibit that bond redemptions (called and maturing securities) finished June at +$40 billion, with July and August's forecasts also calling for aggressive results. Focusing on supply, this year's "supply push" finished in-line with expectations as May and June closed with a strong $74 billion in total issuance. Now that we're venturing further into the summer, the market's seasonal backdrop will likely become more constructive if redemptions bolster demand and supply declines. *However, UST price action and the global interest rate market often have a predominant influence on this asset class, which means municipals may outperform, but nominal yield levels may still rise.*

Before delving into our investment strategy, it's important to review two developments which have surfaced since last month. We believe both are significant (but not systemic) moving forward.

First, Illinois recently passed an operating budget for the first time in two years. Though the budget does not fully address the state's fiscal challenges (specifically its large unfunded pension liabilities), its passage has been viewed positively for GO bondholders as the state is making progress toward stabilizing its position; however, investors should still anticipate volatility until the state passes a credible plan to address its long-term challenges. Overall, we do not believe Illinois' woes will cause a systemic market impact, but stress that the market's household-controlled buyer base may focus more on the pension challenges of select municipalities. As we will discuss shortly, this development only supports our advocacy for investing in high-quality securities.

Second, Standard & Poor's recently downgraded bond insurer National Public Finance Guarantee Corp. citing the firm's weaker business risk profile. We believe credit support provided by the monolines rated A3 or higher offers considerable value, but still advocate looking primarily toward the underlying ratings of municipal securities when evaluating creditworthiness. Should recent interest-rate weakness create an appealing entry point while S&P's downgrade causes National-insured paper to trade cheaper than what underlying ratings dictate (within our credit-rating parameters), we would view it as a buying opportunity.

Moving forward, our strategy focuses on three objectives at this time: (1) remain cautious, but still watch for any potential "hawk talk" entry points to very carefully add exposure; (2) focus on short-to-neutral duration, high-quality securities; and (3) look to complete any overdue portfolio maintenance.

As discussed earlier, the global rate environment is one of the most predominant influences on the asset class due to the arbitrage relationship that exists between USTs and tax-exempts. Even if muni seasonals are constructive, crossover investors may sell tax-exempt bonds to invest in USTs if yields rise considerably (and vice versa). Consequently, we'd stress that investors exercise caution in the event that recent price action represents the beginning of a broader, more significant market movement. This dynamic, coupled with the topics discussed last month (tax reform and the Fed's balance sheet unwind, among others) encourage that investments should be completed carefully as the market is susceptible to weakness in the second half.

Second, and consistent with the recommendations of Morgan Stanley's Global Investment Committee, we continue to favor exposure to short-to-neutral duration, high-quality securities at this time. The reasons for this advocacy are twofold. We touched on the first in the last paragraph, as we remain concerned with the possibility of weakness later this year. Short-to-neutral duration securities (that pay above-market coupons) will likely hold their value more effectively than higher duration/longer final maturity bonds if interest rates rise, and should also be more defensive if bank and insurance company demand wanes if corporate income tax rates are reduced during reform. Additionally, the largest, highest-quality issuers boast stronger fiscal profiles that can be leveraged to manage challenges if they arise in a late cycle economy. We'd recommend exposure to a diversified blend of the sectors listed on page 3. Second, investors are currently being compensated less for risk-taking. As observed in Figures 2 and 4 on the next page, credit spreads hover near/through historical "tights" while the long end of the yield curve is now flatter. In fact, close to 83% of the curve is currently captured by year 13.

Finally, we'd be remiss to discourage investors from continuing any overdue portfolio maintenance. Though current liquidity is not as strong as in June, narrow credit spreads and a flatter yield curve indicate that investors can trade for shorter-maturity and/or higher-quality municipals. Keep in mind this is not an advocacy to sell simply for the sake of selling, but to use the currently "tight" market to move out of less appealing positions. Those investors looking to complete such trades this summer may wish to do so midweek when street liquidity tends to be better.

The heat is on. Just when we thought we could turn our focus toward the 4th of July holiday, the market threw us a summer "curveball." (We know, enough summer analogies!) That's OK, though… because we were ready for it. Enjoy the summer!

