Fixed Income Securities (Bonds)

Janney Montgomery Scott LLC ("Janney") wants investors to understand the features and risks associated with bonds and other fixed income securities so they can make informed decisions about these securities. This information will help investors understand bonds' basic characteristics but will not discuss all features applicable to a specific security. For questions about bonds or other securities, investors should discuss the specific product and investment strategy with a Janney Financial Advisor and carefully review all of the associated offering documents.

What is a Bond?

A bond is a loan an investor makes to a corporation, government, federal agency, or other organization. Bonds sometimes are referred to as debt securities. Since bond issuers know an investor is not going to lend money without compensation, the issuer of the bond (the borrower) enters into a legal agreement to pay interest to the investor (the bondholder). The bond issuer also agrees to repay investors the original sum loaned when the bond matures. Most bonds have a set maturity date; a specific date when the bond must be paid back at its face, or par, value. Bonds are referred to as fixed-income securities because many bonds pay interest based on a regular, predetermined interest rate, also called a coupon rate, set when the bond is issued.

A bond's term, or years to maturity, is usually set when issued. Bond maturities can range from one day to 100 years. The majority of bond maturities range from one to 30 years. Bonds are often referred to as short-, medium- or long-term. Generally, bonds that mature in one to three years are referred to as short-term bonds. Medium- or intermediate-term bonds generally mature in four to ten years. Long-term bonds have maturities greater than 10 years.

Common Terms for Bonds

Par Value The par value of a bond is its denomination and represents the amount of money the holder will get back when the bond matures. The par value is may not be the same as the price paid for a bond. Bonds may trade at prices that are at a discount from (lower than) the par value or at a premium to (higher than) the par value.

Coupon The coupon or coupon rate of a bond is the annual rate of interest paid to investors. The coupon rate is paid based on the bond's par value and is set when the bond is issued. Interest typically is paid semi-annually unless otherwise stated. Bonds may have fixed coupon rates or variable coupon rates that are reset or adjusted from time to time. Variable rates may be linked to a benchmark, such as short-term Treasury bills, various published rates (e.g., the Fed funds rate, SOFR ("Secured Overnight Financing Rate") or the Prime rate), or to a bond index. Zero-coupon bonds do not pay interest; rather, they are sold at a significant discount to their par value. At maturity, par value is paid back to the bondholders. Lower quality bonds, typically those with lower credit ratings as discussed below, generally have higher coupon rates than higher quality bonds, in order to compensate investors for the greater risk of default.

Bond Price A bond's price is the market price at which the bond trades in the marketplace. This price may be different from par value. A bond's price is affected by numerous factors, including overall market conditions, prevailing interest rates and the issuer's creditworthiness. Generally, as prevailing interest rates go up, a bond's price will go down because the coupon is less attractive to potential investors. As interest rates go down, bond prices will go up because the coupon is more attractive to potential investors. Bonds are generally sold in denominations of $1,000 and prices are expressed as a percentage of par. Thus, a bond price of 102.00 would mean that the bond would have a market value of 102.00% of par, or $1,020.00 (assuming $1,000 par value).

Maturity The date on which the principal will be repaid and interest payments will end. A bond's maturity is different from its duration.

Duration The measure of the sensitivity of the price of a bond to changes in prevailing interest rates. Duration often is quoted in years but the number reflects the percentage change in a bond's price for each 1% change in interest rates. Duration is primarily affected by the bond's coupon rate, yield, and remaining time to maturity.

Redemption/Call and Put Rights A bond may be callable or subject to redemption at the option of the issuer. This allows the issuer to repay or retire the bond prior to its scheduled maturity date, at a redemption price determined when the bond is issued. The redemption price is often the par value but can be different from the par value. The redemption price may have a "make whole" call provision that requires the issuer to pay a redemption price equal to the par value plus a make-whole premium, which is designed to compensate investors for the risk of the bonds being called. Depending on the redemption price, an issuer is likely to exercise its redemption right and call the bonds when interest rates have declined to lower its borrowing costs, much like a homeowner refinances his/her mortgage when mortgage rates are low. Bondholders face the risk that the bonds may be called at a redemption price that is less than what they paid for the bond. For example, if the bonds were purchased at a premium and the bonds are called at par, the bondholder would receive less than they paid for the bond. However, in a rising rate environment, it is less likely that the bonds will be called. Bonds that are callable tend to have higher yields than non-callable bonds. Some bonds may be subject to mandatory redemption upon the occurrence of certain events described in the offering document for the bonds. Some bonds may also give the holders the right to "put" their bonds, meaning that the holders can require the issuer to redeem the bonds from bondholders.

