

8 June 2018

Dr Peter J Boxall, AO Chair, Independent Pricing and Regulatory Tribunal PO Box K35 Haymarket Post Shop NSW 1240

Dear Dr Boxall

Re: Sydney Water's submission to IPART's financeability test issues paper

Thank you for the opportunity to respond to IPART's issues paper, 'Review of our financeability test'. We appreciate IPART taking the initiative to review its method of assessing financeability and its ongoing commitment to refining key aspects of its regulatory approach. We consider that the financeability test is an important step in the price-setting process as it assesses the potential implications of price determinations on the financial sustainability of the regulated business.

We consider that IPART has proposed a significant improvement to the current approach. Specifically, we support IPART's preliminary position to assess financeability using both actual and benchmark inputs. IPART's proposal to use actual and benchmark inputs will result in a test that is better able to identify and diagnose potential financeability concerns resulting from price determinations.

We also propose refinements to IPART's current approach. While we consider that the current test is working well, our experience of how the financeability test has been applied to our business in previous price reviews makes us well-placed to propose additional refinements. We consider that there is a sound rationale to:

- · adopt the nominal cost of debt instead of the real cost of debt in the test; and,
- align the financeability test to the approach taken by the ratings agencies by modifying weightings on the metrics, adding the retained cash flow to debt metric and considering qualitative judgment factors.

We have sought the views of Dr Tom Hird of Competition Economists Group to inform our position on these matters. We have attached Dr Hird's expert report, and we endorse the views contained in it as we consider that he has provided sound evidence on IPART's financeability test.

Sydney Water supports IPART using actual and benchmark financeability tests

We support IPART's proposed approach of using two financeability tests, one using benchmark inputs and one using actual inputs. We consider that this represents an improvement from the current approach of assessing financeability solely with actual inputs. Conducting both tests



provides a more sensitive and thorough assessment of financeability than only using the actual test.

Further, we consider that the benchmark test should be the primary focus when assessing financeability, and the actual test should be used as a cross-check. This is because the actual inputs test incentivises regulated businesses to pursue a more aggressive capital structure than the notional gearing structure. Dr Hird has provided detailed analysis on this issue in the attached report.

Sydney Water prefers the nominal cost of debt

We consider that the cost of debt used in the financeability test should be nominal. IPART has proposed to use a real cost of debt based on its analysis that suggests that using a nominal cost of debt may exaggerate financeability problems¹. Australian utilities, including Sydney Water, primarily use nominal bond debt funding. Nominal bond debt with a standard coupon remains the most common source of debt issued in the Australian bond market, and is generally the most liquid.

IPART states that businesses can 'manage the mismatch of when they are compensated for inflation; for example, by issuing bonds with lower-interest coupons to match the regulatory allowance'². While this is theoretically sound, there are practical limitations in capital markets in applying this solution. As noted, most bonds on issue have a standard coupon in the Australian market. There is not a deep and liquid market for inflation indexed bonds in Australia. This view is discussed in greater detail in Dr Hird's expert report.

Sydney Water prefers consistency with the approach of rating agencies

We consider that the financeability test should be based on an effective, well-documented and transparent approach. Moody's has published its methodology for assessing the credit risk of regulated water utilities³, and we consider that there is merit in reweighting the three metrics and including the retained cash flow to debt metric to align with the Moody's approach.

We consider aligning the financeability test with the Moody's approach would reflect best practice, improve the effectiveness of the test and improve transparency. Further, because Moody's routinely assesses the rating of many water utilities, including Sydney Water, it will also reduce our administrative burden.

We would support IPART considering qualitative factors when assessing financeability. There are instances, as noted in Dr Hird's report, where an assessment of financeability requires qualitative judgment of risk factors, rather than just a mechanical review of numerical metrics. Moody's rating methodology sets out effective and transparent guidance to assessing the qualitative and

¹ IPART, *Review of our financeability test – Issues Paper,* May 2018, page 22.

² Ibid.

³ Moody's, *Rating methodology – Regulated water utilities*, December 2015.



quantitative factors that IPART could consider when forming its own views on the implications of its pricing decisions on the business's financeability.

If you have any questions regarding this submission, please contact Liz Harloe, Principal Regulatory Economist on 8849 5725.

Yours sincerely



Zoran Peroski Regulatory Economics Manager



IPART review of financeability test

Dr. Tom Hird

June 2018



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1 Executive summary

1. IPART's issues paper provides an excellent summary of the issues that are encountered when building a financeability test into a regulatory regime. In general, we consider that IPART's proposed approach is appropriate in relation to most issues and provides valuable guidance that other regulators, both within Australia and internationally, can benefit from.

1.1 Benchmark and actual tests

- 2. In particular, we commend IPARTs proposed application of the financeability test to both the benchmark regulated business and also the actual business providing the service. Our view is that the former should be the primary focus of the test but that there is an important role for the latter.
- 3. We consider that the benchmark test should be the focus of the financeability analysis because it both: a) helps identify any real inconsistencies associated with benchmark assumptions; and b) does not distort the decision making of the actual business.
- 4. The test using actual inputs should still be retained, and used a cross-check. A test on the actual business will be important in circumstances where the benchmark assumptions do not necessarily fully capture the impact of changes in the operating environment of the business that are beyond the control of the business. One such example may be a prolonged dry period/drought. Another example may be dislocation in financial markets.

1.2 Real versus nominal debt

- 5. The single main area of disagreement with IPART's preliminary approach relates to the proposed use of inflation indexed debt in the application of the benchmark financeability test.
- 6. We consider that assuming nominal debt issuance will be both administratively simpler and more consistent with standard business practice and, therefore, credit agency practice. If IPART did choose to model a 100% inflation indexed debt portfolio it would have to:
 - model the maturity profile of the portfolio to capture the interest costs associated with returning the indexed component of the capital value on debt maturing each year; and
 - make an assumption as to how a credit rating agency would adapt their credit rating analysis (both metrics and other elements of their rating methodology) to the circumstances of a 100% inflation indexed debt portfolio (and the higher volatility of repayment/refinance obligations associated with such a portfolio).



- 7. There would be no benefit from adding this complexity given that nominal interest costs are, in expectation, the same for a 100% inflation indexed and a 100% nominal debt portfolio.
- 8. Indeed, the fact that there is no evidence that private regulated business have material inflation indexed financing is evidence that
 - there is no benefit to credit ratings from such a strategy; and/or
 - the other costs of raising debt in this way (e.g., higher credit spreads) make it inefficient to do so.
- 9. In this context, IPART should not proceed to adopt a benchmark assumption that is so radically at odds with standard business practice. IPART should certainly not do so on the basis that this would lower benchmark costs (given that if this were true such a practice should already be widespread).
- 10. Finally there is the issue of consistency with other elements of the IPART benchmark. IPART has determined that it will not base its real WACC estimate on observed yields on inflation indexed bonds in part because:¹

"The yield on inflation-linked bonds may be upwardly biased relative to the yield on a nominal bond of the same maturity..."

