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Economists

Interest rate payable on deferred network charges

A report for the Australian Energy Market Commission

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1. Introduction

This report has been prepared by HoustonKemp at the request of the Australian Energy Market Commission (AEMC) with respect to the interest rate that should be applied to the deferred network charges. The AEMC has commissioned this report in the context of the rule change request submitted by the Australian Energy Regulator (AER) to amend the National Electricity Rules (NER) to allow retailers to defer the payment of some network charges incurred between 1 July 2020 and 31 December 2020 to distribution network service providers (DNSPs) for an initial period of six months.[1]

The rule change proposes that retailers would be able to defer network charges incurred by customers on a "COVID-19 customer arrangement" during this period, which includes customers that have entered into:

- a payment plan or instalment arrangement;
- any arrangement as a hardship customer; and
- any deferred debt arrangement.

The arrangements would apply to states that have adopted Chapter 6B of the NER, and so would apply to network charges incurred by retailers in Victoria and the Northern Territory.[2] We also understand that the AEMC is contemplating explicitly excluding the three tier 1 retailers (Origin, Energy Australia and AGL) and government owned retailers from deferring network charges.

The AEMC in assessing the rule change request has developed the following criteria:

- promoting financial resilience – reducing the potential for multiple retailer failures and financial contagion attributable to the impact of COVID-19;
- efficient allocation of risk – does the rule change proposal appropriately allocate any risk and cost to parties best placed to manage them; and
- implementation costs – minimisation implementation costs relative to the benefits of the proposed deferral mechanism.

The remainder of this memo outlines our analysis of:

- the reasonable bounds of the interest rate;
- the best estimate of the reasonable bounds; and
- possible proxies for the cost of debt for a retailer.

We note that the actual cost to retailers of financing COVID-19 customer arrangement are unknown and would depend on the circumstances of the retailers, which could use funds sourced from equity owners, bank loans, redraw facilities (revolver loans), issuing new bonds or hybrid instruments.

[1] We understand that this six month period may be pushed back to begin from the date the rule change is approved.

[2] AEMC, *Deferral of network charges*, Consultation paper, 28 May 2020, pp 13 & 24.

2. Appropriate interest rate

2.1 Reasonable bounds for the interest rate

Our view is that the bounds for the interest rate that retailer should pay distributors is:

- an upper bound equal to the opportunity cost of capital of the distributors which is the inflation adjusted weighted average cost of capital (WACC); and
- a lower bound of the 1 year BBB corporate bond rate.

The WACC represents the cost to the distributor of providing funds provided to the retailer. We note that the rate of return earned by a distributor is not the decision WACC but is instead the outturn inflation adjusted WACC. This is because the regulatory regime protects distributors from unforeseen inflation outcomes by:

- providing a real return on capital in the annual revenue requirement of the distributor, through the removal of the expected inflation indexation of the RAB from the return on capital building block;
- indexes the RAB for outturn inflation in the roll forward; and
- indexes prices during the regulatory period for lagged outturn inflation.

We note that the AER when determining the opportunity cost of capital uses the inflation adjusted WACC> Examples, of the AER using the inflation adjusted WACC include:

- capital incentive mechanism (the capital expenditure sharing scheme);[3] and
- roll forward model.[4]

As a lower bound, we propose to use estimates of the BBB 1 year bond rate. While the term of the bond is greater than 6 months, one year is the shortest period that Bloomberg provides for BBB bond yields. In our opinion, this represents a lower bound because:

- evidence that the credit rating of Tier 1 retailers is BBB, (see below in table 1); and
- bond rates generally represents the cheapest and least flexible form of debt financing for corporations.

We note that retailers seeking a more flexible loan arrangement could seek revolver loans that are established with a lender that allow the company to access funds (up to a limit) at a prearranged lending rate, usually a margin over the bank bill swap rate (BBSW).

