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Submission regarding the Economic Regulation Authority's Issues Paper of 4 September 2008 on the Determination of the Weighted Average Cost of Capital for The Pilbara Infrastructure's Railway from the Cloud Break Iron Ore Mine in the Pilbara to Port Hedland.

15 October 2008

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Executive Summary

This submission is the North West Iron Ore Alliance (Alliance) response to the Issues Paper dated 4 September prepared by the Economic Regulation Authority (Authority) on the determination of the Weighted Average Cost of Capital (WACC) for the rail facilities operated by The Pilbara Infrastructure Ltd (TPI).

The Alliance supports the broad approach to the determination of WACC adopted by the Authority in relation to the Western Australian Freight Network (in relation to WestNet Rail). In doing so the Alliance recognises the significant elements of judgment required of regulators in reaching practical determinations that will fairly balance the interests of rail infrastructure access providers and seekers.

In relation to TPI facilities, it is essential that these judgments are based on a look forward evaluation of TPI as a standalone commercial provider of above and below rail services to the Pilbara iron ore sector. This is important because the current configuration of TPI physical rail assets reflects decisions taken by FMG to optimise the mine-port logistics chain in relation to its market and financing requirements. These are likely to be significantly different from those for an efficient arms length rail transport provider.

From this perspective, the Alliance considers that the combined effect of TPI's proposed approach to WACC (involving an uplift in relation to claimed stranding risk) and the Costing Principles and Overpayment Rules (in relation to accelerated depreciation on a non-optimal capital base for a standalone rail provider) would be to overcompensate TPI for the actual risks it faces in providing rail services to FMG and other third party iron ore producers in the Pilbara.

As is made clear in the Authority's Issues Paper, the critical consideration in relation to an uplift in WACC is the claimed asymmetric/stranding risk arising from exposure to a single product, iron ore, compared with a more diversified railway. This submission examines the evidence for such risks and concludes that:

- TPI has very significant scope to mitigate this risk via long term contractual commitments from FMG and third parties, together with associated capital contributions to meet capacity expansions. The effect of the proposed treatment of depreciation would be to greatly enhance this risk mitigation.
- The residual risks not addressed by mitigation strategies are likely to be low and arguably below those faced by a more diversified rail infrastructure operator (such as WestNet Rail). This reflects: the buoyant demand outlook in the Pilbara's natural customer base – particularly China where structural factors will continue to drive strong steel intensive growth over the period during which TPI will operate; and the favourable position of TPI's customer base on the global supply curve over the commodity price cycle.

Against this background, the Alliance can see no substantive argument for TPI's standalone rail business being granted additional returns via WACC or any other method to compensate for stranding risk. In the absence of a factual basis for the existence of asymmetric/stranding

risk there is no need for complex or synthetic approaches to risk valuation canvassed by TPI and/or CRA International (as advisor to the Authority).

The actual inputs into the framework and the resulting WACC to apply from June 2009 will depend on the movements in the relevant data sets between now and the determination date. There are, however, three general points that we would make in relation to the judgments that the Authority will apply to a TPI WACC.

First, the Alliance considers there is a need for a consistent approach to risk evaluation to be applied across the WACC calculation and the Costing Principles. TPI's current proposals would in principle allow for the reflection of their assessment of residual risk to be included via an enhanced depreciation charge. If the case for significant residual risk is not accepted then there should be no depreciation uplift included in third party charges.

Secondly, from an access seeker perspective the Alliance members are prepared to share the costs of ensuring the railway can perform to a standard necessary to carry third party iron ore efficiently and the costs of maintaining and renewing the infrastructure to this standard. Given the difficulties of estimating the appropriate capital base for this purpose, the Alliance would suggest that the Authority consider the use of an approved Major Periodic Maintenance program in lieu of an essentially arbitrary depreciation charge.

Thirdly, the Alliance would suggest that the market context discussed above may argue for the consideration of an adjustment to the market risk premium (MRP) applicable to TPI. We note the basis of the current figure of 6% and have compared it with very long term premium estimates for US, UK and world equity markets which suggests plausible forward looking premiums of 4-5% against long dated government debt. There may be arguments for a higher equity risk in the Australian market but the Alliance would suggest that the risk profile associated with the global iron ore market and the Pilbara's competitive position supports an arguement for an MRP for TPI not exceeding, and arguably below, that for WestNet Rail with a corresponding adjustment to the overall WACC determination.

1. Purpose and Context

This submission is the North West Iron Ore Alliance (Alliance) response to the Issues Paper dated 4 September prepared by the Economic Regulation Authority (Authority) on the determination of the Weighted Average Cost of Capital (WACC) for the rail facilities operated by The Pilbara Infrastructure Ltd (TPI).

