Australian Gold Fund Valuation and SWOT Analysis

Northern Star Mines Limited (ASX: NST)

Date	13/08/2019
Classification	Large Gold Miner
Current Price	$13.070
No. Issued Stocks (m)	639.6
Net Cash + Bullion + 0.5 x GIC ($ m)	$332.39
Last Dividend Payment ($ p.a.)	$0.11
Market Capitalisation ($ m)	$8,359.48
Enterprise Value ($ m)	$8,027.09
Resources (oz)	20,759,000
Reserves (oz)	5,374,000

Ranking	**Overvalued**
Price Range	$8.22-$12.25
2020 Annual Gold Production Guidance (oz p.a.)	800 000-900 000
2020 All-In Sustaining Cost Guidance ($/oz)	$1 200-$1 300
EV/AISC-Adjusted Production Guidance ($/oz)	$11,804.00
EV/AISC-Adjusted Production Range ($/oz)	$8 000-$10 000
EV/Resources ($/oz)	$386.68
EV/Reserves ($/oz)	$1,493.69

Summary

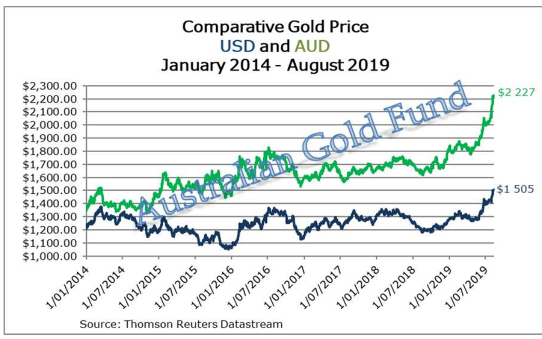
Northern Star Mines released their June quarterly report and the 2019 Reserves and Resources Statement at the end of July. The company delivered 226 028oz of gold at AISC of $1 238/oz for the quarter, an increase of almost 30% from a poor March quarter. This was a record quarter with the three mines producing close to their highest levels. The total production for 2019 was 813 134oz at AISC of $1 296/oz, with the Kalgoorlie mine delivering 334 527oz at AISC of $1 329/oz, the Jundee mine delivering 295 053oz at AISC of $980/oz and the Pogo mine delivering 194 896oz at AISC of $1 717/oz. In terms of the company's resources and reserves, the mineral resources reduced very slightly from 20.8Moz to 20.76Moz while ore reserves increased from 4.75Moz to 5.37Moz, with the contribution of additional reserves net of depletion from the Pogo mine. The ore grades dropped, however, from 5.33g/t to 4.89g/t as a result of the Pogo mine reserves cutoff being made lower. Going forward, the company intends to expand and develop their Southern Kalgoorlie Operations (acquired from Westgold) and increase production in their Kalgoorlie mine.

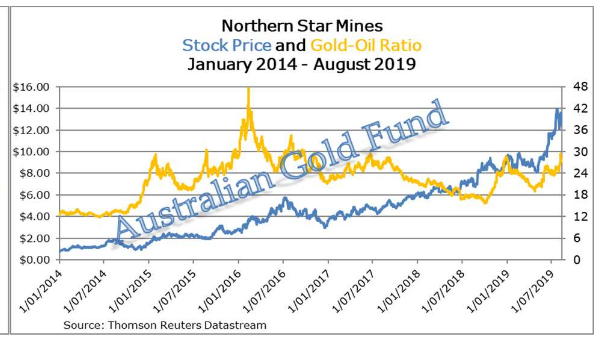
For 2019, Northern Star Mines delivered slightly below the guidance of 850 000-900 000oz at AISC of $1 225-$1 275/oz. The AISC guidance had been downgraded from $1 050-$1 150/oz last August after the Pogo mine acquisition. This is due largely to the Pogo mine operational difficulty encountered especially in the March quarter when the production fell sharply and the AISC sharply rose. The Kalgoorlie mine also experienced higher costs over the year, falling finally in the June quarter. Fortunately, the Jundee mine operations performed strongly over the year and allowed the company to deliver their gold at a cost that is just above the upper end of the guidance range.