- 11. In our view IPART would need to revise this decision were it to assume the benchmark business issued inflation indexed debt for the purposes of the financeability test. If IPART was to assume that the benchmark business issued inflation indexed debt IPART would need to include any 'upward adjustment' in inflation indexed bonds in the estimated cost of debt input into the WACC.
- 12. In addition, IPART would need to revise its current position that the cost of tax is calculated based on the assumption that interest expense claims reflect yields on nominal debt.

1.3 What credit metrics to adopt?

13. We consider that it is important for the financeability test to be based on a welldocumented and transparent methodology. On this basis we consider that Moody's 2015 published methodology for the rating of regulated water utilities should be the starting point for IPART's analysis. Consistent with this methodology, IPART should reweight the three metrics to align with Moody's ratings and include retained cash flow to debt as an additional metric.

¹

IPART, Review of our WACC method, February 2018, p. 103



1.4 What qualitative factors are relevant?

- 14. We also consider that it is important for IPART to have regard to the qualitative aspects of the rating agency methodology. That is not to say that IPART must perform all of the qualitative assessments that a credit rating agency would. However, neither should IPART close its eyes to factors and information that is available and would be relevant to a credit rating agency.
- 15. In particular, imagine that IPART was to adopt certain assumptions about the benchmark financing strategy that have the effect of both:
 - 'improving' the benchmark credit metrics over a certain horizon; but
 - materially reducing the qualitative assessment of financial policy/business profile.
- 16. For example, assuming that all 10 year debt was raised in a recent period of low interest rates. This may improve credit metrics but would materially increase refinance risk (with all debt falling due in the same future year). Refinance risk is a qualitative consideration in credit rating assessments. It would be inappropriate to ignore the latter effect while capturing the first effect.



2 Introduction

- 17. Sydney Water has asked CEG to provide advice in relation to answering questions set out in IPART's "Review of our financeability test" May 2018 issues paper.
- 18. Section 3 of this report addresses each question in the order in which they are asked within the issues paper.



3 IPART questions and answers

3.1 Context and proposed approach

3.1.1 Q1: Do you agree with our guiding objectives for <u>the review</u>? Are there other objectives we should consider?

19. The issues paper states:

To guide our decisions, we propose to set the following objectives for this review:

1. To ensure the financeability test effectively assesses the impact of our pricing decisions on the short-term financial sustainability of the regulated business.

2. That our process for identifying and addressing a potential financeability problem supports efficient and prudent investment decisions by regulated businesses, and supports the long-term interests of consumers.

To meet both objectives, a key question for the review is whether the financeability test should focus on how our pricing decisions affect the financial viability of:

1. the benchmark efficient business (consistent with the approach taken for setting prices for the pricing review)

2. the actual business (the entity that needs to remain financially sustainable to continue providing services to customers), or

3. both.

- 20. We agree with the two guiding objectives set out in IPART's issues paper. The first objective broadly parallels the definition of financeability in relation to a commercial business, while the second objective provides a nexus between the concept of financeability and the broader objectives of utility network regulation. Taken together, these two objectives provide sufficiently comprehensive guidance over the issues that are relevant to this review.
- 21. We further consider that the financeability test should focus primarily on the benchmark efficient business a view that will be further expounded in responses to the remaining questions.



3.2 The purpose of the financeability test

3.2.1 Q2: Do you agree that we should continue to conduct financeability tests?

22. IPART should be commended for its adoption of the financeability test. The financeability tests play a very important role in bridging the long term present value horizons of benchmark-based pricing decisions with the real world short term constraints of continually financing and refinancing debt funding for existing and new assets. We therefore agree that IPART should continue to conduct financeability tests.

3.2.2 Q3: Do you agree with the criteria in the 2013 test that we used to decide whether to conduct the financeability test for a specific business? Are there other criteria we should consider?

23. IPART's 2018 issues paper (p.14) states:

In the 2013 test, we proposed to conduct a financeability test if:

- the prices we regulate determine the revenues of the service provider, and
- the service provider is established as, or part of, an entity with a distinct capital structure.
- 24. We can see no reason why the test would not be applied as part of all regulatory determinations that are based on the assumption that the business finances itself on debt markets.² This is true whether or not the service provider is "established as, or part of, an entity with a distinct capital structure". This position is consistent with our view that the primary purpose of the test is that it be applied to the benchmark business.

3.2.3 Q4: Have we have applied the financeability test to the appropriate price reviews since the 2013 financeability review?

25. We consider that the financeability test should be applied to all regulatory decisions that involve an assumption in relation to a benchmark financing decision. To the extent that this is onerous then flexibility should exist to not apply the test if neither IPART nor the regulated entity see value in doing so.

²

CEG, Testing financeability, November 2012, p.30.



3.2.4 Q5: Do you agree with our proposed objectives for the financeability test?

26. IPART's 2018 issues paper (p.16) states:

The 2013 objective is to:

...assess the short-term financial sustainability of the utility. This means that we assess whether the utility will be able to raise finance, consistent with an investment grade-rated firm, during the regulatory period.

For the 2018 test, we propose that:

The objectives of the financeability test are to:

- ensure our pricing decisions would allow an efficient investment grade-rated business to raise finance during the regulatory period (benchmark test), and
- assess whether the utility would meet this benchmark (actual test) during the regulatory period.
- 27. We assume that the functioning of the financeability test is such that it is intended to promote the credibility of the regulatory regime by ensuring that regulatory decisions do not lead to outcomes such that an otherwise efficient and well managed utility would be unable to fund its operations.
- 28. To that end, the consideration of "an otherwise efficient and well managed utility" necessarily refers to a benchmark firm, as opposed to the actual firm. Such a distinction is important because the purpose of regulation is not to shield the regulated business from poor management decisions. Rather, building block incentive regulation aims to ensure that an efficient and well managed utility will be able to receive fair returns on its investments.
- 29. Implementing the benchmark test therefore improves the credibility of the regulatory regime by providing an additional sanity check against IPART's pricing decisions.³ By contrast, a primary focus on the financeability of the actual business is problematic for the reasons set out in our previous report for Sydney Water.⁴ In summary, although taking action to ensure that the actual business can pass the financeability test (even when the benchmark business already does) is sometimes desirable (see paragraphs 35 to 41 below) it can also be undesirable for two main reasons:

³ CEG, Testing financeability, November 2012. See in particular section 2.5.

