## Australian Gold Fund Valuation and SWOT Analysis

# Perseus Mining Limited (ASX: PRU)

| Date | 19/02/2021 |
|---|---|
| Classification | Mid-Tier Gold Miner |
| Current Price | $1.120 |
| No. Issued Stocks (m) | 1,226.5 |
| Net Cash + Bullion + 0.5 x GIC ($ m) | -$15.48 |
| Last Dividend Payment ($ p.a.) | $0.00 |
| Market Capitalisation ($ m) | $1,373.63 |
| Enterprise Value ($ m) | $1,389.11 |

| Operating Performance Metrics | |
|---|---|
| Annual Gold Production Guidance (oz p.a.) | 300 500-329 000 |
| All-In Sustaining Cost Guidance ($/oz) | $1 400-$1 600 |
| Operating Margin (Sale Price less AISC) | $887.53 |
| Resources (oz) | 7,131,000 |
| Reserves (oz) | 3,281,000 |
| Financial Year Cumulative Production (oz) | 137,386 |
| Production as % of 2020 Annual Guidance | 43.65% |
| Financial Year Cumulative AISC ($/oz) | $1,381.74 |

| Valuation Metrics | |
|---|---|
| Price Range | $0.98-$1.71 |
| Overall Ranking | Undervalued |
| Current EV/AISC-Adjusted Production | $6,620.00 |
| EV/AISC-Adjusted Production Range | $6 400-$9 000 |
| Ranking | Undervalued |
| EV/Resources | $194.80 |
| Ranking | Undervalued |
| EV/Reserves | $423.38 |
| Ranking | Undervalued |


### Summary

Perseus Mining is a mid-tier gold producing company with operations in West Africa. The company has emerged from being a single mine operation at Edikan that commenced production in 2011, to the second mine at Sissingue commencing production in 2018 and in the December 2020 quarter reported the first production at the Yaoure mine. Production has been in the 250 000-280 000oz p.a. over the last three financial years and AISC has varied in the $1 300-$1 500/oz range. With the Yaoure mine producing, the company should be propelled into the 400 000oz p.a. zone, allowing it to be re-rated. The first half-year of 2021 has seen the company produce 137 386oz at AISC of $1 382/oz. Since the construction of the Yaoure mine that cost US$237m (approximately A$300m), the company is in a net debt position of around $15.5m.

The December quarter saw Perseus Mining deliver 65 657oz at AISC A$1 416/oz, slightly down from the September quarter. We have noticed that the Edikan mine has been decreasing its production over the past four years to average from 180 000-220 000oz p.a. to the 170 000oz range. The AISC has been steady in the US$1 100-$1 250/oz range, or A$1 400-$1 800/oz depending on the US/AUD exchange rate. The declining production appears to be driven by lower grade being milled as the stockpiles are being drawn down and they are of a lower grade. Furthermore, the recovery rate has been falling into the high 70% range when it has been generally operating at the 80-88% range. The Sissingue mine, fortunately, has been making up for the decline in the Edikan mine with production now at the 100 000oz p.a. range with increasing ore grade being mined and milled. Sissingue has been a substantial generator of operating cashflows for the company as its AISC has been in the US$580-$800/oz range, or A$800-$1 100/oz. With higher ore grade being milled at Sissingue, we have seen the production increase and costs having decreased. This is likely to continue for a few more quarters as the stockpiles continue to rise and the mined ore appears to also be increasing. Based on the company's June 2021 half-year forecast, the Yaoure mine is expected to produce 48 000-52 000oz at around A$1 450-$1 700/oz.



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In the last two years since the gold price rose above the A$2 000/oz level, Perseus Mining has seen their profit margin increase significantly. The company is no longer a marginally, with their most recent half year's margin being over $800/oz. This has contributed to the company's stock price rising from the $0.30-$0.60 range that had frustrated many investors for over five years. We expect that this stronger profit margin to prevail as long as the Yaoure operations indeed deliver according to the feasibility study estimates and the Edikan operations maintain its current levels and efficiency. The gold price currently being A$2 400/oz appears to be near the cycle bottom as we have seen the gold price not rally significantly as it normally would during the January to early February period. Thus, we expect that the company's profit margin should be able to be maintained at over $750/oz.

Despite its exploration campaigns over the last four years, the company has not seen its existing properties replenish its resources and reserves above the depletion. The acquisition of Amara Resources in 2016 that added the Yaoure mine into the company's inventory has not compensated for the decline in the resources of the company since 2014 when it had 7.9Moz. Excluding Yaoure, the resources now would be around 3.3Moz. The amount of reserves in 2014 was 2.97Moz and excluding Yaoure today, this has fallen to 1.72Moz. During this period, gold production was around 1.5Moz, so there has been a modest 0.3Moz of net increase in reserves as a result of exploration. The exploration performance for this company seems to be lagging substantially to its peers. The acquisition of Exore Resources have added 530 000oz approximately in resources with 440 000oz in the Inferred category. We expect that this acquisition to deliver medium term benefits in extending the mine life of the Sissingue mine rather than anything shorter term.