Monthly Credit Spotlight – *California*

As discussed in our *State of California Credit Synopsis*, California's fiscal position is bolstered by its inherent dominion over the nation's largest economy and taxpayer base. Importantly, the state's fiscal profile has benefited from one of the nation's most robust recoveries, and its leadership has leveraged this progress to strengthen its position (Propositions 2, 30, and 55). Consequently, California's credit rating has been upgraded by three and four levels by S&P and Moody's, respectively, since 2009. The state's proactive management style is also apparent in its FY 2018 budget.

However, California's progressive income tax structure creates a dependence upon financial market performance and the state's highest earners. California's debt burden is also high (net tax-supported debt per capita and as a percentage of personal income), its pension/employee benefit-related liabilities are sizeable, and funding uncertainties exist with Washington's leadership changes.

Overall, the state's fiscal profile continues to progress according to expectations. Further improvements in California's position may be challenging as: (1) the US economy may be in a late cycle; and (2) the state has already made considerable progress. (In fact, personal income and sales tax revenue collections have exhibited some signs of slowing.) However, California's fiscal profile is very strong and the state continues to practice proactive measures to bolster liquidity and address its liabilities. We believe investors should monitor macroeconomic developments and financial market performance (revenue cyclicality), changes to federal funding (ACA), and revenue growth trajectory. The state's overall outlook is stable while its position is of very strong credit quality.

