

YOUR TRUSTED VALUE ADVISER



## WACC assessment – Reserved Letters Business as at 15 February 2019

Australia Post



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## 1. Executive summary

Value Adviser Associates ["VAA"] has been engaged by Australia Post ["AP"] to provide an assessment of the Weighted Average Cost of Capital ["WACC"] for AP's Reserved Letters Business ["RLB"].

VAA understands that this WACC assessment may be used, amongst other things, for the upcoming price notification. The WACC parameters have been assessed on a forward-looking basis as at 15 February 2019.

TABLE 1 summarises our assessment of WACC parameters for RLB, while TABLE 2 and TABLE 3 show the resultant equity beta & WACC calculations respectively. The assessments of the individual WACC parameters for RLB are described in the body of this report.

**TABLE 1 SUMMARY OF WACC INPUT PARAMETERS AS AT 15 FEBRUARY 2019**

Serial no.	Components	RLB WACC
1	Risk-free rate	2.2%
2	Cost of debt (pre-tax)	4.6%
3	Asset beta (ungeared equity beta)	0.70
4	Debt beta	n/a
5	Gearing ( D / V )	22.9%
6	Market risk premium	7.0%
7	Tax rate	30.0%
8	Gamma	0.0

Source: VAA analysis; Australia Post and market information; Bloomberg

**TABLE 2 EQUITY BETA CALCULATION**

Component	RLB WACC	Calculation
<b>Capital structure ratios</b>		
Gearing [D/V]	22.9%	
E/V	77.1%	$E/V = 1 - D/V$
Leverage [D/E]	0.30x	$D/E = (D/V) / (1 - D/V)$
<b>Beta Equity (geared) [<math>\beta_e</math>] calculation</b>		
Beta asset (ungeared) [ $\beta_a$ ]	0.70	
Beta debt [ $\beta_d$ ]	0.00	
Leverage [D/E]	0.30x	$D/E = (D/V) / (1 - D/V)$
Beta equity (geared) [ $\beta_e$ ] - adjusted	0.91	Relevering beta asset at target gearing: $\beta_e = \beta_a + D/E (\beta_a - \beta_d)$
<b>Beta equity (geared) [<math>\beta_e</math>] - rounded</b>	<b>0.90</b>	Rounded value

Source: VAA analysis on Australia Post and market information

**TABLE 3 WACC CALCULATION**

Component	WACC	Calculation
<b>Cost of Equity [<math>K_e</math>] calculation</b>		
Risk-free rate (nominal) [ $R_f$ ]	2.2%	
Market risk premium [MRP]	7.0%	
Beta equity (geared) [ $\beta_e$ ]	0.90	
<b>Cost of Equity [<math>K_e</math>]</b>	<b>8.5%</b>	CAPM: $K_e = R_f + MRP \times \beta_e$
<b>WACC calculation</b>		
Gearing [D/V]	22.9%	
E/V	77.1%	
Cost of debt [ $K_d$ ]	4.6%	
Cost of equity [ $K_e$ ]	8.5%	
<b>WACC</b>	<b>7.6%</b>	Nominal, vanilla WACC: $(E/V) K_e + (D/V) K_d$

Source: VAA analysis on Australia Post and market information

Due to rounding, numbers presented throughout this report may not add up precisely to the totals indicated and percentages may not precisely reflect the absolute figures for the same reason.

## 2. Experience and personnel

VAA's specialist team has extensive experience assessing the cost of capital for various purposes, including regulatory support, impairment testing and investment valuation.

Our experience spans a variety of industries, including regulated utilities, construction, transport and infrastructure. Value Adviser Associates is your Trusted Value Adviser, providing independent and robust valuation services to clients.

This report was prepared under the overall direction of Mr Michael Churchill (Chief Executive Officer). Other professional staff provided assistance where required.

