

## Australian Gold Fund 2020 June Quarter Summary

### Summary



This summary report follows on from the 2020 March Quarter Summary that we released in late May. This report has been released late as a result of waiting for the annual reports, some of which were available in early October.

The past few months have seen a strong rise in the precious metal prices, especially in US dollar terms, as the market caught up to the reality of more stimulus from central banks and governments that will stoke inflation. While the oil price has normalised during this period and hovered in the US\$35-\$45/bbl region, the gold-oil ratio seems to have moved to a higher normal range of over 40, substantially higher than the historic average of around 18. In our view, this new era of higher gold-oil ratio increases the potential for gold producing companies to operate in a highly accommodative and profitable environment. In our valuation, we have adjusted our fair valuation ranges for the multiples and metrics we use.

Our valuation criteria have changed recently to take into account the company's profit margin, calculated as the difference between the realised gold price and the AISC. An EV/AISC-Adjusted Production to Profit Margin multiple has been used as we have realised that this may offer an enhancement into evaluating companies, arising from the fact that investors prefer more profitable and efficiently run companies. Further explanation is in the Investment Thesis and Glossary section at the end of our report.

Based on our valuation metrics on production, we find that 9 out of 27 companies (33%) are undervalued with 8 out of 27 companies (30%) deemed overvalued. While the stock price level in early October is higher than that at the time of the last report, we recognise that the gold-oil ratio is expected to remain at this new elevated range. This will lead to higher expected profitability and hence it is possible to sustain higher valuation multiples. In addition to this, we notice the industry is beginning to consolidate with larger producing companies acquiring new mine deposits as well as engaging in merger activity. This will likely see more investor attention on the industry for the years to come.

## Key Events and Transactions

Since the last summary report released in late May, the following major events occurred:

- Several countries around the world have begun measures to transition out of lockdown mode as the Wuhan/coronavirus is better understood and the mortality rate for this virus appears to be lower than the common flu in several regions. The global economy remains weak given the supply chain was damaged from business shutdown and consumer demand similarly slowing down.
- Massive floods have hit China nationwide during the June to September period, leading to substantial losses of property, farmland and lives. The severity of the floods has not been seen for over 60 years in some regions. The Three Gorges Dam experienced substantial pressure from floodwaters upstream, at one stage releasing over 75 000 cubic metres of water per second, leading to widespread flooding in the downstream regions. Food shortages expected in the country, with the ruling Communist Party implementing a policy of food conservation nationwide.
- Race riots in the US led to several cities and states (predominantly Democrat controlled strongholds) arising from the deaths of George Floyd, Breonna Taylor, Jacob Blake and several others. Looting and burning by Black Lives Matter and Antifa have led to wall to wall coverage by the media regarding this matter, stoking further tensions.
- Israel signed a peace treaty with the United Arab Emirates and Bahrain, assisted by US President Donald Trump, signalling a significant change in the Middle-East political dynamics.
- President Donald Trump was nominated three times for the Nobel Peace Prize, largely precipitated by the Middle East peace treaties.
- Former Vice President Joe Biden and Californian Senator Kamala Harris were nominated by the Democratic National Convention to be the candidates for the US Presidential Election, to be held on 3<sup>rd</sup> November.
- Japanese Prime Minister Shinzo Abe announced his retirement on 28<sup>th</sup> August 2020, remaining as caretaker Prime Minister until his successor, Yoshihide Suga, took office on 16<sup>th</sup> September.

In relation to the ASX-listed gold producers featured in this report, the following major transactions and events occurred in the past four months:

- Austral Gold (ASX: AGD) announced on 3<sup>rd</sup> September a non-binding offer to acquire Revelo, a Canadian TSX-listed explorer company.
- Alkane Resources (ASX: ALK) spun off their non-precious metals business to Australian Strategic Materials (ASX: ASM).
- Aurelia Metals (ASX: AMI) announced on 9<sup>th</sup> June a maiden resource estimate for the Federation deposit that is expected to extend the mine life of the Hera operations.
- Alacer Gold (ASX: AQG) completed their merger on 16<sup>th</sup> September with Silver Standard Resources (ASX: SSR), with 1 AQG stock converted to 0.3294 SSR stock. The SSR stock commenced trading on the ASX 17<sup>th</sup> September.

- Dacian Gold (ASX: DCN) downgraded their 2021 production guidance to 110-120koz at AISC \$1 400-\$1 550/oz on 13<sup>th</sup> July.
- Evolution Mining (ASX: EVN) completed the sale of the Cracow mine to Aeris Resources (ASX: AIS) on 1<sup>st</sup> July. The company announced substantial resources at their recently acquired Red Lake mine on 13<sup>th</sup> August with mineral resources at almost 11Moz.
- Gascoyne Resources (ASX: GCY) announced on 13<sup>th</sup> August of a \$125m recapitalisation plan at 2.5c to repay existing debt and also to accumulate sufficient capital that will allow the company to resume trading on the ASX after being in voluntary administration for over a year.
- Gold Road Resources (ASX: GOR) repaid their remaining debt on 21<sup>st</sup> July and increased their borrowing capacity with a \$150m debt facility negotiated on 18<sup>th</sup> September. The company reduced their 2020 guidance to 250 000-270 000oz at AISC \$1 250-\$1 350/oz on 24<sup>th</sup> September as a result of production stoppage from a ball mill motor bearing failure spanning seven days.
- Kingsrose Mining (ASX: KRM) ceased production from their open-pit mines at Way Linggo on 2<sup>nd</sup> October, with focus on the development of underground mining operations going forward. The CEO, Karen O'Neill, has tendered her resignation effective at end of year with two directors similarly leaving the board, announced on 5<sup>th</sup> October.
- Medusa Mining (ASX: MML) reported a fatality in their Co-O mine on 25<sup>th</sup> August.
- Northern Star Resources (ASX: NST) sold their Ashburton gold project to Kalamazoo Resources (ASX: KZR) for a consideration value of \$17.5m. The company also announced on 6<sup>th</sup> October a plan to merge with Saracen Mineral Holdings (ASX: SAR) to form the second largest ASX-listed major producing company that will produce over 1.6Moz of gold, with an expected market capitalisation exceeding \$15 billion. The merger is expected to close in February 2021.
- Oceanagold Corporation (ASX: OGC) announced on 25<sup>th</sup> August a significant downgrade of their production to 295 000-345 000oz at AISC of around A\$1 550-\$1 900/oz for 2020 resulting from operational slowdown from government lockdown restrictions. The company also raised C\$150m (A\$160m) on 1<sup>st</sup> October with a plan to expand their Haile and Waihi operations.
- Pantoro Mining (ASX: PNR) raised \$55m during August to fund their development of the Central Norseman Project, which is progressing to the Definitive Feasibility Study stage.
- Perseus Mining (ASX: PRU) completed the acquisition of Exore Resources (ASX: ERX) on 25<sup>th</sup> September, adding to the company's portfolio of West African projects.
- Red 5 (ASX: RED) downgraded their 2020 and 2021 guidance on 24<sup>th</sup> June, expecting to produce 90 000-98 000oz at \$1 830-\$2 030/oz for 2021. The company announced on 15<sup>th</sup> September the Final Feasibility Study results for the King of the Hills mine development showing extended mine life of around 16 years with annual production averaging in the first six years at 176 000oz.
- Ramelius Resources (ASX: RMS) released a report on 30<sup>th</sup> June detailing an increase in the company's production to 1.45Moz over the next six years, incorporating production from newly acquired deposits from Tampia and Penny West. The company exceeded

