Alberto Calderon
Managing Director and CEO

Melbourne Mining Club, 7 August 2015

Life after the commodity price 'boom'

CHECK AGAINST DELIVERY

Introduction

Good afternoon. It's an honour to be here today among peers.

I was appointed Managing Director and CEO of Orica in May, so I'm relatively new to mining services.

However, my appointment at Orica follows more than 15 years in the global mining, petroleum and energy sectors, so I understand the industry that Orica serves, our obligations and the opportunities and challenges for Orica and the broader resources sector.

It's fair to say that everyone here today understands how challenging the current environment is. You may have also seen an announcement Orica released this morning about anticipated impairments that also included an update on the outlook for our full year financial result. It's a tough time for the mining services sector, but it's also a challenging time for the whole of the resources industry.

So, I want to spend my time today looking at the resources sector, the current environment, the opportunities this presents for all of us, and the challenges.

My time in resources included the very best years of the cycle – the biggest mining boom in generations. In fact, the commodity price and demand boom was one of the most significant events in history for the Australian economy. As we know, in the 10 years to 2014, the price of Australia's mining exports more than tripled. By the end of 2013, the RBA estimates that the mining boom raised real per capita household disposable income by 13%, real wages by 6% and lowered the unemployment rate by about 1.25 percentage points[1].

This was a boom like no other before it, and none that I can imagine again.

The extent of China's industrialisation over this period was unprecedented, and won't be repeated by any other country with the same speed.

---

[1] The Effect of the Mining Boom on the Australian Economy, RBA Research Discussion Paper, August 2014.

Just 10 years ago, China was producing around 350 million tonnes of crude steel annually[2]. Last year, it produced more than 820 million tonnes[3]. Between 2003 and 2011, China's GDP growth was near or at double digit growth every year.

After the boom...

The commodity price boom delivered value for stakeholders across the board. One of the great features of the higher price environment was that everyone participated in one way or another. We saw that particularly in the monetisation of lower quality resources for the benefit of supply-short resources customers, employees, shareholders, governments and communities.

And while we all know this is a cyclical industry, now that we have come to the inevitable retreat of the cycle, it feels as though not everyone is prepared for the new reality.

The music hasn't stopped – it's just changed tempo.

We all enjoyed the boom times, but many feel a little underwhelmed now.

My view is that this is because we were all flexing to our own advantage during the good times. While prices and demand were at their peak, we didn't come together across the industry – let alone across all our stakeholders – to make sure that we maximised the benefits together. This is a logical outcome of the times, as we all just focused on keeping up with demand that was clearly outstripping supply.

The unprecedented high prices weren't sustainable. We have witnessed the demand/supply mining cycle for generations. There will always be a time when supply catches up with demand and there will always be another point in time when demand outstrips supply...

Booms don't last, but fundamentals endure.

The next phase

So the next phase in the cycle is here, and it's marked by global market volatility, structural shifts and margin headwinds for both miners and the companies that service them.

China's GDP growth has slowed. In 2014, it was 7.4%, which – while still strong by global standards – is the lowest level for China in 25 years[4]. So we are officially back in the 1990s!

---

[2] World Steel Association, Crude Steel Production 1980-2013: https://www.worldsteel.org/dms/internetDocumentList/statistics-archive/production-archive/steel-archive/steel-annually/steel-annually-1980-2013/document/steel%20annually%201980-2013.pdf

[3] World Steel Association media release, World Crude Steel Output Increases by 1.2% in 2014, 22 January 2015.

The price cycle has shifted, as supply and demand levels move closer together. The market has worked.

The pricing outlook for metals and mining globally remains subdued, as China moves from the industrialisation phase into one of consumption-led growth[5].

India, the other great industrialising economy, also had a 7.4% GDP growth rate in 2014[6], but of course, India is not China. In 2014, India's steel output was the equivalent of around 10.5% of China's[7]. In my view, India's industrial intensity is never going to be as high as China's, and it is also moving towards the consumption-based phase.