To the issue of assessing the credit rating table 1 shows the credit ratings of Australian retailers available on Bloomberg. We note that the information available on Bloomberg is limited and of the 44 retailers searched credit ratings was only available for 6 retailers.

[3] See AER, https://www.aer.gov.au/system/files/AER%20-%20Final%20decision%20-%20Ausgrid%202019-24%20-%20Dx%20CESS%20model%20-%20Public%20-%20April%202019.XLSX, April 2019.

[4] AER, *Electricity transmission network service providers | Roll forward model handbook*, Final decision, September 2007, p 8.

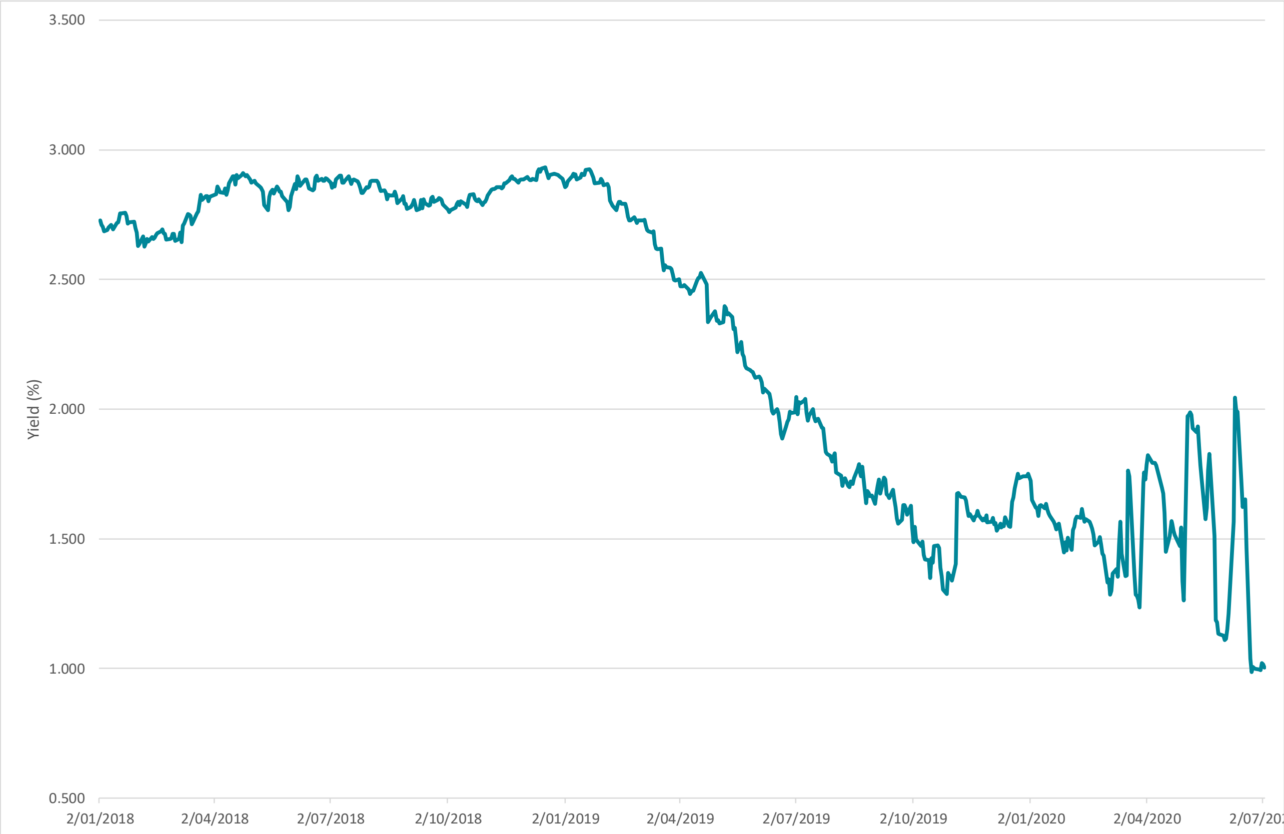
Table 1: Credit ratings of retailers

Retailer	Long-term credit rating			Short-term credit rating		
	Moody's	S&P's	Fitch	Moody's	S&P's	Fitch
Origin Energy	Baa2	BBB	BBB	P-2	A-2	WD
Energy Australia (no ratings for the parent company)	WR	BBB+	WD	-	-	WD
AGL Energy	Baa2	NR (not rated)	-	-	-	-
Ergon Energy	-	-	AA	-	-	-
Lumo Energy (parent company rating: Snowy Hydro Ltd)	-	A-	-	-	NR	-
Powerdirect	-	BBB	-	-	NR	-

2.2 Estimates of the reasonable bounds

The lower bound is cost that BBB rated retailer (ie, tier 1 retailer) issuing a 1 year corporate bond. Figure 1 sets out the Bloomberg fair value yields for 1 year BBB debt.

Figure 1: Bloomberg BBB 1 year fair value yields



We note this series has high degree of volatility especially since March 2020. That said, the 1 year BBB yield has for the last two weeks been around 1.0 per cent (23 June 2020 to 3 July 2020) per annum. We take this as the bottom of the range of the possible range for the interest rate for a retailer deferring network charges for COVID-19 customers.