The stock is currently trading at $1.12 that gives a market capitalisation of $1.37 billion and an enterprise value of $1.39 billion. Given that the company has a production guidance for 2021 of around 303 000-329 000oz at AISC of $1 400-$1 600/oz, this gives the EV/AISC-Adjusted Production of $6 620/oz, an EV/Reserves of $423/oz and EV/Resources of $195/oz. All of these measures suggest the company is undervalued, especially on the production aspect. When the Yaoure mine enters into its full commercial production phase, we expect the annual production of the company to be around 420 000-470 000oz. The company has $153m in cash and bullion and debt of $168m, with operating cashflows being able to reduce the debt without much difficulty. The company is sadly weighed down by their current hedges with some 210 000oz in forward sales contracts at an average price of US$1 470/oz delivering through till 30th June 2022 and just over 100 000oz in spot deferred sales averaging US$1 618/oz. The hedge position is being unwound over the next three years to cover 20% of the upcoming production, which is in line with industry practice. However, the lower prices will reduce the company's profit margin.

With confirmation of Yaoure operations producing according to their mine plans, the chances of Perseus stock price rising above $1.50 should likely rise. We believe that the company's stock price is trading well below the company's operation scope, although we have identified reasons for this including declining operational efficiency in the flagship Edikan operations, the company's exploration and growth strategy not delivering relative to its competitors and a hedge program that is reducing the profit margin.

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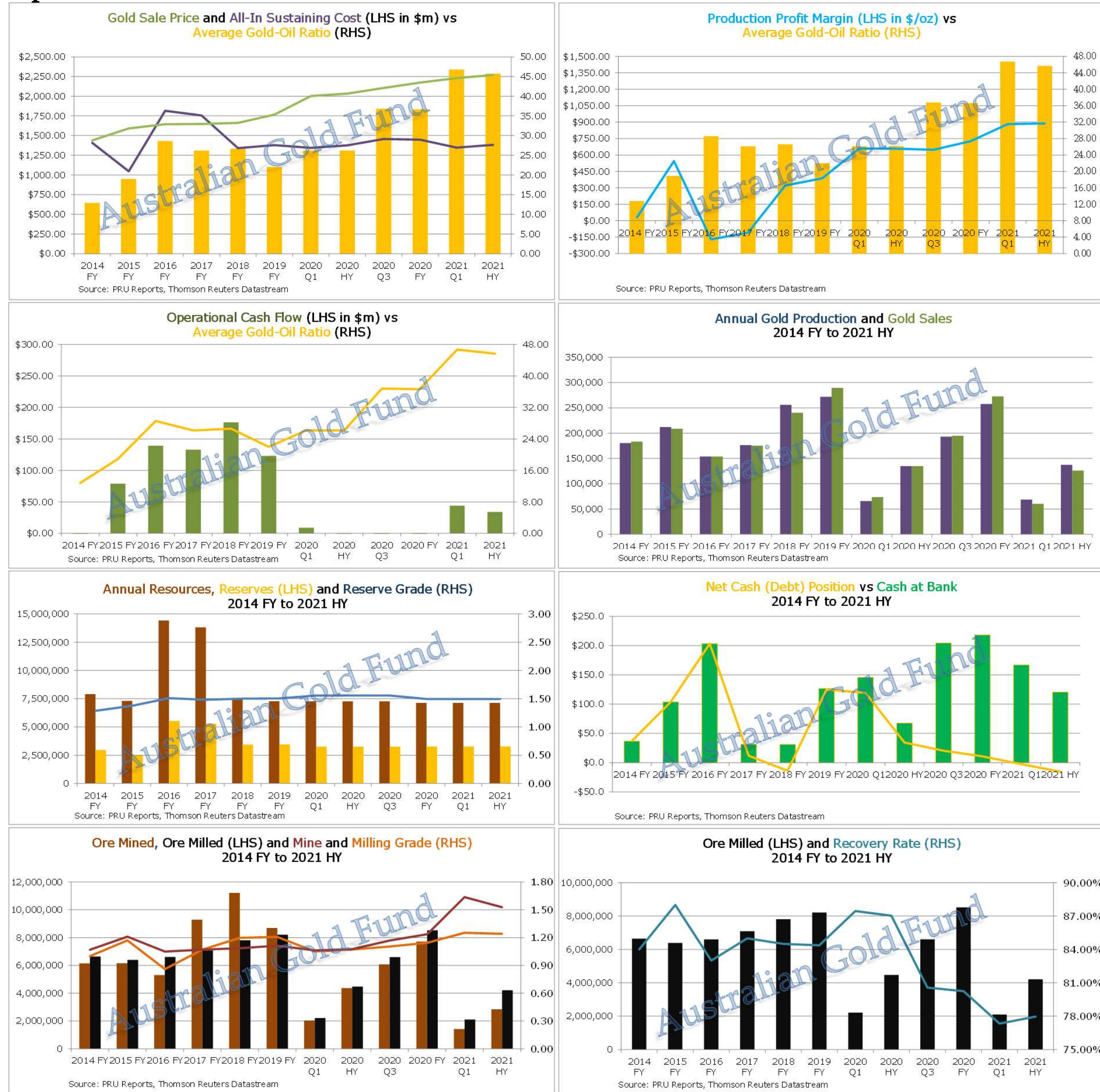
## Prevailing Environment