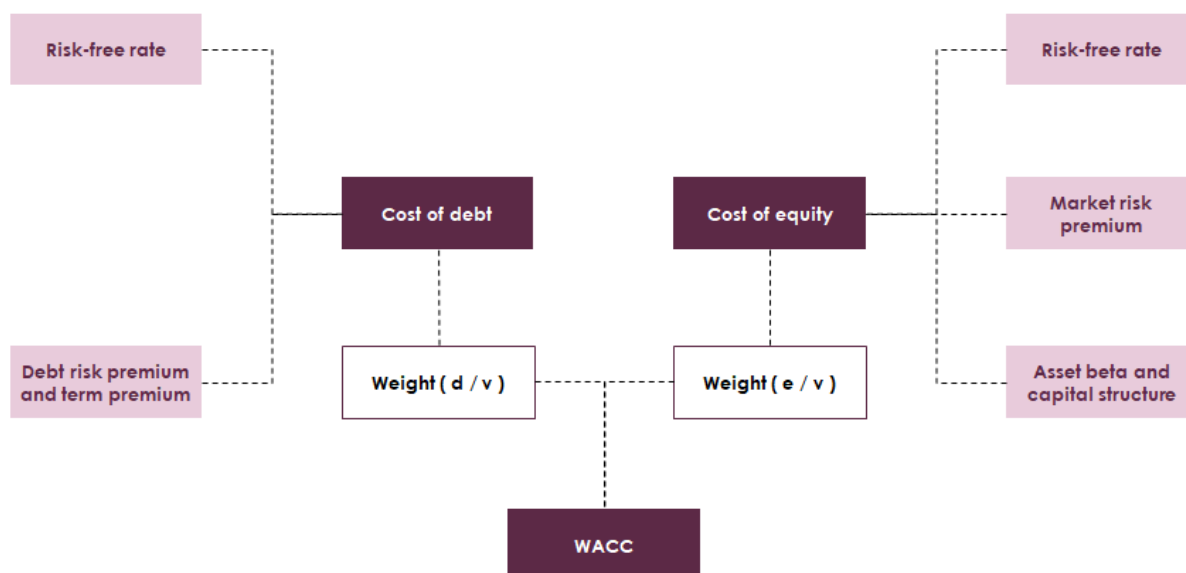
Michael is a founding Director of Value Adviser Associates and has over 30 years' experience in the valuation of complex assets and businesses. Michael's career includes accounting, valuation and corporate advisory experience. Michael was a partner in the PricewaterhouseCoopers Valuation group in Brisbane and Melbourne. Michael co-authored "Business Valuations Digest" and has authored numerous published articles relating to valuations, expert reports, public sector commercialisation and value management.

Michael was assisted in the day-to-day management of the engagement by Saqib Khan (Senior Manager). Saqib is a corporate finance professional with over 15 years' experience.

### 3. Weighted average cost of capital

VAA has assessed the WACC for RLB using the Capital Asset Pricing Model ["CAPM"] and a build-up method to estimate cost of equity and debt respectively. We have explained in detail our calculation methodology for each of the individual components of WACC.

In its simplest form, the determination of WACC is achieved by using weighted averages of cost of equity and cost of debt. The diagram below illustrates the various components that form cost of equity and cost of debt.



*Note: We have not considered debt beta in the above*

### 4. Risk-free rate

Yields on Commonwealth Government Bonds ["CGBs"] are generally used as a proxy for the risk-free rate because these bonds are considered to be the closest to a riskless financial security that trades in an open market (when held to maturity).

The appropriate maturity is 10 years, which is a compromise between matching the long-term nature of the assets and identifying securities that trade in a liquid and well-attended market.

The lack of long-term securities with these characteristics has led to the common use of 10-year CGBs.

In general, the choice between employing spot rates and short-term averages when measuring yields on financial instruments depends on the liquidity of the securities in question.

- For highly liquid securities, such as CGBs, VAA's preference is to use spot yields – as these represent the market's most current view of yields. For less liquid securities, such as some corporate bonds, VAA's preference is to use short-term average yields (over, say, 20 trading days). The use of a short-term average tends to remove short-term aberrations caused by thin trading in the relevant instruments.

VAA has assessed the risk-free rate – and other relevant market data, such as the cost of debt – using average yields over 20 trading days. This approach reduces sensitivity to the particular date selected for assessment but, in general, has little impact on the assessed parameter values.