September production forecast of 65 000-70 000oz, producing over 71 000oz as announced on 1<sup>st</sup> October.

- Regis Resources (ASX: RRL) acquired on 12<sup>th</sup> August the Ben Hur deposit from Stone Resources for HK\$10m (A\$1.7m). The company announced on 15<sup>th</sup> September that they sent the Submissions Report and Amendments Report to the NSW Government for approval in the first half of 2021 regarding the development of the McPhillamys project.
- Resolute Mining (ASX: RSG) reported that the coup occurring in Mali in mid-August did not affect the company's operations. On 9<sup>th</sup> September, the company announced that the employees at the Syama mine would observe a 10-day strike regarding work conditions. This was resolved on 28<sup>th</sup> September with the company reporting an updated 2020 guidance of 400 000-430 000oz at AISC of around A\$1 450-\$1 600/oz.
- Saracen Mineral Holdings (ASX: SAR) reported on 14<sup>th</sup> July a fatality at the Carosue Dam operations with operations resuming the next day. The company announced on 6<sup>th</sup> October the plans to merge with Northern Star Resources (mentioned above).
- St Barbara Mines (ASX: SBM) announced on 27<sup>th</sup> July that it would acquire the remainder of the private company Moose River Resources that had ownership of 40% of the cashflows from the Atlantic Gold operations for C\$60m (A\$64m). The company announced on 8<sup>th</sup> October that further complication in the Gwalia mine has led to greater shortfall on the September quarter production.
- Silver Lake Resources (ASX: SLR) announced on 23<sup>rd</sup> September the development plan for the high-grade Deflector South-West deposit with production commencing in the 2022 financial year.
- West African Resources (ASX: WAF) reported on 23<sup>rd</sup> July their June quarterly results that their first full quarter of production delivered 32 626oz of gold, with the cumulative gold production for the financial year being 40 858oz.
- Westgold Resources (ASX: WGX) announced on 14<sup>th</sup> June a board change whereby the current Executive Chairman Peter Cook will transition in the next six months to a non-executive role. The CFO Debbie Fullerton was appointed the CEO. The company announced on 2<sup>nd</sup> July that their Big Bell mine has ramped up production and the company has fully repaid its gold prepayment loan.

## The Big Picture

ASX Code	Category	Market Capitalisation	Net Cash	Net Cash Flow-Capex	Production	% Annual Guidance	Rise/Fall?	AISC	Rise/Fall?
AGD*	D	\$133,030	\$12,062	\$6,842	10,650	15.90%	Fall	\$1,303,069	Fall
ALK	E	\$812,710	\$62,683	\$2,200	13,358	41.10%	Rise	\$1,368,000	Rise
AMI	D	\$419,510	\$80,932	\$33,700	32,787	38.57%	Rise	\$1,104,000	Fall
AQG*	C	\$2,771,000	\$13,530	\$96,416	63,480	23.69%	Fall	\$1,287,131	Rise
DCN	D	\$186,370	-\$6,824	-\$18,623	31,883	22.61%	Rise	\$1,562,000	Fall
EVN	B	\$9,961,210	-\$176,913	\$224,500	218,104	30.08%	Rise	\$1,088,000	Rise
GCY	D	\$89,430	-\$82,304	\$2,086	20,550	27.40%	Rise	\$1,554,000	Rise
GOR*	C	\$1,262,690	-\$61,335	\$16,607	35,933	26.87%	Rise	\$1,233,000	Rise
KLA*	A	\$19,733,391	\$784,530	\$143,047	329,770	23.98%	Fall	\$1,141,896	Fall
KRM	E	\$27,740	\$28,332	\$1,810	4,218	15.62%	Fall	\$1,106,000	Rise
MML	D	\$168,310	\$56,534		21,947	21.95%	Fall	\$1,621,101	Fall
NCM	A	\$25,550,040	-\$1,900,562		573,145	23.35%	Rise	\$1,334,999	Rise
NST	A	\$10,225,270	-\$63,002	\$252,000	267,361	27.28%	Rise	\$1,475,000	Fall
OGC*	C	\$1,307,130	-\$245,344	-\$53,065	58,678	16.77%	Fall	\$1,923,433	Rise
PNR	D	\$295,760	\$9,260	\$9,225	9,586			\$1,578,000	Fall
PRU	C	\$1,666,890	\$10,749	\$55,000	64,676	22.69%	Rise	\$1,421,668	Fall
RED	D	\$610,880	\$110,310	-\$0,192	20,707	20.71%	Rise	\$2,259,000	Rise
RMS	C	\$1,666,170	\$149,571	\$80,700	86,517	40.24%	Rise	\$1,041,000	Fall
RRL	C	\$2,571,300	\$201,029	\$70,700	87,260	24.58%	Rise	\$1,358,000	Rise
RSG*	C	\$1,004,540	-\$284,375	-\$31,626	107,183	24.93%	Fall	\$1,570,677	Rise
SAR	B	\$5,770,750	\$48,004	\$83,000	145,830	24.10%	Fall	\$1,152,000	Rise
SBM	C	\$2,137,230	\$85,162	\$115,000	108,612	28.21%	Rise	\$1,301,000	Fall
SLR	C	\$2,009,160	\$269,391	\$42,400	71,291	27.96%	Rise	\$1,344,000	Fall
TRY	D	\$54,990	-\$7,396		7,235		Rise	\$2,946,729	Rise
WAF	D	\$968,100	-\$213,921	\$24,690	32,626				
WGX	C	\$991,740	\$99,737		59,789	20.80%	Rise	\$1,638,000	Rise
WMX	D	\$177,330	\$8,611	-\$8,457	11,367	17.22%	Fall	\$3,253,000	Rise

\* Denotes companies trading in 2020 Q2

The 2020 June quarter saw the gold producing companies largely being able to weather the challenges associated with the government-mandated lockdowns in many countries and the requirements for social distancing that would place some impediment on normal day-to-day mining operations. Many companies had to rearrange their FIFO schedule and the on-site operations to meet guidelines with a view to minimise the risk of infections. Staff members were trained to deal with this outbreak and to monitor the sites, thus increasing operating costs. Production has increased to 94 689oz on average across the 26 companies (excluding WAF) from 90 423oz. When including WAF, average production is 92 390oz. The average AISC for the 26 producers is \$1 537/oz, up from \$1 503/oz, although when taking into account the production-weighted average, this remains unchanged at \$1 335/oz. As expected, only 9 out of 24 companies (38% – excluding Pantoro, Troy and West African Resources) produced more than 25% of their annual guidance during this quarter.

