QUIC

RESEARCH REPORT

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Consolidation in the Gold Industry

Digging for Deals

The past few months have seen some of the most significant M&A activity the gold mining industry has experienced in years. Headlined by several mega-mergers, consolidation has become the most important trend to watch in gold mining.

This report provides the reader with an overview of the gold industry as a whole, including primary macroeconomic drivers and how gold miners operate. Next, it covers consolidation as a general trend in the gold industry, summarizes the main drivers of consolidation and gives a brief outlook on the future of M&A in gold mining. Last, it delves into one of the most high profile recent mergers, the Barrick Gold-Randgold Resources mega-merger.

Metals & Mining

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Gold Industry Overview

What is Gold?

Gold is a precious metal, known for its dual purpose in practical applications and as a "safe-haven" monetary asset.

Gold serves a wide variety of practical purposes due to its unique physical properties, including: durability, malleability, and thermal and electrical conductivity. Specifically, gold is used in jewellery (52% of demand) and in technology such as conductors or microprocessors. In recent years, more innovative applications of the metal have emerged, namely its use in diagnostic medicine and in contaminated groundwater treatment.

Historically, under the Gold Standard, countries linked their money supply to gold reserves. And, even as the Gold Standard has been replaced with the current Fiat currency system, gold's importance as a monetary asset remains. Among today's investors and central banks, gold is viewed as a reliable, tangible store of value and as a "safe haven" asset. In other words, gold is used as a portfolio diversifier because it is generally uncorrelated or negatively correlated with the performance of other portfolio assets and investors often turn to it in times of systemic turmoil.

Primary Drivers of Gold Pricing

Relative to other metals, gold prices are extremely sensitive to macroeconomic drivers. Most notably, changes in the value of the US dollar tend to have an inverse effect on gold prices as a result of gold trading being denominated in USD. If the value of the USD falls, foreign purchasers of gold have increased purchasing power of gold in their home currency, increasing demand for the metal. The inverse is true when the USD rises in value.

US interest rates play an equally significant role in gold pricing. As the Federal Reserve increases interest rates or even suggests their intent to do so, demand for gold decreases and its price follows suit. This is because the opportunity cost of forgoing interest-based assets, such as bonds, increases. These assets provide a more enticing yield, relative to gold.

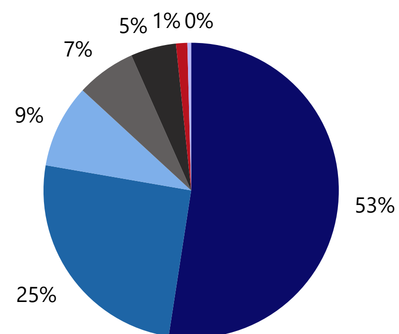
CPI inflation is another important driver for gold pricing. To hedge against rising levels of inflation, investors tend to look to gold, thus pushing its price upwards. Finally, investor sentiment exerts an impact on the price of gold. As geopolitical tensions and market instability loom, investors turn to gold as a safe haven asset to store value.

How Gold Companies Operate

Typically, operators within the commercial gold-mining industry take ownership of the process from sourcing to processing ore into concentrate or bullion. After processing, companies in this industry also store and delay the sale of their output depending on commodity price fluctuations.

EXHIBIT I

Distribution of Gold Demand by Industry (2017)



Source(s): Statista

Gold Industry Overview

The process of sourcing ore is characterized by significant financial investment and lengthy procedures. Before any ore is extracted, companies engage in the exploration process, lasting up to ten years, to determine if there are "proven and probable" reserves. During this exploration phase, the likelihood of discovery leading to a mine being developed is very low-- with less than 0.1% of prospective sites leading to a productive mine.

After exploration, companies spend another one to five years developing the infrastructure, and obtaining permits and licenses for the new mine. The actual productive life of a mine lasts from 10 to 30 years. During this period of operation, ore is extracted and processed with heavy costs being incurred from labour, equipment, diesel fuel, explosives, and electricity. Even after mines have ceased operations-- the ore body is exhausted or remaining deposits become unprofitable to extract-- mines must be decommissioned and land rehabilitated. Gold mining companies typically assume responsibility for the site an additional five to ten years after dismantling.