VAA has assessed the risk-free rate at 2.2%, being the 20-day average yield on 10-year CGBs

to 15 February 2019. This risk-free rate is based on the yield information obtained from Bloomberg under the security name 'Australia 10yr Govt Bond Yield'.

## 5. Cost of debt

The CAPM anticipates that a hypothetical optimal capital structure is employed in the business.

The CAPM does not prescribe a method of assessment for the hypothetical optimal. The Modigliani-Miller theorem proposes that the optimal capital structure occurs when the overall cost of debt and equity is minimised.

In practise, it is generally accepted that an investment grade debt rating (i.e. Standard & Poor's BBB) is representative of the hypothetical optimal capital structure.

AP is currently rated AA- by Standard & Poor's. Standard and Poor's does not separately rate individual component businesses within AP, therefore the overall AP credit rating credit rating extends to the RLB.

The RLB does not have a separate credit rating.

VAA understands that the current owner requires AP to maintain a conservative capital structure – reflective of a credit rating around AA.

For the purpose of this assessment we have assumed that the current ownership will continue and the capital structure policy will require AP and therefore by default the RLB to maintain a capital structure with the same credit rating as the overall AP rating.

Consequently, we have assessed the expected cost of debt on the basis of the current capital structure.

It is therefore appropriate to assume that the same AA- rating applies to RLB.

We have estimated the cost of debt ["Kd"] and debt risk premium ["DRP"] for RLB using yields on AA rated corporate bonds<sup>1</sup> in the absence of reliable data on AA- corporate bonds.

The domestic corporate bond market is thin and illiquid, and long-dated bonds are currently not trading.

The longest maturity AA rated corporate bonds that were trading as at 15 February 2019 had approximately seven years to maturity. We have therefore estimated the yield and spread for 10-year AA rated bonds by adding a term premium based on AA+ rated Queensland Government Bonds (which have the closest rating to AA for 10-year maturity instruments). The calculation process was as follows:

- Yields on 7-year (2.4%) and 10-year (2.8%) Queensland Government Bonds were employed to compute a 7-10 year term premium for Queensland Government (AA+) Bonds (0.3%) which is then used as a proxy for a 7-10 year term premium for corporate AA bonds.
- The 7-10 year term premium for Queensland Government (AA+) Bonds (0.3%) is added to the 7-year AA corporate bond yield (3.2%) to approximate a 10-year AA corporate bond yield (3.6%).

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<sup>1</sup> VAA has obtained its corporate bond yield data from Bloomberg's Corporate AA Bloomberg Fair Value Curve. This curve includes bonds rated AA+, AA or AA- by Standard & Poor's, Moody's, Fitch and/or DBRS. There is no equivalent curve for bonds rated AA- only.

- The risk free rate (Rf, 2.2%) was deducted from the assessed 10-year AA corporate bond yield (Kd, 3.6%) to obtain an assessment of 10-year AA corporate bond spread (1.4%).

VAA accepts that the credit quality of AA-rated State Government bonds may trade at a slightly lower yield than corporate equivalents. However, in the absence of reliable evidence, we have assumed the difference will not materially impact the assessment.

These calculations are illustrated in the following table.

**TABLE 4 DEBT RISK PREMIUM AND COST OF DEBT SUMMARY**

<b>Qld Government (AA+) 7-10 Year Bond Term Premium</b>	
Qld Govt (AA+) 10yr Yield	2.8%
Qld Govt (AA+) 7yr Yield	2.4%
<b>7-10yr Term Premium</b>	<b>0.3%</b>

<b>Cost of Debt - Corporate AA 10-Year Bond Yield</b>	
Corporate (AA) 7yr Yield	3.2%
Qld Govt (AA+) 7-10yr Term Premium	0.0%
<b>Corporate (AA) 10yr Yield [Kd]</b>	<b>3.3%</b>

<b>Debt Risk Premium - Corporate AA 10-Year Bond Spread</b>	
Corporate (AA) 10yr Yield [Kd]	3.6%
Commonwealth Govt 10yr Yield [Rf]	2.2%
<b>Corporate (AA) 10yr Spread [DRP]</b>	<b>1.4%</b>

