

13 April 2022

Mr Steve Edwell
Chair
Economic Regulation Authority
Level 4, Albert Facey House
469 Wellington Street
Perth WA 6000

Dear Mr Edwell

Re: Rate of Return Instrument Discussion Paper

Thank you for the opportunity to respond to the Chairmont report on debt-raising and debt-hedging costs published in March 2022. This letter outlines a submission from ATCO Gas Australia (ATCO) in response to Chairmont's report.

ATCO broadly supports Chairmont's findings to increase the debt raising cost allowance due to the higher offshore issuance costs and inclusion of costs for a 2nd credit rating and annual surveillance, and to increase debt hedging cost allowance due to the addition of an allowance for the costs involved in negotiating an International Swaps Dealers Agreement (ISDA).

However, ATCO considers that the ERA should further investigate the arranger fees and liquidity management cost components of the debt raising costs to ensure that all costs consistent with the benchmark debt strategy are included, as shown in the table below.

Table 1: ATCO review of Chairmont's findings (basis points per annum)

	Chairmont Review	ATCO
Debt raising costs	15.5	15.5
plus additional arranger fees (adjustment for Bloomberg data)		2.6
plus additional arranger fees (issue price discount)		5.1
plus liquidity management costs		12.0
Amended debt raising costs		35.2
Debt hedging costs	12.3	12.3

The following sections explain ATCO's review of Chairmont's finding and the additions that should be considered for debt raising costs.

Arranger's fees

Chairmont have estimated arrangement costs of 32.5 bp for AUD issues and 37.5 bp for USD issues based on informal interviews with several financial market intermediaries and other service providers.

However, based on transparent data from Bloomberg CEG have estimated arrangers' fees for relevant bond issues at 55 bp which is approximately 20 bp higher than Chairmont. The Chairmont estimate

appears understated relative to the data available to the market and should be revised upwards. The 20 bp increase is associated with a 2.6 bppa increase in debt raising costs.¹

Furthermore, the arranger fee consists of a second component that has not been included in the Chairmont review. This second component is the value of the discount to the market price of the bond issue retained by the arranger. As CEG show in their attached report the two components are inextricably linked. If the bp fee is lower the discount to market price increases such that overall the arranger receives a fee commensurate with the underwriting risk. The two components must be added together to calculate the total arrangement fee. CEG has estimated this cost from market data as 39bp of the issue amount. The 39 bp issue price discount is associated with a 5.1 bppa increase in debt raising costs.

Considering these two components of the arranger's fee together the Chairmont estimate of the fee is understated by up to 59bp (equivalent to 7.6 bppa in debt raising cost).

Liquidity management costs

Chairmont have not provided for liquidity management costs. Credit rating agencies require issuers to engage in liquidity management activities to reduce refinancing risk so as to maintain investment grade consistent with the benchmark debt strategy. Liquidity management activities required for prudent financial management typically involve refinanced debt being raised at least 3 months prior to maturity (and ideally 12 months prior) and holding of undrawn committed facilities with banks that allow the firm to draw on that facility if required.

Liquidity costs are real costs as has been advised previously by Chairmont² to the AER as well as being estimated by PwC³ and Incenta⁴. These estimates are not in dispute. ATCO submits that these are a cost to a prudent service provider implementing the benchmark debt strategy. For the estimate of debt raising costs to be complete they should include liquidity management costs and therefore include an allowance of 11 to 13 bppa as estimated by CEG in their attached report.

ESG costs

I was pleased to see that Chairmont have found that Environmental Social and Governance (ESG) rating and investor requirements are starting to impact on debt issuances. In the context of the overall cost of debt a recent study by MCSI found that the difference between a high and low ESG score could be as much as 80 bp.⁵ Our experience is that our stakeholders, investors and rating agencies are increasingly looking for companies to make their ESG performance more transparent and publicly commit to decarbonise. We agree and ATCO first shared its ESG targets in January 2022 for achievement by 2030 and committed to net zero by 2050.

The role of ESG on debt raising costs is an emerging issue that will likely result in additional costs being incurred to raise debt during the life of the rate of return instrument and the access arrangement periods to which it applies. ESG costs will be incurred in relation to debt raising costs, for example, the costs of obtaining an ESG score from an appropriate agency is likely to be a cost that will be incurred in order to obtain access to reasonably priced debt (consistent with the benchmark credit rating). Given this cost has not been considered quantitatively by Chairmont and the RORI can have effects for up to nine years, the calculated allowance estimated by Chairmont must be considered conservative.

1 The arrangement fee should be spread across the life of the bond in a PV neutral manner using a 5% discount rate and 10 yr life. This is the standard approach adopted by the AER. Refer to: AER, Attachment 3: Rate of return | Final decision – SA Power Networks 2020–25., page 3-13.

2 Chairmont, AER Debt Raising Costs, 2019, Section 4.2, p. 17. For example: Chairmont agrees that there are costs of establishing and maintaining a liquidity reserve and financing debt ahead of maturity.

3 PwC, Energy Networks Association: Debt financing costs, June 2013, pp. vi. (13 to 14 bppa)

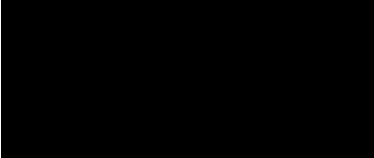
4 Incenta, Debt raising transaction costs: SA Power Networks, October 2014. (11.3 bppa)

5 MSCI, ESG and the cost of capital, February 2020

In summary, our review of the Chairmont report has found that the debt raising costs could be up to 0.352 per cent per annum. The ERA should further investigate the arranger fees and liquidity management cost estimates in the debt raising costs as detailed in the attached CEG report.

If you have any questions or would like to discuss any of these matters further please contact me or Hugh Smith, General Manager Regulation and AA6 Lead.

Yours sincerely



John Ivulich
Chief Financial Officer

Attachment 1: CEG Report



COMPETITION
ECONOMISTS
GROUP

Debt arranging and liquidity management costs

Dr. Tom Hird

April 2022



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1 Executive summary

1. This report provides advice on how best to estimate the costs associated with:
 - Issuing debt via arrangers/underwriters; and
 - Meeting the liquidity requirements set by credit rating agencies as necessary to maintain an investment grade credit rating.
2. In this context I have been asked by ATCO to review Chairmont's recent report to the ERA on debt raising costs.¹

1.1 Efficient costs of issuing debt via an arranger

3. Chairmont describes its methodology for estimating debt raising costs as follows.²

Debt raising costs for issuances in the Australian bond market are not published. As mentioned earlier, Chairmont has undertaken informal interviews with several financial market intermediaries and other service providers to assist with determining these costs.
4. On the basis of these informal discussions Chairmont states estimates of the cost of arrangement fees as 32.5 bp (AUD issues) and 37.5 bp (USD issues). Chairmont provides no further detail on the source of these estimates than the above quote.
5. By contrast, I have collected arrangement fees from debt issues as published by Bloomberg. I have had regard to over 100 observations from the last 10 years and, on this basis, I have estimated total arrangement costs to issuers for a 10 year benchmark bond of:
 - 55 bp in arrangement fees; plus
 - 39 bp in issue price discount costs.
6. My final sample is set out below in Table 1 (although a range of other empirical analysis in the body of the report supports this estimate).

¹ Chairmont, Debt Raising and Hedging Costs, 21 December 2021.

² Chairmont 2021, p. 23.

Table 1: Non-banks summary statistics for sample restricted by tenor (tenor between 8 and 12 years).

Company	No. of bonds	Average tenor	Average issue amount (AUD\$M)	Average arrangement fee (%)	Average issue price discount (%)	Average total cost (%)
BHP Billiton Finance USA	2	10.0	1273	0.40	0.62	1.02
Wesfarmers	1	12.0	934	0.38	-0.09	0.29
AusNet Services Holdings	1	10.0	533	0.38	0.95	1.32
Optus Finance	1	10.0	816	0.35	0.46	0.81
Goodman Aust. Finance	2	8.0	748	1.07	0.19	1.26
Scentre Group Trust 1	1	10.0	866	0.45	0.29	0.74
Rio Tinto Finance USA	1	10.0	1548	0.45	0.44	0.89
Origin Energy Finance	1	8.0	1149.6	0.56	0.21	0.77
Average	1.3	9.6	989	0.55	0.39	0.94

Source: Bloomberg and CEG analysis

7. I consider that my estimate of the arrangement fee is superior to Chairmont's estimate because it is based on a transparent and robust methodology using publicly available information. I note that the AER has, in 2020, rejected Chairmont's estimates of the arrangement fee (based similarly on informal discussions) in favour of the Bloomberg estimates I rely on. My estimate of 55bp arrangement fee is essentially the same as ACG's original estimate in 2004 estimate (which was 54bp³).
8. I also include 39 bp of costs that represent the discounting of the issue price (relative to the market price) that issuers have had to bear in order to sell their debt through an arranger. This discount is a form of compensation paid by the issuer to the arranger. It is common for issuers and arrangers to substitute lower arrangement fees for higher issue price discounts (and *vice versa*). Therefore, any attempt to estimate arrangement costs without regard to the issue price discount will be incomplete and liable to error. I discuss these potential errors in more detail in the body of the report.
9. My estimate of 39bp is similar to the 35bp estimate by Wang et. al. (2021) of the issue price discount in the United States for seasoned bond offerings (bond issues by established companies with existing bonds on issue).⁴
10. If the issue price discount is not compensated in debt raising costs then the benchmark firm will be under-compensated for their benchmark costs by around 5bppa.⁵ To see why, note that the ERA has a cost of debt methodology that relies on

³ See paragraph 70 below. See also, ACG, Debt and Equity Raising Costs, 2004, Table 6.4, p. 51.