⁴ CEG, Testing financeability, November 2012. See in particular section 2.5.1.



- it necessarily raises revenues above costs creating a windfall for the regulated business; and
- thereby creates an incentive for the firm to structure itself to fail the financeability test e.g., by adopting a more aggressive financial structure than the notional financial structure the regulator used to assess the cost of debt funding.

3.2.4.1 Applying an actual financeability test

- 30. IPART proposes that, if a financeability problem is due to imprudent decisions by management, then IPART may not act to remove the financeability problem.
- 31. However, in many dimensions it is very difficult to see how this differs from a benchmark test. Take a scenario where the business adopts a very aggressive capital structure (more aggressive than the benchmark). Presumably, IPART would conclude that any resulting financeability problem was due to an imprudent capital structure. Presumably, IPART would define 'imprudence' relative to the benchmark capital structure. In effect, this would amount to the benchmark test being applied.
- 32. Moreover, such an approach would necessarily be one-sided (asymmetric). A business with a capital structure that was less aggressive than the benchmark would never benefit from the opposite of an imprudence test. IPART might find that, due to very conservative management decisions (more conservative than the benchmark) the business itself has no financeability concern even though the benchmark test would be failed.
- 33. Imagine a policy being adopted to not correct the benchmark problem on the grounds that there was no actual financeability problem. In which case, all regulated entities would have a strong incentive to make their capital structures at least as aggressive as the benchmark capital structure. This action would eliminate the consequences of the asymmetry in the application of the imprudence test at the expense of regulation unduly influencing the capital structure actually adopted.
- 34. The basis on which the financeability test can promote the credibility of the regulatory regime is if it is applied based on the same notional basis as the regulatory decisions made under that regime. If applied on another basis the test is likely to have the opposite effect; either:
 - finding problems with the regulatory regime that do not exist (where the business has adopted a more aggressive strategy than the notional strategy); or
 - hiding problems with the regulatory regime that do exist (where the business has adopted a less aggressive strategy than the notional strategy).



- 35. The context in which an actual financeability test can be helpful is where the benchmark assumptions are not, themselves, fully set out or are not consistent with efficient financing practices.
- 36. Consider a situation where there had been a prolonged dry spell leading up to the beginning of a regulatory period and, as a consequence, water restrictions had been put in place. The effect of this would be a material reduction in Sydney Water's revenues in preceding years which may, due to no fault of its own, put stress on some of Sydney Water's financeability metrics. However, if the benchmark assumptions ignore this recent history then this source of financial stress will be ignored in the benchmark test.
- 37. This example illustrates how a failure of the benchmark assumptions to fully reflect the real world operating environment can create value in the application of the finance test on the basis of the actual business.
- 38. Other examples might include the regulator adopting unrealistic benchmark assumptions For example, imagine that a regulator made a benchmark assumption that all debt was just raised by issuing a single inflation indexed par coupon bond⁵ with a 10 year maturity. (This scenario is discussed further in answer to question 5 below.) This notional assumption would imply that only real interest rates were paid over the next 10 years (with all compensation for inflation built into a final payment made only at maturity). Or, even more extreme, a regulator could assume a nominal "bullet bond" was issued (i.e., zero coupons with all interest compensation built into a premium in the face value of the bond relative to the amount raised when it was issued).
- 39. These notional assumptions are clearly not realistic and not consistent with efficient financing practices because refinancing all debt at a single point in time involves extreme refinance risk. The first best solution would be to correct the benchmark assumptions and make them consistent with efficient financing practices. However, absent that solution, the application of an actual test is appropriate. That is, an actual test can be a check on imprudence in the notional benchmark assumptions.
- 40. Another example might be where there has been a major systemic dislocation in financial markets and counterparties to certain hedge products (efficiently entered into) may default on their obligations leaving a regulated business facing a financeability problem. The notional benchmark financing practices may have, for simplicity, abstracted from hedge market operations even though it was *ex ante* efficient to be active in those markets.
- 41. In this case it would be appropriate to give weight to the actual test even if the benchmark test did not indicate any financeability problem. In this case the actual

⁵

Where the coupon was set such that the amount raised equalled the initial capital value of the bond.



test captures intricacies in actual efficient financing practices that were, for simplicity or other reasons, left out of the notional benchmark assumptions.

3.3 How we implement the test

3.3.1 Q6: Do you agree with our preliminary view that we should conduct separate financeability tests, using inputs for a benchmark efficient business and for the actual business?

42. IPART 2018 P20:

In practice, we conduct our test using the gearing ratio and the cost of debt for the portion of the business for which we are setting prices (ie, the regulated portion of the business).

Alternatively, we could conduct the test by applying the gearing ratio and cost of debt across the whole business.

at the impact of our pricing decisions on the whole business:

- The financial health of a business is driven by the capital structure of the whole business, rather than a subsidiary alone.
- The amount of debt a business allocates to a subsidiary is, in many cases, discretionary.

However, the following factors suggest restricting our analysis to the portion of the business for which we are setting prices:

- Our focus is to promote efficiency within the regulated portion of the business.
- Conducting the assessment on the entire business may require it to provide significant additional data. It may also mean that unregulated and potentially unrelated portions of the business could influence a regulatory decision.

Our preliminary view is that we should conduct two financeability tests, using:

- the benchmark inputs test to make sure our pricing decisions would allow an efficient business to remain financially sustainable, and
- the actual inputs test to assess the impact of our pricing decisions on the actual business.



- 43. As stated in response to question 5, we consider that IPART should focus primarily on the benchmark test with the actual test used as a cross-check on the reasonableness/specificity of the benchmark assumptions.
- 44. Notwithstanding the viewpoint set out above, should IPART decide to implement separate financeability tests, it would then be appropriate to use separate inputs for each test in order to generate interpretable results. Specifically, it would not be easy to interpret the results of the actual test using benchmark inputs and vice-versa.

3.3.2 Q7: Do you agree with our preliminary position that as a default, we should conduct the financeability test on the portion of the business for which we set prices? And Q8: Do you agree that we should consider on a case-by-case basis whether to conduct the test using financial data for the whole business?

- 45. Our response to question 5 explains that the financeability test should be intended to promote the credibility of the regulatory regime by ensuring that regulatory decisions do not lead to outcomes such that an otherwise efficient and well managed utility would be unable to fund its operations.
- 46. This objective would best be fulfilled by applying the test to the portion of the business whose prices are set by IPART. By default, the regulatory framework does not protect the unregulated portions of a regulated business, which should in turn not be considered as part of the financeability test.
- 47. Certain exceptions may exist, however, in cases where the regulated and unregulated activities of the business are intertwined. This may be the case if the regulated and unregulated segments of the business have considerable shared costs, or if their activities are so closely related as to affect one another.

