Public Submission

By BHP Billiton Nickel West in response to the ERA Discussion paper: Measuring the Debt Risk Premium: A Bond-Yield Approach

7 January 2011

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PART A - INTRODUCTION

1 Background

On 1 December 2010, the Economic Regulation Authority (the **Authority**) released a discussion paper titled "Measuring the Debt Risk Premium: A Bond-Yield Approach"[1] (**Discussion Paper**). The purpose of this discussion paper was to present the Authority's proposed method for calculating the debt risk premium in its regulatory roles, and also when undertaking inquiries referred to the Authority by the Western Australian Government.

The Authority requested interested parties to make submissions on the Discussion Paper by 4:00pm on Friday 7 January 2011.

2 Structure

This Submission is structured to focus on the following questions posed by the Authority:

(a) Is the Authority's proposed approach of estimating the debt risk premium likely to better reflect the prevailing conditions in the market for funds than the use of current Bloomberg's estimates of fair yield curves?

(b) Is the use of a benchmark sample of Australian corporate bonds with a term shorter than 10 years likely to better reflect the prevailing conditions in the market for funds than the use of Bloomberg's estimates of fair yield curves to derive a 10-year term?[2]

(c) Is the Authority's proposed approach to the selection of Australian corporate bonds appropriate?

(d) Which method for calculating the weighted average of observed yields from the sample should be used?

(e) Are there any relevant sources of information that the Authority has not considered in the Discussion Paper with regard to estimating the debt risk premium?

3 About BHPB

BHP Billiton (**BHPB**) is the world's largest diversified natural resources company with significant positions in major commodity businesses, including aluminium, energy coal and metallurgical coal, copper, manganese, iron ore, uranium, nickel, silver and titanium minerals, and substantial interests in oil, gas, liquefied natural gas and diamonds.

The Authority has signalled in the Discussion Paper its intention to use the proposed method for calculating the debt risk premium in its pending decision on the Dampier to Bunbury Natural Gas Pipeline (**DBNGP**) revised access arrangement. BHPB is a major user of gas and thus has a significant demand for gas transportation. It is a key shipper on the DBNGP and like the other major shippers, on 1 January 2016, the tariffs payable on its long term gas transportation contracts

[1] Discussion Paper - Measuring the Debt Risk Premium: A Bond-Yield Approach, 1 December 2010, http://www.erawa.com.au/cproot/9104/2/20101201%20D57440%20Discussion%20Paper%20-%20Measuring%20the%20Debt%20Risk%20Premium%20-%20A%20Bond-Yield%20Approach.PDF.

[2] BHPB briefly addresses this question in conjunction with question (c), in section 5 of this Submission.

are scheduled to revert to the reference tariffs payable under the access arrangement in force at that time.

PART B: Responses to the Authority's Questions

4 Requirements of the National Gas Law

Section 24(5) of the National Gas Law (**NGL**) (as amended and implemented by the *National Gas Law*) specifies that:

> *"A reference tariff should allow for a return commensurate with the regulatory and commercial risks involved in providing the reference service to which that tariff relates."*

Similarly, Rule 87 of the National Gas Rules (**NGR**) (as amended and implemented by the *National Gas Law*) states:

> *"The rate of return on capital is to be commensurate with prevailing conditions in the market for funds and the risks involved in providing reference services."*

Importantly, the above principles require the setting of reference tariffs to reflect "the regulatory and commercial risks involved in providing the reference service to which that tariff relates." BHPB submits that this requires an approach in respect of the debt risk premium which reflects the relevant risks of regulated assets and does not overstate such risks.

5 Is the Authority's proposed approach of estimating the debt risk premium likely to better reflect the prevailing conditions in the market for funds than the use of current Bloomberg's estimates of fair yield curves?

The new approach proposed by the Authority appears to be a more transparent method for estimating an appropriate debt risk premium than reliance on the Bloomberg Fair Value (BFV) curves. However, despite this increase in transparency, it is not clearly demonstrated that the proposed approach is an improvement over the current methodology.