As noted in the Issues Paper, TPI is currently a wholly owned subsidiary of Fortescue Metals Group Ltd (FMG). FMG has, however, stated that it intends to dilute its interest in TPI to no more than 40 per cent, so the mining and infrastructure components of the Pilbara iron ore and infrastructure project will be separately funded and managed.[1] Early and complete structural separation of TPI from FMG would most effectively align the commercial interests of the rail operator to treat FMG and third party access at arms length on transparent and equitable terms.[2] This would also establish a clearer factual basis for evaluating a number of the critical parameters that feed into the difficult regulatory judgments about the appropriate WACC for TPI.

In the absence of such structural separation, it is essential that these judgments are based on a look forward evaluation of TPI as a standalone commercial provider of above and below rail services to the Pilbara iron ore sector. This is important because the current configuration of TPI physical rail assets reflects decisions taken by FMG to optimise the mine-port logistics chain in relation to market and financing requirements.[3] As such, it does not reflect the configuration that would be adopted by an arm's length rail operator in terms of engineering design and operating performance, on which both the Costing Principles and WACC calculations should be based. As a result, the building blocks of the WACC calculation (for example gearing ratios, market risk premium, equity beta) are likely to be markedly different and generally lower than individual iron ore mining companies because of the ability of TPI to diversify commercial risk across a range of customers.

The comments in this paper reflect this arms length approach and are consistent with the Authority's methodological approach to the calculation of WACC for WestNetRail (WestNet) with which the Alliance is in very broad agreement. The comments are in the same order as the questions raised in the Authority's Issues Paper. They focus on those areas where the Alliance has material differences of view to those presented in the Issues Paper and/or the TPI WACC proposals.

[1] On 7 May 2004, FMG shareholders voted to sell up to 60% of the Pilbara Infrastructure Fund "so as to ensure that Fortescue Metals will not hold a majority ownership of the new open-access facilities" and FMG stated that it was envisaged that after the commissioning of the infrastructure, the Pilbara Infrastructure Fund would be floated on the Australian and an international Stock Exchange: FMG Quarterly Report for the period ending 30 June 2004.

[2] See North West iron Ore Alliance submission to the ERA on TPI Rail Part 5 Instruments on proposed Segregation Arrangements and supporting provisions dated 5 September 2008, section 4.

[3] Ibid, section 5.

There are important linkages between proposals in the TPI WACC paper and those in the TPI Costing Principles.[4] This paper should therefore be read in conjunction with the Alliance submission on the Costing Principles.[5]

2. Issue: mineral resources in the vicinity of TPI railway

Potential scale/volume of ore for shipment across TPI assets

The four current member companies of the Alliance have delineated total iron ore resources of over 3 billion tonnes within the past five years. This includes more than 1.6 billion tonnes of high-grade hematite, Channel Iron Deposit (CID) mineralisation and detrital ore, as well as some 1.5 billion tonnes of magnetite ore.[6] In addition, as the Issue Paper notes, Hancock Prospecting is seeking to develop the Roy Hill 1 hematite deposit and has future expansion potential at Roy Hill South and Roy Hill 2.

An assessment of current discovered resources of Direct Shipped Ore (DSO) quality product and an estimate of the potential economic resource base and annual production capacity relevant to TPI's rail system are set out in Exhibit 1. Together these projects have the potential to deliver nearly 90 million tonnes of iron ore annually along the TPI railway by 2013 and some 150 million tonnes by 2020. This excludes both FMG shipments and other potential third party producers in the region (as well as those shipments from mines closer to other Pilbara railways, e.g. Pardoo). FMG have already indicated an intention to transport some 45Mtpa over the TPI infrastructure, rising to 120 and then 150Mtpa as Christmas Creek is developed.[7]

Exhibit 1: Discovered and potential hematite/magnetite ore resources in the east Pilbara for possible shipment on TPI.