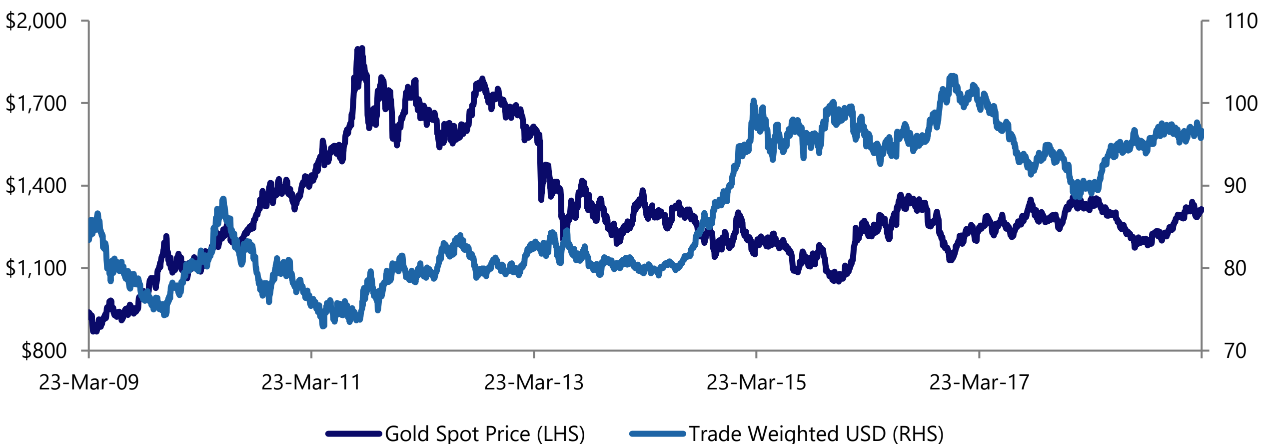
Size of Different Companies

While no definitive guidelines exist, analysts within the mining industry broadly classify mines into three categories based on determinants like production volume, mine ownership, and market capitalization.

Generally, junior mines are defined as having production volumes below the 200K-ozs (thousands of ounces) threshold and a market cap under $500 million-- but these thresholds vary, depending on the source. Junior mines typically have a larger appetite for risk, focusing resources on the discovery of new economic natural resource projects. Further, smaller flagship mines are typically younger because those existing profitable companies are often acquired by larger players or graduate to the intermediate range. These companies are less likely to be held by institutional investors.

EXHIBIT II

Spot Price of Gold and Trade Weighted USD Index (2009 – 2019)



Source(s): Bloomberg

Gold Industry Overview

Mid-tier or intermediate gold producers typically operate multiple gold mines and produce at least 200k-ozs per year. These companies typically base operations in regions with lower geopolitical risk and easily manageable geology, due to the heightened sense of fiduciary duty.

Finally, major or senior producers are the established operators in the industry, with relatively large market capitalization. According to some analysts, companies fall into this category when they produce at least 1% of the global mined supply of gold, translating to an approximate annual production volume of 750k-ozs. Senior mines generate cash flows from operations and grow these operations through M&A rather than exclusively organic growth and exploration. In addition, prices for senior companies are closely tied to the price of gold. This is because commodity pricing reflects the potential profits of the respective companies. Generally, senior mining stocks are considered less volatile and more liquid than junior mining stocks.

