The Interest Rate Market and Factors Affecting It.

What Local Governments Need To Know

This information aims to provide executives and finance professionals within local government with an overview of the relationships between market 'reference rates' and pricing for Western Australian Treasury Corporation (WATC) loans, to assist in making informed decisions when considering debt finance from WATC.

Australian Market Interest Rates – Key Reference Rates

In the Australian market, there are four principal indicator or 'reference' interest rates.

RBA Target Cash Rate

This is the target yield (interest rate) that the Reserve Bank of Australia (RBA) sets for funds placed overnight on the Australian money market. The RBA uses this as a target for monetary policy by virtue of its control over the supply of funds that banks use to settle transactions among themselves.

90-day Bill Rate

The yield on 90-day bank bills, also known as the Bank Bill Swap Rate (BBSW), is anchored by the official RBA cash rate but is affected by market news and participants' views. It is therefore subject to change on a daily basis and can also provide an indication as to the direction of monetary policy. For example, if the official RBA cash rate is 2.00% but there is a strong market view that the RBA will ease monetary policy in the next month or two, 90-day BBSW may trade significantly lower as the market builds in its expectation of an easing. Therefore, the position of the 90-day bank bill yield in relation to the cash rate is an important indicator of the easing or tightening bias of monetary policy.

3-year Bond Yield

The 3-year bond yield for Australian Government Securities (AGS) stands at the dividing line between the influence of monetary policy expectations and broader macroeconomic factors. It is not unusual to see the 3-year bond trade significantly above or below the RBA cash rate. Because of its pivotal position in the yield curve, the spread (difference) between 90-day BBSW and the 3-year bond yield and the spread between the 3 and 10-year bond yields are favourite market indicators about the likely future direction of monetary policy and the broader economic outlook. For example, where the general market consensus is that the economic outlook is positive, the yield curve is likely to be 'steep', meaning the 3-year bond yield is well above the cash rate and the 10-year bond yield much higher again.

10-year Bond Yield

The 10-year bond yield for AGS primarily reflects market participants' perceptions of the long-term economic outlook of both the domestic and global economy. The three major influences on the level and changes in the 10-year bond yield are:

- **The Domestic economic outlook -** The more positive the outlook the greater the upward pressure on the 10-year bond yield.
- **The level and expected direction of domestic inflation -** Inflation directly affects the time value of money and hence the attractiveness of investing in a long-term asset. A higher rate of inflation (or expected future inflation) reduces the time value of any income flowing from a bond and hence the market will demand a higher yield to compensate for this risk.
- **Movements in the US bond market -** In a globalised marketplace fund managers are able to shift large portfolios around the world at minimal cost and effort, and the direction of the US bond market is critical for determining movements in smaller markets such as Australia.

As a result, the 10-year bond yield reflects both an Australian and global market view on economic and monetary conditions 12 months forward and beyond.

The Yield Curve

Interest rates span a wide range of maturities – from the RBA overnight cash rate to 10-year securities (and longer) – which attract different yields. When interest rates for different maturities are plotted on a graph, a 'yield curve' is constructed. The essential point is that there are different factors at play for each interest rate maturity along the yield curve. Specifically, the influence of the RBA cash rate is more important at the short end of the curve and diminishes as we move along the curve, whereas the influence of the domestic and global economic outlook is more important at the long end. As noted, the 3-year bond is usually seen as a pivot between these competing factors.