Million Tonnes		Bedded Ore			Channel Iron Deposits		Detrital		Magnetite	Annual production (Million Tonnes)	
		Reserves	Resources	Potential Total	Resources	Potential Total	Resources	Potential Total	Resources	2013*	2020**
Atlas										17	22
	Pardoo	7.4	24.1	40							
	Abydos	7.4	15.1	140							
	Ridley magnetite								1450 @36.8% Fe		
BC Iron					28	50				5	5
Brockman Resources					56	100	1500	1500		15	25
Ferraus										15	25
	Davidson Creek		78.4	170							
	Robertson Range		45	180							
Hancock Prospecting										35	75
	Roy Hill 1		1000	1000			600	600			
	Roy Hill South			?							
	Roy Hill 2			?							
Total		14.8	1163	1530	84	150	2100	2100	1450	**87**	**152**

[4] Costing Principles, The Pilbara Infrastructure, July 2008

[5] The Pilbara Infrastructure (TPI) Rail Part 5 Instruments submission for the proposed Overpayment Rules & Costing Principles (NWIOA, 1 October 2008)

[6] Source: http://www.nwioa.com.au/pilbara_iron_ore_industry/pilbara_iron_ore_industry.phtml

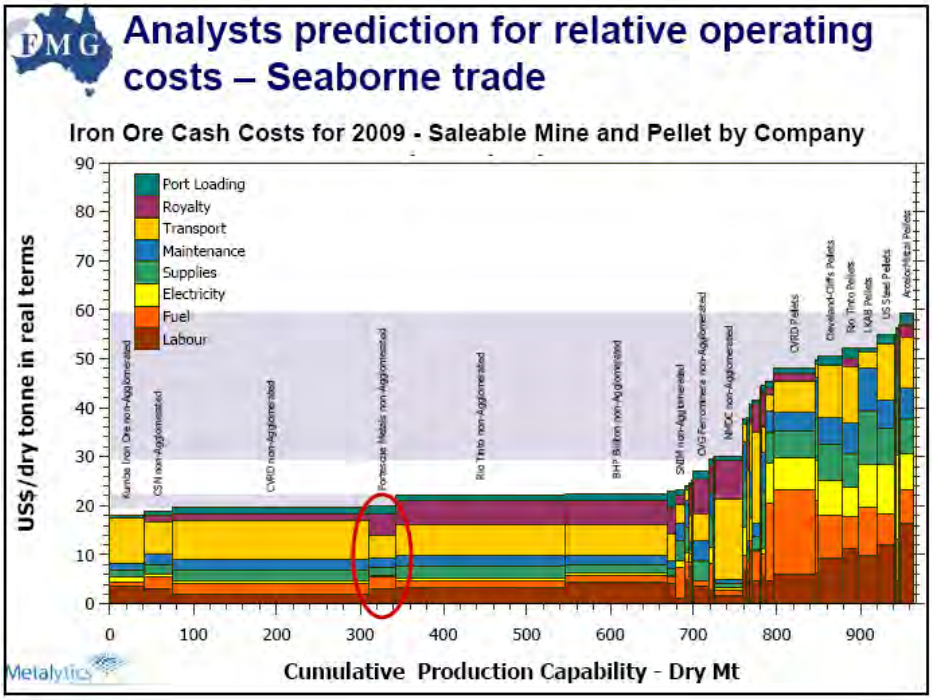
[7] FMG presentation to Diggers and Dealers Conference, June 2008

Grade/quality in relation to global supply

An important consideration in relation to the long term commercial viability of these mining operations is their current and potential position on the global iron ore supply curve. This will determine their ability to maintain operations in the face of adverse market conditions – falling real prices and/or margin squeeze induced by some combination of lower demand, increased supply or higher input costs. This is an important contextual factor in considering the issue of asymmetric or stranding risk raised by TPI in relation to their rail assets which is addressed in more detail in Section 4 below.

The critical determinant of cost competiveness is the underlying quality and geological configuration of the resource. Hence ore grades and strip ratios have a decisive influence on the costs of extracting and processing/blending ore in terms of capital and operating costs. The ore bodies that constitute the natural catchment area for TPI's above and below rail services are very well positioned in terms of their market attractiveness to Chinese and other Asian markets with no or limited beneficiation (i.e. processing to increase Fe content). This generally places them in the lower half of the global supply curve, with FMG's own projected cash costs in the bottom third – see Exhibit 2.[8]

Exhibit 2: Seaborne global iron ore supply curve



The current grade and quality specifications of Alliance members is generally of a comparable or somewhat higher quality than that of FMG's Cloud Break/Christmas Creek tenements.[9] As such, they are likely to be well positioned to remain viable across the price

[8] Source: FMG presentation to Diggers and Dealers Conference, June 2008

[9] For example, the current direct shipping grade iron ore (DSO) resources within FerrAus' Robertson Range and Davidson Creek project areas are some 120 million tonnes @ 58-60% Fe. BC Iron announced In March 2008 a

cycles inevitably associated with the changing balance between supply and demand conditions in global iron ore markets.