⁴ For example, see "How does the creditor conflict affect bond IPO underpricing?" (Wang, Wang, Wang and Zhang), p.34, "The Journal of Finance and Data Science" Volume 7 (2021). See Table II.

⁵ 39bp spread out over 10 years in a present value neutral way, at a 5% discount rate, is 5bppa.

third party estimates of 10 year bond yield in the secondary market.⁶ But because issuers typically issue debts at a 39bp discount to the secondary market prices their cost of funds is higher by 5bppa than that observed in secondary markets. Failure to account for this would amount to assuming that regulated firms can issue 10-year debt at secondary market prices when, in reality, these firms consistently issue its 10-year debt, via an arranger, at a discount to secondary market prices. This is simply part of the cost of marketing a new issue.

1.2 Liquidity management costs

11. In order to issue debt at investment grade, credit rating agencies require issuers to engage in costly liquidity management activities. These are commonly estimated at around 11-13 bppa.

12. Chairmont has in the past advised the AER that:⁷

It is Chairmont's view that the policy approach to this matter needs revisiting. If the refinancing policy benchmark should be changed, then it can be integrated into the Rate of Return instrument.

Current AER benchmark methodology is that the bonds are rolled on maturity. This is not consistent with market practice or risk management common practice.

13. This is entirely consistent with my view. The AER's current benchmark does currently assume that debt is refinanced on the day that it matures (with no other liquidity reserves (e.g., no committed undrawn line of credit)). This is, as Chairmont correctly states, not consistent with market practice or risk management common practice. If a firm actually pursued this policy, it would be denied an investment grade credit rating by rating agencies.

14. It is also true that the ERA's current benchmark assumptions also assume that debt is refinanced on the day that it matures. It follows that the same recommendation to the AER should apply to the ERA.

15. However, the only discussion of these issues in Chairmont's advice to the ERA is in the following passage (note the "footnote 7" reported below is Chairmont's 2021 footnote referring to their 2019 report).⁸

⁶ The RBA Bloomberg and Reuters all derive their estimates for/from the secondary market.

⁷ Chairmont, AER Debt Raising Costs Section 4.2 2019, p. 17.

⁸ Chairmont, Debt Raising and Hedging Costs, 2021 (report for the ERA), p. 6

Historically, the liquidity fee, commitment fee and 3 month facility fee are excluded from the debt raising cost allowance.⁷ Their exclusion should continue.

⁷*Chairmont, AER Debt Raising Costs Section 4.2 2019*

16. The reference that Chairmont supplies in support of not compensating for the costs of efficient liquidity management policies is to the same section of its 2019 report to the AER that states that the AER should alter its method in the light of the liquidity management costs that CEG raised.
17. I am at a loss to understand how Chairmont reconciles the final sentence of the above quote to the reference provided to the first sentence. It may be that Chairmont is engaging in a semantic distinction – arguing that these costs should be included in “interest costs” not “debt raising costs”.
18. If so, such a semantic distinction is, in my view, irrelevant. The critical issue is that efficient costs are compensated correctly – not what label is applied to them. Liquidity management costs are intimately related to debt raising as I have already described. However, if there was a proposal to instead compensate these costs in “interest costs” that would, also, be a reasonable approach. However, it would be unreasonable to:
 - Not compensate for these efficiently incurred costs in debt raising on the basis that they should be compensated elsewhere; and
 - Have no proposal or means of compensating for these costs elsewhere.

2 Introduction

19. I have been asked by ATCO to provide a report reviewing Chairmont’s recent report to the ERA on debt raising costs⁹ with a specific focus on the estimated cost:
- of engaging third party arrangers to market debt; and
 - of managing the debt portfolio to ensure liquidity is sufficient to maintain an investment grade credit rating.
20. The remainder of this report has the following structure:
- **Section 3** estimates the cost of engaging third party arrangers;¹⁰
 - **Section 4** estimates the cost of ensuring liquidity is sufficient to maintain an investment grade credit rating.
21. I have been assisted in the preparation of this report by Samuel Lam in CEG’s Sydney office. However, the opinions set out in this report are my own.



Thomas Nicholas Hird

⁹ Chairmont, Debt Raising and Hedging Costs, 21 December 2021.

¹⁰ PwC, Energy Networks Association: Debt financing costs, June 2013; Incenta, Debt raising transaction costs: SA Power Networks, October 2014.

3 Costs of issuing debt through a third party arranger

3.1 What does a debt arranger do and what compensation is paid to arrangers (incurred by issuers)?

22. An arranger, also commonly referred to as an “underwriter”, works with a debt issuer to both price and market their debt. An arranger is generally an investment bank with a large client base of investors in corporate debt and with the expertise to assess what those clients are willing to pay for a new debt issue (the market price).
23. An arranger and an issuer will form a view about the market value of a debt issue. Indeed, typically the arranger and the issuer will work together to set terms on the debt issue (e.g., coupon and tenor) such that its expected market value is equal to the face value of the bond (typically \$100 by convention). Having determined the terms for the debt, the issuer and the arranger will negotiate an arrangement contract that specifies a number of factors with two factors chief among them:
 - The issue price at which the issuer will sell the bond (either to the arranger directly or to the arranger’s clients) – where that issue price will typically be at a discount to the expected market value of the bond for non-financial issuers; and
 - The direct arrangement fee (generally specified as a percentage of the issue price) which the arranger will retain from the issue proceeds for themselves.
24. Consistent with the above description the issuer receives proceeds equal to the issue price multiplied by one minus the arrangement fee as set out in Equation 1 below.

Equation 1: Net proceeds to the issuer

Proceeds to the issuer per bond = $(\text{Issue price} \times (100\% - \% \text{Arrangement fee}))$

25. It is clear from Equation 1 that an issuer will be indifferent between various different combinations of issue price and arrangement fee. An issue price that is \$99.0 and an arrangement fee of 1.0% will result in the issuer earning \$98.0 in proceeds per bond issued. However, the same \$98.0 proceeds to the issuer could also be achieved by:
 - an issue price of \$99.5 and an arrangement fee of 1.5%;
 - an issue price of \$98.5 and an arrangement fee of 0.5%;
 - etc.
26. So long as the bond issue is successful (fully subscribed) the issuer will be indifferent between all of the above scenarios. It follows that the cost to the issuer of paying a

higher arrangement fee can be offset by having a higher issue price (smaller discount to market value) and *vice versa*.

27. An easy to understand model for a debt issue involves the arranger agreeing to buy all of the debt from the issuer and then, completely separately, selling that debt to its clients and/or more widely (e.g., through a book build process).
28. In this arrangement, the compensation that the arranger receives from the issuer is comprised of:
 - Any fee that the arranger charges the issuer; plus
 - The difference between the price at which they buy the bonds (the issue price) and the price at which they subsequently sell the bonds to their clients (determined in the secondary market).
29. This arrangement involves a firm underwriting of the debt issue by the arranger. That is, the arranger guarantees to the issuer that 100% of the debt will be sold by agreeing to buy all of the debt itself. In doing so, the arranger's expected compensation includes the expected difference between the issue price and the market price of the debt (in the secondary market).
30. In this arrangement, it is obvious that the gap between the issue price and the expected market price is both a cost to the issuer and compensation to the arranger. It is also clear that, other things equal, an arranger will demand a lower direct fee for their service the larger is the expected gap between issue and market price. Indeed, an arranger may accept a zero direct fee for their service if the expected gap between issue price and the market price is sufficiently large.

Equation 2: Compensation to the arranger per bond

$$\begin{aligned} \text{Arranger compensation} &= (\text{Issue price} \times \% \text{ Arrangement fee}) + (\text{Market price} - \text{Issue price}) \\ &= \text{Issue price} \times (\% \text{ Arrangement fee} + \% \text{ issue price discount}) \end{aligned}$$

31. Similarly, the cost to the issuer of accessing the debt market via the arranger (relative to selling the debt issue directly to the final bond holders at the market value of the bonds) is given by the same formula.

Equation 3: Cost to the issuer of marketing via the arranger relative to direct sales at the market price

$$\text{Cost to issuer} = \text{Issue price} \times (\% \text{ Arrangement fee} + \% \text{ discount to market price})$$

32. It can be seen that, from the perspective of both the arranger and the issuer, a higher arrangement fee is a substitute for a lower discount to the market price. The same total cost/compensation to the issuer/arranger can be achieved with multiple different combinations of the arrangement fee and discount to the market price.

33. The same dynamics exist in all arrangement contracts including, as is commonly the case, where the underwriting is not firm and/or not for 100% of the debt issued.
34. Consider, for example, a scenario where the arrangement contract with the investment bank is a “best endeavours” contract with no requirement for the investment bank to buy any of the debt issue – even if the debt issue is undersubscribed by third parties. Even more strongly, imagine a scenario where the arranger was legally barred from buying the debt itself and could only arrange sales to third parties at the issue price agreed with the issuer.
35. Even in this scenario, the arranger still benefits by negotiating an issue price that is below the market price. This allows the arranger (which is generally an investment bank) to allocate the resulting value (in the form of the issue price discount) to its most valued clients which helps the investment bank maintain revenue streams from those clients.
36. A lower issue price also makes the arranger’s job of marketing the debt issue easier. That is, the lower the issue price the smaller the non-price investment in marketing by the investment bank and, therefore, the lower the investment bank’s costs and the lower the direct percentage arrangement fee that they are willing to accept.
37. Clearly, the arranger benefits from negotiating an issue price below the market price and will be willing to trade off a lower issue price for a lower direct arrangement fee. Similarly, the issuer loses as a result of negotiating a lower issue price and will, other things equal, require a lower arrangement fee to compensate for this.