This means lower prices for bulk commodities for the medium term, and in reality, we are unlikely to see inducement pricing in the bulk commodities for a decade. There are grounds for longer term optimism for base metals, and particularly copper, because demand for copper plateaus much later in the industrialisation cycle. Steel intensity tapers off when GDP per capita reaches around the US$15,000 level (on a Purchasing Power Parity basis), while copper demand keeps growing until GDP per capita hits between US$30,000 and US$40,000. China accounts for around 45% of global refined copper demand, and by the end of 2014, its GDP per capita was around US$13,000[8]. Copper is also expected to benefit from rising renewable energy usage and the extension of power supply to the hundreds of millions of people (particularly in India) who still don't have access to electricity.

The story for iron ore and coal is somewhat different. Across the globe, we are seeing early signs of consolidation in the bulk commodity sector, as miners' relative position on the cost curve becomes more important and the highest-cost producers get squeezed out. But this is just the start.

As a result, there is an increased focus in the sector on productivity, with an emphasis on cost-reduction strategies and capital expenditure containment.

Increased price volatility has led the mining industry to develop more flexible operating strategies, adaptable mine plans, and to find ways to embed long-term efficiencies to create greater resilience[9].

---

[4] Wood Mackenzie, Global Copper Long-term Outlook Q2 2015
[5] PwC Mine 2015 report
[6] World Bank GDP data: http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG
[7] India produced 86 million tonnes of crude steel in 2014. World Steel Association, World Steel in Figures 2015
[8] World Bank: http://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD
[9] PwC Mine 2015 report, p10

With challenges come opportunities

While it's not surprising that the dramatic movement in pricing has challenged the industry, focusing too intensely on falling commodity prices can cause us to miss the substantial opportunities that the present still offers.

The supplier/customer relationship has an increasing importance in creating strategic, competitive advantages and shareholder value on both sides, particularly in working together to improve productivity and manage risks. Productivity should not be considered a synonym for cost cutting or investment deferrals – these in themselves do not create long term, sustainable value. The real productivity opportunity is in maximising *both* the quantity and value of the output from the lower capital invested.

This brings significant opportunity. With margin pressures across the board, we should develop more enduring, sustainable relationships throughout the production chain that embed greater value for everyone over the longer term: relationships that have successful and seamless integration across industry boundaries, and that are focused on the innovation and value generated through holistic partnerships.

For example, the automotive industry tightly links suppliers to the production plans of the automotive companies, requiring close coordination from the concept phase through to design, production and delivery.

Toyota has developed long-term partnerships with its key suppliers in Japan over decades, with the philosophy that both sides of the partnership should consider the other a strategic partner, rather than a supplier or customer. There are hard and soft measurement tools as part of this, to ensure the value of the partnership is delivered upon. But they enter these partnerships with the core belief that neither side should be focused on maximising the benefit to the detriment of the other[10].

Another example is global consumer goods manufacturer, Procter & Gamble, which is not only an innovation leader in its industry, but also a leader in building collaborative and effective supplier relationships. More than half of all its product innovation includes at least one major element from external partners, who are a significant source for innovation across materials, products, supply chain, services and business models[11]. By successfully integrating innovation throughout the value chain, P&G shareholders have benefited over the long run: P&G has delivered dividend increases for 58 consecutive years[12].

---

[10] Case study: State of Flux, http://www.stateofflux.co.uk/ideas-insights/case-studies/toyota
[11] Case study: State of Flux, http://www.stateofflux.co.uk/ideas-insights/case-studies/procter-gamble-(1)
[12] 'P&G Declares Quarterly Dividend', Procter & Gamble, 13 January 2015.

Partnerships work best when both the risks and the opportunities are shared between suppliers and producers. Suppliers have to take the downside risks if they want to gain greater benefit from the upside.

Creating a mind shift

In order to create the enduring partnerships model in the mining sector, suppliers and customers have to shift their thinking. It is a leap to move from a product “buy/sell” relationship to a more productive relationship focused on creating greater value from concept to delivery.

Mining services companies have been speaking about this for some time, but along the way we have expected our customers to automatically see the benefit and bring us to the table. This hasn’t happened in a material sense, so we need to better understand the barriers and then foster a willingness on both sides to make significant mind shifts to realise the benefits.

Barriers

Contractual relationships versus partnerships

There is a quite natural commercial tension between suppliers and customers that will always be a reality, but the real barrier comes when contractual negotiations rule the relationship.

