The Costs and Benefits of Part IIIA

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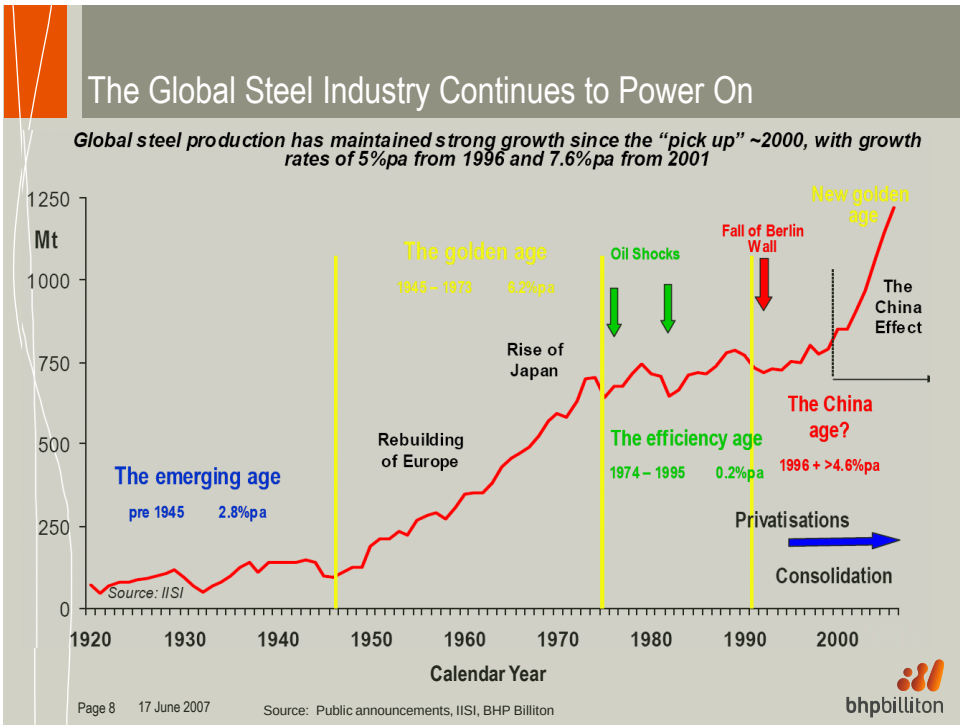
1. *Current business environment*

First let me say a few words about the current environment for the natural resources sector. World resource markets are experiencing a strong increase in demand as China, the world's largest population base, enters a period of sustained industrialisation. The period since the end of 2001 in particular has been very strong. China's impact in steel production is shown below.



Australia is a very significant beneficiary, not only in increased sale volumes but also in increased sale prices. Australia's terms of trade improved by 42% over the last five years and 32% over the last three years, the second largest shift of any country in the G-20 (Reserve Bank, 2007).