Municipal Market Data

Fig 2. Munis Vs. USTs Close to Averages

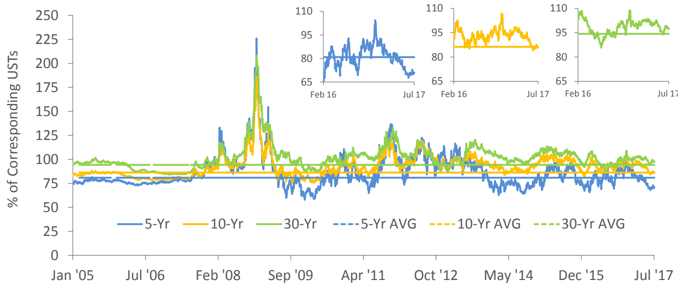


Fig 3. Less Compensation for Credit Risk

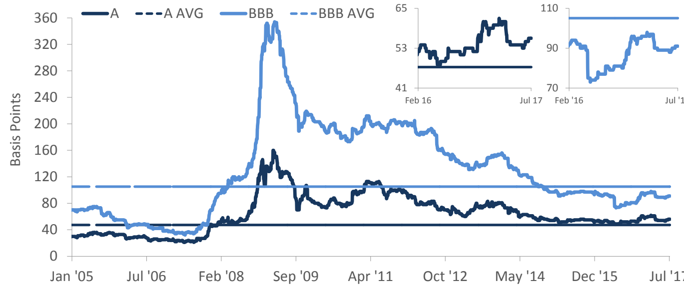


Fig 4. 10-Yr UST & 10-Yr AAA Yield Levels

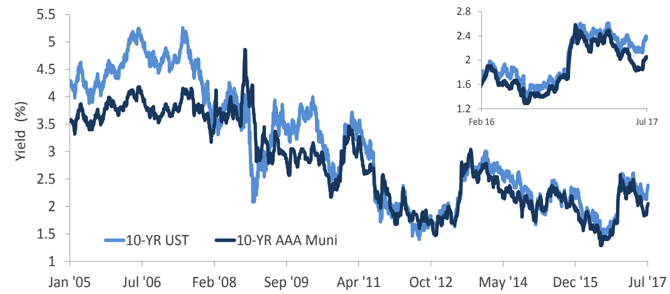


Fig 5. Municipal Bond Yield Curve—"Flatter" Long-End

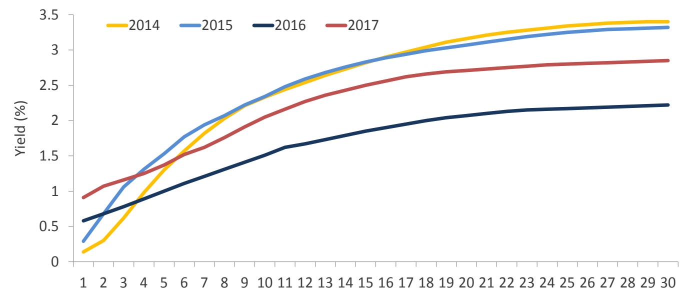


Fig 6. Pre-Summer Supply Push

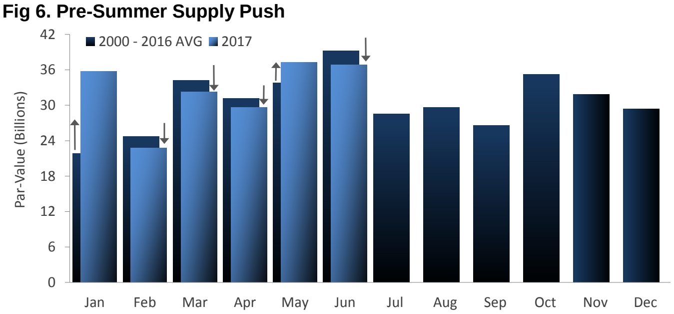
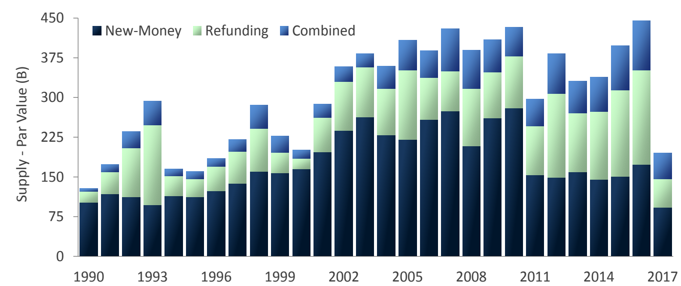


Fig 7. 2017 Supply Healthy; More New-Money, Less Refundings



Source: Morgan Stanley Wealth Management Municipal Research and Strategy, Thomson Reuters MMD, Bloomberg, *The Bond Buyer* as of 7/11/17

Fig 8. Sector Outlooks and Recommended Rating Parameters

Sector	Minimum Rating*	Commentary
State GO & State Appropriated	All	Pension and OPEB in the foreground. Volatility/downgrades continue, market access likely maintained. Be selective
Local GO	Aa1/AA+	State aid and pension challenges remain; we strongly advocate selectivity and favor high credit quality. Be cautious
Essential Service (Water & Sewer)	A2/A	Essential purpose beneficial, where applicable; capital needs may create select challenges
US Public Power	A2/A	Favorable non-cyclicality of revenues; evolving power markets and regulation may create select challenges
State Housing Finance Agencies	A2/A	Directly exposed (positively or negatively) to housing market momentum; diversified business models
Higher Education	A1/A+	We recommend higher-rated, well-established institutions due to student selectivity and price sensitivity
Transportation	A2/A	Bolstered by modest economic growth and lower oil prices. Some recession risk
Not-for-Profit Hospitals	Aa3/AA-	Recommend larger systems as a conservative choice. The future of the ACA remains unclear.
Tax-Secured / Dedicated-Tax	A1/A+	Generally less political risk. We prefer high-quality income, sales, and utility tax bonds with no commingling of revenues

*Table lists *minimum* credit rating recommended for buy-and-hold investors. (Please consider referenced rating with a stable outlook and/or higher rating.) Tactical decisions or whether a bond is over/undervalued should be evaluated on a case-by-case basis.

Moody's and S&P Ratings Scale

	Moody's	S&P
Investment Grade	Aaa	AAA
	Aa1	AA+
	Aa2	AA
	Aa3	AA-
	A1	A+
	A2	A
	A3	A-
	Baa1	BBB+
	Baa2	BBB
	Baa3	BBB-
High Yield	Ba1	BB+
	Ba2	BB
	Ba3	BB-
	B1	B+
	B2	B
	B3	B-
	Caa1	CCC+
	Caa2	CCC
	Caa3	CCC-
	Ca	CC
	C	C
	WR	D
	NR	NR

Source: Bloomberg

Credit ratings throughout this report are cited from Standard & Poor's and Moody's given they are two of the most widely followed credit agencies in the fixed income markets.