3.3.3 Q9: Do you agree with the adjustments we make for lease expenses and pension benefits?

- 48. Such adjustments are only necessary or sensible if the test is being performed on the actual financing strategy of the business. When performing the test based on the notional financing strategy used to set regulated revenues no such adjustments are required.
- 49. If, however, the test is performed based on the actual financing strategy of the business then such adjustments are necessary in order to properly assess the actual debt and debt-like liabilities.⁶

⁶

CEG, Testing financeability, November 2012, p. 28.



3.3.4 Q10: Should we consider any other adjustments to the inputs we use to calculate our financial metrics?

50. IPART should follow as closely as possible the approach that credit rating agencies would take in calculating financial metrics. This includes updating IPART's methodology as the methodology of the rating agencies are updated. We note that IPART fine-tuned the inputs they use to calculate their financial metrics in 2015 and, subject to the points raised in answer to question 16, we are unaware of any other changes to the inputs required at this time.

3.3.5 Q11: Do you agree with our preliminary view that we should calculate a real cost of debt in the financeability test?

- 51. In our view IPART should apply the benchmark test on the assumption that nominal debt is used to fund the RAB. Moreover, IPART should recognise that, for the same staggered maturity profile, the annual cash-flows on a portfolio of inflation indexed debt will be almost identical in expectation (but more volatile in reality) to that on a nominal debt portfolio.
- 52. The issues paper states:

Our preliminary analysis suggests that using a nominal cost of debt in the financeability test may exaggerate financeability problems for actual and benchmark businesses. Because we use a real WACC approach, the impact of inflation on the nominal value of an asset is capitalised into the RAB. As such, we only need to compensate businesses for the real cost of debt and equity in the WACC.

However, when we conduct the financeability test, we use a business's nominal interest expense (the real return plus inflation), which may overestimate the revenue the business requires to finance their investment. We think businesses can manage the mismatch of when they are compensated for inflation; for example, by issuing bonds with lowerinterest coupons to match the regulatory allowance. We think our test should not identify a financeability problem because of the way we compensate the business for inflation.

53. We consider that the above statement has some problematic elements.

3.3.5.1 Nominal interest rates are the same on inflation indexed and nominal debt

54. First, it is potentially confusing to state that IPART "only need to compensate businesses for the real cost of debt and equity in the WACC". This is neither what IPART needs to do nor what IPART actually does. Consistent with the prior sentences, what IPART actually does is compensate businesses for the nominal WACC in two parts:



- A real return delivered through revenues in the relevant year;
- Compensation for inflation delivered via indexation of the RAB (and, therefore, higher revenues in future years).
- 55. Issuing inflation indexed bonds may, depending on the depth and liquidity in the market, be a sensible method for managing exposure to inflation risk by a regulated business. This is because an unexpectedly high/low level of inflation will result in both:
 - Higher/lower than expected nominal value of the business's RAB;
 - Higher/lower than expected nominal payments on the inflation indexed debt.
- 56. Putting aside some important caveats around timing of these events,⁷ this can be argued to involve something akin to inflation risk matching.
- 57. However, in the above passage IPART appears to be relying on a different intuition that, because the real cost of interest is lower than the nominal cost of interest, interest costs on inflation indexed ('real') bonds are lower. While this is true if looked at narrowly in terms of the coupons paid on debt, this is not correct when considered against the whole life of the debt instrument/portfolio. Issuing inflation indexed bonds will not lower the amount of actual interest that is expected to be incurred in any given year.
- 58. In order to see why, imagine that a business maintained a staggered maturity profile of 10 year debt with 10% of the portfolio refinanced every year. For ease of illustration let the nominal cost of debt be roughly constant through time at 5% and expected inflation to be roughly constant at around 2.5%.
- 59. This means that, if the business finances itself purely with nominal (par coupon⁸) debt, it will pay a 5% coupon on the face value of all debts.
- 60. Now consider a business financing itself purely with inflation indexed (par coupon) debt. The business will pay coupons, expressed as a percentage of the amount raised, of between 2.5% on recently issued debt and 3.1% on debt issued 9 years prior (i.e., debt that has had its capital value indexed by 9 years of inflation). However, it will also have to pay out the full amount of inflation indexation of the capital value on the 10% of the portfolio that matures in that year (28% (=(1.025)¹⁰ -1) on 10% of the

Namely, the fact that the fact that the former only translates to higher/lower revenues over a much longer period than the latter translates into higher/lower payments to debt investors.

⁸ The term 'par coupon' simply means that the coupon rate is equal to investors' discount rate such that the bond in question trades at 'par' (face value). If the coupon rate is different to investors' discount rate then the bond will trade at a value different to face value. A bond issued at 'par' is a bond where the amount raised is equal to the face value of the bond. This is not always the case. It is reasonably common for bonds to be issued at a price below par – such that the difference between issue price and face value provides some of the interest component for investors.



portfolio). The net effect of this is that the average payments in that year will, just as is the case for nominal bond issuance, be around 5%.

- 61. This is illustrated in the below table which illustrates the debt portfolio of a firm financing a \$100 investment at the beginning of year t using 10 year inflation indexed bond vs a 10 year nominal bond (assuming expected inflation of 2.5% pa). It can be seen that the inflation indexed debt has a \$2.5 lower coupon initially. However, the difference in coupons falls over time as the coupon on the indexed bond rises with its capital value. However, slightly lower coupons in years 1 to 9 are offset in year 10 with a much higher repayment of the inflation indexed capital value.
- 62. Both bonds have the same nominal interest costs (5%) as illustrated by the fact that both bonds have NPV of zero over their life using a 5% discount rate. It is just the timing of the nominal payments that differs with the nominal interest costs for the inflation indexed bond more back-loaded. Of course, over an entire portfolio of debt there is no such back-loading (with 10% of the portfolio of 10 year debt maturing each year on average).

Year	Cash-flow on real debt	Cash flow on nominal debt	Difference
0	-100.00	-100.00	0.00
1	2.50	5.00	2.50
2	2.56	5.00	2.44
3	2.63	5.00	2.37
4	2.69	5.00	2.31
5	2.76	5.00	2.24
6	2.83	5.00	2.17
7	2.90	5.00	2.10
8	2.97	5.00	2.03
9	3.05	5.00	1.95
10	131.13	105.00	-26.13
NPV at 5%	0.00	0.00	0.00

Table 3-1: Nominal interest costs on \$100 of debt raised in nominal and real terms (assuming 5% nominal discount rate and expected inflation = 2.5%)

- 63. That is, there is 'no free lunch' associated with issuing inflation indexed debt. Inflation indexed debt has part of its interest cost embedded in the inflation component of the capital value that must be paid back at maturity.
- 64. The borrower must still pay the costs of inflation over the life of the bond. For a firm with a staggered debt portfolio the annual nominal cash-flows are expected to be the



same with a portfolio of nominal and inflation indexed debt. The main difference is that with inflation indexed debt the nominal cash-flow is uncertain (it maybe higher or lower than expected). It is not the case that it is expected to be lower.