3.2 Chairmont analysis

38. Chairmont describes its methodology for estimating debt raising costs as follows.¹¹

Debt raising costs for issuances in the Australian bond market are not published. As mentioned earlier, Chairmont has undertaken informal interviews with several financial market intermediaries and other service providers to assist with determining these costs.

39. On the basis of these informal interviews Chairmont presents its best estimate of the costs of issuing debt via a third party arranger. These are summarised below.

¹¹ Chairmont 2021, p. 23.

Table 2: Chairmont arrangement costs based on informal interviews

Issue type	Cost	Source
AUD \$250m issue	30-35 bp (midpoint 32.5)	Chairmont Table 2
USD \$100m issue	35-40 bp (midpoint 37.5)	Chairmont Table 3

Source: Chairmont 2021

40. I cannot comment any further on Chairmont’s methodology and conclusion because there is no further information provided. Chairmont does not disclose what questions were put to which market participants or in what circumstances. I do not know, for example, whether there was any written communication involved in the “informal interviews”.
41. Critically, I do not know what the parties were told to assume about the discount of the issue price to the market price. This is a critical determinant of the arrangement fee that any investment bank would be willing to negotiate. As per Equation 2 above (and as will be shown with empirical data below), the issue price discount is a critical determinant of the overall compensation to an arranger and, therefore, of the arrangement fee that they would be willing to negotiate.
42. It is not only unclear what issue price discount Chairmont instructed the participants in “informal interviews” to assume. It is also unclear whether Chairmont gave any instruction regarding this assumption in its informal discussions at all.
43. Other key information that has not been provided include:
 - How many parties were involved in informal interviews?
 - Who were these parties?
 - How were they chosen for the discussions?
 - What was the response rate out of those parties invited to participate (if, indeed, parties were invited to participate)?
 - When did the informal interviews occur?
 - How were the informal discussions conducted? Each survey method has its strengths and weaknesses. If Chairmont followed a survey methodology, understanding the survey methodology allows stakeholders to better evaluate the quality of the responses.
 - What was the distribution of the survey results?
 - Which statistic did Chairmont use to derive the final 5 bp range? Is this based on the mean/median/mode or some other measure?

3.3 The advantages of a transparent predictable method for estimating costs

44. Transparent, replicable and, therefore, predictable, methodologies are highly desirable for analysis that feeds into regulatory decisions and public policy decisions more generally. Consistent with this, transparent and predictable methodologies are highly prized by regulators (not just the ERA). For example, AER's Rate of Return Instrument [emphasis added]¹²

*We consider that stability can be promoted in furtherance of the legislative objectives through a decision that is well-reasoned, clearly explained, and **sets out an approach to determining the allowed rate of return that is transparent and predictable.***

45. In my opinion a transparent and replicable method for estimating costs is highly desirable. Only if the data and analysis that sits behind a recommendation is transparent can third parties in consultations properly test and comment on the recommendation. Only then can potential improvements in the analysis and data be discovered and made.
46. By way of illustration, imagine that ATCO submitted a report from CEG that simply stated we had carried out informal discussions with undisclosed parties and, on that basis, recommended an 80 bp arrangement fee. There would be no way for the ERA to compare and evaluate the relative merits of the CEG and Chairmont underlying method, data and analysis.

3.4 A transparent predictable method for estimating the costs of issuing through an arranger

47. Fortunately, there exists transparent data on the costs to issuers (and compensation to arrangers) associated with arrangement contracts. Bloomberg collects data on issue price and arrangement fees from public debt issuance prospectuses and Bloomberg also provides an estimate of the contemporaneous market value of the bond.
48. Thus, all of the information necessary to populate Equation 2 and Equation 3 (which are the same) is publicly available from Bloomberg.
49. For the purpose of this report, we examine:
- debt issuance over the last 10 years (since 1 January 2012);
 - debt issuance of at least \$50m;

¹² AER, Rate of return instrument, Explanatory Statement, December 2018, p. 21.

- debt issuances that are not convertible to equity and non-perpetual;
- debt issuances where Bloomberg has an estimate of the market value of the bond at the time of issuance;
- by firms that have:
 - Australia listed as both the country of risk and country of domicile on Bloomberg;
 - Have an investment grade credit rating.

50. When we do this, we have 154 bonds in our dataset issued by 15 corporations. The vast majority of the bonds are issued by banks (127 bonds issued by the big 4 banks). The average arrangement fee for non-banks is 70 bp and the average discount to market price is 2 bp. On the contrary, the average arrangement fee for banks is 64 bp and the average discount to market price is -31 bp. This results in a total average cost estimate to 72 bp (=70+2) and 34 bp ($\approx 64-31$) respectively. These issuers and the characteristics of their bonds are summarised in the following table. It is notable that the banks (Table 4) have low average tenor and low arrangement fees and issue price discount costs.

Table 3: Non-banks summary statistics

Company	No. of bonds	Average tenor	Average issue amount (AUD\$M)	Average arrangement fee (%)	Average issue price discount (%)	Average total cost (%)
Rio Tinto Finance USA	2	20.0	1615	0.66	0.27	0.93
BHP Billiton Finance USA	8	12.0	1168	0.47	0.66	1.13
Wesfarmers	1	12.0	934	0.38	-0.09	0.29
AusNet Services Holdings	2	8.5	627	0.35	0.58	0.93
Optus Finance	1	10.0	816	0.35	0.46	0.81
Goodman Australia Finance	2	8.0	748	1.07	0.19	1.26
Scentre Group Trust 1	2	8.0	866	0.41	0.24	0.65
Toyota Finance Australia	4	3.8	137.6	0.91	-0.75	0.15
Coca-Cola Europacific Partners API	3	7.0	135	1.52	-1.67	-0.15
Origin Energy Finance	1	8.0	1150	0.56	0.21	0.77
Average (across all instruments)	2.6	9.7	804	0.70	0.02	0.72

Source: Bloomberg and CEG analysis

Table 4: Banks summary statistics

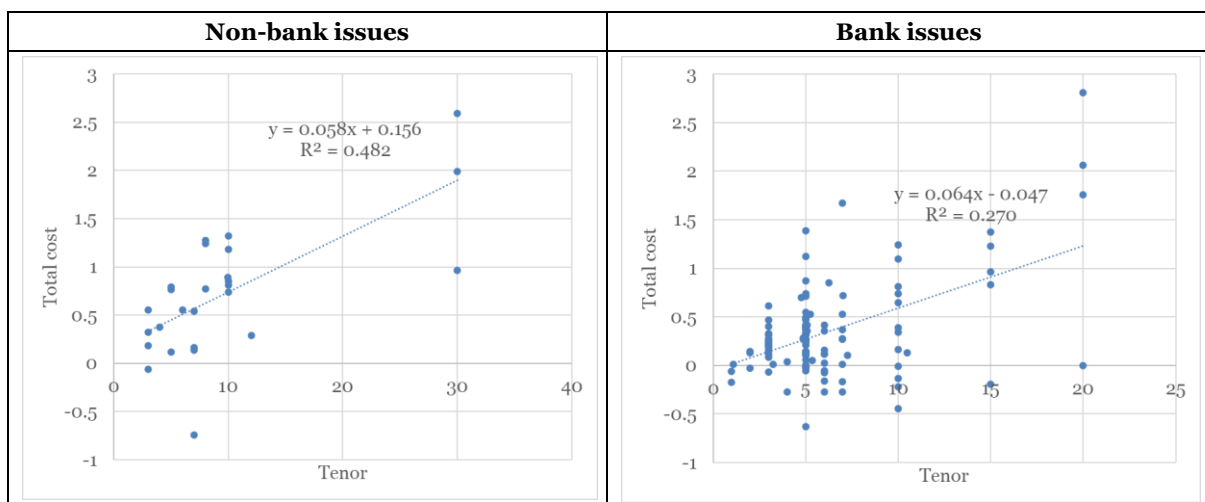
Company	No. of bonds	Average tenor	Average issue amount (AUD\$M)	Average arrangement fee (%)	Average issue price discount (%)	Average total cost (%)
Westpac Banking Corp	73	6.0	1221	0.33	0.15	0.48
National Australia Bank	32	6.0	426	0.96	-0.85	0.11
Comm. Bank of Australia	9	6.7	408	1.11	-0.83	0.28
ANZ Banking Group	13	5.6	294	1.33	-1.16	0.18
Macquarie Group	1	7.0	136	0.10	-0.38	-0.28
Average (across all instruments)	25.6	6.0	863	0.64	-0.31	0.34

Source: Bloomberg and CEG analysis

3.4.1 Tenor is a critical determinant of total arrangement costs

51. It is clear from the above table that the major banks (Table 4) have materially lower average total costs (less than half compared to non-banks). It is also clear that this is associated with lower than average tenor of issues (6 years on average compared to 9.7 for corporates).
52. This relationship between tenor and costs is clear in the disaggregated data. Each year of additional tenor adds around 6 bp on the estimated total costs. The predicted total cost at 10 years tenor is 74 bp for non-bank issues and 59 bp for bank issues according to the regressions presented below.