Yield A bond's yield is generally the return of capital invested in a bond. There are different types of yield.

- **Coupon yield** refers to the annual interest rate paid on the par value of the bonds and is established when the bond is issued.
- **Current yield** is the bond's coupon yield divided by its market price. Thus, if a bond has a coupon of 5% and the market price is 102, the current yield is 4.90%.
- **Yield to maturity** is the overall interest rate earned by an investor who buys a bond at the

market price and holds it to maturity. Mathematically, it is the discount rate at which the sum of all future cash flows (from interest and principal payments, assuming they are all paid on time and that the interest is reinvested at the same rate) equals the price of the bond. Yield to maturity will be the same as the current yield if the bonds were purchased at par value, will exceed the current yield if the bonds were purchased at a discount to the par value, and will be less than the current yield if the bonds were purchased at a premium.

- **Yield to call** is measured the same as yield to maturity but instead of using the maturity date, the calculation uses the bond's call date and call price. This calculation takes into account the impact on a bond's yield if it is called prior to maturity.
- **Yield to worst** is the lower of a bond's yield to maturity or yield to call. A callable bond that is trading at a premium to its par value generally will have a lower yield to call than its yield to maturity, and a bond trading at a discount will have a higher yield to call than its yield to maturity.

Credit Rating

Many bonds have a credit rating, which represents the opinion of a ratings agency such as Standard & Poor's, Moody's or Fitch as to the issuer's ability to pay interest and repay principal. Ratings agencies assign ratings based on their analysis of the issuer's financial condition, economic and debt characteristics, and specific revenue sources securing the bond. Issuers with lower credit ratings generally offer investors higher yields to compensate for the additional credit risk. At times, bonds with comparable ratings may trade at different yields, which may indicate the market's perception of differing risk for different bonds. Ratings agencies may change a bond's credit rating during the life of the bond. A change in either the issuer's credit rating or the market's perception of the issuer's business prospects will affect the value of the issuer's outstanding securities, including bonds. Ratings are not a recommendation to buy, sell or hold, may be subject to review, revision, suspension or reduction, and may be withdrawn at any time. If a bond is insured, attention should be given to the creditworthiness of the underlying insurer on the bond as the insurance feature may not represent additional value in the marketplace or may not contribute to the safety of principal and interest payments. Bonds with ratings below investment grade are considered speculative and have other attributes that investors should be aware of such as limited liquidity. More information about credit ratings can be found in the SEC Investor Bulletin "The ABCs of Credit Ratings." and Janney's website at https://www.janney.com/docs/default-source/client-resources-disclosures/account-agreements-terms-of-service/fixed-income-cds/high-yield-bonds.pdf

Indenture

Bonds may be covered by an indenture, which is a contract or agreement between the issuer and the bondholders under which a trustee, usually a commercial bank or financial institution, is appointed to uphold the rights of the bondholders.

Types of Bonds

US Treasury Securities

Treasury Bills

Treasury bills (or T-bills) are short-term U.S. Treasury securities that are non-interest bearing (zero coupon) with maturities of four weeks, 13 weeks, 26 weeks or 52 weeks. They are purchased at a discount to face value (par) and pay the face value when they mature. The interest income (the discount) is subject to federal income tax, but exempt from state and local income taxes.

Treasury Notes

Treasury notes (or T-notes) are fixed-principal securities issued by the U.S. Treasury with maturities of two, three, five, seven and 10 years. Interest is paid semiannually, with the principal paid when the note matures. Interest income is subject to federal income tax, but exempt from state and local income taxes.