- 65. It should be noted that the above example, where cash flows on par coupon nominal debt and par coupon inflation indexed debts are similar assumes a staggered debt portfolio (and constant inflation and inflation expectations over time). With this assumption, 10% of the portfolio is maturing every year such that 10 years of accumulated inflation costs is being paid in interest on 10% of the portfolio. Or, equivalently, one year (10% times 10 years) of inflation costs is being paid on the entire portfolio. With a staggered debt portfolio this inflation component of cash-flows on inflation indexed debt is smoothed out through time so that, in effect, the business pays one year's worth of inflation on their entire portfolio every year.
- 66. If, instead, a business had only one single 10 year bond that it refinanced every 10 years then the cash-flows on a par coupon nominal bond and par coupon inflation indexed bond would not be identical in each year. The inflation indexed bond would:
 - initially have lower cash-flows (as compensation for inflation is accumulated in the escalating capital value of the bond);
 - have materially higher cash-flows in year ten when the bond matures and this inflation compensation must be paid to the investors.
- 67. One might be tempted to make a hypothetical set of assumptions such that a business finances itself with inflation indexed debt in a manner such that the payment of compensation for inflation always fall outside the window in which the financeability test is applied such that bond cash-flows are lower for the purpose of the test. Specifically, one may wish to assume that the entire portfolio of debt is comprised of recently raised 10 year inflation indexed bonds such that no bonds mature during the window of the financeability test.
- 68. Of course, this would not be reasonable because:
 - Debt eventually falls due. Any (hypothetical) attempt to push inflation related interest costs out beyond the current test will just make the next financeability test harder to pass.
 - IPART might assume 100% of all debt has just been raised with 10 year maturity such that inflation compensation falls outside the window of the current test. However, it will fall inside the window of the next test (and the effective interest rate at that time will be very high – with 10 years of inflation being paid to investors).
 - Assuming all debt is refinanced at the same time would dramatically raise refinance risk and, thereby, reduce credit rating agencies' assessment of the quality of management. That is, while the short term cash-flow metrics might be



lowered the risks associated with long term refinance risk would be factored in by investors and rating agencies now.

69. On the latter point we note the following description of credit rating agencies approach to assessing refinance risk.⁹

Rating agencies do not stipulate the debt amount for the capital structure for an issuer. Neither do they counsel issuers on the most appropriate markets for raising debt, nor the term of the debt. However rating agencies are looking for issuers to be conservative in their approach to the debt markets.

Factors which the rating agencies seek in highly rated users are:

- A company with a spread of maturities to its debt, such that only a small proportion of its debt matures within each year;
- Refinance of maturing debt within 6-9 months of its maturity. Early refinancing obviates the risk of the issuer not being able to refinance a tranche of debt if there is a market disturbance when the debt is maturing; and
- Access to liquid funds

Neither rating agency has published rules concerning debt maturity or refinance. Neither are direct ratings drivers, but both contribute to a well managed company and go towards stronger ratings.

Liquidity is however a significant consideration for rating agencies. The rating agencies take the approach that a company cannot be investment grade without adequate liquidity. In order to be IG an issuer must not only satisfy the long term metrics but must also have acceptable liquidity. Both agencies measure liquidity by calculating the ratio of the assured cash sources over the next 12-24 months to the cash uses over the same time period. In each opinion each agency has a section on liquidity, in which it describes the sources and uses of cash for the next 12-18 months.

70. Put simply, assuming a hypothetical debt management strategy that involves a business creating massive refinance risk will not improve any sensibly constructed financeability test.

⁹

Kanangra, Credit Ratings for Regulated Energy Network Services Businesses, p. 26.



3.3.5.2 Administrate simplicity

- 71. Given the above, we consider that assuming nominal debt issuance will be both administratively simpler and more consistent with standard business practice and, therefore, credit agency practice. If IPART did choose to model a 100% inflation indexed debt portfolio it would have to:
 - model the maturity profile of the portfolio to capture the interest costs associated with returning the indexed component of the capital value on debt maturing each year; and
 - make an assumption as to how a credit rating agency would adapt their credit rating analysis (both metrics and other elements of their rating methodology) to the circumstances of a 100% inflation indexed debt portfolio (and the higher volatility of repayment/refinance obligations associated with such a portfolio).
- 72. There would be no benefit from adding this complexity given that nominal interest costs are, in expectation, the same for a 100% inflation indexed and a 100% nominal debt portfolio.

3.3.5.3 Consistency with IPART's tax calculation

- 73. There is also an important issue of consistency between IPARTs financeability test and its calculation of the tax allowance building block. When it comes to calculating the tax allowance of the benchmark business IPART assumes that the full nominal interest costs are a tax deduction. That is, IPART recognises inflation related interest costs in the year in which they are incurred. It follows that IPART is positing a scenario in which:
 - Investors only factor in the real (non-inflation) component of interest costs when assessing financeability;
 - The Australian Tax Office factors in all interest costs (real and inflation related) when it comes to assessing taxable income.
- 74. If the ATO is able to account for the accrued interest associated with inflation of the capital value of an indexed bond each year then there is no reason for IPART to assume that investors and credit rating agencies would close their eyes to these accruing inflation related interest costs.

3.3.5.4 Wider implications

75. There is nothing special about 'inflation indexed bonds' and the trade-off between lower coupons and higher payments at maturity. Even more aggressive trade-offs can, and often are, made with nominal bonds. A 'bullet bond' is a nominal bond that has zero coupons such that the face value exceeds the amount borrowed at issue by enough to deliver investors their required nominal yield to maturity. This bond has



even lower coupons than a par coupon inflation indexed bond.¹⁰ If it was reasonable for IPART to hypothetically apply the financeability test assuming low coupons on inflation indexed bonds then there would be nothing stopping IPART assuming zero coupons on nominal bullet bonds in the financeability test.

76. Of course, this is not reasonable for the reasons already outlined above. Applying the same logic with bullet bonds provides a *reductio ad absurdum* (argument to absurdity) rejection of the idea that inflation indexed bonds lower interest costs. If IPART can assume inflation related interest costs can be ignored by assuming inflation indexed bonds are issued then why can't it also assume that all interest costs are avoided by assuming bullet bonds are issued? The answer is that IPART cannot reasonably do either of these (and the first is no more reasonable than the second).

