creamer media

REAL ECONOMY INSIGHT: GOLD

JUNE 2018

Contents

Cover picture by Creamer Media

Picture by Creamer Media

SAMANTHA HERBST
CREAMER MEDIA RESEARCH ASSOCIATE

With 140 years of gold mining history, South Africa boasts one of the world's largest gold deposits – the Witwatersrand basin, which spans 400 km across three provinces – as well as the world's deepest gold mine – the 4-km-deep Mponeng operation, which belongs to international gold major AngloGold Ashanti. However, with gold mining taking place at increasingly greater depths and mine sites becoming more remote, South Africa's gold production has slowed considerably over the years since reaching peak production of 1 000 t in 1970, which means the country has slipped down in the ranks and is now the world's eighth-biggest gold producer.

According to information services firm Thomson Reuters' GFMS Gold Survey 2018, the country's mined gold production dropped slightly in 2017 to 139.90 t, from 145.70 t in 2016. The world's most prolific producer is China, which produced 426.10 t in 2017. China is followed by Australia (295 t), Russia (270.70 t), the US (230 t), Canada (175.80 t), Peru (162.30 t) and Indonesia (154.30 t).

South Africa's gold production has plummeted 85% over the past four decades – a decline that can be attributed to shrinking ore reserves, increasing labour costs, industry strikes and frequent safety-related work stoppages. However, while global gold production is expected to hit a record high this year, local production is due to fall even further in 2018, owing to an expected decrease in output from AngloGold Ashanti, which is restructuring its operations to stem lossmaking operations. The world's third-largest producer put the TauTona mine, in Gauteng, on care and maintenance in June 2017 and announced the sale of its Moab Khotsong, in the North West, and its Kopanang operations, in Gauteng, in October 2017, which will result in a fall in contribution from its South African mines. This will also leave AngoGold with only two local gold operations, namely Mponeng and the Mine Waste Solutions surface operation, in Gauteng. South African gold mines now represent only 13% of the AngloGold Ashanti portfolio.

Another challenge facing South Africa's gold mining industry is the exorbitant cost of production. South Africa is the most expensive country in the world in which to mine gold, with average production costs totalling more than $1 000/oz in 2017, compared with average global production costs of about $800/oz.

Nevertheless, the gold mining industry remains a key contributor to South Africa's economy. According to the newly rebranded Minerals Council South Africa (MCSA), formerly the South African Chamber of Mines, the industry employed just over 112 000 people in 2017, earning the country just under R30-billion that year. Moreover, according to MCSA CEO Roger Baxter, for every one mineworker another two workers are employed in related industries. There is also a ten-to-one social multiplier of people who are dependent on each mineworker for their daily subsistence. The MCSA also reports that 73% of the yellow metal was exported in 2017, with sales totalling R67.60-billion, second only to the R94.10-billion earned by the platinum group metals sector.

Baxter further points out that, while South Africa is producing a fraction of what it produced 50 years ago at grades of 2 g/t, the industry faced a fixed gold price of only $35/oz in the 1970s, compared with the current four-digit fixed price, which means the high tonnage produced at a significant grade of 13.70 g/t was necessary in the 1970s for gold miners to break even.

South Africa's Chamber of Mines announced in May 2018 that it had rebranded and would henceforth be known as the Minerals Council of South Africa (MCSA), in line with its quest to reposition the sector as South Africa's preeminent industrial sector, while building a new legacy and creating a "future that all South Africans can be proud of", according to MCSA president Mxolisi Mgojo, who added that the council would act as a "guardian and leader of a . . . better tomorrow".

Source: *Mining Weekly*

LABOUR CHALLENGES

South Africa's gold mining workforce is directly proportional to its production decline over the past few decades.

The 112 000 gold mineworkers currently employed by the sector is significantly less than the 180 000-strong workforce of 2004, and pales in comparison to the 600 000-strong workforce of 1988.

According to the MCSA, the mining industry as a whole has lost almost 30 000 jobs since 2014, including 4 000 jobs lost in the gold sector between 2016 and 2017. This is despite an overall 1.60% increase in employment across the broader mining industry, which employed about 465 000 employees in 2017.