Treasury Bonds

Treasury bonds are long-term, fixed-principal securities issued by the U.S. Treasury with terms from 10 to 30 years. Interest is paid on a semiannual basis with the principal paid when the bond matures. Interest income is subject to federal income tax but exempt from state and local income taxes.

Like other fixed-income securities, US Treasuries are subject to a number of risks, including but not limited to, interest rate risk. For more information, see below under "Risks of Investing in Bonds".

For further information on US Treasuries, please refer to FINRA's website at:
https://www.finra.org/investors/learn-to-invest/types-investments/bonds/types-of-bonds/us-treasury-securities

Certificate of Deposits

Certificate of Deposits ("CDs") at Janney are issued as Brokered CDs. CDs are issued by a bank and can provide an interest rate premium to investors in exchange for their agreement to make a lump sum deposit for a predetermined time period. One of the benefit of a brokered CD is that they offer an investor FDIC protection up to the legal limit. However, investors should monitor their total deposits including bank CDs, checking, savings, trust and money market deposit accounts, in any one bank to be sure their total investment in that bank is covered by FDIC insurance.

Other benefits to CDs include a broad range of maturity dates. Although there is no assurance that a secondary market will exist for CDs, some CDs offer a limited secondary market should an investor need their principal prior to maturity. There are also several different types of CDs:

Callable CD -A "*callable*" CD can be redeemed early by the issuing bank prior to the stated maturity and at a predetermined call price. If a CD is called prior to maturity, the investor would experience loss of interest and would be exposed to interest rate risk. To compensate, the interest rates for callable CDs are usually higher than those for regular CDs.

Step-down CD -A "*step-down*" CD will pay an initial rate above market interest rate for a defined period of time but will then "step down" to a lower, predetermined rate that will be paid until maturity, unless the CD is redeemed prior to maturity.

Step-Up CD -A "*step-up*" CD will pay an initial rate interest rate for a defined period of time and will "step up" to a higher, predetermined rate that will be paid until maturity, unless the CD is redeemed prior to maturity.

Like other fixed-income securities, Certificates of Deposit (CDs are subject to a number of risks, including but not limited to, interest rate risk, credit/default risk, and liquidity risk. For more information, see below under "Risks of Investing in Bonds".

For further information on CDs, please refer to:

- The CD Disclosure Guide https://www.janney.com/docs/default-source/client-resources-disclosures/account-agreements-terms-of-service/fixed-income-cds/generic-cd.pdf
- FDIC insurance information is available at fdic.gov.
- The U.S. Securities and Exchange Commission offers a guide, *Certificates of Deposit: Tips for Investors*, at sec.gov/investor/pubs/certific.htm.
- A comprehensive overview of brokered CDs is also available at FINRA https://www.finra.org/investors/learn-to-invest/types-investments/bank-products/certificates-deposit-cds

Municipal Securities

Municipal securities, "munis," are bonds issued by states, cities, counties and other governmental entities to raise money to build roads, schools, water and sewer systems and other projects for the public good. Munis pay a specified amount of interest (usually semiannually) and repay the principal on a specific maturity date. Municipal bonds can be general obligation bonds or revenue bonds. General obligation bonds typically are backed by the full faith and credit and taxing power of the issuer. In some cases, general obligation bonds are backed by real estate and other taxes. Some governmental entities have unlimited authority to tax residents to pay bondholders but in other cases the governmental entities may have limited or no taxing authority. Revenue bonds are supported by fees and other revenues derived by the enterprise or project. Revenue bonds usually are not backed by the full faith and credit of the governmental entity that issues the bonds. The creditworthiness of revenue bonds depends on the financial success of the specific enterprise or project being financed. Some revenue bonds are "non-recourse," meaning that if the revenue stream dries up or if payments on the bonds are not made, the bondholders do not have a claim on the underlying revenue source or against the issuer or underlying borrower. Conduit revenue bonds are a form of revenue bonds issued by a state, city or other government entity but for the benefit of a university, hospital, charitable organization or corporation that borrows the proceeds from the government entity. Those bonds are backed by the payments made by the non-governmental borrower under the loan agreement. The governmental issuer typically is not responsible for making the bondholders whole if the payments made by the borrower are insufficient. Conduit revenue bonds involve greater risk. Municipal bonds are often tax-exempt, meaning that the interest paid on the bonds is exempt from federal income tax. Some municipal bonds are double tax-exempt, meaning that the interest is not subject to federal or state tax. Other municipal bonds may be taxable. Municipal bonds may be "private activity bonds" and subject to the alternative minimum tax (AMT).