How Gold Companies are Financed

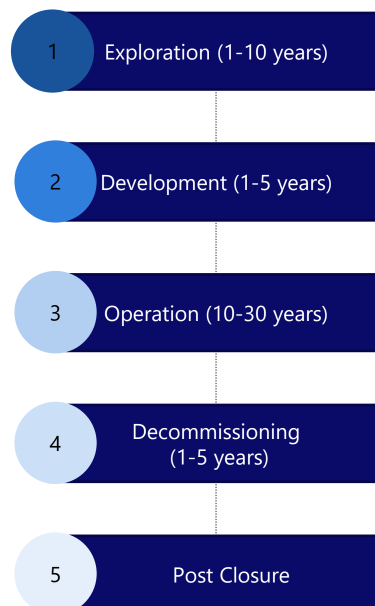
In addition to debt and equity financing methods, gold mining companies, of all sizes, have traditionally relied on gold streaming and royalty agreements as a means of raising capital.

To provide capital in the early stages of a project, streaming companies, such as Franco-Nevada or Wheaton Precious Metals, will purchase non-operational interests in a given mine. In return, these streaming companies receive the right to purchase the produced gold, in the future, at a preset and often reduced price. Royalty agreements also entail an upfront payment to fund the mining project; unlike streaming agreements, however, the company providing funding receives a monetary equivalent of a portion of mining output. These methods of financing are often preferred among mining companies since they provide immediate capital without diluting ownership through equity and without threatening the health of a balance sheet with debt.

Alternative financing methods may also be selected, depending on the mine's size and internal cash reserves. Generally, established producers or senior mines rely more heavily on internal methods of financing, given that they have cash flows from operations. By contrast, in the absence of substantial internal capital, junior mining companies tend towards equity financing.

EXHIBIT III

Lifecycle of a Gold Mine



Source(s): World Gold Council

Consolidation in the Gold Industry

Drivers of Consolidation

The gold industry is facing a growing need to consolidate as it struggles to deal with declining production and rising exploration costs. With many mining companies exhausting their current reserves, they need to find ways to generate pipelines for new gold. However, with the amount of economically accessible reserves rapidly dwindling, this is becoming an increasingly costly task. This has left many majors unable to organically generate the increases in sustainable production levels necessary for long-term growth. As a result, quarter over quarter production levels have been going down for many of the majors while industry-wide all-in sustaining costs (AISC) have been on the rise.

The struggle to find new gold mines is further demonstrated by declining rates of gold mine discoveries, in spite of increasing exploration costs.

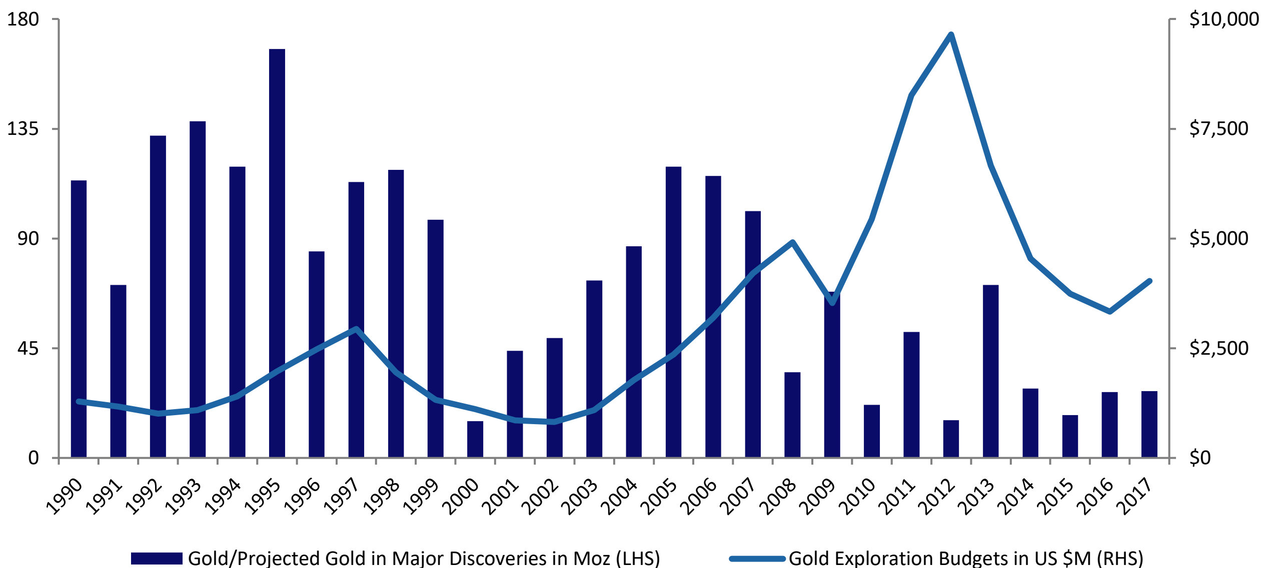
Even more notable is the fact that almost no new discoveries are "world class" deposits – over 5 million ounces of gold reserves. This is particularly concerning considering such mines contribute almost half of global gold production.