AngloGold Ashanti embarked on a major restructuring operation in June 2017, which resulted in the company whittling its local operations down to two, resulting in the closure of TauTona and the sale of the Moab Khotsong and Kopanang mines. At the time, the miner embarked on a consultation process with employees, in terms of sections 189 and 189A of the Labour Relations Act (LRA), aimed at returning the local business to profitability while mitigating job losses.

In May 2018, AngloGold Ashanti announced that it planned to cut 2 000 jobs at its remaining domestic operations. The group currently employs about 8 200 people in South Africa. The company said in a statement that the restructuring would affect employees across the board, including the region's executive committee and senior management.

Fellow gold miner Sibanye-Stillwater, the country's fourth-largest gold producer, announced in August 2017 that it could cut as many as 7 400 jobs, as it progressed to restructure its Beatrix West and Cooke gold operations. It, too, entered into a consultation process with relevant stakeholders in terms of Section 189A of the LRA, after several unsuccessful attempts to contain ongoing losses at the operations, which had been negatively affected by a three-week wildcat strike by employees in June, among other production setbacks.

Further, gold mining group Pan African Resources confirmed the closure of its Evander 8 underground mine, in Mpumalanga, in May 2018, compromising the jobs of 1 700 employees. The company had initiated a Section 189 process following continued operational losses, which it attributed to the prevailing weak rand gold price.

The retrenchments did not fail to raise the ire of the National Union of Mineworkers (NUM), the 52% majority union in South Africa's gold sector, according to data released by gold producers in 2015.

The Association of Mineworkers and Construction Union (AMCU) is the second-largest union in the sector, with a 30% representation, while smaller unions Solidarity and Uasa represent 7% and 2% of gold sector employees respectively.

With the exception of Gold Fields, the second-largest gold producer in South Africa, the country's major gold producers usually engage with the unions in centralised wage negotiations, facilitated by the MCSA.

Departing from tradition, Gold Fields conducted decentralised wage negotiations with the NUM and Uasa at its Gauteng-based South Deep mine in April 2015, while Harmony Gold and AngloGold Ashanti concluded its three-year wage agreements with the NUM, Uasa and Solidarity later that year, resulting in basic wage hikes of between 10% and 13% a year. Sibanye Gold also reached agreement with the unions, with the exception of AMCU, which did not agree to any wage offer.

With the previous gold-sector wage agreements expiring on June 30, 2018, the industry will soon embark on its latest wage negotiations, with Reuters reporting that the NUM submitted a document to the MCSA in April 2018 demanding a 37% wage hike from gold producers over two years.

As this far exceeds the current inflation rate of 3.80%, the NUM's demands signal potentially stormy bargaining sessions ahead for South Africa's gold producers. With wages accounting for about half of the costs sustained by the local gold mining industry, the price of gold needs to increase considerably before double-digit, above-inflation pay hikes can be sustained.

With other unions' demands still outstanding, the gold sector wage negotiations should get under way in June.

However, the NUM has communicated that it wants the talks to be complete by July 1, when the next agreements are supposed to be implemented.

SILICOSIS

South African gold mining companies have, for several years, been embroiled in class action law suits, launched against them by the Legal Resources Centre (LRC), Abrahams Kiewitz Attorneys and Richard Spoor Attorneys, on behalf of about 100 000 former and current mineworkers who contracted silicosis – a form of occupational lung disease caused by the inhalation of silica dust from gold-bearing rock over a prolonged period. Silicosis is incurable and causes shortness of breath, a persistent cough and chest pains. It also makes sufferers susceptible to tuberculosis, which is a common disease among mineworkers.

In May 2018, the litigants reached a settlement – the first of its kind in South Africa – that will result in compensation being paid by the various South African gold mining companies to eligible mineworkers suffering from the disease.

The class suits were initially certified by the South Gauteng High Court in May 2016, and involved compensation claims from South Africans as well as citizens of neighbouring countries dating as far back as 1965.

The settlement agreement follows three years of extensive negotiations between the representative attorneys and the Occupational Lung Disease (OLD) Working Group, which represents African Rainbow Minerals, Anglo American South Africa, AngloGold Ashanti, Gold Fields, Harmony Gold and Sibanye-Stillwater. Pan African Resources recently joined the litigation process, but is still considering the agreement.