In settling upon a methodology, a balance will need to be struck between setting appropriate ground rules but maintaining sufficient 'flexibility' for situations where strict adherence to the rules does not reflect the current market condition. The application of any new approach will need to be reviewed on a case by case basis and if required filter and/or exclude particular businesses from the sample to ensure the estimate reflects the prevailing conditions in the market.

In direct reference to the proposed methodologies canvassed in the Discussion Paper, it is submitted that a retrospective analysis should be undertaken using historical data that compares the results from the proposed methodology with that from the BFV curve. This analysis was carried out by IPART for a variety of different methodologies in their recent discussion paper "Developing the approach to estimating the debt margin"[3]. This

[3] "Developing the approach to estimating the debt margin - Other industries - Discussion Paper, November 2010, http://www.ipart.nsw.gov.au/F6EF3CDC-2B4D-41D5-8D18-D93159D94132/FinalDownload/DownloadId-6EA93E02B880EF15E00B7DA81F674ADF/F6EF3CDC-2B4D-41D5-8D18-D93159D94132/files/Discussion%20Paper%20-%20Debt%20margin%20-%2010%20November%202010%20-%20APD%20-%20Website.PDF.

analysis is necessary to provide insights into any deficiencies or biases of the proposed methodology relative to the methodology used by Bloomberg that is already accepted in the marketplace and currently used by the Authority.

6 Is the Authority's proposed approach to the selection of Australian corporate bonds appropriate?

6.1 Position in Discussion Paper

The Discussion Paper proposes a set of criteria for selection of a sample of Australian corporate bonds to be used to derive the debt risk premium for regulated businesses. Broadly, the Discussion Paper proposes that the bonds used should ideally:

(a) be of the same Standard and Poors credit rating (usually a BBB+ is prescribed for a regulated business);

(b) be in the same industry (a regulated sector); and

(c) have maturity of longer than 2 years.

The Discussion Paper highlights the difficulties in finding a sample of sufficient number of bonds that meet all three of the desired criteria. The two examples provided are of an 'industry only' sample and a sample of Australian bonds within the BBB group for comparison (with both meeting the 2 year maturity criteria).

6.2 BHPB Submission - Summary

BHPB submits that, in deriving the debt risk premium for regulated businesses:

(a) in the first instance, corporate bonds from the same industry as the regulated business should be used;

(b) to the extent that there is insufficient liquidity for corporate bonds from the same industry as the regulated business, bonds from BBB+ rated entities in other industries should be used;

(c) in both circumstances:

  (i) callable bonds should be excluded;

  (ii) all bonds used should have a maturity of 2+ years; and

(d) the Authority should expressly define the circumstances in which (b) above will apply.

6.3 Use of bonds from the same industry

BHPB agrees with the Discussion Paper that the selection of a sample from the same industry and BBB credit rated group as the relevant regulated business should be considered a key requirement with the selection of similar businesses providing a better representation of the current prevailing market conditions to reflect the relevant regulatory and commercial risks without any dilution from the inclusion of other industry businesses. The inclusion of bonds from industries other than the relevant industry runs the very real

risk of producing a debt risk premium which reflects a risk profile that is different from the regulatory and commercial risks involved in providing the reference service for which the tariff is being determined.

6.4 The use of bonds from other industries

The Discussion Paper notes the lack of current liquidity for corporate bonds within the industry sample and favours the selection of a sample of all BBB group credit rated Australian businesses as a more appropriate sample. However the financial market is dynamic and depth may return to these corporate bonds in the future. Accordingly, BHPB submits that the use of bonds from other industry business should only be used in the event that there is insufficient liquidity for corporate bonds from the same industry as the regulated business.

The larger BBB group sample of 15 Australian businesses proposed in the Discussion Paper spans diverse industries, including commercial financing, banking services and real estate. These industries will generally have higher yields than the same industry comparable businesses as they have a risk profile which is greater than that of relevant regulated assets. BHPB submits that there is a real danger that using bonds from such entities will reflect increased risks outside the regulatory and commercial risks that are required to be considered under the NGA and NGR.