3. Issue: appropriate methodology and parameter values for the determination of the WACC for TPI Railway, including CRA commentary and question

General considerations

As is evident from the Authority's own work and that of supporting analysis, and much academic writing on the broad subject area, the use of the Capital Asset Pricing Model (CAPM) as a basis for deriving a WACC for regulated entities is fraught with theoretical and practical difficulties.[10] Most, if not all the critical parameters are not directly measurable. Proxy data is highly variable involving the use of backward-looking analysis of parameter data to derive values of expected parameters. Hence, there is great uncertainty about the appropriate value of a forward looking WACC, with the CAPM providing essentially a convenient aid to informed, consistent and transparent judgment.

This suggests strongly the need to avoid over emphasis on establishing individual parameter values and instead to focus on the overall outcome in terms of the underlying purpose of the regulatory regime. From a policy and practical perspective this involves reaching a balance between: on the one hand, not discouraging discretionary investment in essential infrastructure by providing a reasonable risk adjusted return on the investment; and, on the other, facilitating the use of that infrastructure to enable essentially cost competitive resources to serve regional/global markets by ensuring a return on those resources commensurate with their intrinsic quality. These judgements need to take into account the totality of the framework applying to the regulated entity. In the case of TPI this includes the proposed Costings Principles together with Segregation Arrangements and Train Path and Train Management Guidelines so far tabled by TPI.

On this basis, the Alliance broadly accepts the CAPM framework and its constituent elements as a practical and transparent framework for determining WACC. The Alliance notes CRA's preference for a post tax nominal rate of return. Given however the problematic nature of the forward parameters generally, the Alliance supports the Authority's use of a pre-tax WACC on the grounds of consistency with the WA Rail Access Regime.

However, on the basis of the currently available information, the Alliance considers that, looking forward, the arrangements proposed by TPI would more than adequately compensate an arm's length rail operator for the level of non-diversifiable risk associated with transporting Pilbara iron ore in prospective demand and supply conditions. In addition to

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Channel Iron Deposit resource of 47.2Mt at 53.6% Fe (61.5% calcined Fe) at Nullagine, including a high-grade DSO resource of 28.0Mt grading 57.4% Fe (65.1% calcined Fe).

[10] "*We continue to teach the CAPM as an introduction to the fundamental concepts of portfolio theory and asset pricing, to be built on by more complicated models like Merton's (1973) ICAPM. But we also warn students that despite its seductive simplicity, the CAPM's empirical problems probably invalidate its use in applications."* The Capital Asset Pricing Model: Theory and Evidence by Eugene F. Fama and Kenneth R. French, January 2004

the claimed requirement to increase WACC for asymmetric/stranding risk which is not justified on the facts and discussed in detail in this paper, the proposed other framework elements that would over compensate TPI for risk are:

a. The alternative inclusion of compensation for stranding risk in the Costing Principles via accelerated depreciation and a value included in the operating costs, and an uplift factor in calculating the ceiling price.

b. The treatment of the entire TPI line as one unit, hence exaggerating the likelihood of stranding risk across the entire asset base.

c. The inclusion of accelerated depreciation for major capital items such as earthworks, bridges and rails, using asset lives of one half/one third that of WestNet Rail and the favourable treatment of major periodic maintenance.

d. The overestimation of the appropriate capital base for an efficient stand alone railway by the use of the actual capital and financing costs incurred by FMG which have been dictated by FMG's broader commercial and financing considerations and mine-port logistics. As noted in the companion submission on TPI's Costing Principles, the Alliance considers that the TPI railway is neither a modern equivalent asset (MEA) nor an efficient cost railway. The TPI railway construction undertaking was a rapid development project which resulted in several diseconomies compared to a normally constructed railway, namely:

    - Higher project management and labour costs to build the railway as a result of completing tasks to a compressed timescale rather than to an efficient costs process,
    - Purchasing of materials for the railway with shorter economic life that could be supplied quickly rather than longer life components with longer supply lead times, resulting in some cases in higher maintenance costs than the MEA

Against this background, in relation to both the Costing Principles and the WACC, the Alliance suggests that the Authority should treat the TPI railway on a stand-alone basis and that the efficient costs and the financing charges be estimated from a building block approach:

- Given the difficulties of estimating the capital base, the Alliance would suggest that the Authority consider the use of an approved Major Periodic Maintenance program in lieu of a broad depreciation charge[11]; and
- in relation to debt and equity raising costs, as these can vary significantly depending on the capital requirements and overall risk profile of the corporation the Alliance would suggest that, where possible, these be benchmarked against

[11] For a fuller discussion of this issue, see Section 8 of The Pilbara Infrastructure (TPI) Rail Part 5 Instruments submission for the proposed Overpayment Rules & Costing Principles (NWIOA, 1 October 2008)

stand alone railway infrastructure providers, rather than an integrated mining and logistics entity.