Figure 1: Total cost vs tenor

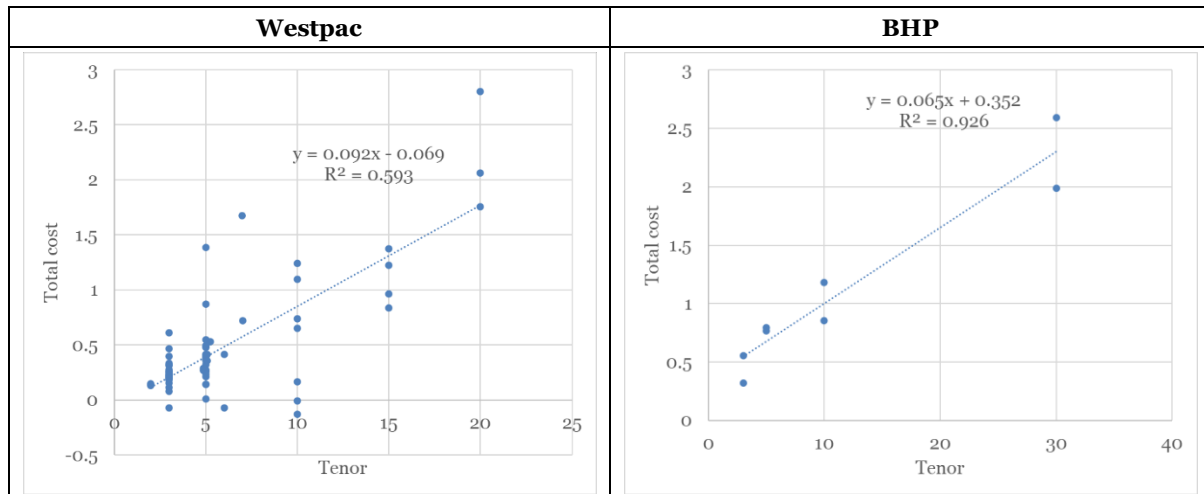


Source: Bloomberg and CEG analysis

53. The strong positive relationship between tenor and total costs is also borne out by looking at individual issuers. Westpac and BHP have the most bonds issued in their

respective sub-samples. There is clearly a strong positive relationship between total cost and tenor. The predicted estimate of total costs at 10 years for both issuers are 85 bp and 100 bp respectively.

Figure 2: Westpac and BHP observations - total costs vs tenor



Source: Bloomberg and CEG analysis

54. The analyses in Figure 1 and Figure 2 both support an estimate of total upfront arrangement costs of between 75 to 100 bp for a non-bank bond with a 10 year tenor.
55. However, these estimates rely on the assumption of a linear relationship between tenor and arrangement costs. An approach that is free from such assumptions is to restrict the sample to bonds with tenors close to 10 years. When I restrict the sample to only include bonds between 8 to 12 years tenor, I estimate a total arrangement cost of 94 bp comprised of 55 bp in average arrangement fees and 39 bp in issue price discount¹³ for the non-banks sample; and a total arrangement cost of 37 bp comprised of 32 bp in average arrangement fees and 5 bp in issue price discount for banks only sample.
56. I have followed ACG and AER precedent (see discussion in section 3.5 below) and excluded banks in the final sample, using only the non-banks sample. The restricted non-banks sample is comprised of ten bonds by eight issuers and the restricted banks only sample is comprised of thirteen bonds by three issuers.

¹³ This is dissimilar to the 35.02 bp estimate for the United States Seasoned bond offering (SBO) underpricing. See “How does the creditor conflict affect bond IPO underpricing?” (Wang, Wang, Wang and Zhang), p.34, “The Journal of Finance and Data Science” Volume 7 (2021).

Table 5: Non-banks summary statistics for sample restricted by tenor (tenor between 8 and 12 years).

Company	No. of bonds	Average tenor	Average issue amount (AUD\$M)	Average arrangement fee (%)	Average issue price discount (%)	Average total cost (%)
BHP Billiton Finance USA	2	10.0	1273	0.40	0.62	1.02
Wesfarmers	1	12.0	934	0.38	-0.09	0.29
AusNet Services Holdings	1	10.0	533	0.38	0.95	1.32
Optus Finance	1	10.0	816	0.35	0.46	0.81
Goodman Australia Finance	2	8.0	748	1.07	0.19	1.26
Scentre Group Trust 1	1	10.0	866	0.45	0.29	0.74
Rio Tinto Finance USA	1	10.0	1548	0.45	0.44	0.89
Origin Energy Finance	1	8.0	1149.6	0.56	0.21	0.77
Average	1.3	9.6	989	0.55	0.39	0.94

Source: Bloomberg and CEG analysis

57. My estimate of 55bp arrangement fee is essentially the same as ACG's estimate (which was 54bp¹⁴). My estimate of 39bp issue price discount is similar to the 35bp estimate by Wang et. al. (2021) of the issue price discount in the United States for seasoned bond offerings (bond issues by established companies with existing bonds on issue).¹⁵

Table 6: Banks summary statistics for sample restricted by tenor (tenor between 8 and 12 years).

Company	No. of bonds	Average tenor	Average issue amount (AUD\$M)	Average arrangement fee (%)	Average issue price discount (%)	Average total cost (%)
Westpac Banking Corp	7	10.0	1511	0.35	0.19	0.54
National Australia Bank	5	10.1	812	0.28	-0.03	0.25
ANZ Banking Group	1	10.0	192	0.35	-0.57	-0.22
Average	4.3	10.0	1140	0.32	0.05	0.37

Source: Bloomberg and CEG analysis

58. There are three key points from these Table 5:
- First, the average total arrangement costs for bonds with 10 year tenor is 94 bp for non-banks sample;

¹⁴ See paragraph 70 below. See also, ACG, Debt and Equity Raising Costs, 2004, Table 6.4, p. 51.

¹⁵ For example, see "How does the creditor conflict affect bond IPO underpricing?" (Wang, Wang, Wang and Zhang), p.34, "The Journal of Finance and Data Science" Volume 7 (2021). See Table II.

- Second, even if we ignore the cost to the issuer of discounting the issue price relative to the market price, the average arrangement fee is 55 bp for the non-banks sample;
 - This is well above Chairmont’s point estimates (32.5 bp for AUD issues and 37.5 bp for USD issues). In fact, Chairmont’s estimates are below all but one of the observations in Table 5.
- Third, banks have significantly lower costs, this applies to both the average arrangement fee and the average issue price discount.

59. For the non-banks sample, it happens that most of the estimated cost (around 60%) is from the arrangement fee. However, it would be a mistake to focus only on the arrangement fee for the following reasons:

- The issue price discount, while smaller, is still nontrivial and is a real cost that is incurred and that should be compensated;
- If the issue price premium is ignored then there can be (and in the past has been) a temptation to identify “outliers” based only on the arrangement fee.
 - For example, in the non-banks sample, the two Goldman bonds have an average arrangement fee of 107 bp which is more than double the average of the other bonds. Therefore, only considering arrangement fees, one might be tempted to exclude these bonds as “outliers”.
 - However, this would be a mistake given that the Goldman bonds are not the highest total cost (the AusNet bond has the highest total cost) and the Goldman bonds have similar total costs to the BHP, Optus and Rio Tinto bonds.
 - In fact, if any bond were to be identified as an outlier based on total costs it would be the Wesfarmers bond with a total cost of only 29 bp.
- If the sample changes, then accounting for the issue price premium could potentially be much more important.

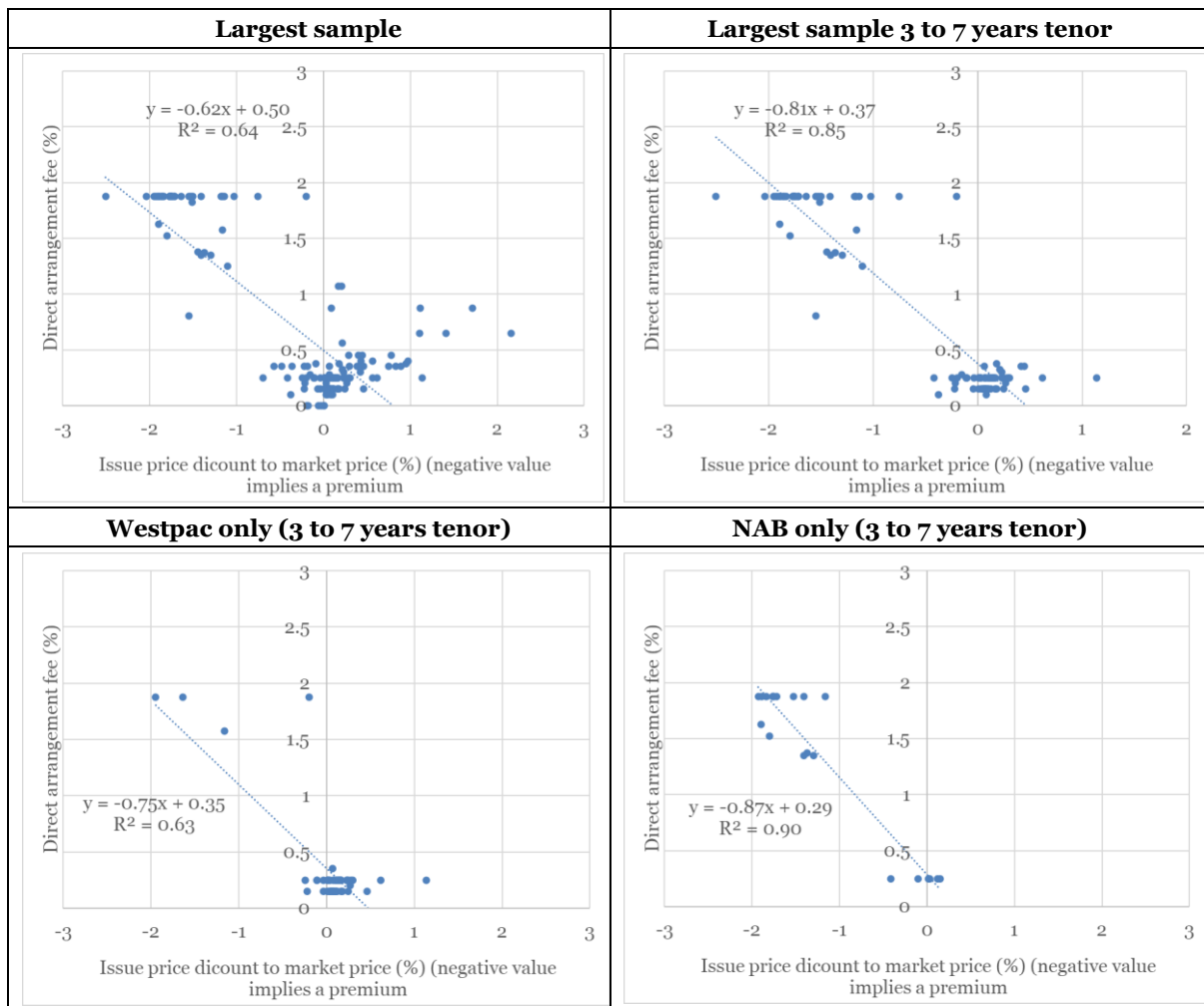
60. I expand on these issues in the next section.

