



**SECTOR OVERVIEW** September 4, 2019

## MINING SECTOR UPDATE

### Silver Price Sensitivity: US\$23/oz – Blink & You Might Miss it

Silver’s recent price strength prompts us to run valuations of our silver-focused precious metals coverage universe at US\$19.00/oz (specifically, producers PAAS, FVI, EDR, EXN and developers MAG and SIL). This analysis follows our previous research where we tested our gold coverage universe at US\$1,500/oz (see our Aug-14-19 Report: [Gold Price Sensitivity: Valuations at US\\$1,500/oz – Game on](#)). Our analysis below also provides a refreshed look at valuations for our gold coverage universe at US\$1,500/oz.

Gold and silver currently trade marginally over US\$1,545/oz Au and US\$19.20, price levels we are monitoring closely before making adjustments to our base case metal price assumptions (unchanged at US\$1,400/oz Au and US\$17.50). As mentioned in our last mining sector research report our thesis for precious metals remains unchanged. Our view on gold remains constructive, supported by the US Fed recent dovish tone prompted by low inflation, combined with uncertainties of trade policies and global growth. We also note heightened potential for sector consolidation and M & A driven by slowing production and reserve growth, balance sheet strength of growth orientated intermediates with better access to the capital markets (many covered by PI) and attractively priced development/exploration focused equities.

Whilst gold’s move to the upside in price (plus-US\$1,300/oz) is three months old and has been commented on numerous times in our research (see our June-25-19 Report: [Mining: Valuations at US\\$1,400/oz Au - Feeling a Little Love](#), and Aug-14-19 Report: [Gold Price Sensitivity: Valuations at US\\$1,500/oz – Game on](#)), silver’s awakening has been more recent (a month and a half and counting). Silver has outperformed gold since mid-July, reflected by a dropping of the Au: Ag ratio from a multi-year high of ~93:1 to a current ratio of ~80:1 (see Exhibit 1).

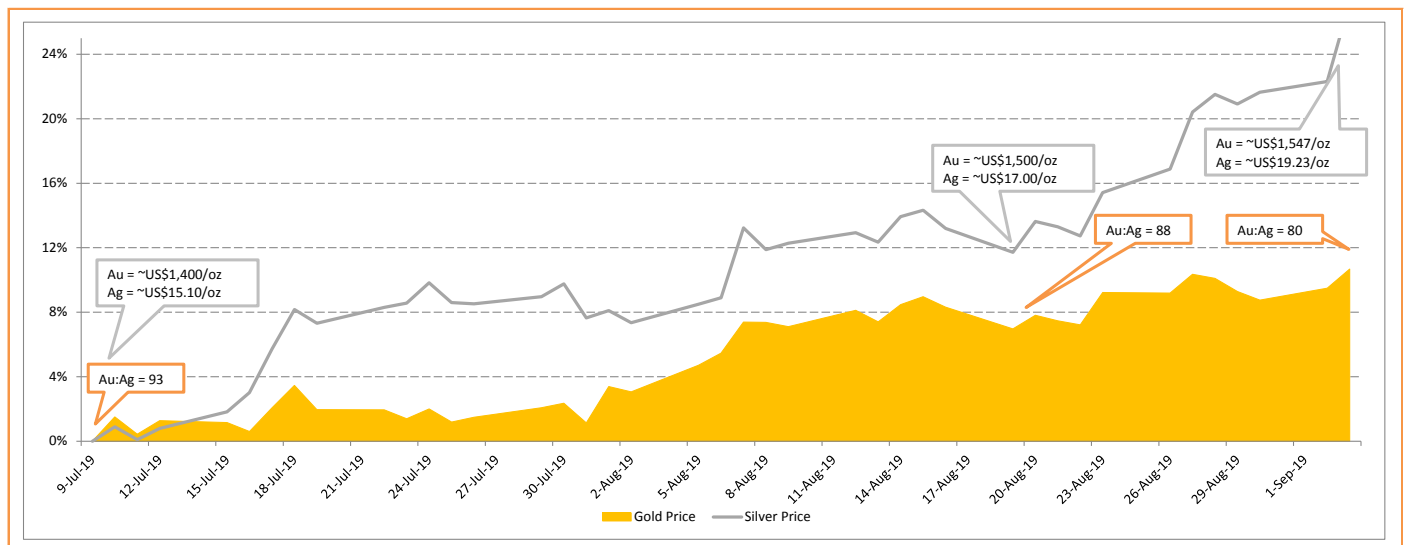
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**Exhibit 1: Gold & Silver Performance (July 9, 2019 – Present)**



Source: Thomson Reuters Eikon, PI Financial Corp.