16 out of 25 companies (64%) delivered a higher quarterly production than the previous quarter, with 11 out of 26 companies (42%) recorded a lower AISC. 17 out of 27 companies (63%) have a positive cash balance as at the end of the June quarter. Out of 23 companies that reported quarterly cashflows, 18 (78%) delivered positive operating cashflows after accounting for sustaining capital expenditure. Despite the impediments faced, we see that companies operated in more accommodative conditions arising from the oil price cratering while the gold price increased during the quarter. This allowed for companies to generate operating free cashflows despite the challenges faced.

ASX Code	Category	MCap	Net Cash	Rise/Fall?	Net CF Less Capex	Cumulative Production	Resources	Reserves	2020 Guidance	Change?	% Progress	On Track?
AGD*	D	\$133.030	\$12.062	Rise	\$6.842	26,826	875,000	241,583	67,000	Upgraded	40.04%	No
ALK	E	\$812.710	\$62.683	Fall	\$2.200	33,507	1,413,000	89,000	32,500	Maintained	103.10%	Yes
AMI	D	\$419.510	\$80.932	Rise	\$33.700	91,672	677,000	356,950	85,000	Withdrawn	101.86%	Yes
AQG*	C	\$2,271.000	\$13.530	Rise	\$96.416	133,270	7,965,000	3,413,050	268,000	Maintained	49.91%	No
DCN	D	\$186.370	-\$6.824	Fall	-\$18.623	138,815	2,067,000	754,000	141,000	Maintained	98.45%	No
EVN	B	\$9,961.210	-\$176.913	Rise	\$224.500	746,463	22,545,000	9,496,000	725,000	Maintained	102.96%	Yes
GCY	D	\$89.430	-\$82.304	Rise	\$2.086	72,912	801,300	426,300	75,000	Maintained	97.22%	No
GOR*	C	\$1,262.690	-\$61.335	Fall	\$16.607	65,730	3,610,000	1,860,000	133,750	Maintained	49.14%	No
KLA*	A	\$68.700	\$784.530	Fall	\$143.047	660,634	39,216,000	23,041,000	1,375,000	Withdrawn	48.05%	No
KRM	E	\$27.740	\$28.332	Fall	\$1.810	28,507	184,000	184,000	27,000	Maintained	105.58%	Yes
MML	D	\$168.310	\$56.534	Rise		95,056	825,200	332,000	100,000	Maintained	95.06%	No
NCM	A	\$25,550.040	-\$735.015	Rise		2,154,666	125,023,000	61,235,000	2,455,000	Maintained	87.77%	No
NST	A	\$10,225.270	-\$63.002	Rise	\$252.000	905,177	31,807,000	10,805,000	980,000	Withdrawn	92.37%	No
OGC*	C	\$1,307.130	-\$245.344	Fall	-\$53.065	139,385	9,380,000	5,378,333	350,000	Downgraded	39.82%	No
PNR	D	\$295.760	\$9.260	Rise	\$2.925	38,705	2,542,884	150,000				
PRU	C	\$1,666.890	\$10.749	Fall	\$55.000	257,639	7,131,000	3,281,000	285,000	Withdrawn	90.40%	No
RED	D	\$610.880	\$110.310	Rise	-\$0.192	92,779	6,371,900	2,184,950	100,000	Maintained	92.78%	No
RMS	C	\$1,666.170	\$149.571	Rise	\$80.700	230,426	4,182,000	876,000	215,000	Maintained	107.17%	Yes
RRL	C	\$2,571.300	\$201.029	Rise	\$70.700	352,042	7,690,000	3,620,000	355,000	Maintained	99.17%	No
RSG*	C	\$1,004.540	-\$284.375	Rise	-\$31.626	217,946	11,498,000	3,950,000	430,000	Maintained	50.69%	Yes
SAR	B	\$5,770.750	\$48.004	Rise	\$83.000	520,413	18,060,000	8,500,000	605,000	Maintained	86.02%	No
SBM	C	\$2,137.230	\$85.162	Rise	\$115.000	381,887	12,173,000	6,427,000	385,000	Maintained	99.19%	No
SLR	C	\$2,009.160	\$269.391	Rise	\$42.400	264,646	5,746,000	1,070,000	255,000	Maintained	103.78%	Yes
TRY	D	\$54.990	-\$7.396	Fall		23,580	932,600	86,500				
WAF	D	\$968.100	-\$213.921	Rise	\$24.690	32,626	4,218,000	1,653,000				
WXG	C	\$991.740	\$99.737	Rise		235,150	8,799,000	2,555,000	287,500	Maintained	81.79%	No
WMX	D	\$177.330	\$8.611	Rise	-\$8.457	61,885	6,381,000	1,380,000	66,000	Maintained	93.77%	No

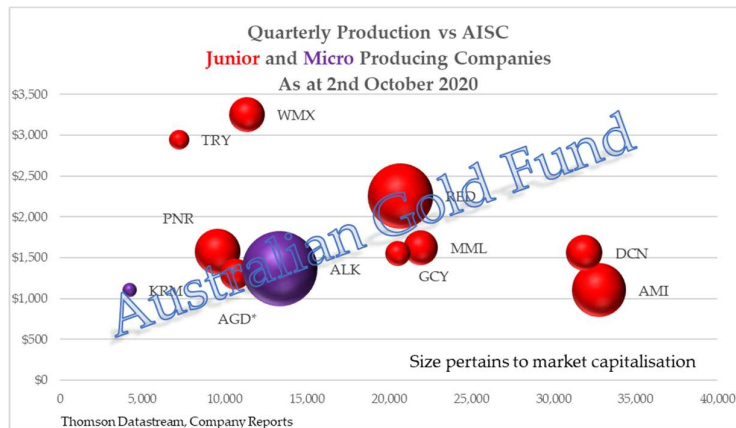
\* Denotes companies trading at 2020 Q2

This quarter marks the end of the 2020 financial year for a large proportion of the companies we cover. Amidst the challenges, several companies have downgraded and even withdrew their production guidance for the year. The June quarter saw companies end the financial year almost admirably with 7 out of 24 (27%) delivering above the midpoint of their management guidance, which is slightly better than the previous quarter. 5 companies finished the financial year missing their guidance by less than 5% and 3 companies are within 2.5% of their mid-year guidance. Thus, over 60% of the companies we cover are more or less on target. Austral Gold upgraded their 2020 guidance during the quarter, Oceanagold Gold downgraded their guidance and the other companies have maintained their guidance. Subsequent to the June quarter, we note that Kirkland Lake Gold reinstated their 2020 management guidance, albeit slightly downgraded, while the other companies that withdrew their guidance announced their 2021 management guidance.