MSRB Rule G-10

Investor and Municipal Advisory Client Education and Protection

Janney is registered with the Securities and Exchange Commission ("SEC") and the Municipal Securities Rulemaking Board ("MSRB"). An investor brochure that describes the protections that may be provided by the MSRB's rules and how to file a complaint with an appropriate regulatory authority is available on the MSRB's website (http://msrb.org).

The Municipal Securities Rulemaking Board maintains the Electric Municipal Market Access (EMMA) website that contains information about specific municipal bonds, including official statements, financial information, notices of material events and trade data. You can access this information at www.emma.msrb.org.

Like other fixed-income securities, municipal bonds are subject to a number of risks, including but not limited to, interest rate risk, credit or default risk and liquidity risk. See below under the caption "Risks of Investing in Bonds".

For further information on municipal bonds, please refer to:

- FINRA Investor Alert, "Municipal Bonds—Important Considerations for Individual Investors" at https://www.finra.org/investors/alerts/municipal-bonds-important-considerations-individual-investors,
- SEC Investor Bulletins, "Municipal Bonds" http://investor.gov/news-alerts/investor-

bulletins/municipal-bonds

- SEC Investor Bulletins, "Municipal Bonds: Understanding Credit Risk" at http://investor.gov/news- alerts/investor-bulletins/investor-bulletin-municipal-bonds-understanding-credit-risk.
- A comprehensive overview of municipal bonds is also available at FINRA https://www.finra.org/investors/learn-to-invest/types-investments/bonds/types-of-bonds/municipal-bonds

Corporate Bonds

Companies issue corporate bonds to raise money for capital expenditures, operations and acquisitions.

Corporate bondholders receive the equivalent of an IOU from the issuer of the bond. Investors who buy corporate bonds are lending money to the company issuing the bonds. In return, the company makes a legal commitment to pay interest on the principal and, in most cases, to return the principal when the bonds come due or mature. Unlike an equity stockholder, the bondholder does not receive any ownership rights in the corporation. The bondholder only receives the interest and principal on the bond, no matter how profitable the company becomes or how high its stock price climbs. Bonds are more senior than, and have priority over, equity securities in the event of bankruptcy or liquidation. Some corporate bonds may be secured by all or certain assets of the issuing corporation. Other corporate bonds (often called "debentures") may be unsecured or subordinated, meaning that they are not backed by any collateral and are junior in rank and priority to senior secured bonds. Interest on these bonds is paid only after interest on more senior corporate bonds is paid. The typical priority of securities in a corporation's capital structure is as follows: (1) senior secured debt; (2) unsecured debt; (3) preferred stock; and (4) common stock. This means that, in a liquidation or bankruptcy of a company, payments are made in that order.

Corporate bonds are classified according to their maturity. Maturities can be short term (less than three years), medium term (four to 10 years) or long term (more than 10 years). Longer-term bonds usually offer higher interest rates but may entail additional risks. Many corporate bonds pay a fixed rate of interest throughout their term but some bonds may offer floating or variable rates that reset periodically. Floating or variable rate bonds adjust their interest payments to changes in benchmark rates or market interest rates. Some bonds are zero-coupon bonds, which mean that they make no interest payments. The principal payment made on a zero-coupon bond at maturity is higher than the initial purchase price. The difference between the payment made at maturity and the price paid for the bond is called "original issue discount." Investors in zero-coupon bonds must pay taxes each year on a prorated share of the imputed interest or original issue discount.