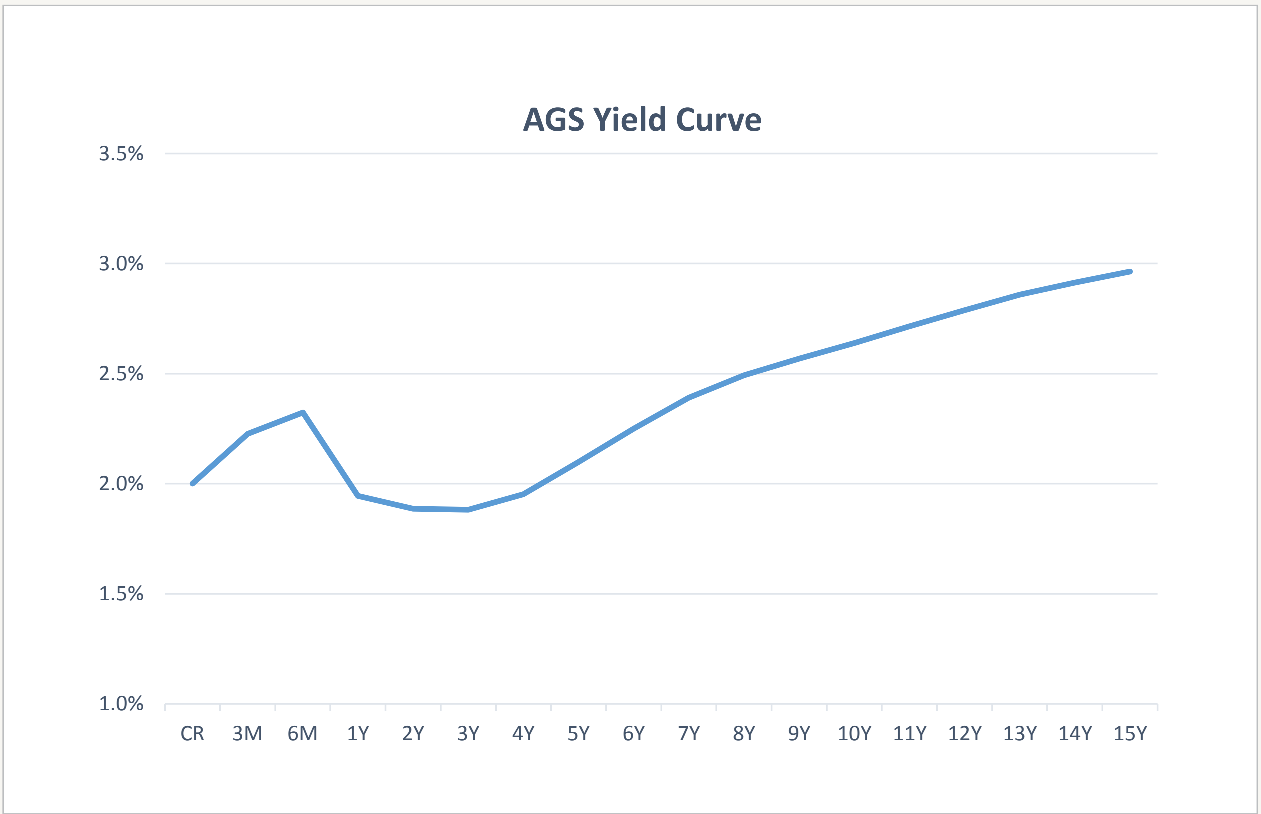
In the absence of market perceptions/expectations (often referred to as 'all other things being equal'), the yield curve is expected to be 'upward sloping', implying the longer the maturity the higher the expected yield on an interest rate instrument. This phenomenon is known as 'liquidity preference theory'. Liquidity preference theory reflects an expectation that investors demand a higher yield for holding interest rate securities with longer maturities.

Historical evaluation of Australian interest rates confirms the above expectation, with the long-term average yield on short-term securities being less than for long-term securities, with the historical average differential between overnight money market interest rates and 10-year AGS yields being in the order of 80 basis points, or 0.8 per cent[1].

WATC Interest Rates

WATC issued securities trade on the Australian interest rate/debt market. Short-dated interest rate instruments (generally six months or less) are priced relative (at a 'margin') to money market rates for which the key reference rate is 90-day BBSW as outlined above.

Figure 1: Australian Government Securities (AGS) yields from 3 months to 15 years at 29 January 2016



[1] Based on published RBA data from January 1993 to January 2016, difference in long-term average 10-year AGS and the interbank overnight rate which broadly matches the RBA target cash rate.