The bubble charts show the relative standing for these gold producers in relation to their quarterly production, AISC and their market capitalisation:







A few noteworthy observations for this quarter in terms of the production vs AISC. Northern Star produced at a slightly lower AISC than the previous quarter, but almost 70% of their production was above \$1 600/oz at Jundee and Pogo. Oceanagold experienced another poor quarter, delivering less than 60 000oz at AISC exceeding \$1 900/oz. Ramelius Resources delivered a bonanza quarter delivering over 85 000oz at AISC of just over \$1 000/oz, making it the cheapest producer for the quarter among all the ASX-listed gold producing companies. Wiluna Mining, Tribune Resources and Red 5 produced at over \$2 000/oz.

## Cumulative Progress

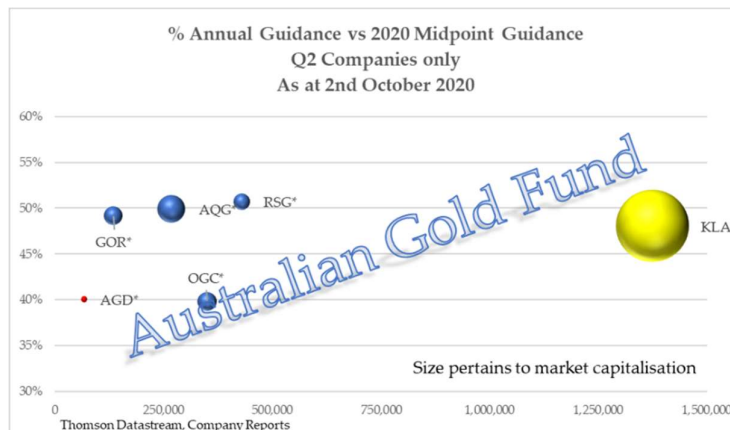
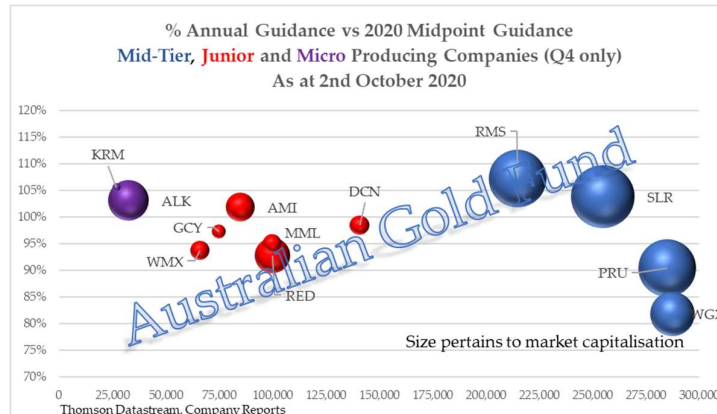
ASX Code	Quarter	Category	Market Capitalisation	Cumulative Production	2020 Midpoint Guidance	Guidance Change	% Annual Guidance	Cumulative AISC
AGD*	2	D	\$133.03	26,826	67,000	Maintained	40.04%	\$1,335.14
ALK	4	E	\$812.71	33,507	32,500	Maintained	103.10%	\$1,356.96
AMI	4	D	\$419.51	91,672	85,000	Withdrawn	101.86%	\$1,507.59
AQG*	2	C	\$2,771.00	133,770	268,000	Maintained	49.91%	\$1,169.43
DCN	4	D	\$186.37	138,815	141,000	Maintained	98.45%	\$1,618.47
EVN	4	B	\$9,961.21	746,463	725,000	Maintained	102.96%	\$1,044.14
GCY	4	D	\$89.43	72,912	75,000	Maintained	97.22%	\$1,584.78
GOR*	2	C	\$1,262.69	65,730	133,750	Maintained	49.14%	\$1,188.57
KLA*	2	A	\$19,733.39	660,634	1,375,000	Withdrawn	48.05%	\$1,160.26
KRM	4	E	\$27.74	28,507	27,000	Maintained	105.58%	\$938.35
MML	4	D	\$168.31	95,056	100,000	Maintained	95.06%	\$1,668.84
NCM	4	A	\$25,550.04	2,154,666	2,455,000	Maintained	87.77%	\$1,290.21
NST	4	A	\$10,225.27	905,177	980,000	Withdrawn	92.37%	\$1,496.18
OCG*	2	C	\$1,307.13	139,385	350,000	Maintained	39.82%	\$1,880.83
PNR	4	D	\$295.76	38,705	0	Maintained		\$1,720.67
PRU	4	C	\$1,666.89	257,639	285,000	Withdrawn	90.40%	\$1,448.30
RED	4	D	\$610.88	92,779	100,000	Downgraded	92.78%	\$1,786.38
RMS	4	C	\$1,666.17	230,426	215,000	Maintained	107.17%	\$1,166.97
RRL	4	C	\$2,571.30	352,042	355,000	Maintained	99.17%	\$1,246.16
RSG*	2	C	\$1,004.54	217,946	430,000	Maintained	50.69%	\$1,549.70
SAR	4	B	\$5,770.75	520,413	605,000	Maintained	86.02%	\$1,098.96
SBM	4	C	\$2,137.23	381,887	385,000	Maintained	99.19%	\$1,366.82
SLR	4	C	\$2,009.16	264,646	255,000	Upgraded	103.78%	\$1,294.74
TRY	4	D	\$54.99	23,580				\$2,388.70
WAF	2	D	\$968.10	32,626				\$0.00
WGX	4	C	\$991.74	235,150	287,500	Miss Expected	81.79%	\$1,481.93
WMX	4	D	\$177.33	61,885	66,000	Downgraded	93.77%	\$2,000.80

\* Denotes companies trading in 2020 Q2

A large proportion of the companies ended their financial year in the June quarter. Among these companies, the average production for the year is 336 296oz, lower than last year's average of 339 220oz. For the companies that finished their first half in the June quarter, the average production is 182 417oz, also a decrease from last year's average of 221 197oz. The comparison should be taken with caution because of changes in the companies during the past year (Millennium Minerals removed, Austral Gold and West African Resources added while Resolute Mining changed to December financial year end). If we do not include additions of mining operations by companies during the year, most delivered a lower

production this year spanning from the government restrictions in the midst of the virus outbreak. The average AISC for this year is \$1 400/oz while the production-weighted average is \$1 322/oz, compared to last year's \$1 367/oz and \$1 199/oz, respectively. The decreased difference between the average and the production-weighted average is consistent with the fact that the virus outbreak affected mining companies across the board and even large producing companies did not escape this despite their economies of scale.