The top of the range is distributors inflation adjusted WACC. Table.2, sets out the inflation adjusted WACC for applicable distributors.

Table.2: Nominal vanilla WACC, and estimates of the inflation adjusted WACC (per cent)

Distributor	2020-21 WACC (% p.a.)	Decision forecast inflation	RBA forecast[5]	Inflation adjusted WACC
Essential Energy	5.55	2.42	0.25	3.31
Endeavour Energy	5.49	2.42	0.25	3.25
Ausgrid	5.50	2.42	0.25	3.26
Evoenergy (ActewAGL)	5.34	2.42	0.25	3.11
TasNetworks	5.13	2.42	0.25	2.90
SA Power Networks	4.75	2.27	0.25	2.68
Energex	4.73	2.27	0.25	2.66
Ergon Energy	4.73	2.27	0.25	2.66

Source: AER updated regulatory models and HoustonKemp analysis.

The estimates of the inflation adjusted WACC is based on the inflation forecasts for the December quarter 2020 set out in the RBA May 2020 Statement of Monetary Policy. If the RBA inflation forecasts are correct the inflation adjusted WACC for regulated distributors would fall between 2.7 and 3.3 per cent, per annum. While the average and median annual WACC is 3.0 per cent.

2.3 Other relevant information

In choosing a value within this reasonable range we would also have regards to the following information:

- the RBA and Bloomberg 3 year BBB corporate bond yields;
- RBA estimates of the cost of new business loans for small, medium and large businesses; and
- revolver loans reported by BBB rated Australian businesses.

2.3.1 RAB 3 year BBB bond yields

The volatility in the Bloomberg 1 year fair value yields is a concerns about the stability of this estimate. Consequently, we would recommend that the AEMC also have regard to the 3 year BBB bond yield provided by both the RBA and Bloomberg. Figure 2, sets out the yields from January 2019.

[5] RBA, *Statement of Monetary Policy*, May 2020, p 89.