Credit quality is a measure of a bond issuer's creditworthiness, or ability to repay interest and principal to bondholders in a timely manner. The credit ratings shown throughout this report are based on each issuer's security rating as provided by Standard & Poor's and Moody's, as applicable. The credit quality of the issuers listed in this report **does not represent the stability or safety of the bonds.** Credit ratings shown range from AAA, being the highest, to D, being the lowest based on S&P's classification (the equivalent of Aaa and C, respectively, by Moody's). Ratings of BBB or higher by S&P (Baa or higher by Moody's) are considered to be investment grade-quality securities. Within Moody's classification, "WR" stands for "withdrawn rating." Reasons for withdrawals include: debt maturity, e.g., calls, puts, conversions, etc.; and business reasons, e.g., change in the size of a debt issue or the issuer defaults. "NR" stands for "not rated" by the agencies.

Risk Considerations

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

Bonds rated below investment grade may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high-yield bonds. High yield bonds should comprise only a limited portion of a balanced portfolio.

Interest on **municipal bonds** is generally exempt from federal income tax; however, some bonds may be subject to the alternative minimum tax (AMT). Also, municipal bonds acquired in the secondary market at a discount may be subject to the market discount tax provisions, and therefore could give rise to taxable income. Typically, state tax-exemption applies if securities are issued within one's state of residence and, if applicable, local tax-exemption applies if securities are issued within one's city of residence. The tax-exempt status of municipal securities may be changed by legislative process, which could affect their value and marketability.

Because of their narrow focus, **sector investments** tend to be more volatile than investments that diversify across many sectors and companies.

Yields are subject to change with economic conditions. Yield is only one factor that should be considered when making an investment decision.

Credit ratings are subject to change.

Disclosure Section

The information and opinions in Morgan Stanley Wealth Management Research were prepared by Morgan Stanley Smith Barney LLC under its trade name Morgan Stanley Wealth Management.

For important disclosures (including copies of historical disclosures) regarding the securities and/or companies that are the subject of this Morgan Stanley Wealth Management Research product, please contact Morgan Stanley Wealth Management Research, 522 Fifth Ave., New York, N.Y. 10036, Attention: Research Management. In addition, the same important disclosures, with the exception of the historical disclosures, are contained on the Firm's disclosure website at https://www.morganstanley.com/online/researchdisclosures. Historical disclosures will be provided upon request back to June 1, 2009.

Morgan Stanley Wealth Management Analyst Certification

The Morgan Stanley Wealth Management research analysts principally responsible for the preparation and content of all or any identified portion of this research report, hereby certify that their views about the securities and/or companies discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report. Unless otherwise stated, the individuals listed on the cover page of this report are Morgan Stanley Wealth Management research analysts.

Global Research Conflict Management Policy

Morgan Stanley Wealth Management has a Conflict Management policy available at: https://www.morganstanley.com/online/researchconflictpolicies

Important US Regulatory Disclosures on Subject Issuers

Within the last 12 months, Morgan Stanley Wealth Management or an affiliate managed or co-managed a public offering (or 144a offering) for: STATE OF CALIFORNIA.

Within the last 12 months, Morgan Stanley Wealth Management or an affiliate has provided or is providing investment banking services to, or has an investment banking client relationship with, the following issuers (if the security is an ETF or Closed-End Fund, the services were or are being provided to, or the relationship is with, the fund's investment manager or advisor): STATE OF CALIFORNIA.

Within the last 12 months, Morgan Stanley Wealth Management has either provided or is providing non-investment banking, securities-related services to and/or in the past has entered into an agreement to provide services or has a client relationship with the following issuers (if the security is an ETF or Closed-End Fund, the services were or are being provided to, or the agreement is with, the fund's investment manager or advisor): STATE OF CALIFORNIA.