3.4.2 Arrangement fees cannot be meaningfully estimated separate from issue price discounts

61. In the final sample there is insufficient number of observations and insufficient variation in the arrangement fee to say anything definitive about the empirical relationship between the arrangement fee and the issue price discount. However, when I lift the restrictions on tenor I have a sample of 154 bonds from 15 issuers.
62. In this larger sample there is a clear negative relationship between the arrangement fee and the issue price discount. Most of these bonds are issued with tenor of 3 to 7 years (104 bonds). When I restrict the sample to these tenors the strong negative

relationship remains (demonstrating that it is not an artefact of different tenors in the sample). The two largest issuers in this restricted tenor sample are Westpac (50 bonds) and NAB (21 bonds). When I restrict the sample further to only examine Westpac or NAB bonds the strong negative relationship remains (demonstrating that the negative relationship is not an artefact of different issuers or tenors in the sample). All of these scenarios are demonstrated in Figure 3.

Figure 3: Arrangement fee vs issue price discount for various samples.

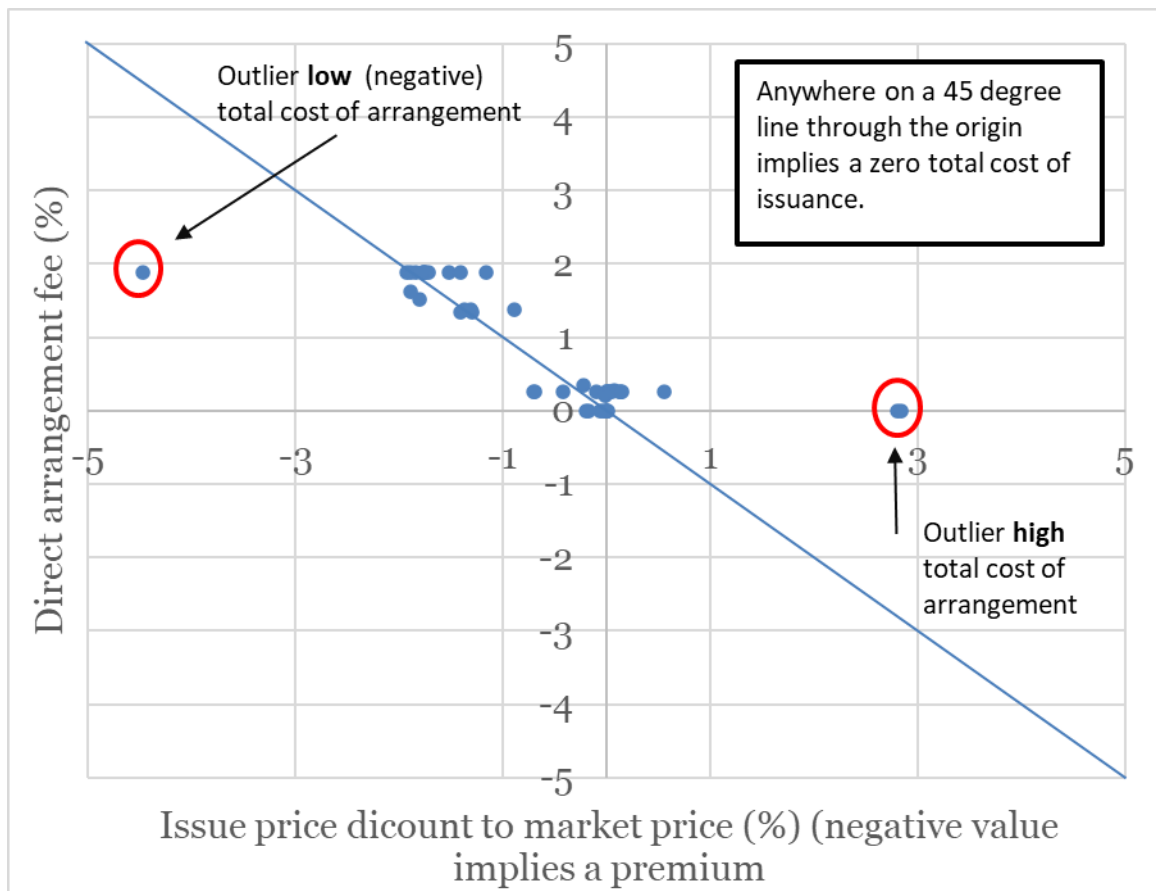


Source: Bloomberg and CEG analysis

63. The cleanest illustration is in the bottom two panels where the issuers are restricted to only Westpac or NAB bonds with tenors between 3 and 7 years. The negative relationship between arrangement fee and issue price discount is very clear in these charts. Bonds with very high arrangement fees are associated with very negative issue price discounts (i.e., an issue price premium) that offsets the high arrangement fee. Similarly, bonds with very low arrangement fees have positive issue price discounts that increase the costs of the issues.

64. In the following section I discuss the fact that, in previous analysis, PwC has excluded bonds with very high arrangement fees as “outliers”. However, these are only outliers because PwC failed to account for the issue price discount. When the inverse relationship between arrangement fees and issue price discounts are accounted for the apparent “outliers” mostly disappear.
65. This can be illustrated graphically by placing a 45 degree line through the origin of the scatter plot of arrangement fees against issue price discount. Anywhere on this 45 degree line represents a zero total cost of arrangement. Most observations are above the 45 degree line – with the distance above the 45 degree line being the total arrangement costs. Those bonds that are below the 45 degree line are only modestly so (suggesting a small number of occasions when an issue price premium modestly exceeded the arrangement fee).
66. For the sake of illustration in Figure 4 below, I show all NAB bonds (removing any restrictions on issue amount and including all bonds issued since 2010).

Figure 4: 45 degree line designating zero



Source: Bloomberg and CEG analysis

67. It can be seen that the only two bonds not close to the 45 degree line (i.e., the only potential outliers) are those are marked with a red circle. Contrary to the conclusion that would be arrived at just looking at the arrangement fee in isolation, the issue with high arrangement fees has unusually low (negative) total cost and *vice versa*.
- The only **high** outliers (a large distance way above the 45 degree line) are associated with a **zero** arrangement fee. These are the observations at a zero arrangement fee and around 2.9% issue price discount. These bonds have zero arrangement fee but were issued at a very large discount (almost 3%) to the market value of the bond;
 - The only **low** outlier (a large distance below the 45 degree line) is associated with the **equal highest** arrangement fee (of just under 2%). However, this bond has an issue price premium of over 4% causing its total cost to be substantially negative. That is, it was issued to the arranger at a value sufficiently above the market value so as to more than offset the high arrangement fee.

3.5 ACG, PwC and AER method

3.5.1 ACG 2004

68. The ACCC commissioned ACG to advise it on how to estimate debt and equity raising costs in 2004.¹⁶ ACG sets out their methodology for estimating arrangement fees on page 49 and it is essentially the same as the approach that I have adopted for estimating arrangement fees.
69. ACG did not discuss the costs to issuers associated with setting the issue price below the market price.
70. ACG's method for estimating arrangement fees was as follows (solid bullet points are direct quotes from ACG, open sub bullet points are comparisons to my method):
- “Step 1: Select the data base — The data base is all Australian companies (excluding GBEs and banks) issuing bonds (excluding convertible bonds) with gross underwriting fees reported by Bloomberg.⁶⁵ In practice this means Australian international bond issues, or joint Australian market/international issues.
- ⁶⁵ Banks are the largest and most frequent issuers of bonds. Only a few GBEs issued bonds. However, given the different nature and high frequency of bank issues relative to industrial companies, and the given the ownership structure of GBEs, these groups were not considered an appropriate proxy”

¹⁶ ACG, Debt and Equity Raising Costs, 2004. A report to the ACCC

- Both ACG and I note that banks are different to other issuers. However, it is instructive to include banks in the analysis to see what the sources of these differences are. My final sample in Table 5 does not include any banks.
- “Step 2: Group the bond issues by tenor and calculate bppa — All bond issues close to 5 and 10 year tenors are grouped separately in order to assess the influence of tenor on gross underwriting fees. bppa is calculated for each issue by dividing the total gross fees (in basis points) by tenor (years to maturity).”
 - My final sample in Table 5 is grouped based on 10 year tenor.
 - My estimate of the arrangement fee is 55 bp. ACG reports estimates in bppa by simply dividing the arrangement fee by the tenor.¹⁷ ACG’s bppa estimate is 5.4 bppa based on a 10 year tenor¹⁸ which implies a 54 bp arrangement fee. It follows that ACG and my estimate of arrangement fee are very similar to each other despite the analysis being undertaken almost 20 years apart.
- “Step 3: Adjust the bppa for tenor to 5 or 10 years — The median tenor of international bond issues by Australian companies is calculated on a rolling 5–year basis, in line with the fee data, based on Bloomberg.”
 - I have estimated an arrangement fee at 10 years tenor consistent with the ERA benchmark assumption.
 - I have used 10 years of data. Had I used 5 years of data then the sample would be four bonds issued by Wesfarmers, Optus and Goodman. The average arrangement fee would be 72 bp and total costs would be 91 bp. I consider that the use of 10 years of data results in a more robust sample size and reliable estimate. As can be seen by comparing the ACG 2004 and my analysis in 2022, there is no evidence of that arrangement fees change materially over-time.
- Steps 4 to 6 all discuss estimating fees to the appropriate tenor assumption (5 vs 10 years).
 - I have estimated an arrangement fee at 10 years tenor consistent with the ERA benchmark assumption.