<b>Cost of debt</b>	
Commonwealth Govt 10yr Yield [Rf]	2.2%
Corporate (AA) 7yr yield	1.0%
7-10yr Term Premium	0.3%
<b>Cost of debt</b>	<b>3.6%</b>

Source: Bloomberg and VAA analysis on market information

All values are averages over 20 trading days

The numbers may not add up due to rounding

VAA notes that AP's pre-tax cost of debt as per the FY18 annual audited financial statements is rounded to 4.6% (interest paid of \$32 million divided by average debt balance of \$703 million). This is materially higher than the calculated cost of debt of 3.6%.

In our view, the actual cost of debt of 4.6% reflects the riskiness specific to the cash flows of AP as envisaged by debt providers. Therefore, we have employed the actual cost of debt as computed from the FY18 annual audited financial statements of 4.6% p.a. in this WACC assessment. In order to be consistent for our assessment, we have used the actual information in assessing the gearing (refer to SECTION 7) and gamma (refer to SECTION 10).

## 6. Asset beta

### 6.1 Impact of capital structure on beta

The beta of equity ( $\beta_e$ ) captures the equity risk that is rewarded by the market, whereas the beta of assets ( $\beta_a$ ) reflects the operational risk that is rewarded by the market. The asset beta can be viewed as the risk of the business 'as if' it is financed by equity alone, i.e. 100% equity.

The difference between these two measures of risk arises from part debt funding of the business. The equity beta will rise above the asset beta when debt funding is employed. This occurs because debt investors contract for lower risk than that represented by the asset beta – thereby 'passing' risk to equity investors. This financing activity does not affect the asset beta (operational risk) – it simply leads to a differential sharing of the risk between equity and debt capital providers.

Some practitioners will employ a debt beta in the assessment of WACC as shown in the formula below.

$$\beta_a = \frac{D}{V} \beta_d + \frac{E}{V} \beta_e \quad (2)$$

*Note: We have assumed debt beta ( $\beta_d$ ) of zero in the above equation*

Where: D is the market value of debt  
E is the market value of equity  
V = D + E is the total market value of debt and equity  
(The remaining symbols are defined in TABLE 1 and TABLE 3, above)

Re-arranging this equation, we obtain:

$$\beta_e = \beta_a + \frac{D}{E} (\beta_a - \beta_d) \quad (3)$$

*Note: We have assumed debt beta ( $\beta_d$ ) of zero in the above equation*

VAA has tested the sensitivity of the outcome with and without the use of a debt beta and found that it is not materially different. Consequently, we have proceed to assess WACC without using a debt beta.

### 6.2 Beta estimation process

Although beta is a forward-looking concept, the equity beta for a listed stock is usually estimated via the 'market model', in which historical total shareholder returns (including dividends) are regressed against those of a broad-based market index from the relevant country.

For unlisted entities such as the RLB segment of AP, the equity beta cannot be directly observed and must be estimated by reference to comparable listed companies using the following process:

1. Obtain observed equity beta for each listed comparator (VAA uses the Bloomberg data service to obtain this data)
2. Estimate gearing ratio (D/V) for each comparator from historical data.
3. Compute asset beta for each listed comparator, by de-levering the observed equity betas using Equation (2)
4. Assess the appropriate asset beta for RLB with reference to the asset betas for listed comparators, and apply the observed gearing ratio from the comparable companies



5. Compute equity beta for RLB by re-levering the selected asset beta using Equation (3)

VAA notes that the use of a market comparable gearing (D/V) ratio presents a mis-match between the assessed cost of debt (reflective of AA- credit rating) and the likely optimal (BBB-equivalent) gearing of the universe of comparable companies. However, this is unlikely to materially impact the resultant WACC.

A number of different beta weighting formulae have been proposed, and these may be used by practitioners as alternatives to Equation (2). In general, the equation used in the 'de-lever/re-lever' process will have little impact on the re-levered equity beta, provided that the same equation is used when de-levering and re-levering.

