APA Group

Goldfields Gas Pipeline Access Arrangement 2009

Proposed Inflation Forecast

March 2009

Recognition of bias in indexed bond yields

Until relatively recently most Australian regulators based the estimate for long-term inflation on the forecast implied by the difference between (ten year) nominal and indexed Commonwealth Government bond yields, using the Fisher equation[1]. While there has always been liquidity issues in the Australian indexed bond market (based on its relative size), the Government's decision to cease the issuance of indexed bonds in 2003 had a significant impact on the depth and liquidity in this market.

It is now generally recognised that a bias exists in indexed bond yields, with the significant reduction in supply relative to demand putting upward pressure on prices (and hence downward pressure on yields). This problem was acknowledged by the Commonwealth Government in a letter to the ACCC in 2007:

> The Australian Government's suspension of issuance of these inflation-linked bonds, as well as increased demand for this asset class, is likely to cause market-implied inflation estimates to exceed consensus forecasts of inflation over the medium term.[2]

In its decision in relation to SP AusNet the Australian Energy Regulator (AER) set out its reasons for departing from estimating implied inflation based on the Fisher equation. While it confirmed that a market-based approach is preferable to any other method, at the current time it is "...not aware of a reliable market based alternative that can be mechanistically applied in a similar way to these measures."[3] In the absence of a reliable market-based estimate, a forecast of inflation needs to be used.

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1 This specifies the following relationship: (1 + nominal rate) = (1 + real rate)(1+ inflation)

2 Commonwealth Treasury (2007), The Treasury Bond Yield as a Proxy for the CAPM Risk-free Rate, Letter to the ACCC, 7 August, p.1.

3 Australian Energy Regulator (2008), Final Decision: SP AusNet Transmission Determination 2008-09 to 2013-14, January, p.102.

In its SP AusNet decision, the AER gave explicit consideration to the source and horizon of inflation forecasts and concluded that the RBA's forecasts should be given the most weight. It also acknowledged the difficulties in reliably forecasting inflation over a long horizon, with the RBA's forecasts only going out as far as two years. It therefore determined to estimate a long-term average based on the RBA's forecasts for the first two years (as published in its *Statement of Monetary Policy*), and then assuming 2.5%, being the mid-point of the RBA's target band for inflation, after that. In its letter to the ACCC the Commonwealth Government had recommended basing the forecast on this mid-point:

> We therefore recommend that the ACCC uses the mid-point of the RBA's target band for inflation (that is, 2.5 per cent per annum) as the best estimate of inflation. Since the independence of the Reserve Bank Board in conducting monetary policy was formalised in March 1996, annual inflation has averaged 2.5%.[4]

Recommended approach

In the absence of a reliable, forward-looking measure of the bias in indexed bond yields, market data cannot be applied to derive a reasonable estimate for long-term inflation, at least at the current time.

Most of the recent regulatory decisions in relation to inflation have departed from the Fisher approach in recognition of the bias in indexed bond yields. The most appropriate approach at the current time is the one that has been adopted by the AER, which estimates a long-term average based on the RBA's forecasts for the next two years and the mid-point of the target range for inflation after that.

The updated forecasts (based on the RBA's February 2009 *Statement of Monetary Policy*) are provided in the following table.

Table 1 Inflation Forecast (from 1 July 2009)

June 2009	June 2010	June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	Average
1.75%	2.75%	2%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	**2.4%**

Source: Reserve Bank of Australia (2009), Statement on Monetary Policy, 6 February.

Based on an arithmetic average, the resulting forecast for inflation is 2.4%.

[4] Commonwealth Treasury (2007), op.cit.