The agreement is subject to certain conditions, including approval by the Johannesburg High Court, which should take place by the end of 2018. Compensation to the claimants will be administered by the Tshiamiso Trust, which will be established following court approval and will be responsible for distribution to the claimants.

Under current legislation – the Occupational Diseases in Mines and Works Act – the benefit for those suffering from first-degree silicosis is R63 100, while those suffering from second-degree silicosis are able to claim R140 506. However, following the recent settlement, claimants will be receiving much more than these amounts, with the gold miners having set aside about R5.20-billion to be paid in compensation to the mineworkers through the trust. The miners have also agreed to contribute R845-million over the life of the trust for administration expenses.

This settlement is the second major occupational lung disease settlement in the South African gold mining industry in two years. In March 2016, Anglo American South Africa and AngloGold Ashanti reached a landmark settlement with 4 000 claimants who had contracted silicosis and silicotuberculosis and sued the mining majors accordingly. Anglo American South Africa and AngloGold Ashanti agreed to pay R454-million into another trust, the Qhubeka Trust, which would be distributed to qualifying claimants.

South Africa's high silicosis rate can be attributed to the historically labour-intensive mining methods prevalent in the gold mining industry. Owing to the extreme depths and narrowness of the country's gold-bearing reefs, it is difficult for gold producers to implement mechanised mining techniques. As a result, mining houses are working diligently to implement dust-suppression techniques to minimise mineworkers' exposure to silica dust. These include the watering down of working spaces and using bonding agents, atomising sprays and haulage sprays that work to reduce the amount of dust generated underground.

This combined effort on the part of gold producers has resulted in a reduction in dust loads across the country's gold mines from 0.28 mg/m^3 to 0.10 mg/m^3 since 2012, which is in line with the Mine Health and Safety Council's challenge to all gold mining companies to achieve a 95% exposure level target of 0.05 mg/m^3 for respirable crystalline silica by 2024.

ILLEGAL MINING

While illegal mining is a challenge that faces all sectors in South Africa's mining industry – including the chrome, diamond and coal sectors – the gold sector has been the most adversely impacted on by the problem. This can be attributed to the high value of gold, the prevalence of abandoned old gold mining areas in South Africa, and buyers who are willing to pay for illegally acquired gold.

According to professional services network PwC, illegal mining costs South Africa more than R7-billion a year, which is equal to the revenue generated from about 430 000 oz of gold. However, the scourge is not only prevalent in South Africa, but also across the rest of sub-Saharan Africa, with AngloGold Ashanti reporting that, out of all its Africa-based operations, the Obuasi mine, in Ghana, is most affected by illegal mining.

PwC attributes illegal mining to the poverty and unemployment plaguing the continent, with many retrenched mineworkers – from South Africa and its neighbouring countries – desperate to provide for their dependants. According to the MCSA, 70% of the illegal miners in South Africa, also known as 'zama-zamas', are undocumented foreign nationals.

To tackle the issue of illegal mining, the MCSA's Standing Committee on Security has emphasised the need for mining houses, the Department of Mineral Resources and the South African Police Service to work together to fight the scourge at every level – from the individuals operating underground to the syndicates that pay them.

PwC further points out that it is also not uncommon for illegal mining syndicates to pay employed mineworkers to transport food and other essentials underground, enabling zama-zama's to work for long periods underground without coming to the surface.

From a producer perspective, Sibanye-Stillwater said in February 2018 that it had arrested nearly 1 400 illegal miners at its South African gold shafts in 2017. It claims that the companywide blitz has almost eradicated the practice at its mines, with the help of the closure of the Gauteng-based Cooke operations, which has been the epicentre of illegal mining activity plaguing the company and where almost 800 arrests were made in 2017. Sibanye-Stillwater CEO Neal Froneman implemented the company's 'Zero Zama' initiative in 2017, vowing to clear illegal miners from Sibanye's shafts by January 2018. According to breaking news source Reuters, the gold miner spent about R300-million on biometric entry control systems at its gold mines in 2017 and will spend the same on that in 2018.

Meanwhile AngloGold Ashanti also reported in February that it would spend up to $500-million to mechanise its

Picture by Creamer Media

Obuasi mine, in Ghana, which was invaded by thousands of illegal miners in 2017 and rendered worthless. The miners had to be removed by military force, prompting AngloGold to reopen the mine as an automated operation following a feasibility study.