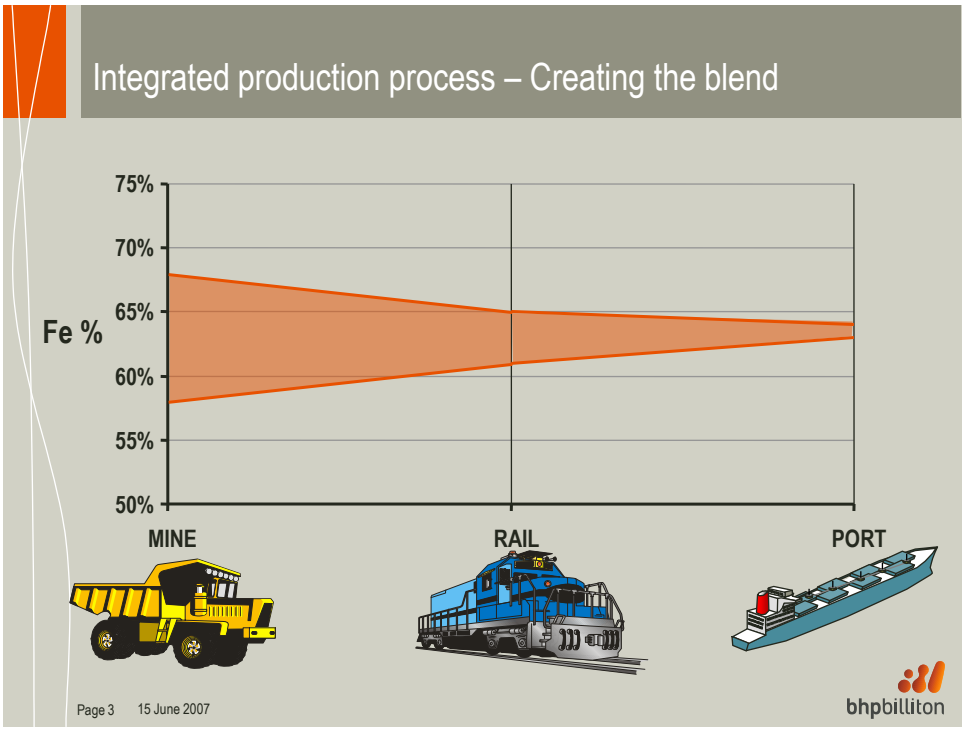
Australia boasts many of the key assets – natural resources, agricultural products, educational services – which are needed by China to support its development. These factors present Australia with a rare window of economic opportunity. Australia is uniquely positioned geologically, geographically, and economically to partner with China and our other growing regional neighbours.

Further, the economic benefit of this growth is already being enjoyed, as buoyant export production and revenue contributes significantly to domestic employment and prosperity.

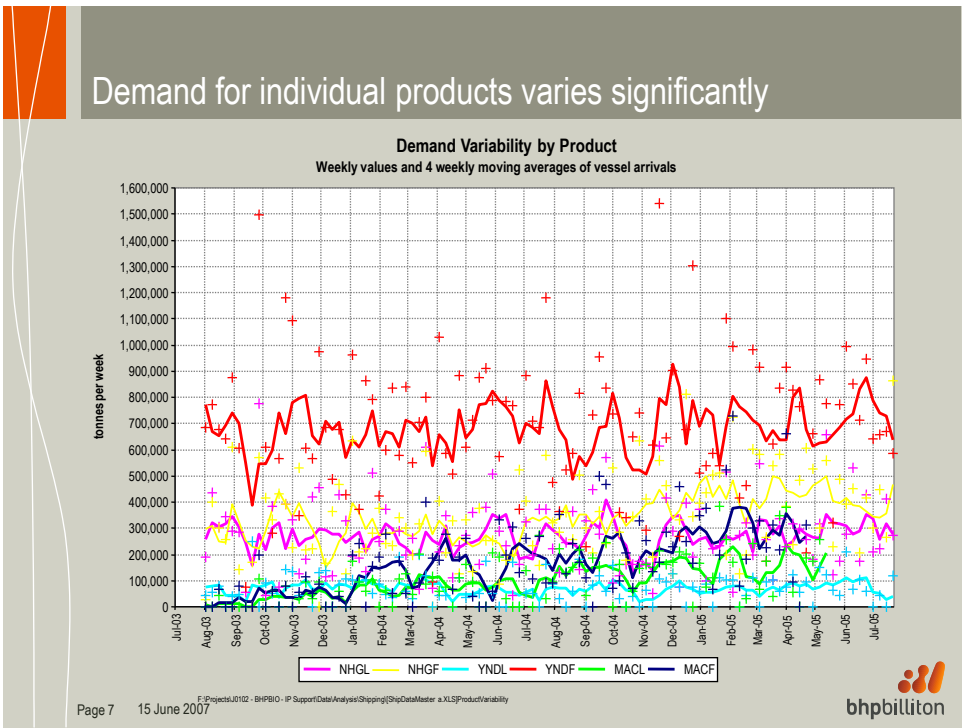
The real question we should be asking, however, is: What can be done to position Australia for even stronger growth? And as we know, the answer to that is increasing the capacity and productivity of the economy.