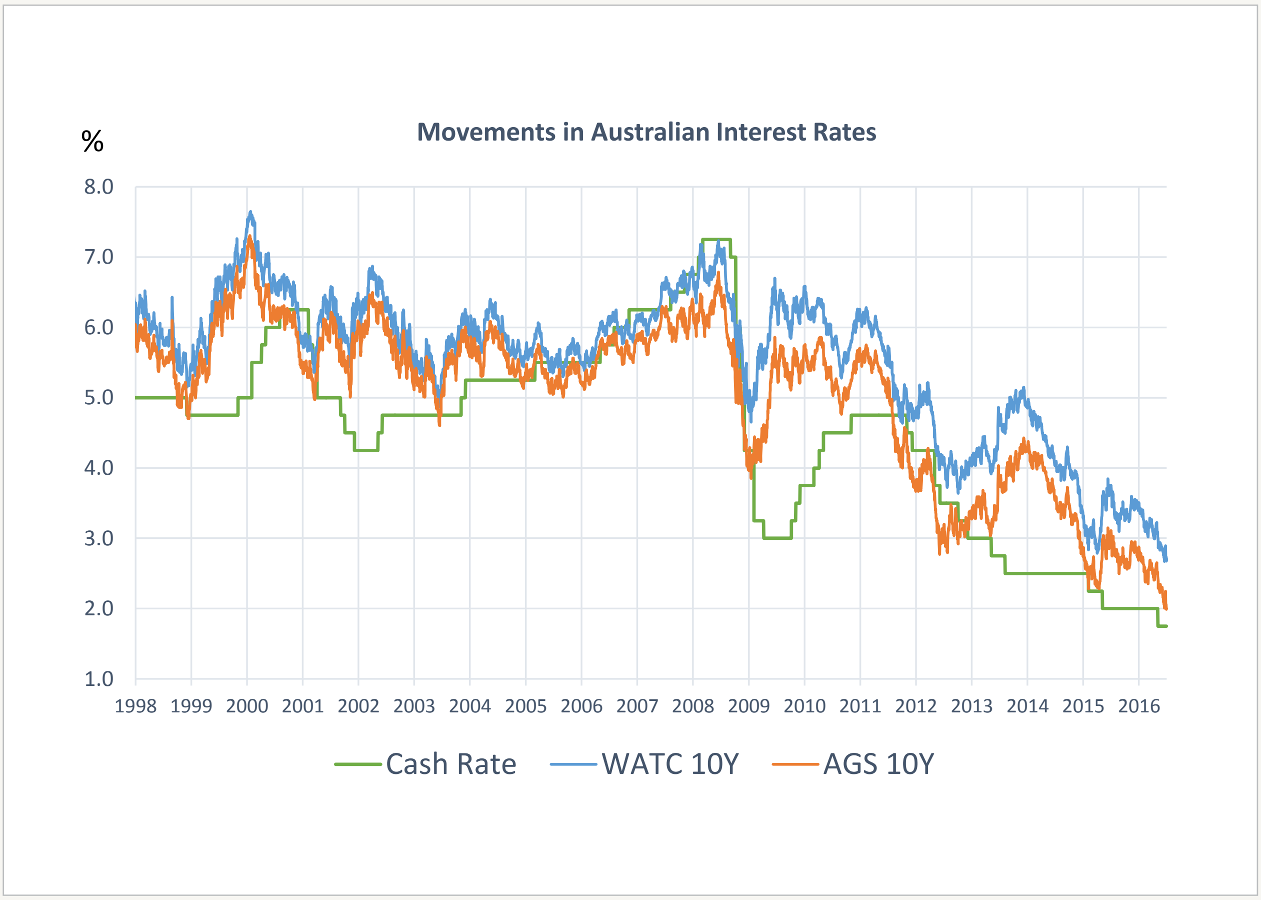
Longer-dated WATC securities, referred to as 'benchmark bonds' are priced relative to AGS, for which the 3-year and the 10-year AGS are the key anchor points.

The key factors influencing the margin at which WATC interest rate securities trade relative to the market reference rates are:

- Demand for State government issued securities – These are known as semi-government bonds as a general class of securities. Investor demand (both Australian and international) relative to AGS can be influenced by a wide range of economic factors. For example, in periods of heightened global economic uncertainty or crisis, demand for semi-government securities relative to AGS will generally fall and therefore the margin between the two bonds' interest rates may increase.
- Strength of the Western Australian Government's financial position and the WA economy in general – This impacts the credit rating of the State which in turn determines the credit quality of WATC issued securities, as these are guaranteed by the Western Australian Government.

The margin at which WATC short-dated securities trade to the market benchmark (e.g. 90-day BBSW) is reasonably small and not volatile on a daily basis. It has been within the range of -0.1% to 0% for a number of years (i.e. WATC securities trade slightly below the market reference rate).

Figure 2: Time series of the yield on WATC and AGS 10-year bonds since 1998 in comparison to the RBA cash rate



The margin at which WATC longer-term securities trade relative to the key market reference rates (e.g. 3-year and 10-year AGS) is larger and more volatile. It was negatively influenced when Standard & Poor's downgraded Western Australia's credit rating from AAA to AA+ in September 2013. However, the degree of volatility is a more recent phenomenon observed since the global financial crisis (GFC), i.e. from approximately mid-2007 onwards. Prior to this, WATC 10-year bonds traded at a fairly consistent margin of approximately 0.2% above 10-year AGS.

Figure 2 clearly indicates the extent to which 10-year bond yields can move well in advance of variations in the cash rate, and also exhibit volatility over time due to the impact of changing perceptions on the economic outlook and movements in global interest rates, most importantly in the US. The stable relationship between the WATC and AGS 10-year bonds prior to mid-2007 is also evident, after which the difference or 'spread' has been wider and more volatile. In more recent times this spread has averaged approximately 0.6%, albeit within a much lower overall interest rate environment that has existed since the GFC.

Interest Rates for Local Government Loans

The interest rates charged by WATC for local government loans is a direct pass through of the rates at which WATC securities trade on the Australian debt market at the time the loan is priced, plus WATC's administrative cost margin.

The majority of loans WATC provides to local government authorities are long-term fixed interest rate amortising loans for the development of community infrastructure. Therefore, the time series for the WATC 10-year bond yield shown in Figure 2 is a good reference for illustrating the evolution over time of local government borrowing rates from WATC. Where a local government uses a short-term loan facility with WATC, drawdowns are priced at a margin to 90-day BBSW, which maintains a close relationship to the RBA cash rate, for which the historical evolution is also shown in Figure 2.

WATC is at Your Service

Should you wish to discuss any issues concerning the appropriate use of debt finance to support local government projects, please contact our team.

Accessing WATC Services

Our services are available to all WA State government agencies and local governments. Contact us for more information and to discuss your specific business requirements.

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