4. Issue: stranding/asymmetric risk

Stranding risk is the central argument deployed by TPI as a basis for commercial compensation via either an augmented rate of return through a higher WACC and/or via an allowance in the Costing Principles. As the TPI submission makes clear, however, the case needs to be made based on the evidence of the scale of risk and the inability to manage the risk via mitigation:

> *There is a compelling case for the compensation of stranding risk where it can be shown to be material, with this compensation commensurate with the residual risk that is efficiently borne after any risk mitigation strategies have been taken into account*. (Issues Paper, page 25, emphasis added)

We first address the degree of mitigation that TPI have achieved or can realistically put in place and then address the scale of the residual risk facing a standalone TPI business that effectively turns on the outlook for global iron ore demand.

Mitigation strategies

The TPI submission on stranding risk points to two sources of risk mitigation: contractual commitments to traffic and associated capital contributions from the customers; and the use of accelerated depreciation to recover the required return of capital over the lives of user contracts.

Treating TPI on a standalone basis, it is clear that, subject to the underlying risk to iron ore tonnages, FMG's position as a foundation customer provides a high level of risk mitigation in relation to capacity utilisation. As noted earlier, allied to their port capacity undertakings to use 45 of the initial 70Mtpa of TPI's Port Hedland facilities, FMG have effectively committed to utilising the railway facilities to deliver these tonnes. FMG have also indicated their intention to expand production over the next few years through 120Mtpa to 150Mtpa.[12]

Thus, even before seeking contractual tonnage commitments from third parties - such as Alliance members, Hancock Prospecting etc - TPI has a degree of surety around traffic that is likely to be equal or greater than that available to a more diversified rail network (such as WestNet Rail). TPI can further mitigate volume and revenue risk by encouraging third party access with the advantage that the timing of these volumes – emerging from 2010 onwards – provide ample opportunity to plan for and configure the rail system to meet the emerging demand profile in an efficient manner, hence allowing for an equitable contribution to capital costs by third party users.

On this basis, the Alliance would note that the risk profile of TPI's business is very significantly lower than that of the Alice Springs-Darwin Railway (ASDR) which faced, and continues to face, very substantial demand/volume risk through alternative, cost effective transport modes. The Alliance wholly rejects the ADSR as a relevant precedent for the

[12] Op cit, Diggers and Dealers Conference 2008

regulatory treatment of TPI facilities for the reasons set out in the Alliance submission to the Authority on TPI's Segregation Arrangement proposals.[13]

The commercial risks around volume will be further mitigated in practice by the Authority's annual review of the WACC and the five yearly review of the broader CAPM framework provided for under the Rail Access Code and Act. In principle, this would allow for a prospective adjustment to either WACC and/or cashflows in recognition of exceptional events/risks not contemplated in the initial determination.

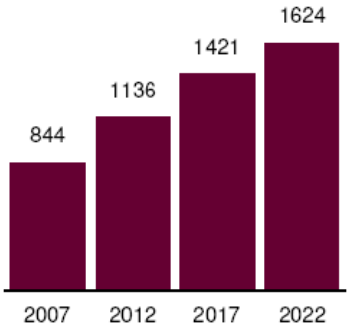
Under the Costing Principles, TPI is also proposing to write off key capital items over periods that are between a half and a third of the asset lives used in the WestNet Rail arrangements. The effect of this is to accelerate the return on capital by increasing the capital component of user charges.[14] This issue is dealt with in more detail in the Alliance submission on the Costing Principles. Subject therefore to the consideration of the underlying prospective iron ore market conditions, the Alliance can see no case for any uplift to WACC in respect of stranding risk. It is to this issue we now turn.

Residual risk – the outlook for global iron ore supply and demand

The industry perspective

There is near unanimity in the iron ore and steel industries on the strength of the medium/long term outlook for global iron ore demand. In summary, major iron ore companies (including FMG) are forecasting that demand for seaborne iron ore is expected to increase by a third by 2012 and nearly double by 2020 (See Exhibit 3).