2. *The iron ore business*

Iron ore is Australia's largest export earner. And the iron ore business is a blending business, with our business challenge being to take highly variable iron ore out of the ground, and deliver a product in the ship's hold that has very little variability at all.

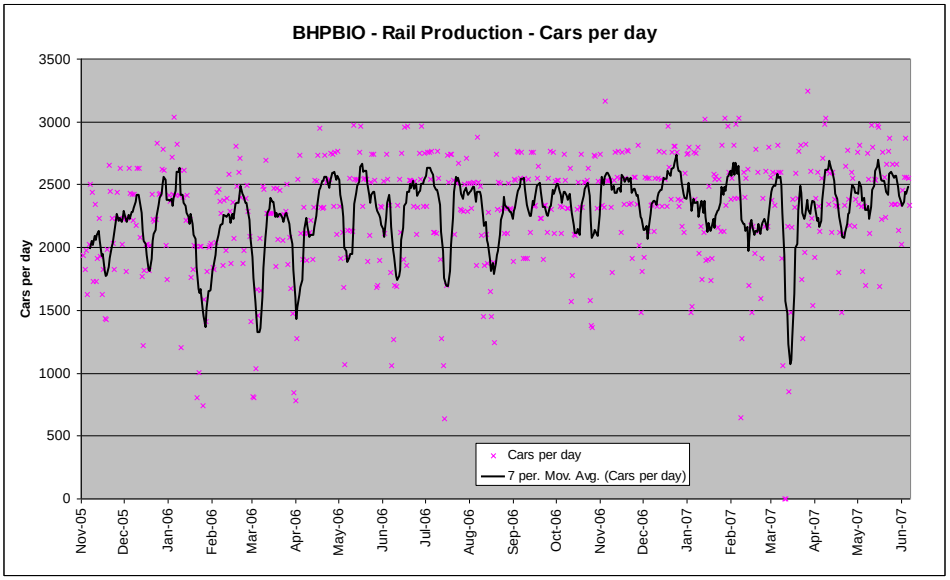


We have to do this for six different elements and compounds, simultaneously, and in real time, for each of our products. And we have six different products with the weekly demand for each of the products varying significantly.



This further stresses the system, and means that system bottlenecks move through the mine, rail and port system depending upon demand requirements. The impact of this on our rail system, coupled with

planned maintenance, unplanned maintenance, and equipment sharing means that the variability of our railings is very large. And so as to avoid any doubt, and as demonstrated by the chart below, we are not running our railways to a timetable.



The importance of our people being able to respond to changed circumstances, on an hourly basis, is critical. Or put another way, flexibility is critical to us maximising system throughput, and maximising system efficiency. This is especially the case when we are running at maximum productive capacity, as we are today and have been for the last number of years.

3. Part IIIA – Ten years on

But let me return to the world of Part IIIA and regulation. I will briefly review my understanding of the intent of Part IIIA, the current interpretation of Part IIIA, and the latest changes to Part IIIA.

3.1 The Hilmer report

The forerunner to Part IIIA was the so-called Hilmer report. The Hilmer committee was well aware of the risks of mandating third party access to private property. The concerns expressed in its report are well worth revisiting:

- it noted that "it would be appropriate to ensure that an obligation to provide access does not unduly impede an owner's right to use its own facility, including any planned expansion of utilisation or capacity …" (p. 256)

- it recognised the need to "carefully limit the circumstances in which one business is required by law to make its facilities available to another", because the "failure to provide appropriate protection to the owners of such facilities has the potential to undermine incentives for investment" (p. 248);

- it emphasised that access should be "essential" to permit effective competition in a downstream or upstream market, rather than "merely convenient" (p. 251); and

- it argued, after setting out what the committee regarded as the appropriate criteria for granting access, that a "frequent feature" of facilities and industries most likely to meet these requirements would be those where there was "traditional involvement of government in these industries, either as owner or extensive regulator" (p. 251).