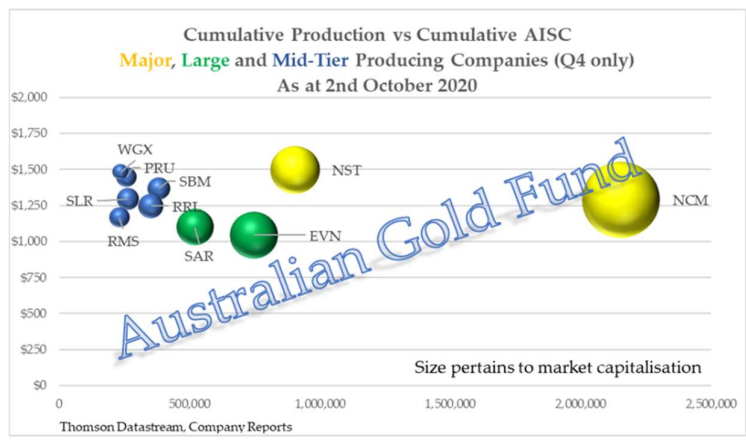
The bubble charts in the next page shows the companies' cumulative performance relative to their annual guidance and also the midpoint of their guidance:

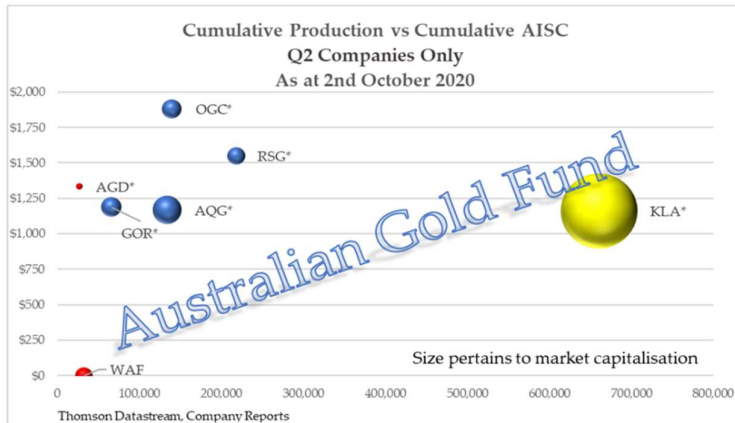
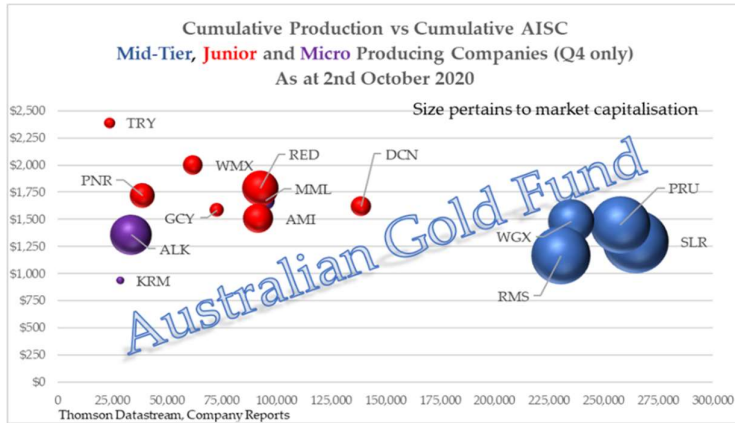




For companies ending their financial year this quarter, their production is on average 96.6% of the midpoint of their production guidance, compared to 96.1% for last year. For those completing their mid-year, this is 46.3% and is higher than last year's 44.7%. However, this year saw companies downgrade or withdrawing their production guidance during the year so they are on track to meeting diminished targets. We find that the production guidance on average fell by around 10% during the financial year, although individual downgrades were much greater. Only two companies upgraded their production guidance during the year, being Kingsrose Mining and Silver Lake Resources. While Alkane Resources and Ramelius Resources did not upgrade their guidance, they comfortably outperformed against their targets for the year. While Saracen Mineral Holdings appeared to have underperformed relative to the target, management had not specified it clearly for the year and the midpoint of 605 000oz would be attributed to the case where we include the annualised level for the Kalgoorlie Super Pit that was acquired in late November 2019. This is the same case for Northern Star Resources.

Newcrest Mining and Westgold Resources underperformed relative to their guidance quite substantially for the year. In the case of Westgold, this is not too much of a surprise as the company has a track record of under-delivering since it was spun off in late 2016. Oceanagold has also been adversely affected by operational slowdown in their Waihi and Haile mines, which contributed to the sharp decline in their stock price during this quarter. Red 5 downgraded their guidance three times during the year and Dacian Gold also disappointed investors as they downgraded their production and even went into a trading halt for over three months to recapitalise. Gascoyne Resources went into voluntary administration for almost the entire financial year and is expected to recapitalise and resume trading by the end of October.





The correlation between the cumulative production and cumulative AISC for major, large and mid-tier companies is weakly negative (-0.29 for companies completing their half-year) to almost insignificant (-0.05 for companies completing their full-year). For smaller companies, it is also almost insignificant (-0.007). While we had hoped to see that larger companies would benefit more from the economies of scale of production, the exceptional circumstances experienced during the last two quarters may have removed this advantage. We also do note that the sample sizes are small so the statistical values should be taken with a grain of salt.