Figure 2: RBA and Bloomberg fair value estimates of the 3 year BBB yield

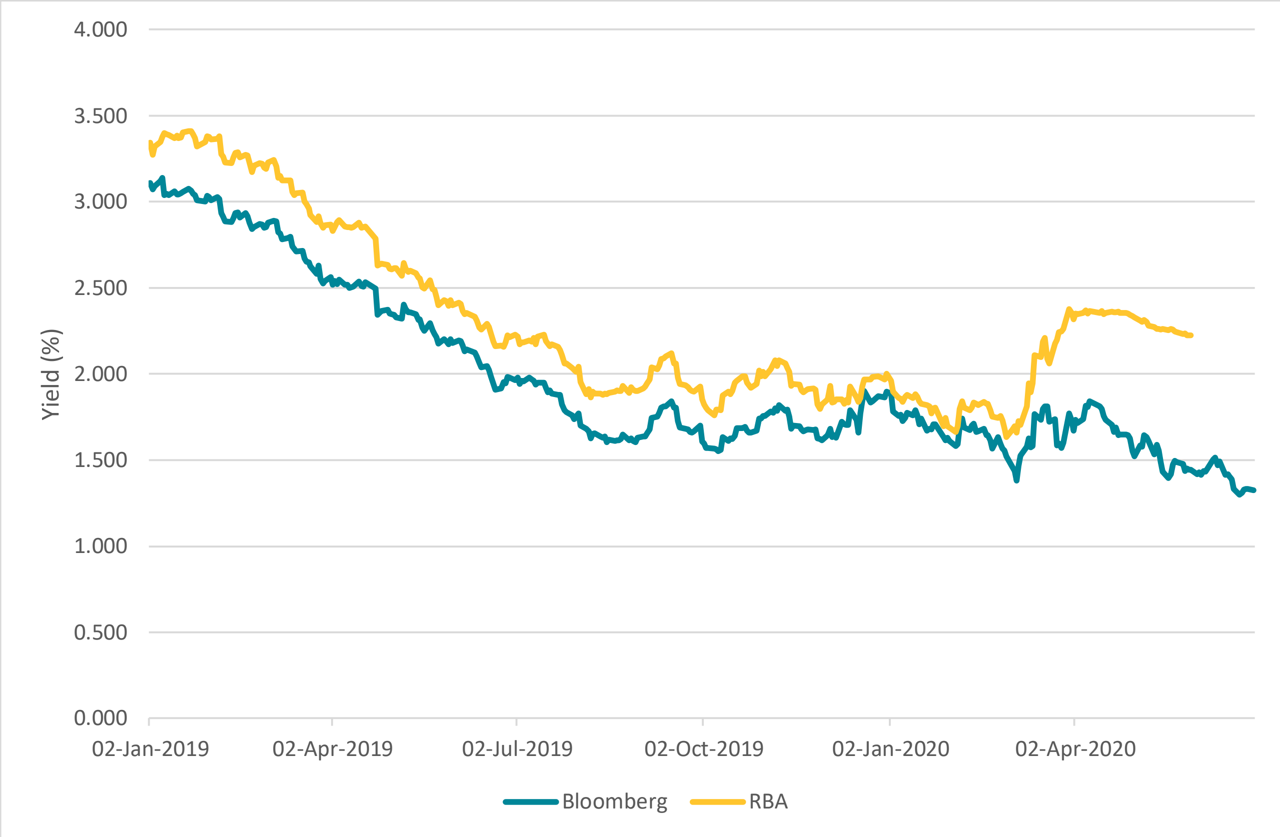


Figure 2 highlights that:

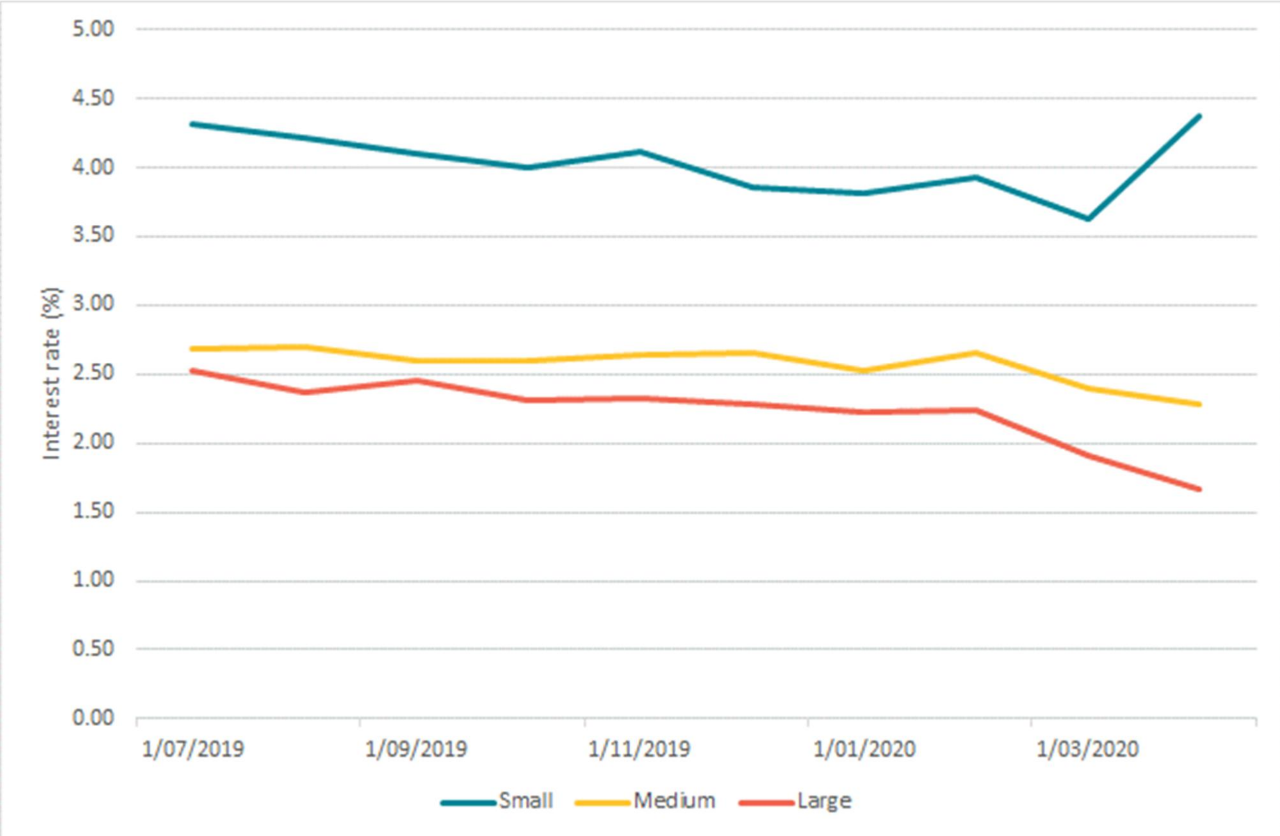
- the Bloomberg estimated yield for 3 year BBB corporate debt is around 1.3 per cent (a 30 basis points above the Bloomberg BBB 1 year yield), per annum; and
- the Bloomberg and RBA series have recently diverged with the Bloomberg series estimating yields that are significantly below that estimated by RBA, with the RBA BBB 3 year yield approximately 80 basis points above the Bloomberg estimate at the end of May 2020.

2.3.2 RBA business loans

The RBA also publishes data on business loans collected by the Australian Prudential Regulation Authority (APRA) from registered financial institutions with at least $2 billion of business loans.[6] The series is a weighted average interest rate on loans, finance leases and bill acceptances to businesses (excluding reverse repos).

Figure 3 sets out the reported cost of new business loans to small, medium and large businesses.[7]

Figure 3: Variable business lending rates for new loans funded in the month (per cent per annum)



Source: RBA Statistical table F07, downloaded 6 July 2020.

Due to the nature of the data sources, the RBA states that these rates are indicative only and are likely to be regularly revised. That said, the indicative rates suggest that over the July 2019 to April 2020 period small business loan rates are on average 1.5 per cent above the rates for medium businesses and 1.8 per cent above the rates for large businesses.

Table 2 reports the most recent reported business loan rates reported by the RBA in 2020.