Corporate bonds may be rated by an independent ratings agency. Some bonds are not rated. Ratings agencies assign credit ratings based on their evaluation of the risk that the company may default on its bonds. Corporate bonds with a rating of BBB- or higher by S&P or Baa- or higher by Moody's are regarded as "investment grade." Bonds that have lower ratings are "below investment grade." Bonds rated below investment grade are often referred to as "high-yield" or "junk" bonds. Such securities may offer higher interest rates but they are predominantly speculative in the issuer's ability to pay interest and repay principal. For more information about high-yield bonds and their risks, please read the SEC Investor Bulletin, "What Are High-Yield Corporate Bonds?" at http://investor.gov/sites/default/files/ib_high-yield.pdf and Janney's product specific disclosure guide on High Yield bonds: https://www.janney.com/docs/default-source/client-resources-disclosures/account-agreements-terms-of-service/fixed-income-cds/high-yield-bonds.pdf

Some corporate bonds may be convertible. Bondholders are entitled to convert all or a portion of the bonds into equity securities of the issuer, at certain times and at conversion rates established when the bonds are issued. The prices of convertible bonds will be influenced by the prices of the underlying securities to which the bonds can be converted.

Like other fixed-income securities, corporate bonds are subject to a number of risks, including but not limited to, interest rate risk, credit or default risk and liquidity risk. See below under the caption "Risks of Investing in Bonds".

For further information on corporate bonds, please refer to:

- SEC Investor Bulletin, "What Are Corporate Bonds?" at http://investor.gov/sites/default/files/ib_corporatebonds.pdf.
- A comprehensive overview of corporates is also available at FINRA https://www.finra.org/investors/learn-to-invest/types-investments/bonds/types-of-bonds/corporate-bonds
- FINRA also maintains a website to specific corporate bond trade data. Such information can be accessed at https://bondfacts.finra.org/

Agency/Government-Sponsored Enterprise ("GSE") Securities

Agency securities are bonds issued by agencies of the U.S. Government, such as the Government National Mortgage Association (GNMA or "Ginnie Mae"), the Small Business Administration or the Federal Housing Administration. These securities are backed by the full faith and credit of the U.S. Government. The Tennessee Valley Authority ("TVA") also may issue agency securities but TVA bonds are backed only by the power revenues generated by the authority. Certain agency securities may be issued by government-sponsored enterprises, such as the Federal National Mortgage Association (FNMA or "Fannie Mae") or the Federal Home Loan Mortgage Corporation (FHLMC or "Freddie Mac"). These issuers are public companies currently under the conservatorship of the Federal Housing Finance Agency, an agency of the U.S. Government. It is commonly but erroneously believed that their securities are implicitly guaranteed by the U.S.

Government. These securities are not backed by the full faith and credit of the U.S. Government but are solely the obligation of the issuer.

Like other fixed-income securities, Agency/GSE bonds are subject to a number of risks, including but not limited to, interest rate risk, credit or default risk and liquidity risk. See below under the caption “Risks of Investing in Bonds”.

For further information on Agency/GSE bonds, please refer to:

- A comprehensive overview of Agency Securities is also available at FINRA https://www.finra.org/investors/learn-to-invest/types-investments/bonds/types-of-bonds/agency-securities
- FINRA also maintains a website to specific agency bond trade data. Such information can be accessed at https://bondfacts.finra.org/

Mortgage Backed Bonds

Mortgage backed securities (“MBS”) are bonds secured by home and other real estate loans. Loans with common characteristics are pooled together, packaged into one investment and sold to investors. The majority of MBS are issued by Ginnie Mae, Fannie Mae, and Freddie Mac. These MBS carry the guarantee of those organizations to pay interest and repay principal, but only MBS issued by Ginnie Mae are backed by the U.S. Government. Some MBS are “private label” securities issued by entities that are subsidiaries of or sponsored by banks, financial institutions or homebuilders. Asset-backed securities (ABS) are bonds secured by pools of cash-generating assets, such as credit card receivables, auto loans, student loans, equipment loans and leases, business trade receivables, and home equity loans.