71. It can be seen that my analysis is essentially the same as ACG’s method set out in 2004 and results in very similar estimates of the arrangement fee. Both my and ACG’s estimates are materially higher than Chairmont’s estimates. The key difference between ACG and my method is that I also consider the cost/compensation to the

¹⁷ ACG does not estimate the bppa by taking estimating an annuity of the upfront bp over the tenor of the bond. This is, in my view, an oversight in the ACG 2004 method that was subsequently corrected by the AER.

¹⁸ ACG, Debt and Equity Raising Costs, 2004, Table 6.4, p. 51.

issuer/arranger that derives from the discount on the issue price relative to the market price.

72. For the reasons set out in the previous sections I consider that this is a critical determinant of costs and that it is not possible to accurately interpret arrangement fees independent from the issue price discount (given the two are essentially substitute forms of payment to the arranger). For this reason, I consider that this aspect of my method is an improvement on the ACG 2004 method. However, I note that ACG could not have implemented this method in 2004 because the relevant Bloomberg data on market value of individual bonds was not available then.
73. I also note the following quote from ACG 2004 regarding the academic literature estimating an arrangement fee of 65 bp for investment grade debt.

Livingston and Zhou investigated the determinants of “gross underwriter spread” which was described as “an important component of total issuing costs”. They found that the most important influence on gross underwriter spread was the assignment of a low debt rating by rating agencies (i.e., high credit risk). From a rating of AAA down to a level of BBB flat, the gross underwriter spread was found to be essentially invariant with credit rating at around 65 basis points.

74. This is broadly consistent with my estimate of 55 bp arrangement fee and is roughly double Chairmont’s estimates.
75. Moreover, Livingston and Zhou also estimated an issue price discount that created a 19 bppa premium in yields estimated relative to the issue price (as opposed to the market price). This is the outcome of an analysis where Livingston and Zhou perform regression analysis across their whole data set including dummies for, amongst other things, credit ratings and whether the debt is privately issued. On the basis of these results, they conclude:¹⁹

“...rule 144A issues [private placement] have on average a yield premium of 19 basis points over public debt, everything else equal.” (Page 19)

76. This is equivalent to an estimate of the yield difference when the yield is calculated relative to the issue price rather than the market price. This is materially higher than my estimate of 39 bp in Table 5. My 39 bp is the estimated difference in issue and market price while Livingston and Zhou’s estimate is a bppa estimate of the impact on yields. For a 10 year bond, my 39 bp estimate implies a difference of around 5 bppa in yields (at as 5% discount rate).

¹⁹ M. Livingston and L Zhou (2002), “The impact of rule 144A debt offerings upon bond yields and underwriter fees,” *Financial Management*, Vol. 31, Iss. 4, pp.5–28.

3.5.2 AER 2020

3.5.2.1 AER approach to arrangement fees

77. The ACG method was adopted by the ACCC and by the AER subsequently. It continues to be in place to this date.
78. In 2019 the AER commissioned a report from Chairmont²⁰ on debt raising costs that included an estimate of 30 bp; based on “informal discussions with several bond market participants” (which translates to around 4 bppa over a 10 year bond). Had the AER adopted this estimate it would have estimated arrangement fees of less than 4 bppa and total debt raising costs of less than 6 bppa.
79. In those proceedings, CEG submitted reports for both SAPN and JEN to the same effect as this report for ATCO. Namely, that the Chairmont estimate was non-transparent and at odds with publicly available information.
80. In its final decision the AER rejected relying on the Chairmont arrangement fee estimate and instead relied on the CEG estimate.²¹

SA Power Networks stated that we should review the three additional costs in its initial 2020-25 proposal. It also submitted a new CEG report (dated November 2019) which disagreed with Chairmont’s report. ...

SA Power Networks’ key focus was one component of our draft decision– Chairmont’s estimate for the ‘arrangement fee’. Having regard to SA Power Networks’ submission, we consider that Bloomberg is likely to be the most suitable source of information for the ‘arrangement fee’ at this time because it is the only published source of data known to us and was previously used to estimate the ‘arrangement fee’. We have updated the ‘arrangement fee’ using Bloomberg data and the selection criteria consistent with the PuC report.

81. The AER explicitly affirmed its continuing use of the ACG methodology.²²

Our current approach to forecasting debt raising costs is based on the approach in a report from the Allen Consulting Group (ACG), commissioned by the Australian Competition & Consumer Commission (ACCC) in 2004.³² This approach compensates for the direct cost of raising debt.

²⁰ Chairmont, Debt Raising Costs, June 2019.

²¹ AER, Attachment 3: Rate of return | Final decision – SA Power Networks 2020–25, p. 3-13 to 3-14.

²² AER, Attachment 3: Rate of return | Final decision – SA Power Networks 2020–25, p. 3-13

3.5.2.2 AER approach to issue price discount

82. The relevant CEG reports submitted by JEN and SAPN to the AER also included analysis of the issue price discount and a recommendation to the AER to include this as a component of the cost of debt issues. However, the AER final decisions are silent on this proposal. The draft decisions address it in the following paragraph.²³

Having considered CEG's submission, we are not persuaded that this cost should be in the debt raising allowance. Our task is to set an efficient allowance to compensate regulated businesses for issuing debt. In terms of the cost of underwriter(s) to an issuer, that is the arrangement fee. The difference between issue price and traded price reflects a gain or loss for the underwriter, but it comes from market participants—not the issuer of the debt. It is not clear to us that there is a need to compensate for underwriters' subsequent profits and losses in a benchmark that compensates issuers. There are also a range of factors that can cause traded price to differ from issued price (such as subsequent change in interest rates, economic outlook) that do not appear to affect the arrangement fee paid by issuers.

83. I do not consider that this is a sound basis on which to reject the issue price discount as a source of cost for the issuer. The core basis for the AER's position is this statement:

The difference between issue price and traded price reflects a gain or loss for the underwriter, but it comes from market participants—not the issuer of the debt.

84. I consider that this is a factual error. Holding all other things constant, a lower issue price implies lower proceeds to the issuer. It results in a direct loss of value to the issuer and this is the source of the gain to the arranger and/or the arranger's clients. The gain to the arranger (or the arranger's clients) comes directly from lost value to the issuer.
85. In the above quote the AER has in mind the simple model for an arrangement contract I describe in paragraph 27 above – where the arranger buys the bonds at the issue price and sells them at the market price. The AER appears to be arguing that buyers being willing to pay market price is the source of the gain to arrangers – not the issuer selling at below market price.
86. In my view, this is illogical. The source of the gain to the arranger can only ever come from the issuer selling the bond to the arranger at below the market price. In the model where the arranger buys the bonds at the issue price and sells them at the

²³

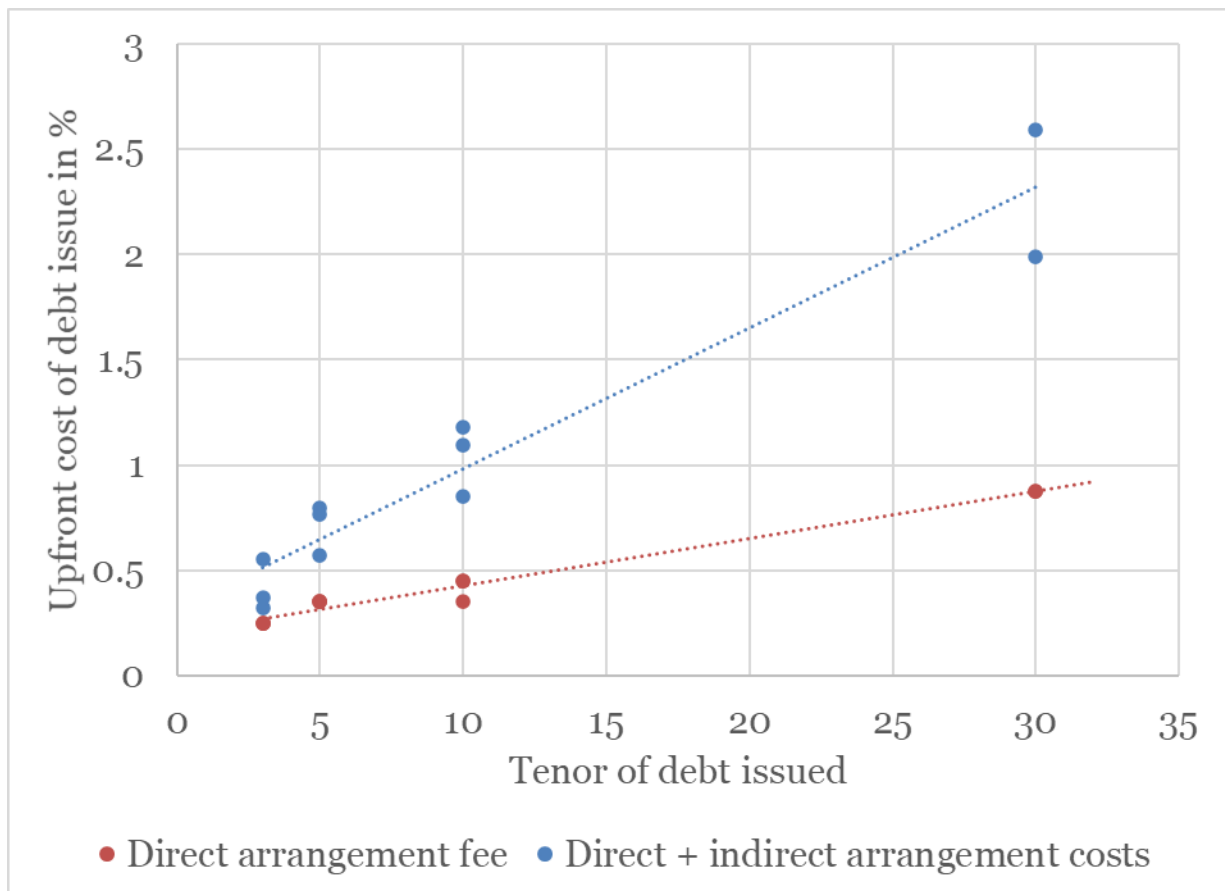
AER, Attachment 3: Rate of return | Draft decision – SA Power Networks 2020–25, p. 3-15

market price the bond buyers pay the same irrespective of the issue price. The only parties that are affected by a lower issue price are:

- The issuer – who receives less compensation; and
- The arranger – who receives more compensation.

