VIEWPOINTS

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Reviving a Declining Mining Industry

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By Norman Mbazima on behalf of Business for South Africa[1]

Introduction

These are extraordinary times and there is little time to mince words: South African mining is in decline. We have limited exploration for new mining opportunities. We have almost no investment in new mines. We have decreasing investment to expand and maintain existing mines. The capital flows into South African mining are drying up. In short, South Africa is mining out a declining pool of reserves with existing mine infrastructure. And if you mine out existing reserves without investing in finding new reserves and building new mines, output will inevitably shrink, as is already happening in South Africa.

Our research provides strong quantitative support for these conclusions. When comparing the South African mining industry in 2010 and 2018, one can make the following objective observations:

- Real output value in dollar terms is down by 10%
- Total direct employment shrunk by 50 000
- Annual CAPEX almost halved (shrunk by 45%)

There are of course some nuances to these conclusions. Certain sub-sectors have shown modest growth, whilst other traditional, larger sectors such as gold have shown significant declines. In aggregate the picture is however undeniable: Even before the impact of Covid-19, the mining industry in South Africa was in structural decline. And without significant intervention to alter this trajectory, we anticipate that output, employment, GDP contribution and fiscal contribution will continue declining.

The root causes of South Africa's mining decline

The difficult reality described in the preceding paragraphs begs an obvious question: Why? Why is South African mining declining when we have geological opportunities and while the rest of the world's largest mining jurisdictions have been growing at rapid rates in recent years? The simple answer is described in the introductory section: South Africa is mining out existing mines and not

VIEWPOINTS is a series of reports on issues critical to South Africa's development. CDE has drawn on the expertise of South Africans in a range of organisations to encourage informed debate on these topics.

replacing these with new mines, which implies that output will shrink over time as existing mines get deeper and increasingly economically unviable.

But the implied underlying question is in fact the real question: Why is it that we are not investing in new mines at significant scale in South Africa? We conducted extensive research, benchmarked South Africa against numerous competitive mining jurisdictions and interviewed many of South Africa's most senior mining CEOs to get to the bottom of this question. We found there are five core answers. In short: There are little to no new mines being built in South Africa, because the quantitative investment case for new mining opportunities is not attractive, mainly due to the five factors we will outline shortly.

It should be noted that this work was focused on finding solutions to our challenges and as such we propose detailed solutions in the latter part of this article. Finding the right solutions however requires an understanding of the challenges and as such we detail those below. The five core inhibitors to investment in mining in South Africa are the following:

Electricity supply

As has been well-publicised, South Africa has two major problems with electricity supply: Load shedding and above-inflation electricity price growth.

We estimate that the South African mining industry, as a whole, lost between R7 billion and R12 billion in output in 2019 due to load shedding. This represents roughly 4% of total industry output, and effectively cuts top-line revenue for most operations by an enormous quantum, not to mention the operational complexities introduced by load shedding. This is of course devastating for profitability. It also causes significant uncertainty about the ability to operate effectively and profitably in future.

From the perspective of potential investment, it requires the rational investor, domestically and internationally, to assume lower revenue than would otherwise be possible. It also requires the rational investor to work in an 'uncertainty buffer' for a potential South African mining investment. The investor is forced to contemplate: What if load shedding gets worse in future? And as such rational investors are 'discounting' the potential returns for investments in South African mining by more than what the current load shedding loss-rate is, simply because of the uncertainty that it introduces. In the context of a globally-competitive investment environment, where investors are looking at all opportunities globally, this effect alone means that many potential South African mining investments are not competitive compared to opportunities in other countries.

Additionally, above-inflation electricity price increases in recent years has also undermined the profitability and sustainability of many operations. For example, there are numerous downstream beneficiation operations which had to shut down due to electricity price increases. The combined impact of loadshedding and electricity price inflation means that South Africa is now ranked 97th in the world for electricity reliability and affordability, as per the World Economic Forum's Global Competitiveness Report 2019 ranking.

Logistical bottlenecks

Despite our various challenges in attracting mining investment, there are a few distinct opportunities for additional production, particularly in bulk materials such as iron ore, manganese and coal. In several instances, these are however constrained by logistical and infrastructural bottlenecks which limit the total production capacity of these industries below the full potential of existing assets (not to mention potential new assets).