### 6.3 Asset beta estimate

We have estimated the RLB asset beta with reference to the de-levered equity beta for comparable listed companies, as described above.

There are no directly comparable businesses to RLB in Australia.

Ideally, comparable companies would be based in Australia and thereby face similar market, tax and regulatory conditions. Further, since beta is a measure of risk that is relative to that of a well-diversified portfolio, it is preferable to use a portfolio that is reflective of the holdings of Australian investors. A home bias in investing means we would ideally seek to assess the risks of RLB relative to a market index that is predominantly Australia-based<sup>2</sup>. However Australian comparable companies are limited, leading us to examine overseas companies.

In order to identify additional comparable companies for RLB, VAA accessed the Universal Postal Union ["UPU"] database and collated a list of listed businesses for RLB. We note that the RLB comparable businesses are listed in foreign jurisdictions. Therefore we also identified Australian publicly-listed businesses which have strong logistics support, such as that operated by RLB, to improve the comparability of the comparable companies. It is important to highlight that these identified Australian public businesses were selected as businesses broadly exposed to similar operational and financial risks as RLB. TABLE 5 provides a list of these businesses under Logistics Services and Retail section.

TABLE 5 shows the estimated equity betas and calculated asset betas for the comparable listed companies. The following approach has been taken in assessing an appropriate asset beta:

1. Equity betas have been sourced from Bloomberg data using sixty monthly observations where available.<sup>3</sup>
2. The market value gearing ratio (D/V) for each comparable company was estimated using the most recent annual historical data available as at the assessment date.

VAA's primary reference for selection of the RLB asset beta is the 'Mean of Means' asset beta of 0.70 from the RLB comparators as exhibited in TABLE 5.

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<sup>2</sup> We are assuming that the investor base of interest is Australian.

<sup>3</sup> An example is Gonedes, N.J., "Evidence on the Information Content of Accounting Numbers: Accounting-Based and Market-Based Estimates of Systematic Risk," Journal of Financial and Quantitative Analysis, Vol. 8, 1973, pp. 407-433.

**TABLE 5 EQUITY BETA AND ASSET BETA FOR COMPARABLE LISTED COMPANIES**

Name	Country	Market Cap	Total Debt	Total Assets	D/V	Adj. Beta Equity	Beta Asset
<b>Reserved Letters Business - Overseas comparables</b>							
POSTNL NV	NETHERLANDS	1,677	948	3,291	0.24	1.17	0.89
DEUTSCHE POST AG-REG	GERMANY	52,216	9,503	61,186	0.11	0.88	0.78
SINGAPORE POST LTD	SINGAPORE	2,224	252	2,775	0.07	0.76	0.70
ROYAL MAIL PLC	BRITAIN	5,043	1,095	13,107	0.10	0.73	0.66
OESTERREICHISCHE POST AG	AUSTRIA	3,801	11	2,649	0.00	0.76	0.75
BPOST SA	BELGIUM	2,568	1,200	5,100	0.13	0.94	0.82
<b>Mean</b>					<b>0.11</b>	<b>0.87</b>	<b>0.77</b>
<b>Median</b>					<b>0.11</b>	<b>0.82</b>	<b>0.77</b>
<b>Logistics services - Australia</b>							
CTI LOGISTICS LTD	AUSTRALIA	68	44	165	0.35	0.93	0.60
K & S CORP LTD	AUSTRALIA	185	146	553	0.42	0.73	0.42
LINDSAY AUSTRALIA LTD	AUSTRALIA	112	122	260	0.52	0.75	0.36
QUBE HOLDINGS LTD	AUSTRALIA	4,496	966	4,035	0.20	1.38	1.10
CHALMERS LTD	AUSTRALIA	31	9	52	0.24	0.52	0.39
<b>Mean</b>					<b>0.35</b>	<b>0.86</b>	<b>0.58</b>
<b>Median</b>					<b>0.35</b>	<b>0.75</b>	<b>0.42</b>
<b>Retail - Australia</b>							
WOOLWORTHS GROUP LTD	AUSTRALIA	39,562	2,803	23,558	0.07	0.80	0.75
<b>Mean</b>					<b>0.07</b>	<b>0.80</b>	<b>0.75</b>
<b>Median</b>					<b>0.07</b>	<b>0.80</b>	<b>0.75</b>
<b>RLB COMPARATOR GROUP - MEAN of MEANS</b>					<b>0.17</b>	<b>0.85</b>	<b>0.70</b>
<b>RLB COMPARATOR GROUP - MEDIAN of MEDIANS</b>					<b>0.11</b>	<b>0.80</b>	<b>0.75</b>