The Discussion Paper proposes the inclusion of bonds with BBB and BBB- credit ratings in the sample. BHPB submits that the inclusion of BBB and BBB- bonds does not reflect the recognised credit ratings of regulated assets and so could be expected to result in an upwardly biased estimate of the debt risk premium for regulated businesses, as the Discussion Paper acknowledges. Such bonds should therefore not be included in the sample of bonds used to calculate the debt risk premium. Relevantly, four of the most recent regulatory pipeline determinations have applied a credit rating of BBB+ to the relevant regulated pipeline.[4]

6.5 Exclusion of callable bonds

The Discussion Paper proposes the inclusion of callable bonds in the sample set. As the Discussion Paper recognises, all else being equal, these bonds could be expected to trade at higher yields than those without a callable redemption. Inclusion of these bonds in the sample set will result in credit spreads that are upwardly biased, and which do not properly reflect the regulatory and commercial risks a reference tariff is required to accommodate under the NGL and NGR, and on this basis should also be excluded from the sample set.

7 Which method for calculating the weighted average of observed yields from the sample should be used?

The Discussion Paper canvasses four approaches for estimating the average debt premium:

(a) Simple average;

(b) Years to maturity;

[4] ACCC - Amadeus Basin to Darwin Pipeline (2002), ACCC - Moomba to Sydney Pipeline (2003), ACCC - GasNet (2008), ERA - Goldfields Gas Pipeline (2010).

(c) Value of bonds issued; and

(d) Median approach.

The Discussion Paper suggests adopting the highest outcome of these approaches as this would reflect a conservative approach.

BHPB submits that adopting this approach would be inconsistent with the requirement under section 25(4) of the NGL to promote the "*efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price*". Such an approach would similarly be inconsistent with section 87 of the NGR. The outcome would be unreasonably favourable toward the operator.

By adopting the highest average estimate of the debt premium, BHPB submits that the relevant reference tariff would provide a return that is greater than that which is permitted under the NGA and NGR.

The table below demonstrates the significant spread between the lowest and highest (or conservative) average approaches.

Summary	All industries and BBB group	All industries and BBB+	All industries and BBB+ less Callable bonds	Same industry and BBB group
Average spread	2.86%	2.71%	2.72%	2.76%
Years until maturity weighted average	2.90%	2.72%	2.68%	2.72%
Amount issued weighted average	2.80%	2.49%	2.43%	3.00%
Duration weighted average	2.86%	2.60%	2.66%	2.69%
Median spread	3.05%	2.71%	2.71%	2.99%
	0.25%	0.23%	0.29%	0.31%

Source: Based on *Bloomberg* data presented on Attachment 1

Based on the above, BHPB submits that the selection of the most appropriate approach should be made by detailed review of the all aspects of each approach, and not purely on taking a conservative approach.

One key determinant of the outcome of any of the averaged approach is the sample size. Therefore, the method for calculating the average should take this into account and align best with the sample size used to ensure no business or outlier inappropriately impacts the outcome.

8 Are there any relevant sources of information that the Authority has not considered in this discussion paper with regard to estimating the debt risk premium?

The Discussion Paper does not address the potential to source information from other well-respected financial information providers. For example, Thomson-Reuters publish data about corporate bonds and fair yield curves that is comparable to that of Bloomberg and is well accepted in the marketplace. If they have been considered, it is not clear from the Discussion Paper why these alternative data providers are not favoured as a replacement for the Bloomberg data.

The Discussion Paper indicates that financial data from outside Australia should not be considered on the basis that it has not been used historically by regulators. BHPB submits that, given the lack of liquidity in respect of bond markets in relevant industries and the global nature of credit markets, international financial data should be considered.

Given that the Authority intends to depart from historical practice in respect of calculation of debt risk premium, BHPB further submits that the lack of precedent as to the use of international data should not be determinative of its future use.

For example, BHPB submits that the Authority should consider making reference to credit spreads observable for comparable BBB+ firms in other parts of the global financial market, including the United States. This approach was recommended and used by IPART in their recent discussion paper "Developing the approach to estimating the debt margin".[5] In particular, the ability of Australian utilities to obtain debt funding in the US bond market (hedge their currency exposure when appropriate), means that this is a valuable source of market data that should not be ignored.