In terms of operational efficiency, Northern Star experienced a substantial increase in their mining and processing in their existing Kalgoorlie and Jundee mines as well as acquiring the Pogo mine last October. However, at the same time, the ore grades for the two mines declined by around 20% and acted as a partial offset to the increased processing capacity. As a result, the acquisition of the Pogo mine was timely and helped to propel the company to further growth. This acquisition did not quite fulfil the management's expectations as the Pogo mine experienced teething problems that led to higher cost production. For US$260m (A$347m), the mine will take a few additional quarters to recoup the initial outlay. The Pogo mine has the advantage of delivering much higher-grade ore, being as much as 11g/t in the September quarter. Management indicates that the Pogo mine maintenance works will eventually allow the benefits of a high-grade and low-cost mine to be realised in the coming years.

From the financial perspective, Northern Star delivered substantial operational cashflows after accounting for capital expenditure and the acquisition of the Pogo mine, which was financed through paying $163m in cash and $175m in stock. The company's net cash position fell from $428m at the end of the 2018 financial year to $311m at the end of the 2019 financial year. However, the company also paid around $65m in dividends during this time, or $0.11 per stock. The strongest cashflow generation came in the June quarter and appears to be an encouraging sign for the year ahead. With a strong cash position and also the gold price rising to over A$2 200/oz, Northern Star is clearly a cash cow with the capability to further acquire other mines and transform themselves into a 1Moz+ major producing company.

Despite a somewhat mixed bag of performance over the financial year, Northern Star has seen their stock price rise strongly after early May as a result of the tailwind of a falling Australian dollar, crude oil price and then the gold price rallying strongly. Furthermore, scepticism regarding the Pogo mine had somewhat blown over and the stock price rose from around $8 in early May to almost $14 in late July. In valuing this company, we consider the gold market swinging strongly into bull territory and hence gold mining companies have been re-rated upwards. Despite that, the current price and the upcoming 2020 guidance of 800 000-900 000oz p.a. at AISC of $1 200-$1 300/oz suggest that a price of $13 may be a bit generous. Should the company demonstrate that their economies of scale can expand further and operational problems in Pogo and Kalgoorlie are resolved, then this may justify its current price.





Prevailing Environment

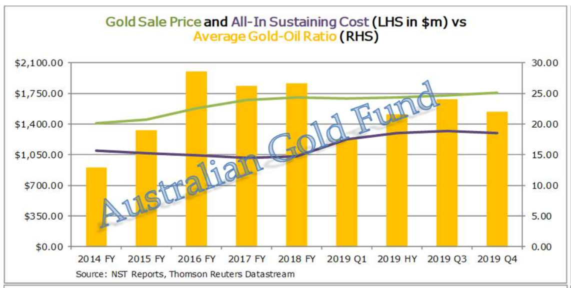
The first half of 2019 has seen the global financial markets make some recovery after a rather sharp decline in December 2018 as the Federal Reserve continued with their monetary policy of raising rates despite the real economy being weak, in conflict with the official economic and unemployment data. The tone of the Federal Reserve began to change as 2019 took its course. Should the Federal Reserve reduce interest rates in July, this would indicate the end of the rates cycle that began in the end of 2015 when the Federal Reserve began to raise interest rates from an unprecedented rock-bottom level of 0.125% and peaked at 2.375%.

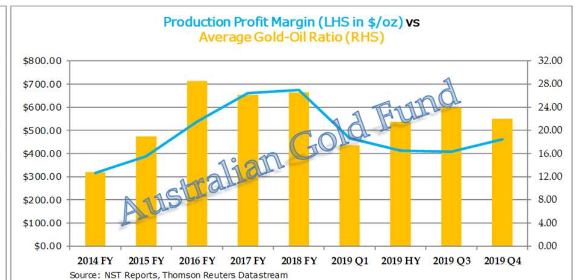
The change in the tone of the Federal Reserve is in conjunction with other central banks around the world taking a more dovish stance. The Reserve Bank of Australia surprised the market with a 0.25% reduction in early June 2019, taking it to 1.25%. This rate reduction comes as a result of a surprise return of the Coalition government in the 18th May election on the backdrop of promises by the government to try to boost a weakening jobs market and slow down an accelerating decline in the property markets in the eastern seaboard.