3.3.5.5 Consistency with observed business practice

- 77. There is no evidence that private regulated business have material inflation indexed financing. This is evidence that:
 - there is no benefit to credit ratings from such a strategy; and/or
 - the other costs of raising debt in this way (e.g., higher credit spreads) make it inefficient to do so.
- 78. In this context, IPART should not proceed to adopt a benchmark assumption that is so radically at odds with standard business practice. IPART should certainly not do so on the basis that this would lower benchmark costs (given that if this were true such a practice should already be widespread).

3.3.5.6 Consistency with benchmark WACC

79. IPART has determined that it will not base its real WACC estimate on observed yields on inflation indexed bonds in part because:¹¹

The yield on inflation-linked bonds may be upwardly biased relative to the yield on a nominal bond of the same maturity, reflecting the additional compensation investors require to hold inflation-linked bonds. Therefore, liquidity risk would tend to result in a downwards bias to the estimate of inflation under the BEI method.

80. In our view IPART would need to revise this decision were it to assume the benchmark business issued inflation indexed debt for the purposes of the financeability test. If IPART was to assume that the benchmark business issued

¹⁰ Although, of course, it is possible to construct an inflation indexed bullet bond also.

¹¹ IPART, Review of our WACC method, February 2018, p. 103



inflate indexed debt IPART would need to include any 'upward bias' in inflation indexed bonds in the estimated cost of debt input into the WACC.

3.3.6 Q12: Do you agree with our preliminary view that our approach to estimating tax payments in the 2013 test remains reasonable? Are there changes we should consider to the way we calculate tax payments in the financeability test?

81. Tax payments should be calculated to include the best estimate of cash costs of tax paid on taxable income given the notional benchmark assumptions.

3.3.7 Q13: Do you agree with our preliminary view that we should continue to assess a business's financeability over the upcoming regulatory period?

- 82. IPART should follow as closely as possible the approach that credit rating agencies would take in calculating financial metrics including the time horizon for credit metrics.
- 83. These may be criticised as 'short term' in nature relative to the long run NPV basis of regulatory decision. However, this is a reflection of the fact that investors in a new 5 or 10 year bond care only if there will be actual cash to redeem their loan at its maturity. In perfect capital markets one can argue that long run financeability gives rise to short run financeability because a business with a present value of future cash flows equal to 100% of the RAB should be able to raise new debt to fund maturing debt on 60% of the RAB.
- 84. However, the assumption of perfect capital markets is critical here. It is well understood that capital markets are not perfect which is the raison d'etre of credit rating agencies. It is, therefore, not reasonable for IPART to lengthen the period of analysis beyond that of interest to actual investors.
- 85. We elaborate further on this in response to questions 20 and 22.

3.3.8 Q14: Do you agree with our preliminary view that we should continue to use quantitative data to assess a business's financeability?

86. We consider that Moody's 2015 published methodology for the rating of regulated water utilities should be the starting point for IPART's analysis.¹²

¹²

Moody's Investor Service, Rating Methodology, Regulated Water Utilities, December 2015.



- 87. We consider that it is important for the financeability test to be based on a welldocumented and transparent methodology.¹³ We therefore consider that it is important for IPART to have regard to the qualitative aspects of the rating agency methodology. That is not to say that IPART must perform all of the qualitative assessments that a credit rating agency would. However, neither should IPART close its eyes to factors and information that is available and would be relevant to a credit rating agency.
- 88. In particular, imagine that IPART was to adopt certain assumptions about the benchmark financing strategy that have the effect of both:
 - 'improving' the benchmark credit metrics over a certain horizon; but
 - materially reducing the qualitative assessment of financial policy/business profile.
- 89. For example, assuming that all 10 year debt was raised in a recent period of low interest rates. This may improve credit metrics but would materially increase refinance risk (with all debt falling due in the same future year). Refinance risk is a qualitative consideration in credit rating assessments. It would be inappropriate to ignore the latter effect while capturing the first effect.

3.4 How we assess financeability

3.4.1 Q15: Do you agree with our preliminary view to continue to use a BBB target credit rating across all industries?

90. We support the continued use of a BBB target credit rating.

3.4.2 Q16: Do you think the current metrics are appropriate?

91. The IPART issues paper (p.27) states:

As presented in Chapter 2, the 2013 test calculates three financial ratios.

- FFO interest cover: This is calculated as FFO plus interest expense divided by interest expense. It measures the business's ability to service its debt.
- Debt gearing (regulatory value): This is calculated as a business's actual debt divided by the regulatory value of fixed assets. It measures the business's leverage.

¹³ CEG 2013 P27



- FFO over debt: This is calculated as FFO divided by the business's actual debt. It is a more dynamic measure of leverage than gearing because it measures the business's ability to generate cash flows to service and repay debt.
- 92. We consider that Moody's 2015 published methodology for the rating of regulated water utilities should be the starting point for IPART's analysis.¹⁴ It is noted that these have changed since IPART's 2013 test was developed. We consider that IPART should update its test to have regard to these changes (and, potentially, any updates to the policies of other rating agencies). Moody's changes, including to qualitative assessments, are summarised below.

PREVIOU	IS		UPDATE	D		Weighting
Rating Fa	actors and Sub-factors	Weighting	Rating F	actors and Sub-factors	Weighting	Change
Factor 1	- Regulatory Environment and Asset Ownership Mo	del (40%)	Factor 1	- BUSINESS PROFILE (50%)		
1	Stability & Predictability of Regulatory	15%	1	Stability & Predictability of Regulatory	15%	no change
	Environment			Environment		
2	Asset Ownership Model	10%	2	Asset Ownership Model	5%	-5%
3	Cost and Investment Recovery	12%	3	Cost and Investment Recovery	15%	3%
	(Ability & Timeliness)			(Sufficiency & Timeliness)		
4	Revenue Risk	3%	4	Revenue Risk	5%	2%
Factor 2	 Operational Characteristics & Asset Risk (10%) 					
5	Operational Efficiency	5%				-5%
6	Scale & Complexity of Capital Programme &	5%	5	Scale & Complexity of Capital Programme &	10%	5%
	Asset Condition Risk			Asset Condition Risk		
Factor 3	Stability of Business Model & Financial Structure	10%)	Factor 2	- FINANCIAL POLICY (10%)		
			6	Financial Policy	10%	10.0%
7	Ability and Willingness to Pursue Opportunistic	3.3%				-3.3%
	Corporate Activity					
8	Ability and Willingness to Increase Leverage	3.3%				-3.3%
9	Targeted Proportion of Operating Profit Outside	3.3%				-3.3%
	Core Water and Wastewater Activities					
Factor 4	- Key Credit Metrics (40%)		Factor 3	- LEVERAGE AND COVERAGE (40%)		
10	Adjusted Interest Coverage OR	15%	7	Adjusted Interest Coverage OR	12.5%	-2.5%
	FFO Interest Coverage			FFO Interest Coverage		
11	Net Debt to RAB or Debt to Capitalisation	15%	8	Net Debt to RAB or Debt to Capitalisation	10.0%	-5.0%
12	FFO to Net Debt	5%	9	FFO to Net Debt	12.5%	7.5%
13	Retained Cash Flow to Capex	5%				-5.0%
			10	Retained Cash Flow to Net Debt	5%	5.0%
TOTAL		100%	TOTAL		100%	0.0%