87. A lower issue price is incontrovertibly a form of payment to the arranger that is made by the issuer (not the bond buyers) and is in addition to, and substitutable with, the direct arrangement fee.
88. To illustrate the magnitudes involved I plot below all BHP bond issues since 2010 for which arrangement fees are available on Bloomberg. I show two series. One is just the arrangement fee. The other is the arrangement fee plus the difference between the bond issue price and the value of the bond in the secondary market (as estimated by Bloomberg). I plot these against bond tenor which is an important determinant of arrangement fees.

Figure 5: BHP arrangement costs since 2010



Source: Bloomberg, CEG analysis. There appear to be more red dots than blue dots but this is because some blue dots are coincident (i.e., some bond issues have the same tenor and direct fee).

89. It can be seen that a 10 year bond issued by BHP attracted a direct fee from arrangers of around 40 bp (or around 5 bppa spread out in an annuity over the life of the bond at a discount rate of 5%). However, much more than this was paid to the arranger (and/or the arrangers clients) by virtue of setting the issue price at least 0.6% below the bond's market value on the secondary market (equivalent to 8 bppa higher interest costs paid by BHP over the life of the bond).
90. That is, in order to successfully sell bonds in the primary market these bonds have been priced at a discount to the value in the secondary market. This is common practice and can be seen clearly in the above chart.
91. However, imagine that BHP was being regulated by the AER. The AER, like the ERA, has a cost of debt methodology that relies on third party estimates of market value yield in the secondary market.²⁴ This means that if BHP were regulated it would be being compensated "as if" it could issue debt at secondary market prices when, in reality, BHP (like other corporates) consistently issues its debt via an arranger at a discount to secondary market prices. This is simply part of the cost of marketing a new issue.

3.5.3 PwC

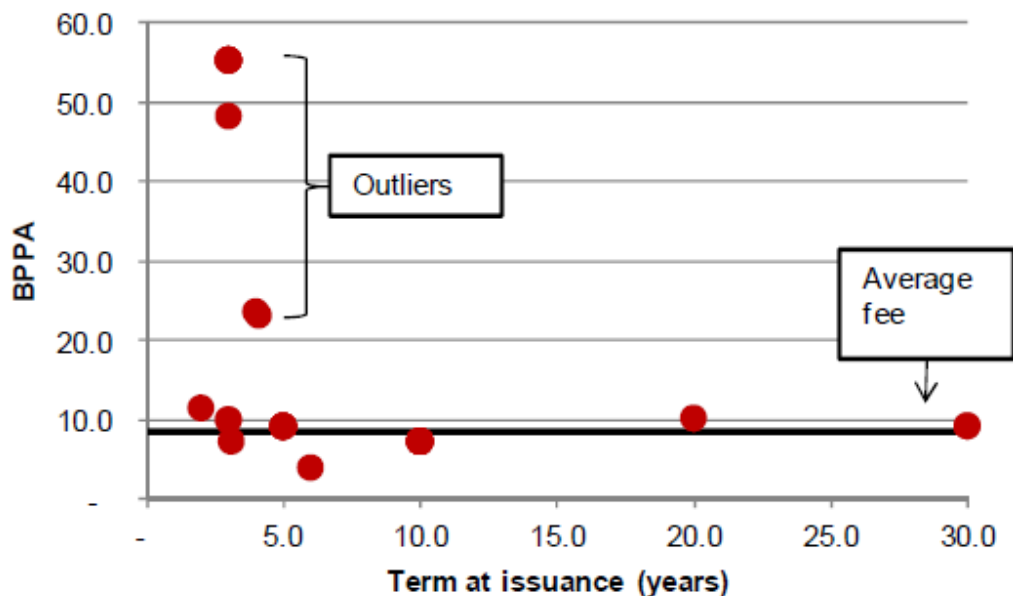
92. A notable application of the ACG method was by PwC in 2013.²⁵ PwC estimated an average arrangement fee on bonds of 8.5 bppa over the period April 2008 to April 2013. This is notable for PwC's exclusions of "outliers".

²⁴ The RBA Bloomberg and Reuters all derive their estimates for/from the secondary market.

²⁵ PwC, Energy Networks Association: Debt financing costs, June 2013.

Figure 6: Replication of PwC 2013 Figure 4.2 (exclusion of “outliers”)

Figure 4.2 – Arrangement fee of bonds on issue between 2008 and 2013 by term at issuance in years



Source: PwC’s analysis, Bloomberg

93. I consider that this was a mistake in the PwC analysis. As explained in the previous section high and low arrangement fees by themselves do not demonstrate that the total costs of the arrangement are unusual. To do this one must perform the calculation inclusive of the costs of the issue price discount. Once this is done, most of the apparent “outliers” (estimated on arrangement fee alone) disappear.

3.6 Summary and conclusion

94. My best estimate of arrangement costs for a 10 year bond issue is 94 bp based on the total costs column reported in Table 5. This is supported by, and consistent with, the analysis presented in Figure 1 and Figure 2. At a 5% discount rate, 94 bp is associated with 12.2 bppa spread over the life of a 10 year bond.
95. My 94 bp estimate is more than double Chairmont’s estimate of arrangement costs (32.5 bp for AUD issues and 37.5 bp for USD issues).
96. Even if the ERA were to ignore the cost to issuers of the issue price discount, Chairmont’s estimates are wholly inconsistent with the publicly available data on arrangement fees in isolation. As can be seen in Table 5, the average arrangement fee is 55 bp for issues with close to 10 years tenor.



COMPETITION
ECONOMISTS
GROUP

97. An estimate of 55 bp is also consistent with the ACG 2004 estimate of arrangement fees and subsequent AER updates of that methodology.

4 Liquidity management costs of maintaining an investment grade credit rating

98. In addition to the costs of directly issuing debt, firms also incur significant costs in maintaining sufficient liquidity to manage refinance risk. Managing refinance risk is at the heart of the benchmark efficient debt management strategy.

4.1 Refinance risk, the trailing average and arrangement costs

99. It is prudent, and standard, practice for a business to ensure that its debt portfolio has maturity dates that are spread over time. Indeed, this is a requirement for firms to maintain an investment grade credit rating. This means that some long term debt must be issued at staggered intervals. As the AER noted when explaining its adoption of the trailing average approach:²⁶

*...we observe that most service providers hold a diversified portfolio of debt with staggered maturity dates. **This means that a service provider will only have to refinance a proportion of its debt at any point in time. Holding a portfolio of debt with different terms to maturity allows a service provider to manage its refinancing risk.***

100. Refinancing risk refers to the risk that a business is unable to issue new debt at reasonable rates when existing debt matures. In fact, a business may simply be unable to refinance debt at all if large amounts of debt fall due in a period of market disruption/financial crisis. This market disruption could arise from factors that are specific to the business (e.g., large debts falling due when the business itself is suffering from financial insecurity/uncertainty) or that are unrelated to the business or its industry (such as tight credit markets, including financial crises, where creditors are reluctant to lend generally).
101. A business that funds long term assets with short term debt runs the risk of being forced to refinance large amounts of debt in unfavourable circumstances – potentially leading to defaults and/or insolvency. Such events can be extremely costly to a business and minimising the potential for them to occur is a key part of prudent treasury operations.

²⁶ AER, Better Regulation | Explanatory Statement | Rate of Return guideline, December 2013, p. 105

102. This fact was the driver of Australian regulators' shift towards a trailing average approach. The ERA also referred to the same issue as one consideration when selecting its return on debt approach which involves a 10 year trailing average of 10 year debts [emphasis added]:²⁷

In line with these requirements, any approach to estimating the rate of return should, among other things:

...

Minimise any differences between the regulated return on debt and that of the benchmark efficient entity, given this is a factor the ERA must consider under the National Gas Rules.