The report recommended a number of safeguards to ensure that mandatory third party access to private property was essential, and not merely convenient. In large part these recommendations have found themselves in the legislation in the form of the strict statutory criteria that are supposed to be met before any facility can be declared.

3.2 The rulings of the Regulator, Tribunal and Courts

The statutory criteria suggested by Hilmer and incorporated into the legislation that need to be met before a facility can be declared – or made available to third party access – have been significantly weakened over the last ten years.

Criterion	Case	Comment
Promotion of competition	Sydney Airport International – 2000	The Tribunal found that this criterion did **not** require "an advance in competition in the sense that competition would be increased..."
Promotion of competition	Sydney Airport Corporation – 2006	The Tribunal found that the financial viability of an access seeker is not relevant to a decision to declare a service
Promotion of competition	Sydney Airport Corporation – 2006	The Full Federal Court held that it was **not** necessary to show that declaration under Part IIIA would promote competition, provided access generally to the facility would do so
Uneconomical to duplicate the facility	Duke Eastern Gas Pipeline – 2001	The Tribunal found that this criterion did **not** consider whether the access seeker could commercially develop another facility (the "private test") rather it interpreted the words to more broadly encompass the so-called "social test"
Health and safety	Sydney Airport International – 2000	The Tribunal found this issue was better dealt with **after** declaration, thereby effectively ignoring this criterion
Already subject to an effective access regime	BHP Billiton rail line – 2005	The NCC found this criterion needed to apply to precisely the same service as that contained in the application. This is the despite the existing access regime being fundamentally more efficient
Threshold issue - "production process" exemption	BHP Billiton rail line (subject to appeal) – 2006	The Federal Court held that it is **not** sufficient that a facility forms an integral and substantial part of a production process. To fall within the exception, the facility subject to access must itself transform one thing into another

There has been a lot of tortured language in arriving at these interpretations. And the net result is that the many of the protections against inappropriate access have been watered down.

3.3 The recent amendments to Part IIIA

The recent amendments to Part IIIA inserted an objects clause, which are to:

- promote the **economically efficient operation of, use of and investment in, the infrastructure by which services are provided, thereby promoting effective competition in upstream and downstream markets**; and
- provide a framework and guiding principles to encourage a consistent approach to access regulation in each industry.

The Council, the designated Minister and the Tribunal are now required to take these objects into account when making decisions.

Borrowing heavily from the objects clause, I suggest that to evaluate the costs and benefits of Part IIIA, we should consider Part IIIA against the following four criteria. That is, to benefit Australian consumers Part IIIA should:

1. allow for the efficient operation of existing infrastructure that is or may be "declared";
2. promote investment in new infrastructure;
3. promote competition in upstream or down stream markets; and
4. be administered in a professional, consistent, cost-effective and timely manner.

Let me discuss each of these issues in turn.

4. Allow for efficient operation of existing assets

One would hope that any facility declared pursuant to Part IIIA would continue to operate efficiently after declaration. While inconsistent with our own first hand experience[1], let us assume that the regulator is concerned with operational efficiency post any third party access arrangements. What issues should the regulator consider?

- In a vertically integrated production process, such as we operate in the Pilbara, the Regulator needs to focus on maximising **system efficiency**, as opposed to the efficiency of system

[1] The National Competition Council in its Final Recommendation labelled system efficiency issues as "diseconomies of scope". It noted:

> *6.252 The Council accepts that in some contexts, access could potentially give rise to diseconomies of scope. If poorly managed, such diseconomies **could be significant**. The Council considers that any diseconomies are likely to be addressed through appropriate management and, in any event, are **unlikely to be significant**. **To the extent that access does give rise to diseconomies of scope, they can be internalised through the access price.***

To summarise the National Competition Council's position:

- it did not distinguish the different types of diseconomies of scope;
- it said diseconomies of scope "could be significant";
- but one sentence later it says they are "unlikely to be significant"; and
- in any event they can be ignored because they **can** (not **will**, I might add) be reflected in access prices.

components. In our case system efficiency is gained by considering our mines, rail and port operations as a complete and integrated production process.