If the relationship becomes fixated on terms and conditions, then those relationships will always be fraught. Finding a way through this – to focus on the philosophy and objectives of the relationship – is the only way to forge more mutually beneficial relationships.

As an example, look at the move in iron ore away from annual benchmark negotiations to shorter term, market clearing pricing. Supplier/customer relationships that for years were tense and fraught with hostility are now on a more even keel. Those relationships can now focus on what is critically important to both producer and customer: long term agreements based on security of supply.

At this point in the cycle, miners are doing as they should. They are cutting costs by reducing capital expenditure, exploration, and reviewing headcount and, in some cases, supplier arrangements. They are optimising their operations to reduce wastage. But the real maximisation of productivity benefits comes when miners actively manage the whole chain through strategic partnerships based on long run value creation.

Willingness to pilot and innovate

There is a general wariness – on both sides – to experiment and pilot new technologies, and in some sectors of the mining industry, there is a reluctance to invest in innovation at this point of the cycle.

The mining and metals sector spends 90% less on technology and innovation than the petroleum sector. This is despite the fact that targeted innovation adds genuine value. This can be seen through relatively recent innovations in oil and gas, including shale and coal seam gas extraction and floating LNG platforms, which have given greater access to reserves and delivered significant productivity benefits.[13]

But there is a general reticence among miners to be the first to test new products, particularly off the back of significant investments already sunk in major mining projects. For example, a couple of years ago Orica developed a new blasting technique that negates the need to mine the undercut level and allows drawbell cavity generation in a single blast (Single-level Drawbell Blasting Project). This is a technique that has the potential to revolutionise block caving, and significantly reduce the initial capital investment and operating costs. The value we can provide is tangible, but we can't expect our customers to adopt new applications or services just because we tell them they should.

It is up to us as the service provider to prove the value – we have to accept our part of the risk. That takes a different mindset in our customer interactions, and for our customers too. We can share the risks and benefits, but it requires trust and commitment from both sides.

Procurement versus Marketing

There is a mismatch that often exists between the procurement processes in the mining industry and the sales processes on the supply side.

A 'top-down' focus on productivity and efficiency has led to centralised procurement functions, which can mean that the people furthest away from the operations are often making procurement decisions on behalf of mine site operations. On the one hand, this often achieves what it sets out to, because centralised procurement functions leverage their scale for efficiency benefits. But it can also mean that the conversations between producer and supplier are driven towards the contractual pricing, terms and conditions level. These are functions that are rewarded on that basis, despite the fact that the lowest cost option is not the one that necessarily adds the most value. We have seen this create tension between procurement departments and people at the coal face.

[13] Business Risks Facing Mining and Metals 2015-2016, 'Moving from the back seat to the driver's seat', EY

There is nothing inherently wrong with centralised procurement, as long as it genuinely supports its company's operations by enabling them to focus on value creation through direct relationships with their service partners.

As suppliers, we need to ensure we have strong relationships with both our customers' operations and central procurement functions, and that we are focusing on the issues that matter to both.

Short term versus long term

The mining sector is an industry that's well accustomed to long term planning. Conversations in major mining companies are shaped by a multi decade, through-the-cycle outlook.

Major capital investment decisions are made with a multi generational production view, but when it comes to operational improvements, the short term focus often wins.

When it comes to achieving operational improvements, suppliers have to apply long term, strategic thinking and applications that support customers in using the same multi decade approach.

Ineffective use of 'big data'

We have a wealth of information across this industry that we do not use effectively. We all collect data individually, but if we could collect, aggregate and use this information collectively with our customers, we could better understand trends, value, varieties and variability. This already happens in oil and gas, where the challenges and risks are often greater, so the incentive to innovate is higher.

Schlumberger, for example, is mastering big data. It is using data, combined with specialist software platforms, to enable its customers to standardise workflows from exploration to production, and to make more informed decisions with a clear understanding of both opportunities and risks. This requires collaborative partnerships between Schlumberger and its customers.

Closer to home, Woodside recently announced it was partnering with IBM to develop advanced predictive data science, to make use of its historical internal data from three decades of running LNG and other operations, to improve its ability to run efficiently and better design, fabricate and construct future oil and gas facilities.

What does this mean for all of us?

I have said many times that Orica needs to get closer to the customer, but this requires structural and behavioural changes across the board, with some ‘heavy lifting’ from us.