Exhibit 3: Rio Tinto forecast of global seaborne iron ore demand[15]

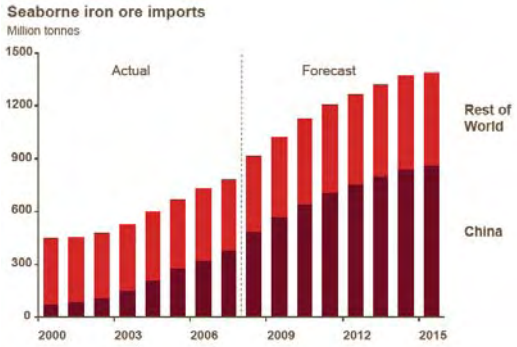


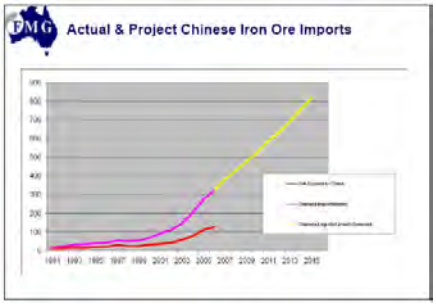
This growth is driven by continuing growth in Chinese steel demand and growing Indian demand. China is forecast to double iron ore imports in the next six years. Falling grades of Chinese domestic iron ore will constrain domestic supply.[16]

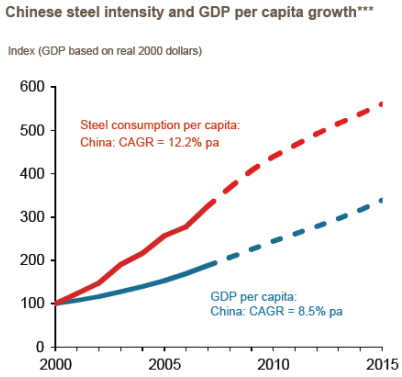
[13] The Pilbara Infrastructure (TPI) Rail Part 5 Instruments submission for the proposed Segregation Arrangements and supporting provisions, page 15 (NWIOA, 5 September 2008).
[14] Op cit, Annexure C.
[15] Presentation by CEO Rio Tinto Ltd, 13 June 2008 (Source: http://www.riotinto.com/response/ENG/investors/702_900.asp)
[16] Implied run of mine grade had fallen from 40% to 30% over the period 2002 to 2007. (Source Rio Tinto)

The bullish industry outlook reflects the structural transition under way in China that will play out over the next 10-15 years as another 400 million Chinese people move into cities. By the early 2020s nearly one billion Chinese people are expected to live in some 220 cities with over a million people each. This is likely to require historically unprecedented investment in the accommodation and infrastructure to service the needs of the urban population (Exhibit 4).

Exhibit 4: rising Chinese urbanisation, steel intensity of GDP and iron ore imports





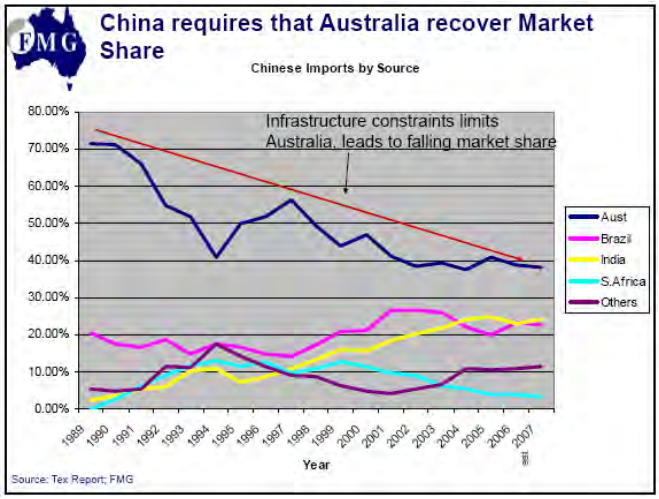


Current Indian steel demand is at a much lower level than China but steel output is still expected to double by 2020. Much of the resulting increased iron ore demand will be sourced domestically but this will divert Indian exports to China into the Indian domestic market. In the longer term India may well become a net importer.[17]

World iron ore supply is clearly expanding to meet this growing demand, reflected in the expansion plans in the Pilbara of which the Alliance members are a part. This will undoubtedly eventually ease current severe shortages of iron ore and hence pricing pressures. Given, however, the Pilbara's generally advantaged position on the global supply curve (see Section 2 above), the increased investment in mines and logistics infrastructure in the region is expected to stabilize and then increase the Pilbara's market share into China (Exhibit 5).

[17] Raw Materials Outlook for India - Joint India/OECD/IISI Workshop, New Delhi (India), May 2006.

Exhibit 5: Australian market share of Chinese iron ore imports[18]



An independent perspective

The Alliance is conscious of the danger of correlated optimistic beliefs driving unrealistic expectations of iron ore supply and demand over the medium/longer term in which TPI would be seeking to earn a normal return on an efficient capital base. The Alliance has therefore sought an element of independent verification of the underlying economic dynamics, particularly in relation to the size and composition of predicted Chinese growth.