GOLD PRICE

The price of gold remained steady in 2017, averaging $1 257/oz, which was virtually unchanged from the average price a year earlier. According to Australia's Office of the Chief Economist's Resources & Energy Quarterly (REQ), published in March 2018, this could be attributed to the market demand for gold as a safe haven asset, as the market weathered three US Federal Reserve interest rate hikes in 2017, among other actions by the bank, which placed pressure on the gold price. In addition, geopolitical concerns about North Korea's Nuclear Missile programme, compounded by political developents in the US, prompted support for gold as a safe-haven asset.

However, leading up to the Federal Open Market Committee meeting in December, when the US Federal Reserve raised interest rates for the third time in a move widely anticipated by the markets, gold prices came under renewed pressure amid dollar strength, slipping to a near five-month low of $1 241/oz. Nevertheless, by the second half of December, the yellow metal had recovered most of its earlier losses, buoyed by a then weaker US dollar.

Still, investors' interest in gold remained lacklustre in 2017, with Western investors reducing their gold exchange-traded fund holdings by 5 t in the fourth quarter. According to Thomson Reuters' Gold Survey 2018, this could be attributed to improved economic sentiment, sustained equity market strength and growing risk appetite.

However, the firm expects gold to average $1 360/oz in 2018, adding that it could potentially, but briefly, approach the $1 500/oz mark later in the year amid the current geopolitical climate and equity markets, which are predicted to continue their support for gold as a risk hedge. Among the key drivers for this are US President Donald Trump's politics, compounded by ongoing tension in the Middle East, as well as Brexit negotiations. Against this backdrop, Thomson Reuters also predicts exchange-traded funds' demand to rebound to 350 t, after the modest 177 t increase seen in 2017. Therefore, in the short term, the gold price is likely to be supported by investors who are cautious about the global economic outlook, equity prices and the global political environment.

Meanwhile, REQ says gold prices are predicted to rise in the medium term to around $1 300/oz in 2023, supported by steady investor demand, increasing jewellery consumption and declining mine supply after 2020.

OUTLOOK

While bringing elation to many homebound industries, the strengthening of South Africa's rand against the US dollar in 2017/18 means that South Africa has not been able to enjoy the recent gold price rally. The resultant decline in the rand gold price, compounded by the impact of high production costs and depleting reserves, is likely to continue to hamper the profitability of local mining houses in the short term.

The rand was trending at about R13 to the dollar in 2017, peaking at a high of R15 before strengthening considerably (at one point to R11.56) in February 2018, following the election of Cyril Ramaphosa as South Africa's new President. Buoyed by a better-than-expected gross domestic product growth rate of 1.30% in 2017, the strength of the rand is expected to continue into 2019, with research firm BMI's country risk team predicting a year-end exchange rate of R10.90 to the dollar.

This will, in turn, continue to impact on the high-cost gold mining industry which, according to BMI Research commodities analyst Diego Oliva-Velez, will have to consider a new operating model to compete with other gold-producing countries in the region whose deposits are more accessible and easier to mine. Oliva-Velez believes the best route forward would be the implementation of new technologies – such as artificial intelligence, blockchain or drones – to bring down costs and streamline local gold operations.

PwC agrees, stating that unless technological solutions in the South African gold industry improve the productivity of extreme deep-level mining in the country, the lower rand price is likely to accelerate the country's long-term production decline.

According to the MCSA, if there isn't an imminent shift in mining methodology, the industry will fail to mine South Africa's deep-level complex orebodies, which could result in the sterilisation of resources, subsequent mine closures and job losses. Research suggests that 200 000 job losses by 2025 could affect up to two-million people indirectly.

However, if modernised mining methods, including mechanisation, are implemented, gold producers will be able to profitably mine an estimated 400-million tonnes of unrecovered low-grade gold, as well as an additional 160-million tonnes of high-grade gold trapped in underground support pillars.

Mechanisation is, therefore, the answer to prolonging the operating lives of gold mines and improving their financial and safety performances, making it possible to mine lower-grade orebodies and deeper resources.

This brief was compiled by Samantha Herbst – Creamer Media Research Associate.

Creamer Media (Pty) Ltd
tel +27 11 622 3744 | fax +27 11 622 9350
email subscriptions@creamermedia.co.za