- In the complex and tightly integrated system that we operate in the Pilbara, the Regulator also needs to recognise and allow the owner of the business to maintain hour-to-hour, day-to-day and week-to-week system **flexibility**. This allows us to efficiently manage:
    - significant variability in demand for our products;
    - significant variability in the quality of our ore bodies;
    - planned maintenance;
    - equipment sharing conflicts; and
    - breakdowns, or unplanned maintenance.
- Operational efficiency is also about continuous improvement in all aspects of our operation. This means making system-wide changes – **without delay** – to :
    - safety standards;
    - work practices;
    - operational technologies; and
    - operations to facilitate system expansions.

In discussing some of these issues in our case, the National Competition Council said

> *6.255 …While the Council acknowledges that congestions, delays and flexibility issues may result in costs, such costs are theoretical and unforseen at this time and therefore impossible to quantify. It is therefore impossible to conclude any correlation between these diseconomies of scope and lost revenue resulting from foregone sales.*

At its simplest, the National Competition Council said:

- we will ignore the issue of maximising system efficiency versus sub-system efficiency;
- we can't quantify the value decrement from delays; and
- we can't quantify the value decrement from loss of flexibility,

so we will ignore the costs.

Put another way, the Council said it lacks the appropriate tools in its tool kit to regulate facilities like the iron ore business, and to get around this problem we will assume the costs that we can't quantify don't exist.

The approach articulated by paragraph 6.255 would ensure that the Australian iron ore operations would not operate efficiently should any third party access occur, and that the very substantial system costs of this would simply be ignored.

Even with the new objects clause, I am not sure we will see a different regulatory approach. The only place holder for the crucial criterion of system efficiency to be considered is the public interest test. Prior to the new objects clause being inserted in Part IIIA, any issues of operational inefficiency should have been considered under the public interest criterion. The new objects clause has not changed this.

Further, the public interest criterion is framed in the negative, and has to overcome the apparent presumption that if all the other criteria are met, the public interest test will be met.

And let me put this critical issue in perspective. Broker valuations put the value of our Iron Ore business somewhere around US$20 billion. A recent Independent Expert report valued Mindy Mindy – the deposit underpinning the Part IIIA access application – at some US$50 million. That is, going by these third party assessments, our business may be some 400 times larger in value terms. Any small percentage loss in system efficiency will have a very significant impact on the public benefits.

Part IIIA does not address properly the critical issues of system efficiency, either explicitly or as administered. One of the major reasons we are fighting the Pilbara rail access case so strongly is the threat to our operational efficiency. The only beneficiaries of reduced Australian operational efficiency are the Australian iron ore industry's biggest competitors; the Brazilians, Indians and domestic Chinese producers.

Another reason we are fighting this case is the risk to our expansions, which I will now turn to.

5. Promote investment in new infrastructure

Encouragingly, the new objects clause says that regulators should take into account the need to "promote investment". However, this is a bald and unsupported statement, and inconsistent with current regulatory behaviour. Further, and like system efficiency, it is not one of the explicit statutory criteria that must be considered. Rather this critical issue is relegated in practice to being part of the public interest criterion. And as I noted before, the public interest criterion is framed in the negative, and is being interpreted as presumptively met if all the other criteria are fulfilled.

The challenge for the Regulator in promoting investment in infrastructure is to give practical meaning and effect to what is a very broad concept. If the promotion of investment goal articulated in the new objects clause is to have any meaning, let me set out the challenges facing the regulator:

- most importantly, system efficiency post any third party access must be preserved. Investment will be discouraged if the operating performance of the system post investment and post third party access is compromised;
- the delays to investment and the uncertainty caused by regulation need to be recognised, and minimised or eliminated;
- investment in latent capacity needs to be encouraged, which will not occur with the current access arrangements;
- all the costs of providing access need to be priced and fair compensation provided to the business owner. In particular all the costs of expanding the system, not just the marginal costs, need to be recognised and the business owner compensated for all the costs; and
- the return on sunk costs provided to the business owner needs to be fair and reasonable, otherwise investment will be discouraged.