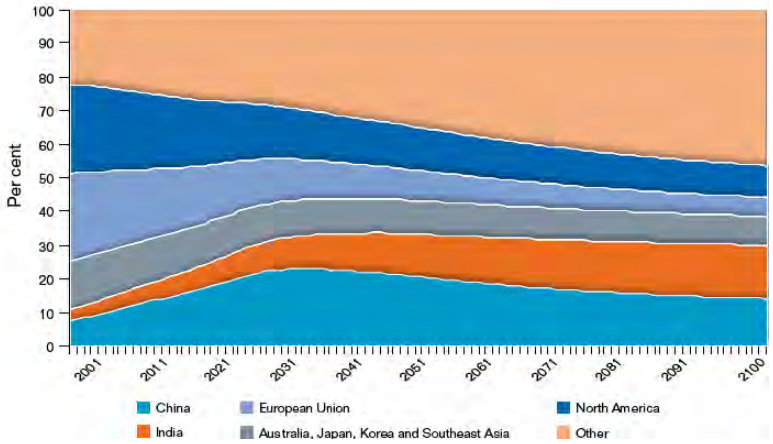
Set out below is an extract from the Garnaut Supplementary Report issued on 5 September addressing China's growth outlook, together with a supporting graph showing the long term composition of global growth by major region/country (Exhibit 6).

> *"China's economy will continue to grow rapidly. Using growth accounting, Garnaut et al. (forthcoming) project GDP growth of China of 9.0 per cent from 2005 to 2015 and 6.8 per cent from 2015 to 2025. This rapid GDP growth will take place on the back of continued very high investment levels and total factor productivity growth. This projection is higher than most literature forecasts, but below performance seen in recent years. ....China's economic expansion will continue to be energy intensive. .....This reflects rapid growth in China in heavy energy-intensive industry: between 2000 and 2006, crude steel production has grown in China by an annual average of 22 per cent, pig iron by 21 per cent, and cement by 13 per cent (National Bureau of Statistics of China 2007a)".*[19]

[18] Op cit, Diggers and Dealers Conference, May 2008

[19] In Chapter 4 Emissions in the Platinum Age: the rapid, recent and projected future growth of greenhouse gas emissions Garnaut Review Supplementary Report, September 2008

Exhibit 6: Shares in global output of various countries and regions, 2001 to 2100



These views on the fundamentals driving global steel and iron ore demand are reflected in recent commercial analysis of the medium term outlook for commodities:

> "...*our China economists still see Chinese GDP ~9.5-10%pa for 2009 and growth in commodities demand is generally > GDP. Given renewed China govt. focus to prioritise growth, we see little change to the "urbanisation & infrastructure" drivers for the industrialisation of China. GDP growth in emerging nations such as China and India are as commodity intensive as GDP growth in emerging nations."*[20]

It is important to stress that these reflect judgments about the medium term structural drivers of iron ore demand even against the backdrop of the current shorter term economic uncertainties created by the major flow on effects of the global liquidity crisis:

> *"We are believers in the Super Cycle. We vehemently hold the view that quality investments in the mining sector will give investors strong returns over 1-5 years. However, business cycles will move higher & lower through the larger Super Cycle, and parts of the subordinate cycle will feature price volatility."* [21]

Conclusions on residual risk

Against this outlook, which the Alliance members endorse, the Alliance can see no substantive argument for TPI's standalone rail business being granted additional returns via WACC (or any other route) to compensate for stranding risk. Given the evidence quoted above, which draws heavily on FMG's published commercial perspectives and statements, it is difficult to see a credible ex ante argument for asymmetric risk related to partial or total closure of FMG's mining operations. With regard to the possible stranding risk associated with third parties (i.e. non FMG tonnes), for the reasons set out above, the Alliance would regard this as risk as low, in a worst case scenario for TPI.

In summary, the Alliance would argue that:

[20] Commodity Price Review: Looking beyond the storm, page 4 (Merrill Lynch, 5 September 2008)

[21] Op cit, page 4

- Stranding risk on TPI's main line is negligible in relation to projected FMG usage and, to the extent such risk existed, would likely be effectively mitigated by other third party producers requiring the incremental capacity; and
- Stranding risk on the spur lines is also negligible as the construction of such spurs is most likely to be undertaken by the access seeker(s).