Source: VAA analysis on market information; Bloomberg

Note: - Debt beta has been assumed as NIL.

-All amounts in AUD millions.

-D/V stands for Short-term and long-term debt ÷ (Short-term and long-term debt + Market capitalisation)

-Total assets represent total of short and long-term assets as reported in the Balance Sheet (Bloomberg definition)

## 7. Gearing

A company's enterprise value (V) is the sum of the market values of debt (D) and equity (E), while gearing is the ratio of debt to enterprise value (D/V). In assessing appropriate gearing ratios for RLB, we have considered the following information:

- The comparable listed companies for RLB (TABLE 5) exhibit an overall 'Mean of Means' historical gearing of 17%;
- The actual gearing of AP at book value is 22.9%, interest-bearing debt and equity of \$703.0 million and \$2,366.7 million respectively at the financial year end 30 June 2018;
- In the absence any information regarding debt allocated to RLB, we considered that AP's actual gearing of 21.4% based on book value debt and fair value equity in the amounts of \$703.0 million of \$2,582.3<sup>4</sup> million respectively as at 30 June 2018; and,
- AP has previously advised VAA that, to maintain its current credit rating, AP's gearing cannot be substantially higher than 30%.

VAA notes that AP is an unlisted entity. While fair value of the AP equity has been provided in the annual report for the Department of Communication and the Arts ["DoCA"] for financial year 2017/18, it appears that this valuation has been performed for financial reporting purposes. Therefore, we have adopted a gearing of 22.9% based on the book value of debt and equity as at 30 June 2018 of AP for this assessment.

## 8. Equity beta

Re-levering RLB asset beta of 0.70 produces an equity beta of 0.90 (when using a debt beta of nil).

## 9. Market risk premium

The market risk premium ["MRP"] (or equity risk premium ["ERP"]) is a key input to the CAPM.

The CAPM is a forward-looking model – it guides an assessment of what equity investors require to compensate for time and risk over the period of interest.

Although the CAPM is a forward-looking model, which means all inputs need to be forward-looking, it is not unusual to rely on historical (ex-post) data when estimating the MRP. However, we note that the ex-post MRP cannot be constant – if it was constant, there would be no risk and no risk premium. This stochastic nature of MRP leads to a wide confidence interval around the point estimate required for the forward-looking (ex-ante) MRP estimate. Under these circumstances, it is best to utilise a long time series of historical data: this will not only improve statistical "accuracy", but will also weight events according to their likelihood of occurrence.

Long term estimates of the historical Australian MRP are provided in TABLE 6. These have been derived from a broad-based stock market index and, in general, from the yield on 10-year Commonwealth Government Bonds.

**TABLE 6 HISTORICAL AUSTRALIAN MARKET RISK PREMIUM**

Market risk premium		
Description	Excess returns	
	Ignoring GFC (Jan 08 to Jun 10)	All inclusive
Average	7.0%	5.4%
Standard deviation	11.4%	14.3%
First quartile	-0.7%	-2.1%
Median	7.1%	6.9%
Third quartile	14.6%	14.6%

Source: Bloomberg and VAA analysis on market information

The long-term MRP has been assessed by using the following approach:

- Observed monthly closing values of S&P/ASX Total Return Indices (Bloomberg ticker: ASA51 Index) from 31 May 1992 (the earliest availability date of the index values) to 31 January 2019.
- Estimated annual returns on the monthly closing index values.
- Observed monthly closing yields on 'Australia 10yr Government Bond Yield' (Bloomberg ticker: GACGB10 Index).
- Computed excess annual returns by deducting the bond yields from the total return of the index.
- Averaged the excess annual returns estimated on a monthly basis under the two following scenarios:
  - Excess annual returns ignoring the period of global financial crisis ["GFC"] which has been assumed from January 2008 to June 2010; and,
  - Excess annual returns including the period during GFC.