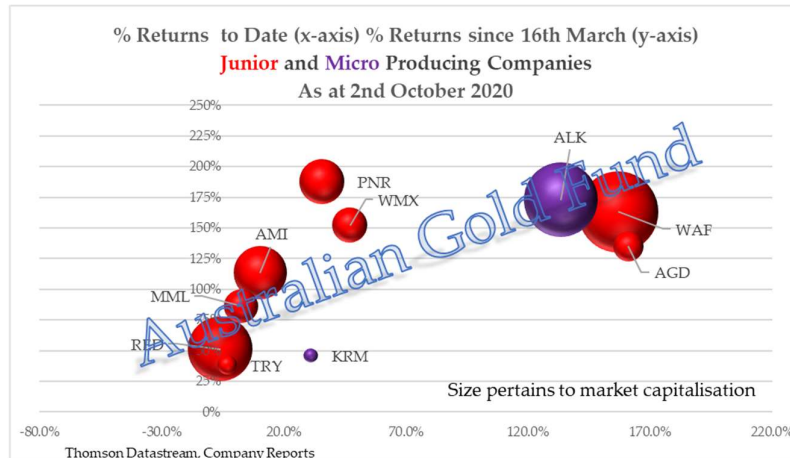
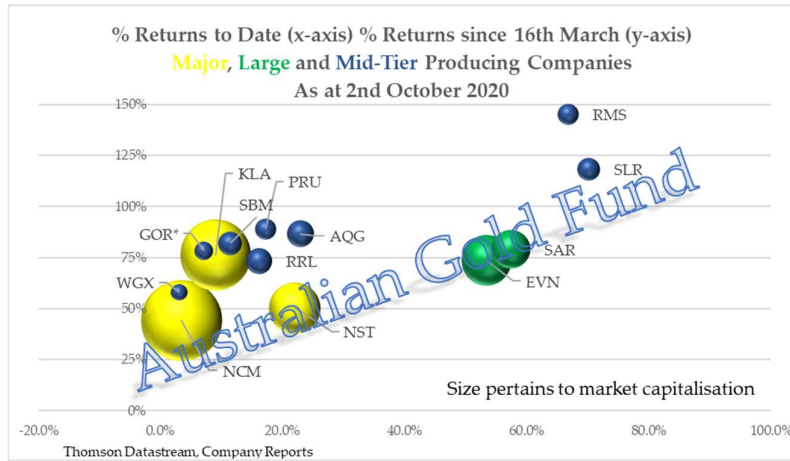
## Stock Price Performance

ASX Code	Category	Market Capitalisation	Price - 2nd Oct	Price - 1st Jan	Returns Since 16 Mar	YTD Returns
AGD	D	\$133.03	\$0.235	\$0.090	135.0%	161.1%
ALK	E	\$812.71	\$1.37	\$0.585	173.0%	133.3%
AMI	D	\$419.51	\$0.480	\$0.435	113.3%	10.3%
AQG	C	\$2,771.00	\$9.400	\$7.650	86.5%	22.9%
DCN	D	\$186.37	\$0.335	\$1.590	-76.1%	-78.9%
EVN	B	\$9,961.21	\$5.830	\$3.800	73.5%	53.4%
GCY	D	\$89.43	\$0.030	\$0.039	-23.1%	-23.1%
GOR*	C	\$1,262.69	\$1.435	\$1.340	78.3%	7.1%
KLA	A	\$19,733.39	\$68.700	\$63.000	76.2%	9.0%
KRM	E	\$27.74	\$0.038	\$0.029	46.2%	31.0%
MML	D	\$168.31	\$0.810	\$0.790	86.2%	2.5%
NCM	A	\$25,550.04	\$31.290	\$30.250	44.1%	3.4%
NST	A	\$10,225.27	\$13.800	\$11.310	50.2%	22.0%
OGC	C	\$1,307.13	\$2.100	\$2.780	11.1%	-24.5%
PNR	D	\$295.76	\$0.210	\$0.155	187.7%	35.5%
PRU	C	\$1,666.89	\$1.360	\$1.160	88.9%	17.2%
RED	D	\$610.88	\$0.310	\$0.330	51.2%	-6.1%
RMS	C	\$1,666.17	\$2.060	\$1.235	145.2%	66.8%
RRL	C	\$2,571.30	\$5.040	\$4.340	73.2%	16.1%
RSG	C	\$1,004.54	\$0.910	\$1.260	46.8%	-27.8%
SAR	B	\$5,770.75	\$5.210	\$3.310	79.0%	57.4%
SBM	C	\$2,137.23	\$3.030	\$2.720	82.0%	11.4%
SLR	C	\$2,009.16	\$2.280	\$1.340	118.2%	70.1%
TRY	D	\$54.99	\$0.087	\$0.090	38.1%	-3.3%
WAF	D	\$968.10	\$1.105	\$0.430	163.1%	157.0%
WGX	C	\$991.74	\$2.360	\$2.290	57.9%	3.1%
WMX	D	\$177.33	\$1.765	\$1.200	152.1%	47.1%

\* Denotes companies trading at 2020 Q2

Since the last report, the proportion of companies delivering a positive return since the start of the year has increased to 21 out of 27 (78%). The average return to date is 28.7%, up from 14% in the previous report. This is formidable considering that the ASX 200 Index fell 8.7% during the comparable period. The top 3 performers for the year thus far are Austral Gold, West African Resources and Alkane Resources. A number of the large gold producing companies have retraced some of the gains made in July and August, so their prices are similar to that in the last report. Ramelius Resources, Pantoro Resources, Saracen Mineral Holdings and Silver Lake Resources continued their rally during the quarter, although having reached higher levels in mid-August. Wiluna Mining delivered a strong rally beginning in September as a result of strong drilling results. On the other hand, Gold Road Resources, Oceanagold and Alacer Gold declined markedly since the last report.

The bubble charts below show the comparison of these producers' YTD performance against the performance since mid-March:



The bubble chart shows that the leading outperformers to date, Austral Gold, West African Resources, Alkane Resources, Silver Lake Resources and Ramelius Resources largely share a common theme of upgrading their production guidance, reporting increases in their reserves and resources as well as being able to deliver gold ounces in a cost-effective manner. Larger gold producing companies such as Newcrest Mining, Northern Star and Kirkland Lake Gold have delivered more ordinary returns this year to date as a result of their performance meeting guidance and investors having priced in their management guidance at the start of the year before the pandemic struck and production being impacted due to government restrictions on operations. That being said, these companies performed strongly in 2019 as the gold price soared over A\$2 000/oz in the end of May 2019. The junior and micro producing companies delivered a diverse range of returns. Even during the year, they declined sharply during the late February to late March period as the markets imploded in response to the pandemic. Their recovery is equally pronounced but the year-to-date returns for several of them are solid but not overwhelming.