An affiliate of Morgan Stanley Wealth Management has a significant financial interest in relation to the following issuers (if the security is an ETF or Closed-End Fund, the significant financial is in relation to the fund's investment manager or advisor): ILLINOIS, STATE OF, STATE OF CALIFORNIA. For an explanation of the determination of significant financial interest, please refer to the applicable policies for managing conflicts of interest, which can be found at https://www.morganstanley.com/online/researchconflictpolicies.

The research analysts or strategists principally responsible for the preparation of Morgan Stanley Wealth Management Research have received compensation based upon various factors, including quality of research, investor client feedback, competitive factors, and firm profitability or revenues (which include fixed income trading and capital markets profitability or revenues). Research analysts' or strategists' compensation is not linked to the profitability or revenues of particular capital markets transactions performed by Morgan Stanley Wealth Management or the profitability or revenues of particular fixed income trading desks.

Morgan Stanley Wealth Management and its affiliates do business that relates to companies/instruments covered in Morgan Stanley Wealth Management Research. Morgan Stanley Wealth Management and/or its affiliates sells to and buys from customers the securities/instruments of issuers covered in this Morgan Stanley Wealth Management Research report on a principal basis.

Certain disclosures listed above are also for compliance with applicable regulations in non-US jurisdictions.

Closed-End Fund Rating System

Morgan Stanley Wealth Management only rates Closed-End Funds ("CEF"). For CEFs, Morgan Stanley Wealth Management uses a relative rating system using the terms Overweight, Equal-weight, Underweight, and Not Covered (see definitions below). Morgan Stanley Wealth Management does not assign ratings of Buy, Hold or Sell to the CEFs we cover. Overweight, Equal-weight, and Underweight are not the equivalent of buy, hold and sell. Investors should carefully read the definitions of all ratings used in Morgan Stanley Wealth Management Research. In addition, since Morgan Stanley Wealth Management Research contains more complete information concerning the analyst's view, investors should carefully read Morgan Stanley Wealth Management Research, in its entirety, and not infer the contents from the ratings alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a security or fund should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

Closed-End Fund Ratings Definitions

Overweight (O): The closed-end fund's total return is expected to exceed the average total return of the analyst's industry coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E): The closed-end fund's total return is expected to be in line with the average total return of the analyst's industry coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U): The closed end fund's total return is expected to be below the average total return of the analyst's industry coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Not Covered (NC): Indicates that the analyst does not cover the fund.

Closed-End Fund Ratings Distribution

(as of date **June 30, 2017**)

Morgan Stanley Wealth Management only rates CEFs. Thus, this Ratings Distribution table only displays the distribution data for the rated CEFs. For disclosure purposes only (in accordance with FINRA requirements), we include the category of Buy, Hold, and Sell alongside our ratings of Overweight, Equal-weight, and Underweight. Morgan Stanley Wealth Management does not assign ratings of Buy, Hold or Sell to the CEFs we cover. Overweight, Equal-weight, and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definition below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight to hold and Underweight to sell recommendations, respectively.

	CEF Coverage Universe			Investment Banking Clients (IBC)		
Closed-End Fund (CEF) Rating Category	**Count**	**% of Total**		**Count**	**% of Total IBC**	**% of Rating Category**
Overweight/Buy	34	35.8%		15	44.1%	44.1%
Equal-weight/Hold	43	45.3%		13	38.2%	30.2%
Underweight/Sell	18	18.9%		6	17.7%	33.3%
Total	95	100.0%		34	100.0%	

Data includes CEFs currently assigned ratings. An investor's decision to buy or sell a fund should depend on individual circumstances (such as an investor's existing holdings) and other considerations.

The Investment Banking Clients data above applies only to Morgan Stanley Wealth Management's CEF coverage universe. The data indicates those CEF investment managers for whom Morgan Stanley Wealth Management, provided investment banking services within the previous 12 months.