The recent six months have seen the gold price decline after having reached a peak in mid-2020 in the context of massive central bank cash printing and government spending to encourage economic activity during the Wuhan virus outbreak worldwide. The seasonal decline in the gold price from mid-September to mid-December continued into January 2021 as the Biden administration was inaugurated. Interestingly the market expected a higher stimulus package from the Biden administration than the $1.9 trillion that is currently agreed upon. On top of that, the cryptocurrency market appears to have attracted a lot of investors and hence this may have left the precious metals market stagnant.

Given the unprecedented unusualness of events that have emerged worldwide the last year, we believe that events should not be taken at face value. We hold to the belief that the financial system is currently being heavily controlled by central banks and financial institutions intent on maintaining the illusion of status quo in the backdrop of their desired plan of "The Great Reset" to be implemented by the World Economic Forum. However, we believe that the sharp rise in the cryptocurrencies market, the need for Treasury Secretary Janet Yellen to intervene on behalf of hedge funds to regulate against investors seeking to short-squeeze selected stocks in the market led by WallStreetBets, are examples of how their plan will not be successful.

The Australian dollar has strengthened by around 8% against the US dollar over the past six months and hence the gold price is trading around the $2 300-$2 400/oz mark. The crude oil price has surprisingly jumped almost 35% over the last six months, though much of the rise occurred from December onwards as the world began to believe that President Trump was unable to overturn the election results that appeared to favour Joe Biden. Given that the Biden administration campaigned heavily on climate change and green energy, the US oil production industry would suffer when he assumed office. The reduction in oil supply by the US and increasing reliance once more of the Middle East has contributed to the rising oil price. In turn, higher oil prices and the gold price being relatively stagnant have led to gold mining companies not being able to enjoy as accommodative operating environment than they had in the past year. That being said, the gold-oil ratio is still over 30, providing conditions that are still conducive to supernormal profits for mining companies.

## Operational and Financial Performance Charts

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## SWOT Analysis

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**Strengths**

- Mid-tier producer with three operating mines that offers substantial value relative to the current market capitalisation.
- Strong cash balance with improving future cashflow generation from operations.

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**Weaknesses**

- Exploration campaigns have not yielded much replenishment of existing mine deposits' resources and reserves.
- Hedge positions are keeping down the company's realised gold price on bullion sold and also the resulting profit margin.

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**Opportunities**

- Exploration success in the Bagoe land holdings acquired from Exore Resources will increase mine life for Sissingue, a low-cost operation.
- Edikan mine to see an additional deposit to be developed, namely to Esuajah South underground project that could bring some higher grade ore to feed its mills.
- At current price, company may actually be undervalued so much that it becomes a takeover target by larger producers seeking to increase their resources base and operations quickly.

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**Threats**

- Edikan operations appear to be declining due to lower recovery rates arising from processing low-grade ore stockpiles.
- If exploration campaigns in the coming two years do not yield substantial replenishment of resources in existing operations, this may negatively impact on investors' perception of growth potential when evaluating the stock price.