## Valuation

ASX Code	Category	Market Capitalisation	Annualised Production	Resources	Reserves	EV/AISC Production	Valuation	Profit Margin	EV to Profit Multiple	EV/Resources	EV/Reserves
ACD*	D	\$133.03	53,652	875,000	241,583	\$3,010,310	Undervalued	\$1,307,630	2.30	\$138,249	\$500,728
ALK	E	\$812.71	33,507	1,413,000	89,000	\$30,374,534	Overvalued	\$959,000	31.67	\$530,805	\$8,427,270
AMI	D	\$419.51	91,672	677,000	356,950	\$5,568,083	Undervalued	\$1,469,000	3.79	\$500,115	\$948,531
AQG*	C	\$2,771.00	267,540	7,965,000	3,413,050	\$12,053,068	Fair Value	\$1,317,523	9.15	\$346,198	\$807,920
DCN	D	\$186.37	138,815	2,067,000	754,000	\$2,252,478	Fair Value	\$203,000	11.10	\$93,466	\$256,225
EVN	B	\$9,961.21	746,463	22,545,000	9,496,000	\$14,181,066	Fair Value	\$1,412,000	10.04	\$449,684	\$1,067,620
GCY	D	\$89.43	72,912	801,300	426,300	\$3,732,738	Undervalued	\$1,048,000	3.56	\$214,319	\$402,848
GOR*	C	\$1,262.69	131,460	3,610,000	1,860,000	\$11,970,949	Fair Value	\$1,265,000	9.46	\$366,766	\$711,841
KLA*	A	\$19,733.39	1,321,268	39,216,000	23,041,000	\$16,639,791	Fair Value	\$1,467,283	11.34	\$483,192	\$822,397
KRM	E	\$27.74	28,507	184,000	184,000	-\$19,487	Undervalued	\$1,170,400	-0.02	-\$3,217	-\$3,217
MML	D	\$168.31	95,056	825,200	332,000	\$1,962,385	Undervalued	\$913,685	2.15	\$135,454	\$336,676
NCM	A	\$25,550.04	2,154,666	125,023,000	61,235,000	\$15,739,455	Fair Value	\$991,366	15.88	\$210,242	\$429,249
NST	A	\$10,225.27	905,177	31,807,000	10,805,000	\$17,005,628	Overvalued	\$1,012,000	16.80	\$323,459	\$952,177
OQC*	C	\$1,307.13	278,770	9,380,000	5,378,333	\$10,474,389	Overvalued	\$392,289	26.70	\$165,509	\$288,653
PNR	D	\$295.76	38,705	2,542,884	150,000	\$12,736,652	Overvalued			\$112,667	\$1,910,000
PRU	C	\$1,666.89	257,639	7,131,000	3,281,000	\$9,309,869	Fair Value	\$925,985	10.05	\$323,245	\$504,767
RED	D	\$610.88	92,779	6,371,900	2,184,950	\$9,638,050	Overvalued	\$252,596	38.19	\$78,559	\$229,099
RMS	C	\$1,666.17	230,426	4,182,000	876,000	\$7,680,672	Undervalued	\$1,182,000	6.50	\$362,649	\$1,731,277
RRL	C	\$2,571.30	352,042	7,690,000	3,620,000	\$8,390,272	Undervalued	\$1,023,000	8.20	\$308,228	\$654,771
RSC*	C	\$1,004.54	435,892	11,498,000	3,950,000	\$4,582,402	Undervalued	\$627,967	7.30	\$112,099	\$326,308
SAR	B	\$5,770.75	520,413	18,060,000	8,500,000	\$12,084,817	Fair Value	\$1,128,000	10.71	\$316,874	\$673,264
SBM	C	\$2,137.23	381,887	12,173,000	6,427,000	\$7,344,621	Undervalued	\$1,111,000	6.61	\$168,575	\$319,289
SLR	C	\$2,009.16	264,646	5,746,000	1,070,000	\$8,511,581	Fair Value	\$956,000	8.90	\$302,779	\$1,625,952
TRY	D	\$54.99	23,580	932,600	86,500	\$6,319,824	Overvalued	-\$319,305	-19.79	\$66,895	\$721,225
WAF	D	\$968.10	65,252	4,218,000	1,653,000		Overvalued			\$280,233	\$715,076
WGX	C	\$991.74	235,150	8,799,000	2,555,000	\$5,621,448	Fair Value	\$656,000	8.57	\$101,375	\$349,121
WMX	D	\$177.33	61,885	6,381,000	1,380,000	\$5,454,835	Overvalued	-\$793,000	-6.88	\$26,441	\$122,260

\* Denotes companies trading in 2020 Q2

The June quarter saw production reduce for a number of companies compared to the previous quarters while the stock prices generally increased due to seasonal factors and also increased enthusiasm for precious metals as an inflation hedge. This has led to the average of the valuation multiples we use to increase compared to the last report. The average EV/AISC-Adjusted Production multiple has increased from \$8 952/oz to \$9 332/oz, for EV/Reserves, it has increased from \$787/oz to \$957/oz and, for EV/Resources, it has increased from \$218/oz to \$238/oz. The production-weighted average valuation metrics are as follows – EV/AISC-Adjusted Production \$12 558/oz (down from \$12 873/oz), EV/Reserves \$603/oz (down from \$622/oz) and EV/Resources \$270/oz (down from \$277/oz). Thus, when we consider the production level, the valuation metrics actually reduced. This observation provides some support as to why the industry may become more attractive as an investment going forward.

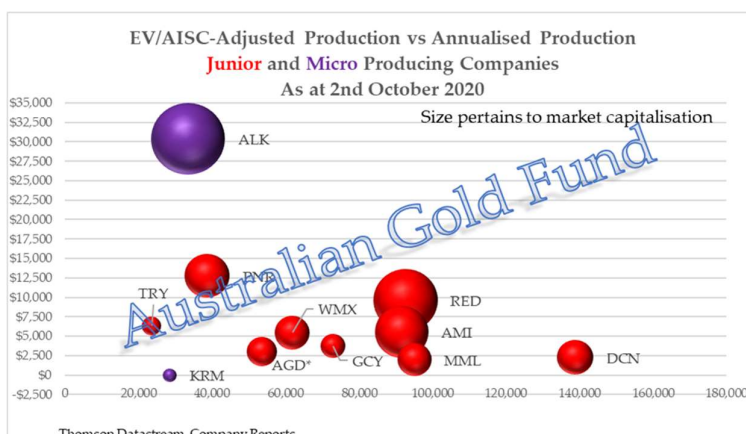
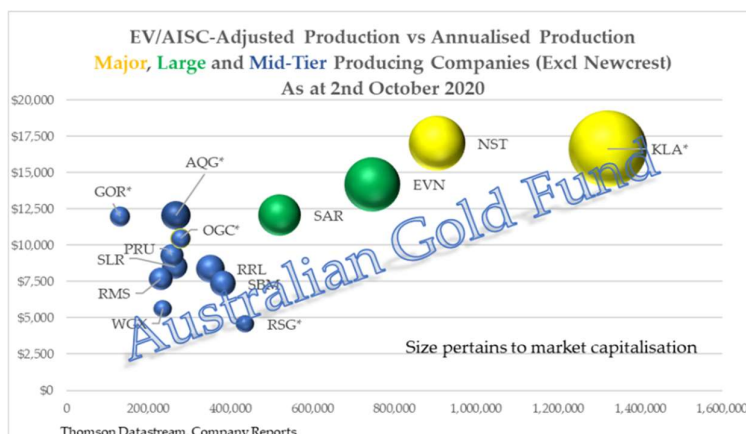
We note that we have made changes in terms of our classification of overvaluation and undervaluation this quarter to incorporate the EV/AISC-Adjusted Production to Profit Margin multiple as well. This is because we recognise that companies vary in their profitability as determined by the difference between the price of gold sold and the AISC, with more profitable companies naturally attracting higher premium in the market.