While some progress has been made, we still have a way to go to move from being a ‘supplier of choice’ to a true partner in the mining sector, despite having a natural advantage.

For example, we have our people in more locations than anyone else – some 450 mine sites across every type of market and operation, from developing economies through to highly mature, sophisticated markets and operations. We undertake around 1,500 blasts around the world, every day. When you think about this, we essentially have an expansive ‘big data’ collection and knowledge base that could be fully leveraged to link customers’ sites and regions and enable the very best in knowledge transfer.

We also invest around three times more than our competitors on innovation and R&D, and can demonstrate how this leads to improved productivity for our customers through advanced blasting services, data recording, management and analysis for optimal productive blasting results. This is why we know we can and do add significant value for our customers. For example, by improving fragmentation in gold operations we have helped our customers reduce their power consumption and therefore their unit costs.

But we have to make changes in how we operate so that the case for being a partner to our customers is overwhelmingly compelling.

Relationships

We need to move from a ‘contract win’ mindset to a relationship model. We have to move from a focus on contractual terms and conditions to focus on value sharing, and how we and our customer will operate together. This is a substantial shift, particularly when we know that we have some history to overcome. Just like everybody else, we took the opportunities in the good times to maximise our margins, and we have some work to do to build greater trust.

Operations

We also have to make sure we are operating in the optimal way for us and our customers. This includes empowering our people who are closest to our customers – enabling their day-to-day decision making – so they can work with customers to both anticipate their needs and respond more efficiently and effectively.

Like a lot of businesses with a substantial geographic spread, we let ourselves involve too many internal stakeholders in everyday decisions at the operational level. This also affects the amount of time we can spend with our customers. If we want to forge deeper, more meaningful relationships, we have to free up our people to enable them to spend more time with customers.

Innovating with customers, not only for customers

This also applies to our R&D. Orica is a global leader in the innovation of skills and technologies, but we need to bring our customers along with us from the start of the process – not just when the products are defined or developed. Our innovations need to start with the question: "What problems do our customers want us to solve", rather than "What problem can we tell our customers they need to solve".

Knowing our value

We have to be clearer about our own total value proposition, versus our product proposition, so that it is clear – without question – to our customers.

Knowing our value also means getting better at bundling our products and services so that the value is obvious. Sometimes, our customised approach holds both us and our customers back from getting more value out of our products and services.

Sharing the risks

A true partnership means sharing risks and benefits, through every part of the cycle. We can't expect our customers to embrace us as partners if we don't do the same.

As a supplier, the obligation is on us to prove our value, and this means taking on some of the downside risks too. This may mean taking on more risk in trialling new products and services in order to demonstrate value and lay legitimate claim to benefiting with our partners when our value is delivered.

Conclusion

It is precisely at this point in the cycle that we have an incentive to leverage our customers' and our own knowledge and know-how for mutual benefit.

The commodity price boom has ended, but production growth and exports of bulk commodities persist, with volumes still expected to grow in line with GDP, and demand still strong from China and India in particular.

While there is no denying that we are now in far more challenging times, there are always more opportunities to achieve systemic, sustainable productivity gains.

Orica is increasingly focused on working with our customers to develop better outcomes in productivity, costs and safety, and in minimising environmental impacts.

This requires a partnership between us and our customers with a commitment to sharing risks and benefits, and taking a long term view. Most importantly, it calls for a willingness to innovate.

The mining industry has proven time and again that it can innovate when the environment demands it, and it can and does reinvent itself as cycles turn. We have been here before, but let's prepare better this time for the next boom.

At Orica, we have some challenges. Our success is tied to production volumes, which continue to rise, rather than commodity prices. But our fortunes are also linked to the overburden and we've been seeing reductions in stripping ratios as miners adapt their plans for the current environment.

In the medium to longer term, I'm optimistic about what we can achieve. Our industry structure is robust, and Orica is continuing to build its resilience.

I believe we are a company with greater value to offer the mining sector, because it will be those companies who best manage the risks and opportunities that will be best positioned to take advantage of the next cycle. Mining companies have more to gain from shifting to a supplier partnership philosophy, but only if we prove our value, and only if there is a commitment on both sides to true innovation, both in operational applications and in how decisions are made.

Thank you.