[6] RBA, https://www.rba.gov.au/statistics/tables/xls/f07hist.xls?v=2020-06-30-18-11-25, Downloaded 6 July 2020.

[7] Small businesses are defined as those receiving funding less than $1m and with turnover less than $50m. Medium businesses are defined as those receiving funds greater than $1m and with turnover less than $50m. Large businesses are defined as those with turnover greater than $50m.

Table 3: Variable business lending rates for new loans funded in the month (per cent per annum)

Date	Small	Medium	Large
31/01/2020	3.81	2.53	2.22
29/02/2020	3.93	2.66	2.24
31/03/2020	3.63	2.40	1.91
30/04/2020	4.37	2.28	1.67

Source: RBA Statistical table F07, downloaded 6 July 2020.

Table 3 shows that indicative annual lending rate at the end of April 2020, for small business is 4.4 per cent and 2.3 per cent medium businesses. While the indicative lending rate for large businesses is 1.7 per cent per annum.

2.3.3 Revolver loans

A revolving loan facility is a flexible form of debt financing that allows a borrower to both draw down (withdraw) and repay the loan as required. This flexibility would allow retailers to address any cashflow issues arising from the deferment of revenues due to customers seeking financial relief due to COVID-19.

Examples of revolver loans include:

- Origin Energy which has a BBB- credit rating, arranged a number of revolver guaranteed unsecured loans with ANZ in 2013 for at a margin of between 130 to 160 bps above the 3 month bank bill swap rate (BBSW);
- Lendlease Finance which has a BBB- credit rating, arranged a revolver guaranteed unsecured loan with CBA in 2013 for at a margin of 140 bps above the BBSW;
- Lendlease Group which has a BBB- credit rating, arranged a revolver unsecured loan with NAB in 2019 for at a margin of 165 bps above the BBSW; and
- Downer EDI which has a BBB credit rating, arranged a number of revolver unsecured loans with CBA in 2018 for at a margin of between 125 to 140 bps above the BBSW.

We note that the current 3 month BBSW is 0.1 per cent,[8] which would make the cost of the above revolver loans of between 1.4 per cent and 1.8 per cent, per annum.

In our view these rate represent are likely to be less than the cost of debt for small retailers because:

- these rates do not include the costs of arranging the loan facility, which can be significant; and
- small retailers are unlikely to have an investment grade credit rating.

[8] 3 month BBSW for 3 July 2020.

3. Conclusion

In our opinion the range of possible interest rates that could be applied to defer network charges is:

- an upper bound equal to the opportunity cost of capital of the distributors which is the inflation adjusted weighted average cost of capital (WACC), which for 2020/21 ranged between 2.7 to 3.3 per cent and averages 3.0 per cent per annum; and
- a lower bound of the 1 year BBB corporate bond rate which is currently 1.0 per cent per annum.

In our opinion adopting an interest rate at the upper end of this range (ie, the distributor's inflation adjusted WACC) would be consistent with the AEMC's assessment criteria, because:

- it is above the indicative loan rates estimated by the RBA for medium and large businesses and the historical costs of revolving loan facilities arranged by businesses with an investment grade credit rating, and so ensures that retailers that have the financial capability to secure private sector or government funds would not be incentivised to defer network charges; and
- is less than the indicative loan rates estimated by the RBA for small businesses and so reduces the risk of financial contagion attributable to the impact of COVID-19.

While the adoption of each distributor's inflation adjusted WACC is relatively simple to implement, the rate would not be known until the release of the December 2020 consumer price index (CPI) at the end of January 2021.

Potential alternatives to adopting the inflation adjusted WACC, is to set an interest rate equal to the current estimated opportunity cost of capital for distributors, ie:[9]

- 3.0 per cent per annum fixed interest rate; or
- 3 month BBSW + 290 bps, floating interest rate

[9] Which equates to the average inflation adjusted WACC for distributors, based on the RBA's current forecast annual inflation rate of ¼ per cent for December 2020.

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