The results of the above two scenarios have been summarised in TABLE 6.

VAA considered the averages under the two scenarios of 7.0% and 5.4% respectively, and the medians under the two scenarios of 7.1% and 6.9% respectively.

The average and median excess annual returns (ignoring the GFC) over the 26 year period are 7.0% and 7.1% respectively.

Based on this analysis, an MRP of 7.0% has been employed in the WACC assessment.

## 10. Gamma

Gamma ( $\gamma$ ) is the value assigned to imputation credits which attach to dividends paid to domestic investors and represents the extent to which the tax paid by a company is able to be 'reclaimed' by its shareholders.

The value of gamma is specific to the tax circumstances of the shareholders of a company and how the company distributes franked dividends. Gamma is a function of the amount of tax the company pays, how and when it distributes franking tax (imputation) credits to shareholders and how much, if any, of the credits are claimed by shareholders. The cost of capital is a market rate that reflects the risk of the company (beta in the CAPM context), not its tax rate. However, to earn the cost of capital, it must cover its actual tax payments (the net tax that does not flow to shareholders). In the case of AP, it has to cover tax payments at

the corporate tax rate of 30% because its ultimate shareholder (the Australian Government) does not recover any of the tax paid by redeeming imputation credits.

AP is wholly-owned by the Commonwealth of Australia and operates under a tax-equivalent regime whereby taxes are administered as if it was subject to the Income Tax Assessment Act. The Commonwealth (Treasury) collects the tax equivalent at a prima facie rate of 30%. However, the Commonwealth itself is not subject to tax and therefore cannot utilise franking tax credits.

Our view, which remains unchanged from our previous WACC assessments, is that the gamma value used to determine the tax component of the Post Tax Revenue Model's ["PTRM"] cost build-up should be zero. Our reasons are that:

- AP does not distribute franking tax credits; and,
- AP's shareholder does not claim franking tax credits.

We note that a non-zero gamma value would place AP at a competitive disadvantage, as it would be unable to earn sufficient revenue to cover its actual tax payments, which are unable to be offset by franking tax credits. A positive gamma value would also imply that AP had an effective tax rate less than 30%, which is not the case.

An alternative (but equivalent) way of expressing the above reasoning is to consider how the tax collected from a company may be broken down into components of personal tax and company tax. Under an imputation tax system, tax is collected at the company level, but a proportion may be reclaimed by shareholders via imputation tax credits, such that the tax collected comprises two distinct components:

- the proportion of collected tax that is ultimately redeemed by shareholders (via imputation credits) represents a (pre-)payment by the company of personal tax; and,
- the proportion of collected tax that is not redeemed by shareholders represents a (final) payment by the company of company tax.

The PTRM's cost build-up includes a tax component, which reflects the company tax that is expected to be paid. This item reflects company tax *only* – a gamma adjustment is applied to the total collected tax to exclude the component that represents a pre-payment of personal tax. However, in the case of AP, where no imputation credits are distributed or redeemed, no part of the collected tax represents a pre-payment of personal tax. The entire amount of collected tax represents company tax and must therefore be included in the tax component of the cost build-up – which is equivalent to using a gamma value of zero.

As stated above, gamma is specific to the circumstances of a company – it depends on the extent to which franking tax credits can actually be used to offset tax collected at the company level. Where it is difficult (or impossible) to accurately determine the value of franking tax credits to a specific entity's shareholders, an average gamma value will often be used as a proxy. However, this is not the case for AP, where the ultimate shareholder cannot utilise franking tax credits, and gamma clearly has a value of zero. There is no reason or justification for using an average gamma value as a proxy.

The application of an average Australian gamma value to AP is unsupportable and, as such, we have not provided any estimate of an average gamma value.

The appropriate gamma value for AP is zero and this has been employed in VAA's WACC assessment.