103. If a firm could always guarantee the ability to sell its debt at short notice into a deep and liquid secondary market then it would not need to worry about spreading out its maturity profile (i.e., managing to a trailing average). Nor would the firm need to use arrangers to help market and/or underwrite its debt issues. Similarly, a firm would not have to concern itself with maintaining liquidity in the lead up to a debt refinancing event.
104. This is because (by assumption in this hypothetical world) the firm would be able to issue as much new debt as it desired at short notice. The firm would not need to enlist the efforts of an arranger to market their debt because the secondary market price would be sufficiently deep and liquid that no price discovery by the arranger would be required. Similarly, the firm could issue debt the day before old debt matures and use the proceeds of the former to pay for the latter.
105. In reality, the secondary market for any given corporation's debt is typically not sufficiently deep and liquid to allow that firm to refinance debt on the same day that the existing debt falls due. This is too risky because if the refinance is unsuccessful the firm will default on its existing debt.
106. Consequently, a benchmark efficient entity will:
- Stagger its maturity profile (consistent with a 10 year trailing average);
 - Compensate arrangers (via arrangement fees and discounted issue price) to be confident that when it does attempt to issue debt it will be successful; and
 - Engage in that debt raising materially prior to existing debt maturing and have in place other liquidity management facilities to ensure that if there is any hiccup in debt raising this will be able to be managed without risking default on its maturing debt.

²⁷

ERA, Final Gas Rate of Return Guidelines: Explanatory Statement, 18 December 2018, pp. 79-80 at [470].

4.2 Liquidity management costs

107. To maintain an investment grade credit rating Standard and Poor's (S&P) imposes a number of financial requirements that businesses must demonstrate in order to maintain certain credit ratings.²⁸ These include a limit on the amount of debt falling due in any given period but also require the company to demonstrate that it has a debt management strategy that has sufficient "failsafes" in place such that it can pay its debt obligations when they come due even if access to bond markets is disrupted in the lead up to the maturity of those debts.
108. Liquidity management costs relate to the costs associated with maintaining a liquidity reserve sufficient to achieve an investment grade credit rating. If these costs are not incurred then an issuer will be unable to maintain an investment grade credit rating. These costs generally come in two forms.
109. First, rather than raising new debt to refinance existing debt on the day that debt matures, credit rating agencies require a policy that the refinanced debt is raised at least 3 months prior to maturity (and ideally 12 months prior). This results in costs to the business in the form of the difference between the 10 year cost of debt (the cost to them of early refinance) and the 3-12 month return on investing liquid assets (the return to them of investing those funds until maturity of the existing debt).
110. Second, the holding of undrawn committed facilities with banks that allow the firm to draw on that facility if required. While these facilities are almost always undrawn, the firm will need to pay the relevant financial institution a "commitment fee" to have the facility available.
111. In my role as adviser to the ENA I have access to all AER regulated firms debt portfolios.²⁹ It is public knowledge that these include many undrawn committed facilities that attract commitment fees. These are held for precisely the purpose described above. Similarly, it is common knowledge that firms raise new debt materially prior to the maturity of existing debt. This is precisely for the reasons described above.

4.2.1 Magnitude of liquidity management costs to maintain investment grade credit rating

112. There are numerous public quantifications of the costs of liquidity management (committed facilities and early refinance) required in order to maintain investment

²⁸ For example, see S&P, Methodology and Assumptions: Liquidity Descriptors for Global Corporate Issuers, December 16, 2014.

²⁹ For example, see ENA, Estimating the cost of debt Response to AER's Pathway to 2022 Rate of Return Instrument: Draft Debt Omnibus Working Paper 3 September 2021, p. 14.

grade credit rating. These are all around 11-13 bppa and have been estimated by me (11.6 bppa)³⁰, PwC (11 to 13 bppa)³¹ and Incenta (11.3 bppa).³²

113. All of these reports have been submitted to the AER. The AER has not compensated for these costs. This is despite seeking advice from Chairmont who advised that the AER should compensate for these costs – advice that the AER subsequently did not acknowledge.

4.2.2 Chairmont 2019 advice to the AER

114. Chairmont advised the AER as follows:³³

It is Chairmont's view that the policy approach to this matter needs revisiting. If the refinancing policy benchmark should be changed, then it can be integrated into the Rate of Return instrument.

Current AER benchmark methodology is that the bonds are rolled on maturity. This is not consistent with market practice or risk management common practice.

115. This is entirely consistent with my view. The AER's current benchmark does currently assume that debt is refinanced on the day that it matures (with no other liquidity reserves (e.g., no committed undrawn line of credit)). This is, as Chairmont correctly states, not consistent with market practice or risk management common practice. If a firm actually pursued this policy, it would be denied an investment grade credit rating by rating agencies.
116. I note that the same is true of the ERA benchmark. This also currently assumes that debt is refinanced on the day that it matures (with no other liquidity reserves (e.g., no committed undrawn line of credit)).
117. Chairmont goes onto note that PwC and I have estimated these costs assuming a combination of 3 month early refinancing and commitment fees for undrawn facilities.³⁴

PWC and CEG on the 3 month Refinancing costs all adopt the 3 month minimum requirement. This forces the calculation on this basis, the effect

³⁰ 11.6 bppa - see Table 1-1 of CEG, Debt transaction costs and PTRM timing benefits, January 2019.

³¹ 13 to 14 bppa PwC, Energy Networks Association: Debt financing costs, June 2013, pp. vi.

³² 11.3 bppa Incenta, Debt raising transaction costs: SA Power Networks, October 2014.

³³ Chairmont, AER Debt Raising Costs Section 4.2 2019, p. 17.

³⁴ Chairmont, AER Debt Raising Costs Section 4.2 2019, p. 17.

being it increases the liquidity reserve requirement and associated costs and increases the commitment fee.

118. Chairmont does not dispute the fact that there are costs associated with this strategy. But instead proposes a different (also costly) way of managing liquidity costs.³⁵

Chairmont agrees that there are costs of establishing and maintaining a liquidity reserve and financing debt ahead of maturity. There are steps that companies can take to mitigate or reduce the size and the cost of these reserves. These include:

- Using a minimum 6 month time horizon for refinancing debt;*
- Repurchase of short dated maturing debt; and*
- Inclusion of the cashflow from the hedging strategy of the 10 year benchmark interest rate risk.*

119. In this passage Chairmont is proposing even earlier prefinancing of debt (a minimum 6 months prior) and Chairmont seems to be suggesting that this could avoid the need to incur costs associated with maintaining a committed undrawn facility. Chairmont also seems to be suggesting that the prefinanced funds, once raised, could be used to buy back debt prior to its maturity rate and that the relevant bond could be removed from the trailing average cost of debt at that time (this is how I interpret the last two dot points above).

120. This seems to be consistent with the earlier statement that:³⁶

The benchmark should be changed so that bonds are re-purchased 1 year before maturity and an adjustment the debt transaction cost model for the shorter term, i.e., 9 years not 10 years of the bonds being in the market place.

121. Chairmont's alternative amendment to the benchmark may have merit if it can be shown to result in lower costs than those that I (and PwC and Incenta) estimates (around 11-13 bppa).
122. I am sceptical about this because it seems likely to me that it would be costly for a business to always buy back its debt one year prior to its maturity. The business would likely have to pay a premium to convince debt holders to do this (or pay a premium for a non-standard contract that allows the issuer to force the bond holder to sell to them). In addition, all the other costs of debt raising would need to be recovered over a shorter period (9 years rather than 10) raising the bppa cost of these expenses.

³⁵ Chairmont, AER Debt Raising Costs Section 4.2 2019, p. 18.

³⁶ Chairmont, AER Debt Raising Costs Section 4.2 2019, p. 17.

123. However, the most important point is that both Chairmont (2019) and I agree that the 10 year trailing average benchmark is appropriate and that the implication of this is that firms must be assumed to refinance their debt some months prior to that debt falling due. That is, the current assumption that debt is refinanced on the same day that it falls due is inappropriate and underestimates the costs of implementing the 10 year trailing average benchmark.

4.2.3 Chairmont 2021 advice to the ERA

124. The only discussion of these issues in Chairmont’s advice to the ERA is in the following passage (the “footnote 7” in the below quote is Chairmont 2021 referring to Chairmont 2019).³⁷

Historically, the liquidity fee, commitment fee and 3 month facility fee are excluded from the debt raising cost allowance.⁷ Their exclusion should continue.

⁷Chairmont, AER Debt Raising Costs Section 4.2 2019

125. The reference that Chairmont supplies in support of not compensating for the costs of efficient liquidity management policies is to the same section of its 2019 report to the AER that I have quoted from extensively in the previous section. This is the section where Chairmont advised the AER to change its benchmark to include compensation for these costs.
126. I am at a loss to understand how Chairmont reconciles the final sentence of the above quote to the reference provided to the first sentence. It may be that Chairmont is engaging in a semantic distinction – arguing that these costs should be included in “interest costs” not “debt raising costs”.
127. If so, such a semantic distinction is, in my view, irrelevant. The critical issue is that efficient costs are compensated correctly – not what label is applied to them. Liquidity management costs are intimately related to debt raising as I have already described. However, if there was a proposal to instead compensate these costs in “interest costs” that would, also, be a reasonable approach. However, it would be unreasonable to:
- Not compensate for these efficiently incurred costs in debt raising on the basis that they should be compensated elsewhere; and
 - Have no proposal or means of compensating for these costs elsewhere.

³⁷ Chairmont, Debt Raising and Hedging Costs, 2021 (report for the ERA), p. 6

4.3 Summary

128. In order to issue debt at investment grade, credit rating agencies require issuers to engage in costly liquidity management activities. These are commonly estimated at around 11-13 bppa.
129. Chairmont has in the past advised the AER that these costs are real and need to be accounted for within the benchmark debt strategy associated with a 10 year trailing average:³⁸
130. However, Chairmont’s advice to the ERA has the potential to be misunderstood if the reference Chairmont provides to its advice to the AER is not read closely. Chairmont appears to be advising that these costs should be included in “interest costs” not “debt raising costs”. If so, such a semantic distinction is, in my view, irrelevant. The critical issue is that efficient costs are compensated correctly – not what label is applied to them.

³⁸ Chairmont, AER Debt Raising Costs Section 4.2 2019, p. 17.