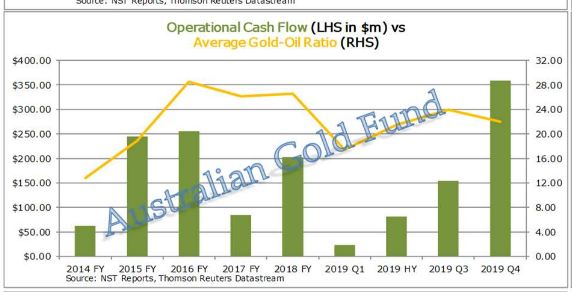
The gold price for most of early 2019 was rangebound between US$1 260-$1 350/oz, but this took a sudden turn after the June meeting on 19th June 2019 when the Federal Reserve indicated they were looking to start reducing rates as early as the July meeting scheduled on 30th-31st July. The gold price rose above US$1 400/oz on 24th June 2019, for the first time since 2013 after the sharp decline in April and June. At the same time, the gold price in Australian dollar terms went above $2 000/oz and supported further by a weaker Australian dollar. With the July meeting leading to the Federal Reserve reducing the interest rate by 0.25%, the gold price continued to head upwards. Most interestingly, the gold price surpassed US$1 500/oz at the same time a twenty-year gold sale agreement among leading central banks expired and was not renewed. While many know that the physical sales of gold and precious metals do not move market prices as they are determined by the paper contracts, this is symbolic of what may potentially be the end of the suppression of precious metal prices to give an illusion of a stable petrodollar financial system.

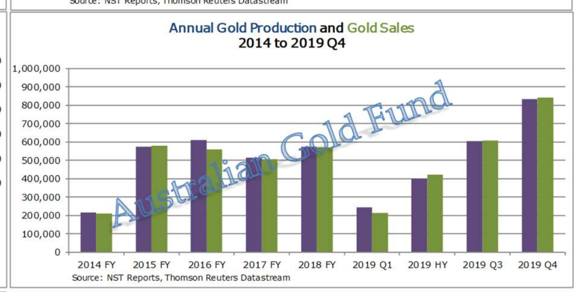
The oil price has been trading between US$50-$65/bbl on the backdrop of rising Middle East tension with Iran being in the spotlight. The US-Iran tension in the Persian Gulf and Strait of Hormuz briefly attracted much media attention and pushed the oil price above the US$60/bbl mark. This has now since been less at the forefront of market traders as increasing crude oil inventory and the escalation of the US-China trade wars takes a toll on economic activity and reduced the oil price approach US$50/bbl.

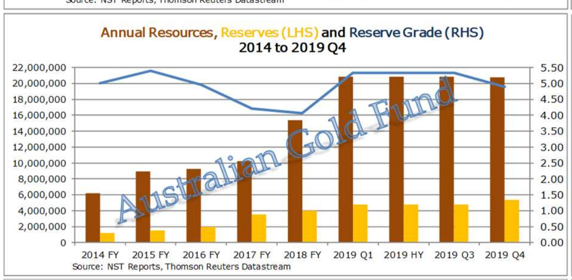
Operational and Financial Performance Charts