5.1 Lack of operational efficiency a significant barrier to investment

Part IIIA will act as a barrier to investment if its application continues to disregard the critical issue of the operational efficiency of a declared facility. This disincentive to investment acts on two levels:

- the **risk** of declaration will deter investment. Not being able to answer a question from the Board as simple as "What will be the productive capacity of the business should I sanction the investment?" is a strong disincentive to investment. The current two part declaration process means this issue cannot be resolved satisfactorily; and

- if it is assumed the facility will be declared, and if the system capacity loss can be precisely quantified – which it probably cannot be - this is simply another significant cost to the project. Again this is a material disincentive to invest.

5.2 Regulatory delays to investment must be recognised

In my experience no regulator wants to acknowledge that regulation will generally cause delays to investment decisions, and that these delays can be very expensive. In my view, this blinkered approach is naïve, uncommercial and misguided. Port Jackson Partners in a report for Rio Tinto estimated the cost of lost revenues caused by delays to investment at between A$26 to A$43 billion. BHP Billiton in its submissions to the National Competition Council conservatively estimated the cost of regulatory delays to its profits of some A$1.6 billion. I note these two figures are broadly consistent.

5.3 Investment in latent capacity is being discouraged

Most businesses are faced with significant uncertainty in making investment decisions, namely:

- the prices realised in the future are highly uncertain;

- the volume of product demanded in the future is highly uncertain; and

- the competitive supply is also uncertain.

All this uncertainty exists in an environment of significant capital investments, and often long lead times to bring on new capacity – typically 3 to 5 years in the case of the iron ore business.

A rational business response is to invest in latent capacity to provide itself with an option on the upside to its demand forecasts. However, in the current regulatory environment this is likely to be classified as "spare" capacity by regulators and expropriated for the benefit of third parties, at exactly the same time the business would wish to utilise this optionality for its own benefit. This is a very significant disincentive to investment.

5.4 All costs of access must be recognised and compensated

Another significant issue with the current Regulatory environment includes systematically discouraging investment in the expansion capability of the infrastructure by not properly pricing the cost of expanding the system. At its simplest, current regulatory pricing is charging marginal cost to the access seeker for expanding the system, not the full cost of expanding the system.

A simple example concerns our operations. We are currently looking at duplicating a large part of our rail line at a cost in excess of A$500 million. The advantage of this is that we will then be able to further expand our system at the cost of tens of millions of dollars by putting "cross-overs" between the rail lines. However, were the third-party only to pay for the cost of cross-overs the business owner would

be significantly disadvantaged, thereby discouraging, or delaying, the initial investment in a system that can be easily expanded.

While conceptually this issue is different to discouraging investment in latent capacity, the end result is the same lack of, or delay in, investment.

5.5 Current approach to return on sunk costs is discouraging investment

Let us assume that two of us are thinking of investing in infrastructure, and that the initial investor must by law provide access to the second mover. Then whether I rush to invest, or hang back, is simply a matter of:

- the return I need to achieve if I am the initial investor; and
- if I choose to hang back and wait and seek access, the returns I will have to pay the initial investor.

In this thought experiment, I will determine the lowest cost alternative of the two, and attempt to pursue that strategy.

Accordingly, to achieve the objective of promoting infrastructure investment the Regulator must:

- understand and properly estimate the returns the infrastructure provider requires to make the investment; and
- ensure that **at least** this rate on sunk costs is charged to access seekers.

To the extent the Regulator systematically **underestimates** the required rate of return the Infrastructure Provider needs to invest in new infrastructure it will:

- discourage investment in new infrastructure, as it will be better to be a free-riding access seeker; and
- increase demand for regulated services, thereby turning demand for Part IIIA into a commercial convenience, rather than an essential service applied sparingly.

