Independent Panel questions to the AER

Dates of correspondence: 27-30 July 2018

Correspondence between: Natalia Southern (Chair of Panel), and Esmond Smith (Director – Rate of Return – AER)

*Please note the Panel's requests/comments are in **black** text and the AER's responses in **blue**.*

The Independent Panel (**Panel**) wrote to the AER regarding the following:

1. Follow up question from 20-25 July correspondence re interactions

- Further to your response on our previous question on interactions, the Panel is not clear about how the imputation tax credit affects measures of the market risk premium.
- The first paragraph on p. 395 says that "[w]e adjust estimates of the MRP in a matter consistent with our determination of the value of imputation credits." The chapter on the market risk premium says that historical excess returns have been "Calculated using an assumed imputation value (or theta value) of 0.6." (Table 25 note) However there does not seem to be an explanation of how the imputation value was included in market returns.
- The Panel assumes that market returns were calculated using dividends that were partially grossed up to a pre-personal income tax equivalent, but we can't be sure.
- Is there a reference on this topic you could point to, or could you provide us with some guidance to explain?

- Pre the introduction of imputation (in mid-1987) the return on the Australian stock market consisted of capital gains and dividends.
- Post the introduction of imputation the return on the Australian stock market consists of three components: capital gains; dividends; and utilised imputation credits (from receiving and utilising franking credits).
- In estimating the utilised historical imputation credit yield (to add to the return on the market from dividends and capital gains) the AER has assumed a utilisation rate of 0.60 (or 60%) consistent with our assumed utilisation rate used in calculating gamma.
- Our calculations are explained in Attachment 3 to our 2015 Final distribution determination for SA Power Networks available here (see p3-398). They can also be seen in the Excel spreadsheet named AER – Historical Excess Returns and Wright Approach Data – 20 July 2018, (available on our draft decision webpage here):
    - Open the Excel spreadsheet referred to above.
    - Open Worksheet 'BHM Rm, MRP Calculations'

    - Looking at the stock accumulation index return in column H (post 1987) you'll see it is higher than the values in column D.
    - The values in Column H (post 1987) are higher than the values in column D due to the inclusion of the imputation credit yield from column J in worksheet 'Consolidated underlying data' multiplied by our utilisation rate of 0.6 in cell I1 in the 'BHM Rm, MRP Calculations' Worksheet.
- Also note:
    - Pre 1988 we have no imputation credit yield in column J in the 'Consolidated underlying data' Worksheet. As a result the column D and column H values in Worksheet ‘BHM Rm, MRP Calculations’ are the same before 1988.
    - Pre 1998 (from 1988 to 1997) the imputation credit yield (in column J of Worksheet ‘Consolidated underlying data’) was calculated as the dividend yield (calculated as column B minus column C) multiplied by the average proportion of dividends franked (in column H) multiplied by the tax rate divided by one minus the tax rate. For example, 0.036 in cell J108 =(B108-C108)*H108*(I108/(1-I108))