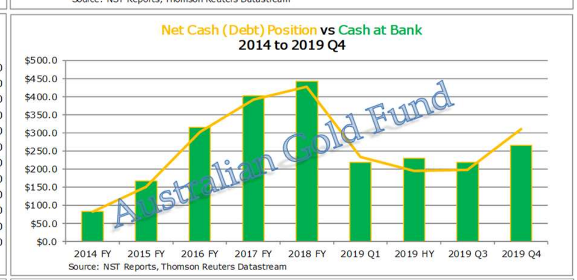


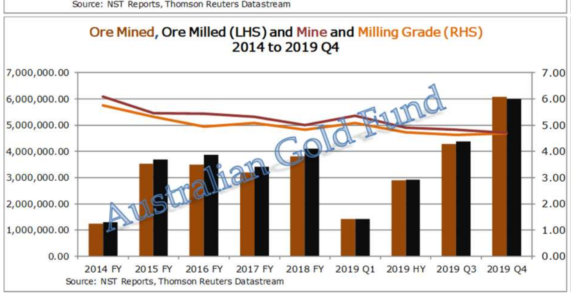


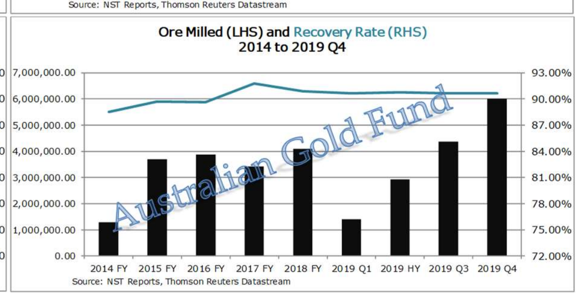








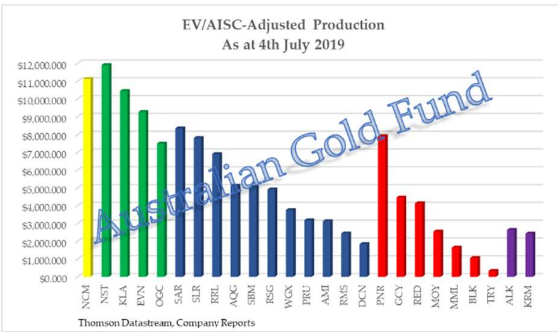


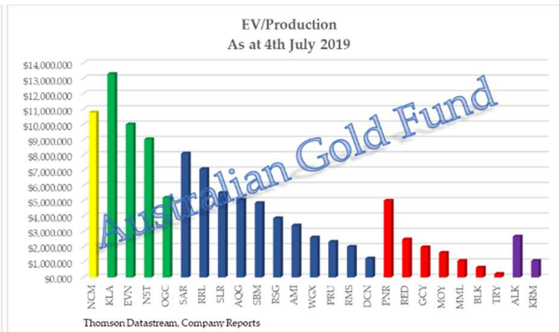


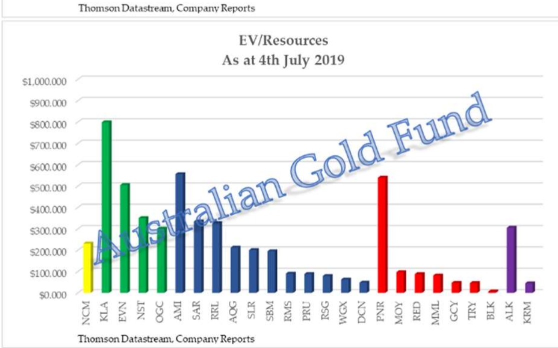
SWOT Analysis

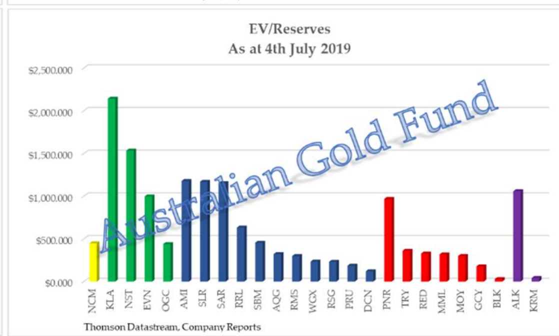
Strengths	Weaknesses
• Excellent track record of delivering growth, low-cost gold and reliable dividend stream. • Highly competent management with the ability to time acquisitions near market cycle bottom, thus able to expand strategically. • Mine properties in highly secure jurisdictions.	• Being one of the top mining companies on the ASX, the stock is likely to be priced at a premium. • Company downgraded AISC guidance three times in 2019. • Despite expanding processing capacity and improved efficiency, 2020 guidance is conservative.
Opportunities	**Threats**
• Existing mine properties have expanded in scope with a potential to expand production and exceed current guidance. • Large cash reserves may facilitate acquisition of more mine deposits. • Development of existing properties such as Central and West Tanami and Ashburton for organic growth.	• Relative to annual production, the company's reserve life is somewhat low (6 years). • AISC could escalate significantly in their underground mines given low reserves base and as operations go deeper below the surface.