- 93. Key Credit Metrics (now titled Leverage and Coverage) have retained their total 40% factor weighting.
 - All credit metrics are now focused on debt and debt service coverage.
 - The weighting of each sub-factor has changed.
 - In the updated methodology, there is an increased emphasis on debt coverage ratios with increased weighting given to FFO to Net Debt and the introduction of the new ratio, Retained Cash Flow (RCF) to Net Debt
 - FFO to Net Debt increased in weighting to 12.5% from 5%

¹⁴ Moody's Investor Service, Rating Methodology, Regulated Water Utilities, December 2015.



- RCF to Net Debt has a weighting of 5%, replacing RCF to Capex of 5%
- The increase in weighting of debt coverage metrics has been at the expense of Net Debt to RAB and FFO Interest Coverage ratios
 - Net Debt to RAB has reduced, falling from a weighting of 15% to 10%
 - FFO Interest Coverage has reduced from 15% to 12.5%

3.4.3 Q17: Are there any additional metrics we should use, and if so why?

94. The IPART issues paper (p.27) states:

However, other regulators and Moody's use a range of other financial metrics to assess financeability. Appendix A presents a comparison of other regulators and Moody's. In particular:

- Moody's, Ofwat and Ofgem consider retained cash flow (RCF) over debt. It is calculated as the net change in the business's cash divided by its debt. It measures the ability of a business to service and repay debt after paying dividends.
- Ofwat and Ofgem consider equity metrics. For example, Ofgem considers regulated equity over profit after tax. This measure could be used to assess the capacity of shareholders to address financeability problems, or whether the WACC provides shareholders with a market-based rate of return.
- 95. We consider that Moody's 2015 published methodology for the rating of regulated water utilities should be the starting point for IPART's analysis. These have been set out in answer to Q16. Consistent with this methodology, IPART should include retained cash flow to debt as an additional metric.

3.4.4 Q18: How should we refine the benchmark ratios for our financial metrics?

96. The IPART issues paper (p.28) states:

Each benchmark ratio has a wide range, and there is significant overlap between ratios. We think this could make it difficult for stakeholders to judge whether a particular set of ratios meets our target credit rating. In addition, the benchmark ratios credit rating agencies use have been refined since we developed our benchmark ratios in 2013. For example, Moody's has since published its benchmarks for regulated water utilities (see Table 5.2). We will consider the updated benchmarks.

We propose to revise the benchmark ratios for each metric as part of this review, so that they:



- reflect current best practice (eg, for credit rating agencies and lenders such as TCorp)
- reduce or eliminate any overlap where appropriate, and
- reflect the circumstances of the businesses we regulate.

Table 5.1	IPART's	current	financial	ratio	benchmarks
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Metrics	A3	Baa1	Baa2	Baa3	Ba1
FFO/interest	>2.9x	2.3-2.9x	1.7-2.5x	1.4/1.5-1.7x	<1.4/1.5x
Debt/RAB ^a	<60%	80-85%	60-91%	90->100%	>100%
FFO/debt	>10%	>10%	<6-10%	5-8%	<4%

a Regulatory value.

Factor 3 – Leverage and Coverage (40%)

The following tables show the grid scoring categ

Source: IPART, Financeability tests in price regulation - Final Decision, December 2013, p 10.

- 97. IPART's benchmark ratios of the metrics has a wide range and there is significant overlap between ratios. For example, a business with Debt/RAB ratio of 60% still has the possibility to be classified as a Baa2, while Baa1 only ranges from 80% to 85%.
- 98. The metrics we propose to use are those used in Moody's 2015 published methodology of the rating of regulated water utilities. As can be seen below, there is no overlap in these metrics.

ries for each Loverage and Coverage sub-factor and the w

Rating Factor	Weight	Aaa	Aa	Α	Baa	Ba	В	Caa
Adjusted Interest Coverage Ratio (1)	12.5%	≥8x	4.5-8x	2.5-4.5x	1.5-2.5x	1.2-1.5x	1-1.2x	<1x
		OR	OR	OR	OR	OR	OR	OR
OR		≥10x	7-10x	4.5-7x	2.5-4.5x	1.8-2.5x	1.5-1.8x	<1.5x
FO Interest Coverage (2)								
Net Debt / Regulated Asset Base (3)	10%	<25%	25-40%	40-55%	55-70%	70-85%	85-100%	≥100%
OR								
Debt / Capitalisation								
FFO / Net Debt	12.5%	≥40%	25-40%	15-25%	10-15%	6-10%	4-6%	<4%
CF / Net Debt	5%	≥30%	20-30%	10-20%	6-10%	4-6%	2-4%	<2%

99. We believe that it is important to base the financeability test on a well-documented and transparent methodology. As well as being transparent this approach also reduces administrative burdens for both IPART and regulated businesses.



3.4.5 Q19: Should we rank our financial ratios or adopt a weighting? If you think a ranking is appropriate, are there any improvements we can make to our current rankings?

- 100. We consider that IPART should adopt the same weighting as published in Moody's methodology.
- 101. We disagree with the view that IPART should not adopt the same quantitative weights as Moody's. While IPART can, and should, retain flexibility in applying the overall financeability test, we consider that, absent very strong reasons, this should not extend to adopting a different approach to credit metric calculation. In our view IPART can adopt the Moody's quantitative rankings and still exercise appropriate discretion in the interpretation of the results.

3.4.6 Q20: Should we set out a step-by-step decision process to assess if a financeability problem exists?

102. The IPART issues paper (p.29) states:

The 2013 test also ranks the financial ratios in order of importance, to focus on the ratios that are most relevant in assessing financeability. The test places more importance on the FFO interest coverage and the debt to RAB ratios than it does on the FFO to debt ratio.

Other than these guides, we do not have a step-by-step process or decision rule for assessing whether a financeability problem exists. This means the circumstances in which we would conclude that a financeability problem exists are unclear. It also implies that the assessment of a financeability concern is guided by discretion and judgement.

To promote regulatory certainty, we could set out a decision process – detailed or high-level – for assessing whether a financeability problem exists.