[5] "Developing the approach to estimating the debt margin - Other industries - Discussion Paper, November 2010, http://www.ipart.nsw.gov.au/F6EF3CDC-2B4D-41D5-8D18-D93159D94132/FinalDownload/DownloadId-6EA93E02B880EF15E00B7DA81F674ADF/F6EF3CDC-2B4D-41D5-8D18-D93159D94132/files/Discussion%20Paper%20-%20Debt%20margin%20-%2010%20November%202010%20-%20APD%20-%20Website.PDF.

No.	Name of business	Bloomberg ticker	Coupon	Maturity	Year to Maturity	Yield (%)	Spread (bps)	Duration (yrs)	Amount issued (A$M)	Main industry	Standard and Poors Credit rating	Comment
1	APT PIPELINES	E1325336 Corp	7.75	22/07/2020	9.65	8.61	299.4	6.32	300	Electric transmission18	BBB	
2	BBI DBCT FINANCE PTY	EF461870 Corp	6.25	09/06/2016	5.53	7.57	211.6	4.5	150	Diversified Financial Services	BBB+	Callable bond
3	BANK OF QUEENSLAND LTD	EH390789 Corp	10.75	04/06/2018	7.51	8.38	325.4	2.13	140	Commercial Banks Non-US	BBB+	Callable bond
4	CLP AUSTRALIA	EF167960 Corp	6.25	16/11/2012	1.96	7.17	198.9	1.75	325	Finance commercial	BBB-	
5	DBNGP FINANCE CO PTY	EI414656 Corp	8.25	29/09/2015	4.83	8.94	358.7	3.78	150	Gas transportation	BBB-	
6	DEXUS FINANCE	EI223256 Corp	8.75	21/04/2017	6.39	8.65	315.5	4.71	180	Mortgage	BBB+	
7	ENVESTRA VICTORIA PTY LT	EC866427 Corp	6.25	14/10/2015	4.87	6.72	136.6	4.04	45	Gas distribution	BBB-	
8	LEIGHTON FINANCE	EH911249 Corp	9.5	28/07/2014	3.66	8.93	364.8	2.9	280	Diversified financial service	BBB	
9	SYDNEY AIRPORT FINANCE	EI308853 Corp	8	06/07/2015	4.6	8.5	314.8	3.59	175	Finance-Other Services	BBB	
10	MIRVAC GROUP FUNDING LTD	EI195249 Corp	8.25	15/03/2015	4.29	8.5	305.2	4.41	150	Real Estate Oper/Development	BBB	
11	MIRVAC GROUP FINANCE LTD	EI414696 Corp	8	16/09/2016	5.8	8.5	305.2	4.41	200	Real Estate Oper/Development	BBB	
12	NEW TERMINAL FIN	EF641357 Corp	6.25	20/09/2016	5.81	9.17	377.4	4.55	100	Special Purpose entity	BBB	
13	SNOWY HYDRO LTD	EC870795 Corp	6.5	25/02/2013	2.24	8.78	359.8	1.94	104	Energy - alternate sources	BBB+	
14	SANTOS FINANCE	EF102609 Corp	6.25	23/09/2015	4.81	7.99	226.8	3.94	100	Oil Comp-Exploration & Production	BBB+	
15	WESFARMERS LTD	EH964875 Corp	8.25	11/09/2014	3.78	7.12	184.2	3.11	400	Retail-Misc/Diversified	BBB+	

Source: Bloomberg (accessed on 17 December 2010)

Note: Yield, Spread, Duration and amount issued were determined using the Bloomberg Ticker presented on table above.
Bond data was obtained using the "BVAL" function on Bloomberg (BVAL Yield, Spread to ACG Bond, and OAS Duration)
EF641357 Corp not listed in "BVAL" so used "YAS" function instead.
EH390789 Corp not listed in "BVAL" so used "YAS" function instead. Yield calculated based on next callable date.