The bottlenecks are particularly acute for manganese and iron ore to Saldanha. We will detail the proposed solutions further in the 'solutions' section below. But it should be noted that rail and port infrastructure investments, combined with competitive rates for

[1]The research contained in this article was conducted to support Business for South Africa's Economic Recovery Strategy (ERS). The content detailed here reflects the ERS work as it pertains to the mining industry. This research was led by Norman Mbazima supported by experts who volunteered their time and expertise to Business for South Africa and included wide-ranging input from senior industry stakeholders and the Minerals Council of South Africa.

the use of this infrastructure, is potentially one of the largest levers to unlock known potential output growth in South African mining.

From the potential manganese and iron ore investor's perspective, these bottlenecks automatically eliminate any investment potential. Without the logistics capacity to transport output cost-effectively, there is no feasible investment potential in South Africa for the relevant commodities.

Regulatory uncertainty

A lot has been written on the topic of mining regulatory uncertainty in South Africa. There are numerous ongoing processes relating to the current iteration of the Mining Charter that do indeed, as many have noted, inject uncertainty into the South African mining regulatory framework. The conversation about mining regulatory uncertainty has however missed a critical, fundamental point: Even if we resolve all uncertainties associated with the current iteration of the Mining Charter, intense regulatory uncertainty will remain specifically because of the existence of a charter.

The fact is that the existence of the charter is a challenge. The charter can change. And it can do so at any time. Regulating a mining industry with such a malleable regulatory instrument injects enormous uncertainty, especially given the fact that mining investments are made over a 10-30 year horizon.

The global best practice is clear: Mining industries should be regulated by simple, clear, direct legislation, with stability commitments built into the legislation. Leading mining jurisdictions regulate by legislation; not charter. If done by legislation, the regulatory regime cannot be changed very easily, and the investor can trust that the regulations which exist today can be planned around for the long-term.

From the perspective of the potential domestic or international investor, the charter will almost certainly change again in the next 5-10 years, simply due to the nature of the charter mechanism which does not require the more rigorous legislative process of an Act. In investment language, this therefore requires that South African mining investments generate additional return to cover this 'risk premium' related to regulatory uncertainty, putting up yet another hurdle to potential investments in South African mining. And again, given the competitive nature of the global mining investment landscape, this effect alone is enough to make South African mining opportunities uncompetitive in most cases.

As an aside, one point should be made clear from the outset: We are not proposing scrapping the redistributive requirements currently contained in the Mining Charter. These should be agreed upon and then hard-coded into law, with explicit stability commitments written into law, so that the investor can plan with clarity and certainty.

Cost competitiveness

We conducted a detailed analysis of all South African mines' unit production costs. We compared the costs per unit of production for South Africa to all other major mining jurisdictions and discovered a disturbing fact: More than 60% of South Africa's mining output (by value) is produced in mines that are in the bottom half of cost competitiveness. This means that South African mines typically have higher production cost per unit of output. For the students of economics reading this, the conclusion should be clear: South African output will be some of the most vulnerable if demand for commodities is reduced. If demand and prices drop, South African mines will become some of the first to no longer be able to produce profitably due to comparably high unit production costs. In the context of a Covid-induced global economic downturn this is of serious concern for some commodities in the short-to-medium term. (It should be noted that in some cases the global pandemic has driven up commodity prices such as gold, which of course is helpful to South African gold miners.)

The detailed analysis suggests numerous drivers for this challenge: The complexity of mining in some of our deeper and older mines, the relative lack of investment in modernisation for some mines, high labour costs per unit of production due to the complexity of mining and of course electricity prices.

Licence to operate

The mining industry's relationship with organised labour and mining communities has often been strained and adversarial (despite many good efforts on all sides in many cases). In recent years, strikes, community unrest and other issues have been well-publicised, leading to heightened investor risk perceptions about South African mining, reinforcing the 'risk premium' associated with investment in South African mining. Beyond the 'perceived risks' there are of course also very real challenges with community development and empowerment, health and safety issues and other socio-economic objectives that all stakeholders are sincerely committed to, but that have not always been fully delivered on.

The impact of Covid-19

We also analysed the impact of Covid-19 and the associated lockdowns on mining industries across the world. For the purposes of this publication, we will provide a brief overview.