Peer Comparison









Glossary

The gold mining companies are classified based on their production level on an annual basis. The classification used in this report is as follows – **A** (major producer – 1Moz p.a. or more), **B** (large producer – 0.5-1Moz p.a.), **C** (mid-tier producer – 150 000-500 000oz p.a.), **D** (junior producer – 50 000-150 000oz p.a.) and **E** (micro producer – less than 50 000oz p.a.).

The **All-in Sustaining Cost (AISC)** is a measure adopted by the World Gold Council as a standardised measure of production costs. This cost includes typically the **Cash Cost** associated with the direct production (extraction, transportation, processing and refining costs, staff salary and wages and relevant corporate costs) as well as **Sustaining Expenditure** that may include maintenance of mine equipment and infrastructure, insurance and administration costs over its production life. Companies may still have discretion in apportioning their expenses.

The **EV/AISC-Adjusted Annual Production** is a *comparative measure* used for valuing companies in this report and can be used to determine relative value. The enterprise value is the sum of the market value of equity (stock price multiplied by number of issued stocks) and net debt (total borrowings less cash and gold bullion, but excluding gold in circuit and ore stockpiles). The AISC-adjusted annual production is measure whereby the annual production of gold per oz is divided by the AISC adjusted by a factor of 1 000. The intuition behind this measure is to value the company by taking into account annual production but giving favourable treatment for lower AISC and penalising for higher AISC. The factor of 1 000 is arbitrarily chosen. As an illustration, if a company produces 250 000oz p.a. at AISC of $1 250, the AISC-adjusted production is 200 000.

The metric is used to determine the Price Range for the company. This range takes into account the baseline range depending on the company's classification, as determined by the annual gold production level. The range can be adjusted upwards or downwards based on other factors that are presented in the SWOT Analysis section.

As a rough guide, the fair value ranges for different mining company classes are as follows:

Major and Large Companies - $6 000-8 000/oz

Mid-Tier Companies - $2 500-5 000/oz

Micro and Junior Companies - $800-1 800/oz

The metric is by no means perfect and other factors should be considered including reserve and resource life, projected production volume and costs, management quality and geographic location. Further, it is of a retrospective nature, focusing on past performance and this may not be a good indicator for future performance.

The **Net Cash/Debt** is the net amount of cash and bullion the company holds after their borrowings and interest-bearing debt are paid. This represents the liquidity position of the company, although this measure does not consider whether the debt is current (due within the next twelve months) or not. A company in a significant net debt position is owing more than they currently have in cash and bullion, which may potentially put them in financial distress if the debt is due soon.

The **Net Cashflow from Operations Excluding Maintenance Capital Expenditure** measures to what extent the company can generate cashflows from its operations after paying for its operating costs as well as Cash Paid for Purchases of Property, Plant and Equipment and the Cash Paid for Development Expenditure in the Investing Cashflows section of the Statement of Cash Flows. It does not include Cash Paid for Exploration and Evaluation, which is assumed to be growth capital expenditure. This is by no means a stable and comparable measure as different companies may have discretionary interpretation of what constitutes as Operating Activities and Investing Activities or Development, Exploration and Evaluation expenditures.

The **Price Range** determines a reasonable range for which the company stock price should be trading at. This range is relatively wide as it considers the *margin of safety*. A company whose stock price is currently outside the fair value range is significantly over or undervalued and investors should look more deeply into the company's operations, financial performance and recent market announcements. This range should not be taken as the sole driver for investment decisions, but as a starting point for further research to identify the potential causes for the current stock price.

Disclaimer

Information in this report is not intended to be financial advice and should not be used as such. While every effort is made to ensure the information is reliable and accurate, errors and omissions may still exist. The interpretation of financial reports, market announcements and management commentary is subject to personal views and discretion. Users of this report are highly advised to seek professional financial advice before making their decisions.

Declaration of Interest

The Australian Gold Fund and its directors currently hold Northern Star Mines stocks and may purchase or sell their holdings prior to or subsequent to the report being published in their website. We do not hold a substantial stake and do not receive any income or benefits from the company as a result of our report.