Other Important Disclosures

This Morgan Stanley Wealth Management Research does not provide individually tailored investment advice. Morgan Stanley Wealth Management Research has been prepared without regard to the individual financial circumstances and objectives of persons who receive it. Morgan Stanley Wealth Management recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial advisor. The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives. The securities, instruments, or strategies discussed in Morgan Stanley Wealth Management Research may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them.

Morgan Stanley Smith Barney LLC, its affiliates and Morgan Stanley Financial Advisors do not provide legal or tax advice. Each client should always consult his/her personal tax and/or legal advisor for information concerning his/her individual situation and to learn about any potential tax or other implications that may result from acting on a particular recommendation.

Morgan Stanley Wealth Management Research is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy. The "Important US Regulatory Disclosures on Subject Issuers" section in Morgan Stanley Wealth Management Research reports or the "Listing of Important U.S. Regulatory Disclosures by security" section of the firm's disclosure website at https://www.morganstanley.com/online/researchdisclosures lists all issuers mentioned where Morgan Stanley Wealth Management or its affiliates own 1% or more of a class of common equity securities of the issuers. For all other issuers mentioned in Morgan Stanley Wealth Management Research, Morgan Stanley Wealth Management or its affiliates may have an investment of less than 1% in securities/instruments or derivatives of securities/instruments of companies and may trade them in ways different from those discussed in Morgan Stanley Wealth Management Research. Employees of Morgan Stanley Wealth Management Research are not involved in the preparation of Morgan Stanley Wealth Management Research, may have investments in securities/instruments or derivatives of securities/instruments of issuers mentioned and may trade them in ways different from those discussed in Morgan Stanley Wealth Management Research.

Morgan Stanley Wealth Management Research is based on public information. Morgan Stanley Wealth Management makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in Morgan Stanley Wealth Management Research change apart from when we intend to discontinue equity research coverage of a subject company. Facts and views presented in Morgan Stanley Wealth Management Research have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley Wealth Management business areas, including investment banking personnel.

Morgan Stanley Wealth Management Research personnel conduct site visits from time to time but are prohibited from accepting payment or reimbursement by the company of travel expenses for such visits.

The value of and income from your investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. If provided, and unless otherwise stated, the closing price on the cover page is that of the primary exchange for the subject company's securities/instruments.

Morgan Stanley Wealth Management may make investment decisions or take proprietary positions that are inconsistent with the recommendations or views in this report.

Investing in closed-end funds involves risks. These include the general risks associated with investing in securities, possible changes in market prices relative to net asset values and manager performance.

Besides the general risk of holding securities that may decline in value, closed-end funds have risks related to leverage and the potential for discounts to widen.

Morgan Stanley Wealth Management's Global Research Department produces and distributes research products for clients of Morgan Stanley Wealth Management.

This research is disseminated in Australia to "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813).

Morgan Stanley Wealth Management is not incorporated under the People's Republic of China ("PRC") law and the research in relation to this report is conducted outside the PRC. In the PRC, this report will be distributed only upon request of a specific recipient. This report does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors must have the relevant qualifications to invest in such securities and must be responsible for obtaining all relevant approvals, licenses, verifications and or registrations from PRC's relevant governmental authorities.

If your financial adviser is based in Australia, Switzerland or the United Kingdom, then please be aware that this report is being distributed by the Morgan Stanley entity where your financial adviser is located, as follows: Australia: Morgan Stanley Wealth Management Australia Pty Ltd (ABN 19 009 145 555, AFSL No. 240813); Switzerland: Morgan Stanley (Switzerland) AG regulated by the Swiss Financial Market Supervisory Authority; or United Kingdom: Morgan Stanley Private Wealth Management Ltd, authorized and regulated by the Financial Conduct Authority, approves for the purposes of section 21 of the Financial Services and Markets Act 2000 this research for distribution in the United Kingdom.

Morgan Stanley Wealth Management is not acting as a municipal advisor to any municipal entity or obligated person within the meaning of Section 15B of the Securities Exchange Act (the "Municipal Advisor Rule") and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of the Municipal Advisor Rule.

This material is disseminated in the United States of America by Morgan Stanley Wealth Management.