

FACT SHEET

Changes to the debt margin calculation for Sydney Water's draft prices

Based on *Draft determination and report for Sydney Water's prices*
March 2012

On 16 March 2012, IPART released its draft determination on the prices that Sydney Water can charge for providing water and related services to its customers during the four years from 1 July 2012 to 30 June 2016. Customers are invited to make written comments on our draft decisions by 13 April 2012. The draft report and determination are available on IPART's website (www.ipart.nsw.gov.au). We expect to complete our review and release our final determination in June 2012.

We have made several changes to the structure of prices for this determination. This price restructuring does not increase the total revenue received by Sydney Water for services, rather it removes some inequitable cross-subsidies so that customers in all groups pay bills that represent the costs they impose on Sydney Water.

Calculation of return on assets

One of our most important steps in determining Sydney Water's revenue requirements and then prices is deciding on the appropriate rate of return to allow Sydney Water to earn on its assets. While there are several potential approaches for determining the rate of return, we have decided to use a post-tax real weighted average cost of capital (WACC).¹ We initially calculated a range of potential WAAC values and then decided on a value within that range for price setting purposes.

The WACC for a regulated business is the expected cost of debt and equity. The value is weighted to take into account the relative share of debt and equity in its capital structure. The debt margin is one of the inputs used to calculate the cost of debt in the WACC formula and is defined as the cost of debt that a company has to pay above the nominal risk free rate. To calculate the minimum, maximum and midpoint values of the WACC range for this draft determination, we have changed from using a point estimate (ie a single value) for the debt margin to a range of values.

¹ For a full discussion of our WACC calculations for the draft determination, see Appendix C of our draft report available on our website (www.ipart.nsw.gov.au).

Change in method for calculating debt margin

Our debt margin estimate is derived from the yields of bonds in a proxy bond portfolio. In April 2011, we published a set of criteria that determines what bonds are to be included in this portfolio and this has led to a significantly larger sample of bonds in our proxy bond portfolio than previously. The decision also specified that the debt margin should be determined as the median (a point estimate) of the yields of the bonds in our proxy bond portfolio.

However, the range of yields of bonds in our proxy portfolio widened significantly between May 2011 and January 2012:

- ▼ the median increased by 90 basis points; but
- ▼ the range increased by 337 basis points.

As a result, we have become concerned that using a point estimate for the debt margin does not fully reflect the recent increase in uncertainty in the debt market. Therefore, we have decided to represent the debt margin in calculations for this draft decision as a range. The range is based on the interquartile range of our proxy bond portfolio. We use the upper value of the debt margin range to calculate the upper value of the WACC range, the lower value for the lower of the WACC range, and the median to calculate the midpoint of the WACC range.

We consider that using a range instead of a point estimate will produce a debt margin which more accurately reflects the uncertainty involved in its estimation. A debt margin range is also consistent with the way we estimate other WACC parameters such as the equity beta and the market risk premium.

Under this proposed methodology we will still use the median to establish the midpoint of the WACC range. This will result in no change in the midpoint compared to our current methodology but will add a wider range to the WACC estimate by introducing the interquartile range for the debt margin.