The high-level estimate for the South African case is that due to the lockdown period and the uneven ramp-up of production across commodities and operations, South African mining output is likely to come in 15-25% below pre-Covid expectations for 2020 based on a number of scenarios that we have modelled. This is of course uncertain and subject to change, but the core point remains certain: Covid-19 is a devastating one-time shock to the South African mining industry.

Beyond the immediate and direct impact of the lockdown, we see two additional important implications:

Firstly, the industry will have to, and thankfully to a large extent already has, adapt to new ways of working and operating to ensure the health and safety of employees. These involve intensive safety measures to ensure employees remain healthy and strong action to intervene when Covid-19 infections are detected within specific operations. These operating model adjustments come with additional complexities and costs but are of course non-negotiable to ensure the safety of employees and the sustainable operation of the industry.

Secondly, we see significant uncertainty in demand for commodities in the short-to-medium term, largely dependent on the recovery and 'opening up' of the global economy and the pace thereof. It is of course impossible to predict this with certainty, given that the uneven progression of the virus remains an uncertain core driver of economic outcomes, but with most rational scenarios it appears that there will be clear, specific implications for different commodities' demand and pricing in the short-to-medium term.

The solutions: Structural reform for competitiveness

Having analysed the root causes of the decline of the South African mining industry, we developed a number of core recommendations to revive the industry, with a focus on improving the investment-competitiveness of South African mining. Investment-competitiveness is the critical enabler for growth in the industry. South Africa needs more capital in mining to recover and grow and it needs to be globally competitive to attract it.

We see eight top priority actions to revive the industry. It should be noted that these are interlinked and all need to be taken simultaneously for maximum effect.

Solution 1: Regulatory reform for competitiveness

As described in the previous section, South Africa must significantly improve regulatory certainty for mining investments. Our proposal is to amend the Mineral and Petroleum Resources Development Act(MPRDA) to write all regulatory requirements explicitly into law, with global best practice stability commitments, effectively eliminating the need for a charter. This will create a much more certain environment for mining investment to take place, since legislation and accompanying stability commitments are much, much more permanent than regulations enshrined in a charter.

Of course, the exact regulatory framework to be written into law will be an enormously important question to resolve, but would require discussions by all major stakeholders, with the understanding that regulatory requirements should be stable, competitive and support South African's socio-economic and transformation agenda. We believe that, with a common objective and goodwill by all parties, this is possible.

We provide some initial proposals in this regard in our research, including reconsideration of tax deductions as per section 37E of the Income Tax Act, amplification of incentives associated with Industrial Development Zones and a significant strengthening of the rights conferred by South African mineral licenses in line with global best practice.

Solution 2: Reliable energy supply

The mining industry needs a constant and affordable supply of energy. Given South Africa's current context, there are unfortunately no quick fixes. It should be noted that as a first port of call, all options should be explored to maximise Eskom's generation performance as quickly as possible.

But beyond maximising Eskom generation, we believe mining companies can play a significant role in energy generation in South Africa, either through self-generation or third-party-facilitated generation. However, actions need to be taken to effectively enable this. At this stage, there are hurdles that stop self-generation from becoming a reality. The following actions are required:

- The Electricity Regulation Act should be amended to remove the licensing requirement for isolated self-generation in accordance with stated policy. Issues related to licensing, environmental regulations, land use regulations and the ability to wheel on the Eskom network at reasonable cost need to be addressed
- Increase the efficiency of the application-to-licensing process by focusing National Energy Regulator of South Africa (NERSA) resources on reviewing large self-generation projects (greater than 10 MW)
- The relevant stakeholders (Government, Eskom, NERSA, the Renewable Energy Independent Power Producer Procurement (REIPPP) programme) should support the development of power purchase agreements to allow mines to supply excess capacity into the grid
- Serious consideration should be given to the proposals that the intensive energy user group has already submitted to government for consideration

Solution 3: Infrastructure development

As outlined previously, logistical bottlenecks are constraining production potential in key bulk minerals in South Africa. We propose that an expansion of the Saldanha line be studied in detail, with the objective of potentially increasing the total annual capacity of the line by between 20 and 27 million tons. We furthermore propose to investigate coal rail capacity expansion out of Lephalale, preferably to Maputo to the tune of 10 to 15 million tons a year. In each case, private concessioning or alternatives to the traditional 'take or pay' arrangements should be explored. We should of course stress that further detailed due diligence is required for both potential investments.