I assert simply that the Regulator is systematically underestimating the returns needed to encourage investment in new infrastructure. Depending upon the circumstances, this underestimation is around 100 per cent, and possibly much more. That is, the returns an infrastructure provider needs to invest in new infrastructure can be of the order of double, or more, of what is currently calculated by Regulators.

Further, and as a corollary, the rate that access seekers are typically charged as a return on sunk costs is an artificially low, super cheap rate, when calculated in accordance with current regulatory "best practice".

What is the problem with the current regulatory approach? The problem is a mis-application of standard NPV theory, which assumes that an investment decision is simply a now-or-never investment decision. This is a key assumption underpinning the NPV approach.

In the real world, a potential investor can invest now, walk away, (as per the NPV world) **or defer the investment for another day**. In the presence of uncertainty the last alternative of deferring the investment is not able to be accommodated within the NPV framework. That is, the corporate finance

paradigm that underpins the so-called building block approach to set access prices is fundamentally flawed.

To value this ability to defer the investment we need to use **real options**. And, I emphasise for the benefit of all the NPV tragics in the audience, it **cannot** be handled with any rigour within an NPV framework.

To put these statements in an academic context, the problem we face is a corporate finance problem of determining optimal project investment rules. The approach currently being used by Regulators – namely NPV analysis - is **at best a special case** of a more general corporate finance framework known as real options. The real options field of corporate finance has a rich academic literature developed over the last twenty years.

Let me try to explain the flaws of the current regulatory approach with a simple example. Because of the China boom we need to significantly expand our infrastructure in the Pilbara. This could cost in the order of A$10 billion dollars. Standard NPV theory says that if the NPV of the project is $1, we should invest. While absurd, this is what is assumed in the regulatory building block approach. This standard, or naïve, NPV investment rule is an incorrect conclusion on a number of levels, but let me just focus on one.

In practice, we would not accept such a marginal project because a better alternative is to wait and see what happens to iron ore prices, iron ore volumes, interest rates, operating costs outlook, corporate tax rates and any number of other variables that go into project valuation. If these improve in aggregate we may invest, but if they worsen we will certainly continue to defer the investment.

The value of deferral is the ability to minimise the chances of a bad outcome in terms of project value. And, believe me, this is very valuable.

But when do we stop deferring our investment and sanction the project? We invest when project returns are **sufficiently** large. Let me explain by reference to a financial option. Let's assume you all own a ten year call option on ABC Limited with an exercise price of $40. Analogous with the NPV rule, do you exercise the option when the share price hits $41? Unless the option expires tomorrow, you will not exercise at that price if you are economically rational. You should wait until the destruction of option time value is more than offset by the dividend return you obtain by exercising and becoming a shareholder in ABC Limited. You might be waiting a long time before you rationally invest, and the share price could easily be $80 or more before you should exercise your option.

In the same way we will only **sanction** the project when the IRR of the project is way in excess of the project's cost of capital. This is to offset the very valuable right we have to defer the investment and hence avoid bad states of the world.

And it is for this reason the Regulators in Australia are:

- systematically underestimating the returns required by infrastructure providers; and
- thereby systematically discouraging investment in new infrastructure.

5.6 Summary on promotion of investment

Part IIIA cannot promote investment in new infrastructure when it systematically:

- fails to ensure a facility can operate efficiently post declaration;
- fails to recognise the delays to investment caused by regulation;
- actively discourages investment in latent capacity;
- fails to properly compensate the business owner if a system is built that is quickly and easily expanded; and
- underprices the return on sunk costs by using the wrong corporate finance paradigm;

I note in passing that the last three issues can only properly be handled with the corporate finance paradigm of real options.

6 Promoting competition

The legislation as currently drafted does **not** require that the alleged markets in which competition is to be promoted be of any real significance. In our case, for example, I am not sure anyone is alleging that promoting competition in the iron ore tenements market within 80 or 100km of our rail line is of national significance.

