Local government discount rate

23 August 2018

WHAT

As at the end of July 2018, the nominal local government discount rate is 4.1% and the real discount rate is 1.7%.

We have included the calculation of the local government discount rate in the WACC model spreadsheet, available on our website.

WHY

Every six months, IPART publishes the discount rate we recommend councils apply if they are using a net present value (NPV) approach to calculating local infrastructure contributions.

We have updated our method of calculating the discount rate, as outlined in our August 2018 Technical Paper, *Modelling local infrastructure contributions in a present value framework.*

The changes mean that our method of calculating the cost of debt (which is our recommended nominal discount rate) and inflation forecast (used to convert the nominal discount rate to a real discount rate) are consistent with IPART's current Weighted Average Cost of Capital (WACC) method, which was finalised in February 2018.

Our approach to calculating the discount rate:

- is consistent with IPART's WACC method (in determining the cost of debt for utilities)
- is market based (based on an assumed credit rating for the sector)
- is relatively simple to administer, and
- is based on historical data on the relevant debt margin.

HOW

Our method for calculating the discount rate uses a market-based estimate of the cost of debt for the local government sector.

We calculate this by taking the risk free rate (10-year Commonwealth bond yield), adding half the spread of our estimate of the debt margin (10-year non-financial corporate A-rated debt) and debt-raising costs of 12.5 basis points.

Councils have the flexibility to model contributions rates using either nominal or real values. If councils use real values, they should use a real discount rate.

We adjust the nominal discount rate for inflation in order to derive a real discount rate. Our inflation estimate is the average of the RBA's inflation forecast for the next year, and four years of the midpoint of its target inflation range.

WHEN

IPART will next publish the local government discount rate in February 2019.

Latest local government discount rate

Since the publication of our last Fact Sheet in February 2018, the nominal discount rate has decreased from 4.3% to 4.1%. The real discount rate has remained steady at 1.7%, due to a lower inflation forecast.

Table 1.1 shows the nominal and real discount rates and the various components that make up the rates.

Table 1.1 Calculating nominal and real discount rates – IPART method

Relevant rates	Commonwealth 10-yr bond yield (%)[b]	Corporate A-rated 10-yr yield (%)[b]	Spread (%)
Current cost of debt[a]	2.70[d]	4.20[d]	
Historic cost of debt[a]	3.60[d]	5.40[d]	
Midpoint	3.15	4.80	1.65
Calculating the discount rate			
Commonwealth 10-year bond yield (midpoint)	3.15		
+ half of the spread	0.83		
+ debt raising costs	0.125		
= Nominal discount rate	**4.10**		
Inflation forecast[c]	2.40		
Real discount rate	**1.66**		
Nominal discount rate (rounded to 1 decimal place)	**4.1**		
Real discount rate (rounded to 1 decimal place)	**1.7**		

[a] We use a trailing average to calculate the historic and current cost of debt. The historic cost of debt consists of ten equal tranches of debt for a 10 year period and the current cost of debt consists of five equal tranches of debt for a five year period.

[b] For each tranche of debt, the Commonwealth 10-year bond yield is based on 40 trading days of data and the non-financial corporate A-rated 10-year yield is based on 2 months of data.

[c] The inflation forecast is based on the current 1-year forecast based on quarterly data from the RBA's Statement of Monetary Policy, and the remaining four years is based on midpoint of the RBA's target band of inflation of 2.5%

[d] The bond yield values are all rounded to 1 decimal place to be consistent with the corresponding inputs in the primary WACC calculation.

Note: The periods over which the trailing averages are calculated are to 31 July 2018.

Source: Reserve Bank of Australia, Statistical Tables F2 (Commonwealth 10-year bond yield), F3 (non-financial corporate A-rated 10-year yield) and Statement of Monetary Policy (inflation).