Taking this into account, we find that 9 out of 27 companies (33%) are undervalued, 10 (36%) are fairly valued and 8 (31%) are overvalued. Thus, since the last report, we find that more companies are attractively valued rather than being overvalued. Factors that contribute to the changes besides the classification is that this industry has been consolidating via mergers/acquisitions as well as exploration successes, a more accommodative economic environment backed by central bank and government stimulus as well as the low oil price leading to higher profit margins. This agrees with our finding that the production-weighted average valuation metrics have reduced, making these stocks slightly better value than in the previous report.

The average levels of the producers' valuation relative to AISC-Adjusted Production, Ore Reserves and Mineral Resources are given below:

	EV/AISC Production	EV/Resources	EV/Reserves
A	\$16,461.62	\$338.96	\$734.61
B	\$13,132.94	\$383.28	\$870.44
C	\$8,593.93	\$246.64	\$731.99
D	\$5,630.60	\$164.64	\$614.27
E	\$15,177.52	\$263.79	\$4,212.03

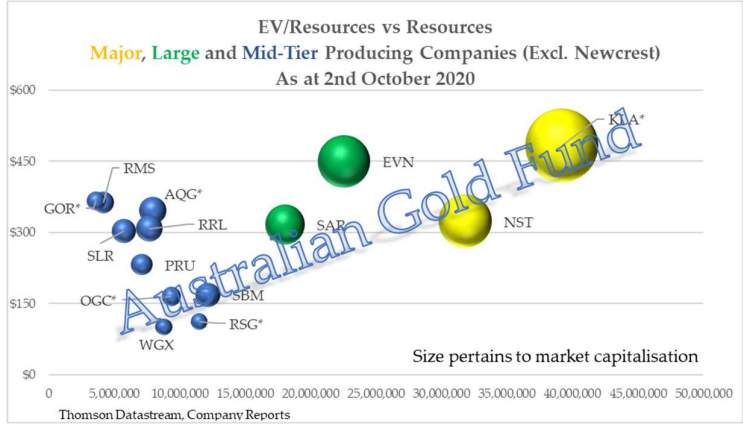
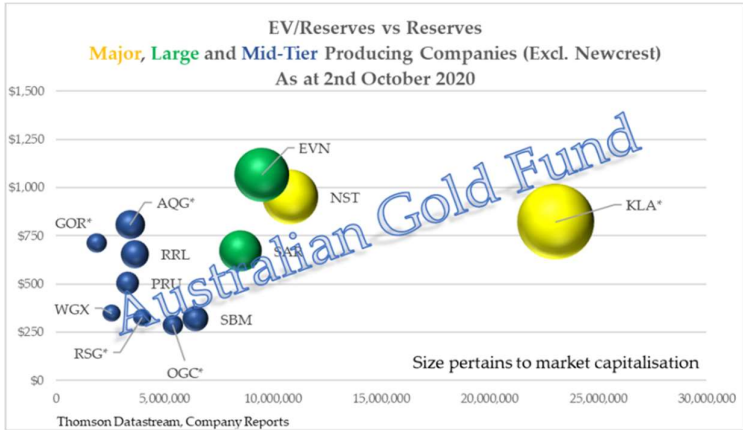
The valuation multiples when stratified by the classes show that the major, large and mid-tier producing companies have declined between 1% to 17%, with the large companies (Evolution and Saracen) declining more so compared to the previous report. This is due to the companies being sold down in the two weeks leading up to 2<sup>nd</sup> October after peaking when the gold price declined. However, the fundamentals of these companies are sound, as we have seen with their forecasts and their operations. On the other hand, for the junior and micro producing companies, their valuation metrics have increased substantially since the last report, rising between 24% to 92%. The reason for this is twofold. On one hand, companies such as Austral, Alkane and Aurelia Metals delivered better operating results in the June quarter leading to investors becoming more enthusiastic about their stocks. On the other hand, companies such as Pantoro Resources, Troy Resources and Wiluna Mining downgrading their guidance for the coming year leading to higher valuation multiples as investors purchased these stocks with expectation of higher gold price but on weaker fundamentals.



The bubble charts show that for the larger producing companies, the scope of the company plays a significant role in determining its valuation relative to the AISC-Adjusted Production.



The correlation coefficient is 0.675. However, this does not apply to the junior and micro producing companies, with the correlation coefficient being -0.349. We believe that the reason for the smaller companies not following the trend is that the economies of scale is not as evident in these companies and investors also consider the idiosyncratic nature of these companies. These factors may include exploration successes, operational disruptions as well as the likelihood and timing of mining development projects.





For Mineral Resources and Ore Reserves, the trend is similar in that the larger producing companies demonstrate a positive trend between the amount of resources and reserves beneath the ground and the valuation. With smaller companies, again, it provides little correlation. The correlation coefficients between the EV multiple with resources and reserves for larger companies are -0.214 and -0.014, respectively and for junior and micro companies, these are -0.314 and -0.254, respectively. Furthermore, it appears that the amount of reserves in the ground does not explain better the company's relative valuation than the amount of resources, even though Ore Reserves are more likely to deliver future profitability than Mineral Resources. Especially for junior companies, a large reserve or resource base may not be recognised yet by investors because investors have seen these deposits not being profitably extracted (as is the case with Wiluna's Matilda-Wiluna mine, Dacian Gold's Mount Morgans and Red 5's Darlot mine).

Despite the increasing enthusiasm for the gold mining industry in recent times and rising gold price, investors appear to be more pragmatic in their preference for what is coming out of the ground as opposed to future prospects relating to what is beneath the ground. We anticipate that this will prevail as investors that prefer to invest on future prospects will find explosive profit opportunities in the exploration and development space.

## 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

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.

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.

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