- 103. We believe that it is important to base the financeability test on a well-documented and transparent methodology.
- 104. IPART should look to actual practice by ratings agencies for the time span for which below investment grade metrics would trigger a downgrade. This should be informed by the fact that a regulated business will generally have more reliable forecasts of both revenues and expenditures than many other businesses – such that rating agencies may give more weight to projections than might be the case in other industries.
- 105. If such an assessment reveals that a regulated business has persistently lower (Moody's weighted) credit metrics than the relevant benchmark, then a financeability problem should be identified. This would be the case if, for example, there was no



improvement in the position over a determination period, or if the trend into the next determination period does not improve above the benchmarks.

106. If the projections extend beyond the next regulatory period this will create a need to predict regulated revenues and expenditures in the next regulatory period. Perhaps the most contentious issue in doing so will be to forecast the rate of return that will be allowed by the regulator in that period. Subject to any contrary information on how a rating agency would approach this issue, we consider that the best approach to this problem will be to assume the same real rate of return in the next regulatory decision as in the current regulatory decision. This approach would mean that the test was effectively asking whether the current rate of return/market conditions, if continued indefinitely, would lead to any financial sustainability problems. This appears to be the most compelling basis for carrying out the test.

3.4.7 Q21: Are there any other factors we should consider when we analyse the financial ratios?

107. We consider that Moody's 2015 published methodology for the rating of regulated water utilities should be the starting point for IPART's analysis.¹⁵

3.5 Addressing a financeability concern

- 3.5.1 Q22: Do you think the three stages we have proposed to conduct the financeability test would identify whether a financeability concern is due to: setting the regulatory allowance too low; the business taking imprudent or inefficient decisions; and/or the timing of cash flows?
- 108. We consider that:
 - The primary focus of the financeability test should be on the benchmark notional business. It follows that identifying 'imprudent' business decisions is not relevant/a focus of the test;
 - A financeability problem is, by definition, a signal that the regulatory allowance is too low whether or not this is characterised as due to a 'timing of cash flows' problem.
- 109. In relation to the second point, and as discussed in answer to Q5, if the business failed the financeability test (perhaps due to high interest expense or high capital expenditure requirements relative to cash-flows or both) based on its notional capital structure and notional interest costs, then this would be an indication that the credit rating, and therefore interest costs, notionally assumed by the regulator were overly optimistic. That is, the equity buffer allowed was not consistent with the business

¹⁵ Moody's Investor Service, Rating Methodology, Regulated Water Utilities, December 2015.



providing debt investors the level of comfort consistent with the notional credit rating. Any solution to this problem must raise the expected present value of the equity buffer (the present value of net cash flows). This can be achieved by various potential mechanisms:

- holding the notional credit rating/interest rates constant while increasing the proportion of equity in the notional capital structure (reducing notional gearing) until the credit metrics return to investment grade;
- keep the notional gearing constant but raise the equity buffer directly by raising the allowed cost of equity to a level sufficient to return the credit metrics to investment grade. This could be achieved by simply adopting a higher point in the estimated range;
- providing a specific cash-flow allowance that might be called a 'financeability allowance' at a level sufficient to return the credit metrics to investment grade; or
- implement a 'regulatory loan' at an interest rate that is equal to or less than the risk free rate.
- 110. In an important sense, each of the above solutions has a common element which is that it raises the present value of revenues at a given discount rate. However, in our view the first and second options are the most transparent approaches for achieving the desired end. This approach acknowledges that the regulatory WACC is based on assumptions, including credit rating assumptions, and that these need to be internally consistent.
- 111. If there is a financeability problem given the notional capital structure it is because the assumed credit rating does not match the credit rating actually achievable by a business (given its expenditure profile etc.). Adjusting the notional assumptions to make them internally consistent is the most transparent means of solving a financeability problem.
- 112. In contrast to this, IPART is proposing that some kind of financeability problems can be resolved by the business taking a loan from itself (from its future revenues) at a rate that is equal to its cost of capital (i.e., higher than its debt financing costs). This would include a 'solution' that involves accelerated regulatory depreciation of the RAB for a short period. We do not consider that this is a sensible approach. It, in effect, amounts to 'kicking the can' down the road – potentially simply creating a new financeability problem in the future.
- 113. Our view is that the identification of financeability problem with the benchmark test is the identification that the regulatory allowance has been set too low/inconsistent with the benchmark assumptions.



3.5.2 Q23: Does our proposed financeability test capture the relevant temporary cash flow problems that might require a timing adjustment to regulated income?

114. See the answer to question 22.

3.5.3 Q24: Do you agree that our proposed remedies to address a financeability concern are appropriate?

115. The IPART issues paper (p.32) states:

If the source of the concern is that prices are too low even for a benchmark efficient business, we think the appropriate remedy is to review our pricing decision. In essence, this step would involve correcting a regulatory error. The financeability test could help identify any such error by applying additional information that may not have been available in the building block model used to set prices.

If the source of the concern is that prices are adequate for a benchmark efficient business but too low for the actual business because its owners have been imprudent or inefficient, there are appropriate remedies. The owners could reduce the business's level of debt by injecting more equity, accept a lower than market rate of return on their equity, or both. It is an important principle that an inefficient business should not be rewarded for its imprudent decisions at the expense of customers.

If the source of the financeability concern is a temporary cash flow problem despite an acceptable level of average profitability over time, it may be appropriate for the regulator to adjust the revenue profile over time in a way that is neutral to the business in present-value terms. We could make such an adjustment by increasing prices in some time periods while reducing them in others without changing the present value of income overall. This remedy is part of our existing financeability method.

116. See the answer to question 22.

3.5.4 Q25: Are there other remedies that we should consider, and in what circumstances might it be appropriate to apply these remedies?

117. See the answer to question 22.

3.5.5 Q26: Do you think that any NPV-neutral adjustments to prices should be limited to the upcoming regulatory period?

118. See the answer to question 20 and 22.



- 119. IPART should look to actual practice by ratings agencies for the time span for which below investment grade metrics would trigger a downgrade. This should be informed by the fact that a regulated business will generally have more reliable forecasts of both revenues and expenditures than many other businesses such that more weight can be given to projections than might be the case in other industries.
- 120. If such an assessment reveals that a regulated business has persistently lower (Moody's weighted) credit metrics than the relevant benchmark, then a financeability problem should be identified. This would be the case if, for example, there was no improvement in the position over a determination period, or if the trend into the next determination period does not improve above the benchmarks.
- 121. With the test failed, then the remedies outlined in answer to Q22 come into play. None of these involves a loan from Sydney Water's future self at the cost of capital.

3.5.6 Q27: Is our proposed process for addressing a financeability concern workable and reasonable?

122. We consider that IPART's proposed process, amended consistent with our proposals, is workable and reasonable.