Were there to be a predisposition to consider such a risk in setting the regulatory parameters then, on the grounds advanced by CRA, the Alliance considers the stranding risk should be limited to the efficient incremental cost of the capacity required for third party access. This would be consistent with the arguments set out in the Costing Principles submission for the segmentation of TPI's line for accurate and equitable cost allocation purposes.[22]

On the overall facts presented here, however, the Alliance considers that the residual risks arguments would seem to point the other way i.e. towards a lower risk profile for TPI and hence a WACC determination that is somewhat lower than that judged appropriate under the CAPM arithmetic for WestNet Rail. It is within this context that we now offer comments on the broader considerations that should drive the regulatory judgment on the appropriate WACC for TPI.

5. Background considerations relating to setting a TPI WACC

The Alliance supports the approach and structure the Authority has recently applied to WestNet Rail after a careful review of literature and statistical evidence as a foundation for determining TPI's WACC.[23] (Extract of summary results table at Exhibit 7.)

[22] Op cit, Section 5

[23] Final Determination 2008 Weighted Average Cost of Capital for the Freight (WestNet Rail) and Urban (Public Transport Authority) Railway Networks; ERA, 23 June 2008.

Exhibit 7: 2008 ERA Freight Network WACC

Table 1: WACC values for the 2008 WACC Final Determination

CAPM or WACC parameter	Freight network 2008 value
Nominal risk free rate of return (%)	6.37
Inflation rate (%)	2.75
Real risk free rate of return (%)	3.62
Debt proportion (%)	35
Equity proportion (%)	65
Market risk premium (%)	6.0
Equity beta	1.00
Debt margin (%)	3.02
Debt issuance costs (%)	0.125
Taxation rate (%)	30
Franking credit value (gamma)	0.5
Nominal pre-tax cost of debt (%)	9.52
Nominal post-tax cost of equity (%)	12.37
Real post-tax cost of equity (%)	9.36
Nominal pre-tax cost of equity (%)	14.55
Real pre-tax cost of equity (%)	11.49
Nominal pre-tax ("Officer") WACC (%)	12.79
Real pre-tax ("Officer") WACC (%)	**9.77**
Nominal post-tax ("vanilla") WACC (%)	11.37
Real post-tax ("vanilla") WACC (%)	8.39

This reflects our view that the factual base for the existence of asymmetric/stranding has not been established. As such this dispenses with the need for complex or synthetic approaches to risk valuation canvassed by TPI and/or CRA. Clearly, the actual inputs into the framework and the resulting WACC to apply from June 2009 will depend on the movements in the relevant data sets between now and the determination date.

There are, however, two general points that we would make in relation to the judgments that the Authority will apply to a TPI WACC and the overall regulatory framework governing its operations.

First, the Alliance considers there is a need for a consistent approach to risk evaluation to be applied across the WACC calculation and the Costing Principles. TPI's current proposals would in principle allow for the reflection of their assessment of residual risk to be included via an enhanced depreciation charge. If the case for significant residual risk is not accepted then there should be no depreciation uplift (or any other compensation mechanisms) included in third party charges.[24]

Second, the Alliance would suggest that the market context discussed above may argue for the consideration of an adjustment to the market risk premium (MRP) applied to TPI. We note that CRA comments were not sought on the MRP, understandably given the prior work by Allen Consulting on this topic. Like all key elements of the framework, considerable

[24] As set out in more detail in its submission on Costing Principles and Overpayment Rules, the Alliance would suggest that the Authority consider the use of Major Periodic Maintenance in lieu of depreciation. Such an approach would: ensure that the railway was at a standard appropriate to meet the task, would better align TPI and third party users' incentives to undertake and fund the required investments; provide openness as to the capital works program to meet the operational standard and reduce the areas of problematic judgments in relation to the WACC.

judgment is required since the premium is not directly observable. We note the basis of the current figure of 6% and have compared it with very long term premium estimates for US, UK and world equity markets which suggests plausible forward looking premiums of 4-5% against long dated government bonds.[25] Work carried out by the UK Office of Rail Regulation for their 2008 periodic review of Network Rail's access charges suggested a figure within this range.[26].

There may be arguments for a higher equity risk in the Australian market, related to different market size and the relative efficiencies of the Australian and comparator economies. We would suggest, however, that the risk profile associated with the global iron ore market and the Pilbara's competitive position would argue for an MRP for TPI not exceeding, and arguably below, that for WestNet Rail with a corresponding adjustment to the overall WACC determination.

[25] Dimson Marsh and Staunton quoted in "Recent market evidence on the common WACC/CAPM parameters (Oxera Consulting, August 2007)

[26] *"We have reviewed the available evidence and will set the allowed return at 4.7% on a real vanilla basis."* (Office of Rail Regulation, Periodic review 2008: Draft determinations, June 2008, para 14.64)