

## Chapter 7

# GENERAL DEBT STRUCTURE ISSUES

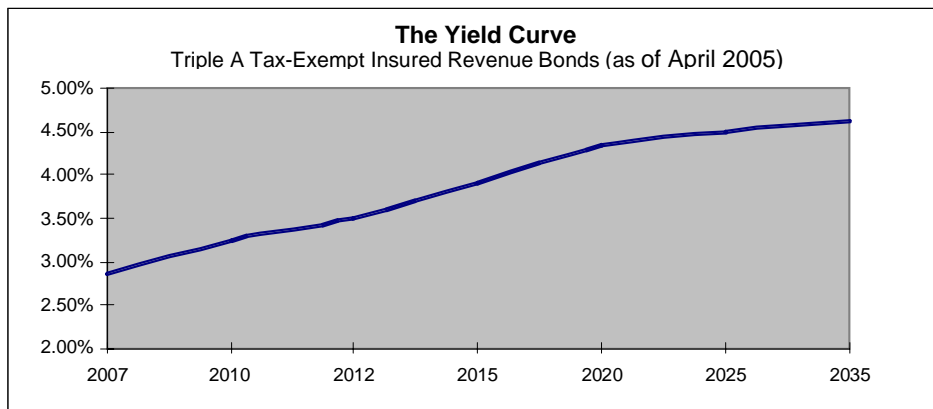
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### CAPITAL MARKET CONSIDERATIONS

Issuers and their financing teams will expend considerable effort attempting to match the structural features of the bond issue to the current conditions in the capital markets, especially the preferences of investors. Issuers must rely to great extent upon their underwriters and financial advisors to identify these conditions and suggest appropriate structural features that will take advantage of or mitigate these conditions. However, issuers must take the final responsibility for these decisions, and should have an adequate understanding of and basic level of comfort with them.

**Interest Rates and the Yield Curve.** The general level of interest rates is probably the most important factor affecting the issuer's goal of minimizing borrowing costs on a bond issue. Interest rate levels tend to fluctuate over time, in response to business cycles, government policy and major economic events. While debt issuance levels do tend to go up in low interest rate environments, governmental agencies' capital project financing needs dictate that debt issuance occur in higher interest rate environments as well. Bonds issued in higher interest rate environments are often refunded when interest rates decline to more favorable levels.

Interest rates also tend to vary as a function of how long money is borrowed or loaned. This relationship of interest rates and maturity is known as the "yield curve," and is graphically depicted in the figure below. For municipal bonds of similar credit quality, interest rates tend to be higher for longer maturities relative to shorter maturities. At different points in the business cycle, this relationship may be more or less pronounced, causing a more steeply sloped curve or a curve that is relatively flat. In general, the slope of the yield curve reflects investors' expectations about the behavior of interest rates in the future. In tax-exempt capital markets,



investors' expectations about the prospect for federal tax reform and other technical factors also play a large role. The yield curve determines the interest rate or yield at which bonds of differing maturities will be offered to the public by the underwriters.

**Fixed and Variable Rate Bonds.** Most municipal bonds are issued as fixed rate bonds, which mean that the rate of interest to be paid is “fixed” at the time of issuance and never changes. In recent years, however, a significant proportion of municipal bonds have been issued as variable rate bonds, which do not have a fixed rate of interest. Instead, the interest rate is re-set periodically to match current market conditions—often daily, weekly, or monthly. The most common forms of municipal variable rate obligations are variable rate demand obligations (VRDOs) and auction rate securities (ARS). For an in-depth discussion of fixed and variable rate structures, see **Chapter 8, Fixed and Variable Interest Rate Structures**.