The most basic MBS are known as pass-throughs. They are a mechanism—in the form of a trust—through which mortgage payments are collected and distributed (or passed through) to investors. The majority of pass-throughs have stated maturities of 30 years, 15 years and five years. Fixed-rate mortgage loans back most pass-throughs, but adjustable-rate mortgage loans (ARMs) and other loan mixtures also are pooled to create securities. Because these securities "pass through" the principal payments received, the average life is much less than the stated maturity life, and varies depending upon the paydown experience of the pool of mortgages underlying the bond.

Like other fixed-income securities, Mortgage Back Securities are subject to a number of risks, including but not limited to, interest rate risk, credit or default risk and liquidity risk. See below under the caption “Risks of Investing in Bonds”.

For further information on Mortgage Back Securities, please refer to:

- A comprehensive overview of MBS Securities is also available at FINRA https://www.finra.org/investors/learn-to-invest/types-investments/bonds/types-of-bonds/mortgage-backed-securities

Structured Products

Structured Products are debt securities issued by financial institutions where returns are linked to the performance of an underlying equity, basket of equities, index, basket of indexes, commodity, or other asset class). Structured products are a hybrid between two asset classes. Typically issued as an unsecured corporate bond or certificate of deposit with a fixed term, they also include a derivative component whose cash flow and value are linked to the performance of another underlying investment or asset class. Janney offers two primary types of structured products—Market-Linked Certificates of Deposit (MLCDs) and Structured Notes.

MLCDs are FDIC-insured certificates of deposit issued by banks, whose return is tied to the performance of a market index or basket of securities. MLCDs combine the market exposure of an equity or other asset class with the safety and security of a traditional certificate of deposit. Purchasers are typically "buy and hold investors" seeking to participate in the appreciation of the underlying index(es) while retaining downside protection in the event of a market decline. Instead of paying a fixed rate of interest, MLCDs pay a return at maturity based on the appreciation of the underlying asset(s). MLCDs also may offer the potential to earn income during the life of the investment based on market performance. The MLCD's principal is guaranteed by the issuing bank if held to maturity. Additionally, the original principal investment (not any underlying gain) is further insured by the FDIC up to the current legal limits.

Structured Notes are debt securities created for investors seeking growth and/or income potential that is tied to the performance of an underlying equity, commodity, currency, index, or basket of securities and also seeking a level of downside protection. Structured Notes may be a suitable investment for investors who seek access to a particular asset class or potentially a higher income stream than can be found with conventional fixed income securities. However, they can be complicated, and it is essential that any investor understand the features and risks before investing. A Janney Financial Advisor can help determine if a given product matches your investment objectives and risk profile.

Like other fixed-income securities, Structured Product securities are subject to a number of risks, including but not limited to, interest rate risk, credit or default risk and liquidity risk. See below under the caption "Risks of Investing in Bonds".

For further information on Structured Products, please refer to:

- FINRA Investor Alert, "Structured Notes With Principal Protection: Note the Terms of Your Investment" at https://www.finra.org/investors/alerts/structured-notes-principal-protection-note-terms-your-investment

- Janney Structured Product specific product disclosure for more details Structured Products

Preferred Securities

Like shares of common stock, preferred shares represent an ownership stake in a company. The primary difference between preferred stock and common stock is priority in the event of the issuer's bankruptcy or other corporate restructuring. If the issuer seeks bankruptcy protection, the owners of preferred shares take priority over common shareholders when it comes time to pay dividends and liquidate the company's assets. Another important difference between preferred and common stock relates to dividends. Dividends paid on common stock are not guaranteed and can fluctuate from quarter to quarter. Dividends on preferred shares usually are guaranteed to be fixed and paid on a regular basis. As a result, preferred stocks may be seen as similar to bonds. Accordingly, preferred stock may be viewed as more a more conservative investment than common stock. However, preferred securities often incorporate certain features which place them in a different risk category than plain vanilla fixed income products.

There are several different types of preferred securities: equity preferred, which trade more like common stock, a hybrid preferred, which pays interest like a bond and can trade at $25 par or $1,000 par, and debt preferred (also known as "baby bonds"), which pay interest like a bond but have claim structures above an equity preferred. Each type of preferred security carries its own set of risks, and priorities of claim structure.