Solution 4: Exploration strategy

South Africa has had particular challenges in attracting exploration investment. The proposed regulatory steps under Solution 1 is an important start to improve our exploration attractiveness, particularly as it relates to enabling the trading of minerals licenses without undue state intervention. More will however need to be done. The following are key required actions:

- Selected high-potential areas of the country should be geologically remapped at 1:50000 scale using the funds which have previously already been earmarked for this purpose
- All existing geosciences materials should be made available free of charge and on an easy-to-access online platform that is comparable to global best practice regions' online databases (such as South Australia)
- In the longer term, all possible "pre-competitive" investment information should be made available online and for free to the global exploration community
- The mining licenses applications process should be comprehensively overhauled to be faster, more efficient and more objective
- Special incentives for investing in exploration should be considered, with the Canadian flow -through share scheme being a prime example to follow

Solution 5: Industry modernisation

South African mining faces real cost-competitiveness challenges. There are numerous contributing factors, but a relative lack of investment in industry modernisation is an important part of the story. This is of course also a nuanced point as many mines may be too old or simply not suited to modernisation; however, there are some opportunities to improve cost efficiency through the right investments.

These investments have been held back by the same forces that constrain capital flows into the industry in general and will therefore be facilitated with the collective suite of interventions laid out here. It should be noted though that the industry can help drive this by collectively investing in joint efforts to drive modernisation through research, development and innovation such as the Mandela Precinct.

Stakeholders should also be brought along on the journey to facilitate a modernised, competitive mining industry which we calculate on a net-net basis will in fact employ more people, at higher wage rates, than an increasingly uncompetitive and technologically stagnant industry. The key is for stakeholders to cooperatively work towards modernisation and competitiveness.

Solution 6: Productive community investments

Improving the real, tangible community development impact of South African mining is an absolute imperative for the long-term sustainability of the mining industry.

We recommend a number of best-practice actions for companies, communities and local governments to ensure the success of community development investments:

- An obvious starting point is to ensure that development plans for mining communities are put together with the involvement of all stakeholders, especially the communities, government and the mining companies. This will ensure that all parties have a common vision for the communities and shared expectations of who should contribute what to achieve that vision, and can hold each other to account in the implementation of these plans
- Community investment plans by individual mining companies should be allowed to be pooled and coordinated in areas where geographic proximity allows such coordinated action
- Community development plans should be clearly outlined with KPIs that can be systematically tracked and reported with transparency
- Government should consider ring-fencing a portion of mining royalties to boost development activities for the mining communities most-affected by mining activities

Solution 7: A task force for executional certainty

In all conversations with senior stakeholders an important theme emerged: Numerous good plans have been made in the past, but none has had a significant impact on boosting competitiveness and investment in South African mining. Implementation, coordination and systematic follow-through has been a continual challenge.

It is imperative that this time things should be different. We must ensure sufficient executional capacity is available to ensure these critical initiatives are driven to completion. We are proposing that a special task force be set up, with strong individuals seconded from both government and the industry to drive an agreed-to set of competitiveness reforms for the mining industry. These individuals should work together closely, with direct lines of communication to decision-makers in both the industry and government. The task force should be made up of individuals with dedicated capacity allocated to driving the agreed-to initiatives for a period of at least 12 months; and the task force should very rigorously track and continually report progress to key decision-makers.

Solution 8: Investment promotion

South African mining and investment has a serious branding problem in the rest of the world. We are considered to be a risky, uncertain and generally challenging investment destination for mining. This is amplified by poor messaging and negative foreign media coverage of South Africa. The result is that of the 10 biggest global mining funds, only one has exposure to South Africa, and even that exposure is very small indeed.

We can do two things to address this challenge. Firstly, we can address some of the real root causes for uncertainty and investment risk in South Africa, which we have attempted to do with solutions 1 to 7 above. We need to address these real concerns.

But secondly, we must also promote South Africa aggressively in all appropriate fora, using a consistent hymn sheet between both the industry and government. Initiating catalytic reforms for competitiveness is an ideal opportunity to drive such a repositioning of perceptions of South African mining investments.

In conclusion

South African mining, like numerous other South African industries, faces enormous challenges. Now is the time for us to take real action to reform our industry for competitiveness and growth. The time has come to put all options on the table and do what it takes to get the industry growing again. The future of the industry, and the other industries that are affected by mining, depends on it.

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