Facing these difficulties, gold companies now believe that it is both cheaper and more predictable to acquire reserves on the stock market than to inject additional capital into discovery.

An additional driver of consolidation is gold company executives desire to attract more investor capital into the industry. As a result of historical underperformance, investors have become weary of buying into North American gold miners. Executive teams hope that prudent consolidation can show investors a brighter future ahead, resulting in more capital from investors and in higher share prices.

EXHIBIT IV

Gold in Major Discoveries versus Exploration Budgets (1990 – 2017)



Source(s): S&P Global Market Intelligence

Consolidation in the Gold Industry

Effectiveness of Consolidation

The effectiveness of utilizing consolidation to drive production growth is a highly contested topic. Majors often argue to shareholders that acquisitions possess extensive cost-efficiencies and synergies. Synergies can be found through scale, reducing operating costs and leveraging strong combinations of reserves and processing plants. They also argue that M&A provides them with additional capital to develop and expand gold mines. The synergies resultant from consolidation can be demonstrated by Barrick CEO recently suggesting a disputed value of over $7B in potential synergies related to their bid for Newmont.

With that said, many experts argue that consolidation does little to increase value for shareholders. Rather, they argue M&A activity is a function of companies wanting to appease shareholders with increases in production, as consistent production declines inevitably lead to losses in shareholder value. While consolidation offers a short-term fix, it does little to resolve the greater exploration problem facing the gold industry.

Outlook on M&A

M&A activity will continue to shape the future of the fragmented gold industry, both in the form of frequent acquisitions of junior mining companies and occasional mega-mergers

Juniors have increasingly become strong takeover targets, with many of them trading at extremely attractive multiples. With juniors playing a significant role in the discovery and development of mines, acquiring them is a cost-effective way for majors to expand their reach and replenish their gold supply.

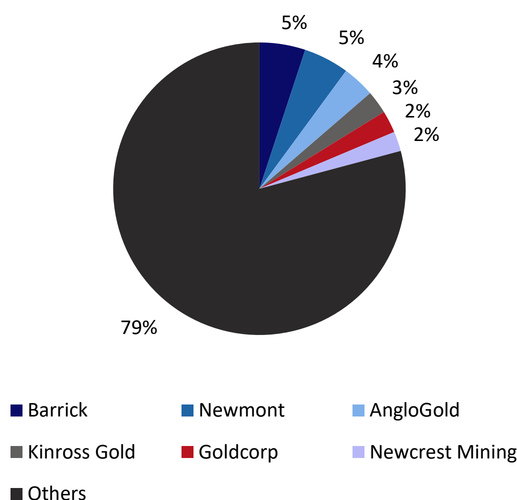
The other area of M&A in gold is through mega-mergers. This has been seen recently through both the Barrick-Rangold and Newmont-Goldcorp deals, which at their respective times of acquisition made the companies the world's largest gold mining company.

The trend of mergers almost culminated in February when Barrick offered Newmont shareholders an all stock acquisition worth $18B. While the deal likely will not go through – they may pursue a joint venture in Nevada – it is demonstrative of the willingness of the majors to engage in significant M&A activity.