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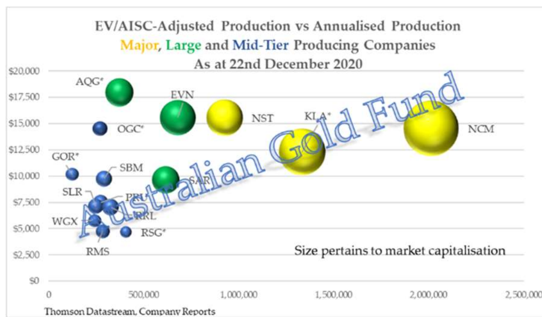
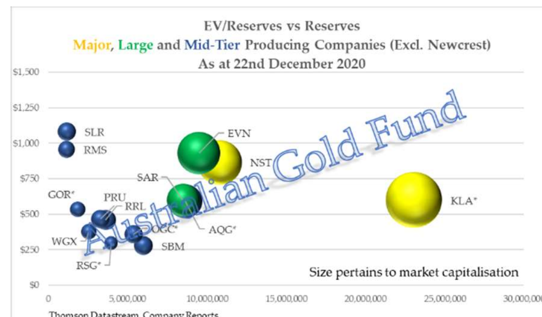
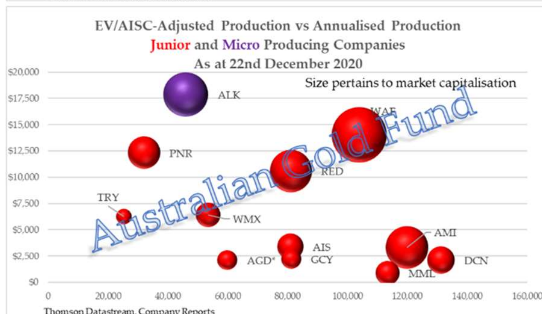
## Peer Comparison



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EV/Resources vs Resources
Major, Large and Mid-Tier Producing Companies (Excl. Newcrest)
As at 22nd December 2020
Size pertains to market capitalisation
Thomson Datastream, Company Reports

EV/Resources vs Resources
Junior and Micro Producing Companies
As at 22nd December 2020
Size pertains to market capitalisation
Thomson Datastream, Company Reports

## Valuation Thesis

Our key valuation metric is the **EV/AISC-Adjusted Annual Production** as we have found in our empirical study that the market valuation is most aligned to this metric, as opposed to earnings, resources and reserves. We also prefer a multiples method over the typical Discounted Cashflow Method for valuation because we understand that beyond even one year of projection, everything is highly speculative – whether it is the management outlook on production and costs as well as the gold price and broader economic drivers. To allow for comparison across all classes of producers, our metric can standardise by the company's scope of production as we observe that the market values the companies with higher production with a greater multiple. However, we scale production by AISC because we believe that not all ounces are equal. Companies that can produce gold at lower cost are naturally more profitable and deserve a higher multiple of their production and other operational or financial performance measures. We use the following classes for the different tiers of gold producing companies – **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 **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). This metric quantifies the market value of the company's assets deployed in the company's operations. The **AISC-Adjusted Annual Production** calculated as the annual production of gold per oz divided by the AISC adjusted by a factor of 1 000. The factor of 1 000 is arbitrarily chosen as a way to standardise the final metric. As an illustration, if a company produces 250 000oz p.a. at AISC of $1 250, the AISC-adjusted production is 200 000.

When determining the production ranges in our valuation metric, we take the management guidance as this is based on their access to information relating to their operations and progress. We believe that the market will use the guidance figures to base their valuation and investment decisions. This may not always be optimal given that some management may have their bias in reporting their outlook, as well as having a track record of announcing surprises. In such cases, we seek to qualify this in our SWOT analysis and adjust it in our EV/AISC-Adjusted Production multiple.

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.

We recognise that many analysts consider discretionary forecasts and adjustments on the company's production level, ore grade, cost levels, resources and reserves and economic

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factors into their valuation. We have studied many of these reports and recognise their merits. However, our view is that such subjective adjustments are dubious in terms of additional accuracy of their estimations. This is because with mining companies, both internal and external drivers that affect the company's future performance are unpredictable. Furthermore, we understand that while a company with substantial resources and reserves have potential to convert into substantial value in future, this is contingent on the successes in building the infrastructure, extracting the ore from the ground and processing it in a cost-effective manner. We recognise the criticism by many regarding our approach, but we have tried and tested our valuation against the actual price performance as well as through our own investment performance. We let these results speak for themselves.

*Given the rise in gold price in the recent three months, we see reason to re-rate the gold mining companies' valuation metrics upwards to reflect their improving profitability as well as increased enthusiasm from investors. As a rough guide, the fair value ranges for different mining company classes are as follows:*

***Major and Large Companies*** *- $8 000-$12 000/oz*

***Mid-Tier Companies*** *- $4 000-$7 000/oz*

***Micro and Junior Companies*** *- $1 500-$4 000/oz*

*We also add that after reviewing our reports, we have found another metric that may inform the fair value ranges, namely the Operating Margin. The Operating Margin is the difference between the Gold Sale Price per oz and the AISC. A higher Operating Margin implies higher cashflow generation. We have also found that the market appears to take this into account when determining the price they will pay to purchase the stocks. We found that there is a link between the Operating Margin and our EV/AISC-Adjusted Production in that 8-12 times the Operating Margin gives a reasonable EV/AISC-Adjusted Production.*

## Glossary

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 **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.

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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.

## 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 own Perseus Mining stocks and may trade them subsequent to the report being published on their website. We do not receive any income or benefits from the company as a result of our report.

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