Like other fixed-income securities, preferred securities are subject to a number of risks, including but not limited to, interest rate risk, credit or default risk and liquidity risk. See below under the caption "Risks of Investing in Bonds".

For further information on preferred securities, please refer to:

- A comprehensive overview of types of stocks is also available at FINRA https://www.finra.org/investors/learn-to-invest/types-investments/stocks/types-of-stocks

Costs of Investing in Bonds

Janney acts in one of two capacities, Agent or Principal, when buying or selling bonds on behalf of our clients:

- As Agent, Janney will execute a transaction in the market without risking its own capital. Janney's trading desks are not compensated for the transaction. However, our Financial Advisors may receive a formula-based commission or, if an investor's account is in Janney's Investment Advisory program, Janney and the Financial Advisor receive a fee based on assets under management.

- As Principal, Janney will purchase and sell bonds into and out of its own inventory, carrying financial risk to facilitate client transactions. The Janney trading desk could make a profit or a loss based on Janney's inventory holdings exposure to the marketplace. In addition, Janney Financial Advisors making trades for brokerage accounts could make a markup/markdown (i.e. compensation) which netted into the bond price to the client.

Please contact your Janney Financial Advisor for more detail information.

Risks of Investing in Bonds

Risks associated with investing in bonds are important considerations in making investment decisions. The list below is not exhaustive of all risk, but among the more common are the following:

- Interest Rate (Market) Risk. Bond prices and interest rates generally move in opposite directions. When interest rates fall, bond prices rise, and when interest rates rise, bond prices fall. Bond prices are thus inversely correlated with interest rates. Interest rate risk is the risk that changes in interest rates in the U.S. or the world may reduce (or increase) the market value of a bond you hold. Interest rate risk usually increases the longer you hold a bond. Similarly, as bond prices change, their yields to maturity will change as well. If bond prices go down, the yield to maturity of the bond will go up for investors who buy the bonds at the new lower price. If bond prices go up, the yield to maturity will go down for investors who buy the bonds at the higher price. Bonds also are subject to inflation risk, meaning that the yield and interest earned on a bond may not keep up with the rate of inflation, thus reducing an investor's purchasing power. If interest rates rise, bond prices are generally expected to fall. Even a small rise in prevailing rates could have a dramatic negative effect on bond prices. Some bonds are more sensitive to interest rate changes than others. Typically, bonds with longer maturities are subject to higher interest rate risk than those with shorter maturities, and bonds with lower coupon or interest rates are subject to higher interest rate risk. See "Duration Risk" below. In addition to interest rate fluctuations, bonds may fluctuate in price due to other factors, such as the time to maturity, call features, the issuer's financial condition, macroeconomic forces and developments, and the prices of other fixed income securities.

  For more information on interest rate risk, please read the SEC Investor Bulletin, "Interest Rate Risk—When Interest Rates Go Up, Prices of Fixed-Income Bonds Fall" at http://investor.gov/sites/default/files/ib_interestraterisk.pdf.

- Duration Risk. Duration measures the sensitivity of the price of a bond to a change in interest rates. Duration is calculated using a complex mathematical formula and is different from maturity (maturity reflects the years remaining until the principal is scheduled to be repaid). A bond with a duration of 5 years means that, for a 1% change in interest rates, the price of the bond will change by 5%. The higher a bond's duration, the greater its sensitivity to interest rate changes and the more pronounced its fluctuations in price.. Longer-term bonds tend to have higher durations than shorter-term bonds. A bond's call features, coupon rate and yield also will have an impact on duration. Duration is higher for bonds with lower coupon rates and yields. Knowing a bond's duration is very important when interest rates are low and are expected to increase. Bear in mind that bonds with low duration are not less risky.