## Appendix 1 – Information provided and relied upon

VAA has utilised the following information was sourced by VAA:

- Previous reports prepared by VAA for AP;
- AP Annual Report 2018;
- Previous ACCC regulatory determinations for AP and other entities;
- News and academic articles, as referenced in the body of the report;
- Information from Bloomberg terminal;
- Annual reports and stock exchange releases for comparable listed companies as provided in Appendix 2;
- Term Sheet of a \$180 million fixed rate notes due 1 December 2026; and,
- COMMS & ARTS, Annual Report 2017-18, Department of Communications and the Arts, Australian Government.

In addition, VAA also held discussions with the following senior executives of AP:

- Raymond Ngai, Head of Corporate Finance;
- Sandra Mills, Head of Network and Planning; and,
- Mark Pollock, General Manager Mail Business Unit.

## Appendix 2 – Comparable companies

The following business descriptions of the comparable companies have been sourced from Bloomberg:

Name	Country	Business description
<b>Reserved Letters Business - Overseas comparables</b>		
POSTNL NV	NETHERLANDS	PostNL NV collects, transports, stores, sorts, and distributes letters, printed matter, parcels, documents, and freight items. The Company provides mail and logistics services domestically and internationally.
DEUTSCHE POST AG-REG	GERMANY	Deutsche Post AG provides mail delivery and other services to the public and businesses. The Company offers domestic mail delivery, international parcel and mail delivery services, and freight delivery and logistics services.
SINGAPORE POST LTD	SINGAPORE	Singapore Post Limited is the national postal service provider in Singapore. The Company provides domestic and international postal and courier services including end-to-end integrated mail solutions covering data printing, letter-shopping, delivery and mailroom management, and others. Singapore Post also offers end-to-end e-commerce logistics solutions.
ROYAL MAIL PLC	BRITAIN	Royal Mail plc provides postal and delivery services. The Company offers its services in the United Kingdom as well as parts of continental Europe.
OESTERREICHISCHE POST AG	AUSTRIA	Oesterreichische Post AG offers mail delivery services. The Company delivers mail and parcels and operates post offices.
BPOST SA	BELGIUM	bpost SA provides postal delivery services. The Company delivers mail, packages, and parcels, as well as offers direct marketing, market surveys, business databases, and document services.
<b>Logistics services - Australia</b>		
CTI LOGISTICS LTD	AUSTRALIA	CTI Logistics Limited provides courier services, freight forwarding, parcel, warehousing, logistic and customs broking services. The Company also designs, produces and installs security systems in Western Australia along with plastic services such as manufacturing plumbing fittings.
K & S CORP LTD	AUSTRALIA	K & S Corporation Limited provides transportation, warehousing, logistics, fuel distribution and various services to companies throughout Australia. K & S provides road, rail and sea forwarding services, warehousing and storage, fuel distribution to fishing, farming and retail customers in certain regions of Australia. K & S also provides bulk distribution throughout New Zealand.
LINDSAY AUSTRALIA LTD	AUSTRALIA	Lindsay Australia Limited is an integrated transport, logistics and rural supply company. The Company primarily services customers in the food processing, food services, fresh produce, rural and horticultural industries.
QUBE HOLDINGS LTD	AUSTRALIA	Qube Holdings Ltd. is a logistics company. The Group operates in divisions covering Automotive, Bulk and General Stevedoring, Landside Logistics and Strategic Development Assets.
CHALMERS LTD	AUSTRALIA	Chalmers Limited provides various bulk transportation and storage services in Australia and New Zealand. The Company operates storage facilities, drop deck equipment to move equipment and bottom dumpers to carry bulk malt and grain. Chalmers also provides private companies and government agencies with the maintenance and servicing of storage facilities.
<b>Retail - Australia</b>		
WOOLWORTHS LTD	AUSTRALIA	Woolworths Limited operates supermarkets, specialty and discount department stores, liquor and electronics stores throughout Australia. Woolworths also manufactures processed foods, exports and wholesales food and offers petrol retailing. The Company also operates hotels which includes pubs, food, accommodation, and gaming operations.