Putting aside this point however, let us look at the issue of promotion of competition in the atomised markets that have been identified by the National Competition Council, namely the:

- the iron ore tenements market; and
- the iron ore rail haulage market.

6.1 The iron ore tenements market

In the iron ore tenements market we are accused of refusing access to our infrastructure so that we can buy iron ore properties on the cheap. The only problem is that the facts don't support this assertion.

- On the basis of resource estimates released to the ASX we have a 65 year mine life at current production rates. On the basis of mineralisation, the life of our iron ore operations is even greater. In economic speak, the marginal value of another tonne of iron ore in the ground is low.
- We have **not** historically bought iron ore tenements. Over the last ten years we have not bought any iron ore tenements.

Put more bluntly, we don't **need** to buy iron ore tenements. So it makes no sense for us to spend the money and energy protecting this alleged anti-competitive practice.

6.2 The iron ore haulage market

The iron ore haulage market is where we (or someone else) haul iron ore for third parties, as opposed to third parties using their locomotives and rolling stock on our (declared) rail lines. We have an existing State-based legal obligation to provide iron ore rail haulage to third parties. We are in discussions with the WA Government about modernising our existing State-based rail haulage obligations. The challenge

for all of us is managing the conflicting forces of so-called regulatory best practice with the realities of the global iron ore industry.

There are risks in us hauling third party ore because of:

- the challenges of integrating a third-party into our highly variable and flexible system;
- our very real fear that any Regulator will be unable to properly price access and will lack the resources to arbitrate any disputes in a timely and fair manner; and
- the potential for it to reduce our focus on our primary business of producing high quality, low variability iron ore for our global customers.

Notwithstanding our existing legal obligations, the National Competition Council alleged that competition needed to be promoted in the Pilbara iron ore rail haulage market. Presumably the National Competition Council thought two entities offering rail haulage services were better than one. However, it is a leap to suggest that we will compete for haulage business. I have yet to see any competition being promoted if only one player is involved.

So to summarise, a Part IIIA declaration of our private rail line, which is integral to our production process, will not promote any competition, even in any atomised market, in the Pilbara.

7 Administered in a professional, consistent, cost effective and timely manner

I don't want to say much on this topic. However, I note that the splitting of access terms from the declaration process is a potentially flawed approach. With the wrong mindset, too many problems can be assumed away by saying they will be resolved at the next stage in the process, with a concomitant loss in intellectual integrity.

No-one appears too concerned with the costs of this regime. But let me quote some numbers. The direct legal and consultant costs – so far – of us fighting this threat to our operational efficiency and expansion potential are some A$25 million. To date, the cost of lost export sales are between A$50 and A$100 million.

In addition, there will be the very large and significant costs should our rail lines ultimately be declared.

8 Summary

Let me summarise by putting up the criteria I initially suggested, and seeing how the general access regime to private property that has developed over the last ten years has gone.

	General Applicability	Pilbara Experience
Efficient operation of existing assets		
Promote investment in new infrastructure		
Promoting competition		
Administered in professional, consistent cost effective and timely manner		 Current costs around A$100 million. Potential costs estimated at A$26 to A$43 billion.

9 Conclusion

Exports are booming and Australia has the opportunity to further benefit from the once in a lifetime opportunity afforded by China's industrialisation. This can only be achieved if Australia's export industries:

- continue to operate efficiently; and
- continue to invest to maximise the opportunities available.

Over the last ten years Australian regulatory practice has evolved to:

- put at significant risk the effective and efficient operation of the Australian iron ore business post any declaration;
- systematically discourage investment in the iron ore business; and
- compound an already bad situation by reading down the statutory criteria that act as safeguards to business owners and infrastructure providers, thereby encouraging third party access

Australia deserves better. Part IIIA for Australia's export industries is an expensive failure and is counter-productive to Australia's best interests.

Thank you.

26 July 2007