The extent to which the fragmented gold industry consolidates is largely dependent on the effectiveness of this recent spate of M&A as well as market perception of said M&A. If these companies are able to realize synergies and increase returns, then merger activity will only heat up. But if these deals fail and destroy shareholder value, as they have in the past, the consolidation trend may slow.

EXHIBIT V

Gold Mining Market Share by Production (2017)



Source(s): Statista, Company Reports

Consolidation Case Study: Barrick-Randgold

Deal Structure & Timeline

On September 24, 2018 Barrick Gold announced an agreement with the Board of Directors of Randgold Resources for a merger between the two senior gold producers under the Barrick Gold name. Barrick shareholders approved the merger on November 5, 2018, with Randgold shareholders giving it the green light two days later. The Jersey Court handed down final regulatory approval on December 17, 2018, with shares in the new company commencing trading on January 2, 2019.

The deal was structured as a share-for-share merger, in which Barrick acquired all issued shares of Randgold through the issuance of 6.128 Barrick shares to every one Randgold share. This translates to Barrick paying US$6.2B for Randgold at $64.06 per share. This implies no premium and creates a company with a market capitalization of US$18.3B.

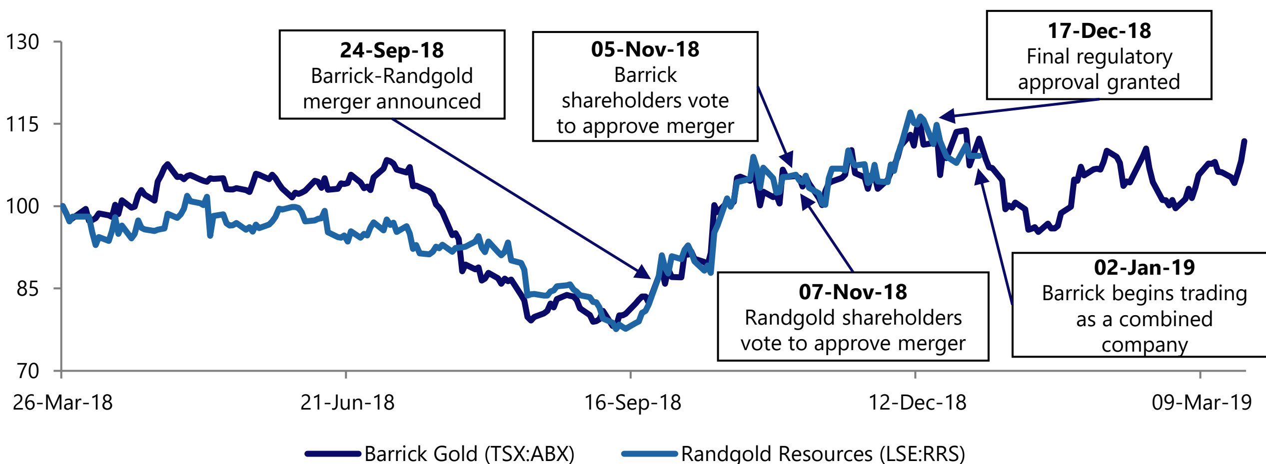
Deal Rationale

At its core, this merger is fueled by a desire for greater scale and the benefits it brings, while also being a strong strategic fit. The two companies have complementary strengths in their operating portfolios. Barrick produces massive quantities of gold, producing 5.3M oz/Au in 2017, however many of their mines are lower grade, making them relatively higher cost. Conversely, Randgold has lower production numbers, but produces at higher grades and lower costs. The combination of these portfolios will benefit both companies as it creates a more balanced portfolio.

The larger company created by the merger will benefit from synergies as a result of reduced combined operating expenses. Additionally, scale will give New Barrick more capacity to expand through either acquisition or organic growth, with management having expressed intent to pursue the latter.

