

Capital shift disruption in Mining

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UNDERCAPITALISED INDUSTRY

The global mining sector is undercapitalised. There are some important reasons for this, but these are outside of the scope of this paper. Nevertheless, the restricted access to capital is constraining innovation and technology adoption, which in turn is constraining productivity improvement.

In 2010, the mining industry had a total market capitalisation of \$1.7T and was attracting significant capital to fuel growth. In just 3 years however, this dropped to a third of that value. By 2017, it had fallen to just \$500B. In this landscape it is important to consider that the current value of funds under management globally, is \$90T. This is money being managed by professional fund managers, actively looking to put that money at work. In stark contrast, the current global mining industry market capitalisation represents only 0.001% of this available capital!

Effectively the mining industry is cut off from capital, other than the capital that is already active in the industry. As an example, in 2018 Snapchat's IPO was worth \$30B but the total new investment in the mining sector globally for the same year was considerably less than that. Not only has the pace of capital investment in the industry slowed, the profile of capital has shifted from expansion capital to sustaining capital.

One of the reasons for external investment shying away from mining is that the drivers of a return on investment are not always clear. Capital will flow, if it can see a clear path to deliver a return.

HOW TECHNOLOGY LEADS TO CAPITAL SHIFT DISRUPTION

The currently held view is that technology causes disruption in traditional industries where manual or inefficient processes are exposed by new technology-enabled ones. Another way to view disruption, is through the capital lens. When case studies of disrupted industries or businesses are examined, it is clear that while the prime mover of the disruption was a new technology or new business model, the wave of the disruption was amplified by a shift in capital.

If capital can see that a new technology or business model is likely to generate better returns on investment than the incumbent solution, it is going to shift. The capital effectively accelerates the disruptive process into hyper-growth, making it both global and permanent.

EXAMPLES OF CAPITAL SHIFT DISRUPTION IN OTHER SECTORS

Examples of disruption are well publicised. Case studies such as Skype, Netflix and Wikipedia are well known. However, there are other less textbook or well-known examples of disruption caused by shifting capital. Siemens had a global communications business in the early 2000s that accounted for approximately a third of its global revenues. In that era however, Siemens did not recognise that the technological advancement of data and voice convergence combined with consumer demand for this, could have significant commercial implications. They didn't understand quickly enough how capital would rally behind the companies that did. As a result, Siemens communications business

was carried away with the rest of the telecommunication incumbents in a wave of disruption sparked by Qualcomm and amplified by Apple.

IMPLICATIONS FOR MINING AND METALS COMPANIES

The Siemens example is relevant because Siemens has a market capitalisation in the order of \$130B, much the same as the world's largest mining company, and Siemens will attest that size is no defence.

For mining, investment in technology is low compared with other asset intensive industries. A notable consequence of this is the equally low levels of productivity improvement evident in recent years. Historically, the mining industry has been recognised as a slow adopter of technology-led innovation. Although evidence supports growing momentum in this area since 2010, seemingly small gains in resultant productivity have seen capital leaving the sector. Only in more recent years, have we witnessed a modest 2% increase in productivity.

These trends are attracting the attention of start-ups and companies from other industries who see mining as a prime target for disruption. Netflix was the prime disruptor of the entertainment industry and the main lesson here is that it did not take a cadre of companies to cause the disruption, it only took one. This is the power of capital shift. The capital got behind Netflix and the rest is history.

The implication for mining companies is profound. If they are not tuned into disruptive forces either emerging from within or coming from outside, they could find themselves caught in a structural change.

The disruption will be not be caused by technology itself, but by how the capital markets follow the mining companies, or new entrants, that quickly adapt to innovative approaches and service models.

A plausible scenario is that one or two mining companies discover a new business model or technology that enables them to release significant value improvement from each asset that they touch. They will be able to find value where others have not. This means that any asset in the world suddenly looks appealing, even a bargain for them. This will get the attention of the fund managers controlling the investment of capital, and the shift, or flow will occur to those companies. This could propel a wave of acquisitions or even introduce new entrants. This has happened in other industries. Mining will be no different.

POSSIBLE SOLUTIONS

In such a scenario, mining companies pondering the potential implications of a capital shift disruption should be considering if they are willing to be the acquired or the acquirer.

To be the acquirer, a miner is going to need to attract the attention of "new" capital i.e. capital that is not normally associated with mining. To attract this attention, they are going to need to be able to demonstrate they can add value to assets that others can't.

To do this, they could look to suppliers (mining and other industries) for tools and enablers. They could set up their own separate, arms-length organisations to do this. A more practical solution may be to partner with an organisation or coalition that understands these issues and has the capability to shepherd a progressive and successful transformation in the industry.

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