- Credit and Default Risk. Bonds are subject to credit risk, which is the risk that the issuer may not pay interest or repay principal. While U.S. Treasury securities are generally deemed to be risk-free, most bonds face a *possibility* of default. This means that the bond issuer/obligor will be late paying creditors (including bondholders), pay a negotiated reduced amount or, in worst-case scenarios, be unable to pay at all. It is also important to know where the bonds are ranked in the issuer's capital structure in the event of insolvency, bankruptcy or liquidation. Bonds that are rated below investment grade are speculative with respect to the issuer's ability to make interest and principal payments. These bonds, known as high-yield or "junk" bonds, are subject to greater default risk and liquidity risk than investment grade bonds. Please see separate Janney Disclosure on High Yield investing at High Yield Disclosure Also, please read the SEC Investor Bulletin, "What Are High-Yield Corporate Bonds?" http://investor.gov/sites/default/files/ib_high-yield.pdf.
- Call/Reinvestment Risk. A bond with a call feature runs the risk that when interest rates drop the bonds will be called by the issuer. The issuer is able to refinance the debt at a lower rate; thus saving it money. The bond's principal is repaid early, but often the investor is unable to find a similar bond offering with a comparable yield. Call risk also is referred to as reinvestment risk, which is the risk that the investor may not be able to reinvest the proceeds from the redemption of the bond and earn a comparable rate of interest. Similarly, mortgage backed securities are prone to prepayment risk because homeowners tend to pay off their existing mortgages and refinance their homes at lower rates.
- Event Risk. Mergers, acquisitions, leveraged buyouts and major corporate restructurings are all events that put corporate bonds at risk. Other events or developments affecting an issuer's financial health also may impact the price of its bonds.
- Liquidity Risk. Liquidity risk is the risk that you will not be able to easily find a buyer for a bond you need to sell, or at a price you consider attractive. A sign of liquidity, or lack of it, is the general level of trading activity: A bond that is traded frequently in a given trading day is considerably more liquid than one which only shows trading activity a few times a week. Although U.S. Treasury securities are extremely liquid, some corporate bonds and many municipal bonds may not be actively traded and thus more difficult to sell at advantageous times and prices. Unlike common stocks, bonds are not traded on a national exchange but rather between dealers who are not required to provide a secondary trading market. It is also important to understand that bonds typically trade in large blocks.

Therefore, selling a small number of bonds may be more difficult, and the prices paid when purchasing a small amount of bonds or received when selling a small amount of bonds are likely to be unattractive.

For more information on liquidity risk, see the FINRA Investor Alert, "Bond Liquidity – Factors to Consider and Questions to Ask" at http://www.finra.org/investors/alerts/bond-liquidity- factors-questions.

- Interest Payment Risk. Some bonds may allow the issuer to skip or miss an interest payment under certain conditions. The bond terms may also allow payment-in-kind, or PIK, which means that an interest payment may be made in the form of additional bonds rather than cash. Many bonds pay interest semi-annually but some bonds may have different payment schedules. Before purchasing a bond, investors should make sure they understand the payment terms.

- Tax Considerations. Investors should consider tax consequences before investing in bonds. Gains on the sale of bonds are subject to federal and state tax. Interest on corporate bonds likewise is subject to federal and state income tax. However, some bonds may offer tax advantages. Interest on U.S. Treasury securities is exempt from state income tax. Interest on municipal bonds is generally exempt from federal income tax and, for some municipal bonds, exempt from state income tax. Nonetheless, certain municipal bonds may be taxable and/or subject to the federal alternative income tax. Please consult your tax advisor before investing in bonds.

- Diversification Risk. Ownership of individual bonds may not provide investors with sufficient diversification. A decline in the price of a particular bond or a default by an issuer of a particular bond may materially and adversely affect an investor's bond portfolio. Individual investors seeking investments in bonds may wish to consider a diversified mutual fund that is managed by an investment advisor and invests in fixed income securities.

- Other Risks. Each bond's specific risks will be described in the offering documents or prospectus specific to the product. Investors who purchase new issues will be provided these documents at or before settlement date.

Before investing in bonds, consult your Janney Financial Advisor to understand the structure, terms and risks and determine whether they are right for you in light of your objectives, financial goals, tax status and risk profile. More information about bonds is available from the Securities Industry and Financial Markets Association (SIFMA) at www.investinginbonds.com and from the Financial Industry Regulatory Authority under Smart Bond Investing at https://www.finra.org/investors/learn-to-invest/types- investments/bonds.