EXHIBIT VI

Barrick Gold and Randgold Resources Relative Performance (March 26, 2018 = 100)



Source(s): S&P Capital IQ

Consolidation Case Study: Barrick-Randgold

Lastly, prior to the merger Randgold had a sterling balance sheet, with virtually no debt and $751M of cash. Barrick on the other hand, had $5.7B of long-term debt on their balance sheet. From Barrick's perspective, acquiring Randgold creates a far stronger balance sheet than they previously possessed, giving them freedom to undertake exploration projects or acquire junior players. Additionally, Barrick's BBB credit rating is likely to be upgraded following the merger, lowering their future cost of debt.

The Future of New Barrick

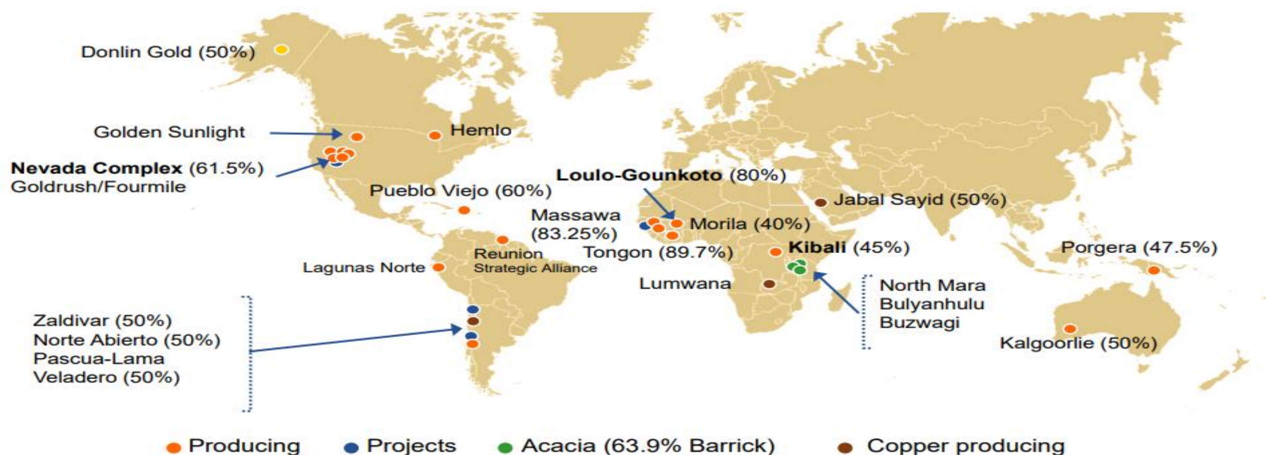
For all of 12 days Barrick was the biggest gold producer in the world, when they were usurped by the proposed merger of Newmont and Goldcorp. Barrick's new President and CEO will be Mark Bristow, former CEO of Randgold. He has announced intentions for the divestiture of non-core assets to return focus to effective operation of the company's five tier one gold assets. Industry low cash costs of US$538/oz will allow Barrick to realize the highest EBITDA margins of any senior gold producer at 48%. The company will generate significant FCF that gives them a high degree of freedom to pursue growth initiatives.

While New Barrick boasts many strengths, there are hurdles that must be overcome before they can be realized. There are the normal integration and management risks seen in most any merger, but New Barrick also must now deal with their declining production numbers. The acquisition of Randgold will patch this up for the time being, but they must begin to find meaningful reserves again if they hope to sustain their production numbers in the long-run.

Ultimately, Barrick-Rangold represents a fundamentally attractive merger for both parties, as evidenced by share performance since the announcement. Based on the past couple months and general industry trends, it would appear that this mega-merger may prove to be the first domino to fall in an explosion of mining M&A.

EXHIBIT VII

Barrick-Randgold Combined Mine Portfolio



Source(s): Company Reports

References

1. Bloomberg
2. Company Reports
3. Financial Post
4. Forbes
5. Google Images
6. IBISWorld
7. Mining.com
8. Seeking Alpha
9. S&P Capital IQ
10. Statista
11. Sunshine Profits
12. The Motley Fool
13. Versant Partners
14. WisdomTree
15. World Gold Council