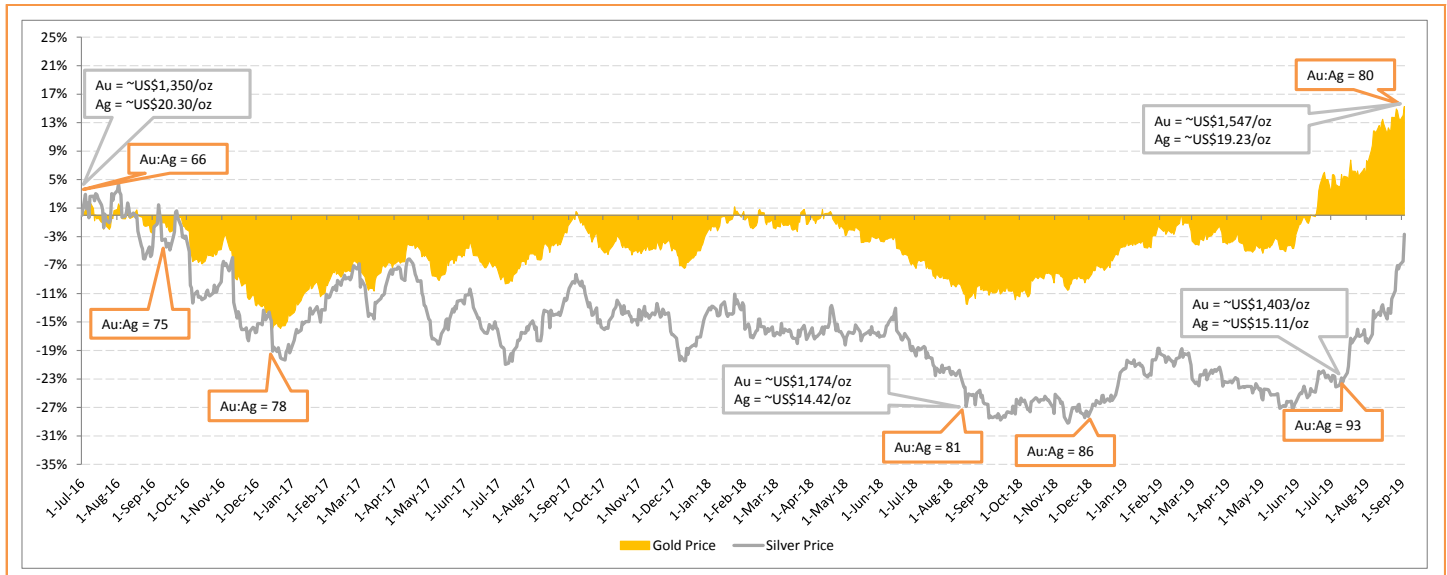
Priced as of September 3, 2019

**A Disclosure fact sheet is available on Pages 7-8 of this report.**



Whilst the silver price move has been dramatic, we see potential for further gains should gold continue to consolidate above US\$1,500/oz. We note that ~3 years ago, when silver began to underperform gold (mid- 2016) the Au:Ag ratio was ~66:1 and Spot gold and silver were US\$1,350/oz and US\$20.30/oz, respectively (see Exhibit 2). If silver continues to outperform gold and the Au:Ag ratio approaches ~66:1, a silver price of ~US\$23/oz (or a ~22% premium over current Spot Silver) isn't unrealistic. We also note that the ten year average Au: Ag ratio is ~66:1.

**Exhibit 2: Gold & Silver Performance (July 2016 – Present)**



Source: Thomson Reuters Eikon, PI Financial Corp.

As mentioned, we continue to monitor gold looking for support north of US\$1,500/oz, a price significantly (~7%) higher than our long-term base case metal price assumption (US\$1,400/oz). We are also monitoring silver which is playing catchup to gold. For the time being we have elected to leave our long-term base case metal price assumptions unchanged (Au: US\$1,400/oz, Ag: US\$17.50/oz). We also note, for the time being, that our medium term silver price forecast of US\$16.50/oz remains for the remainder of 2019.

Looking for value in the silver sector we continue to highlight PAAS at current levels for larger Cap exposure to silver as we await the benefits of the full integration and rationalization of THO's gold assets into PAAS' asset portfolio. We also highlight EXN, EDR and FVI (despite Argentinian uncertainties) for attractive valuations and potential to offer an attractive FCF/EV yield (on a NTM basis) based on the need for operational improvements (for EXN and EDR) and the commissioning of Lindero in late 2019/early 2020 (for FVI). Looking for value in the silver-focused development sector we highlight MAG (first production from Juanicipio anticipated in ~late 2020) and SIL. We note that SSRM offers exposure to silver from its Puna operation in Argentina (~20% of estimated 2020 production) and ~9.9% ownership of SIL. We also note NUAG (not covered but profiled in our Q2/19 Exploration Report (see our June-28-19 Report: [A 2H/19 Awakening. 10 Explorers Worth Watching](#)) and the company's aggressive development of its Silver Sands project in Bolivia.

Reiterating observations made in our last precious metals sector report looking at our gold coverage universe at ~US\$1,500/oz (see our Aug-14-19 Report: [Gold Price Sensitivity: Valuations at US\\$1,500/oz – Game on](#)), looking for value in the intermediate precious metals producer sector, whilst we like BTO and EDV for FCF growth, we highlight SSRM and OGC (despite Philippine uncertainties) for their attractive valuation (OGC trading at discounts to NAV at US\$1,500/oz). In the junior precious metals sector we continue to like KNT for the company's ability to deliver an



attractive combination of production growth and exploration upside. We also highlight SGI for attractive valuations and potential to offer an attractive FCF/EV yield (on a NTM basis) based on operational improvements.

## Thoughts on Gold Price Sensitivity & Equity Valuations

Valuation multiples (P/NAV), based on estimates (unchanged) and Au price (\$1,500/oz and \$1,400/oz, base case) assumptions) (see Exhibits 3, 5 & 6)

- Silvers: (30 Day Performance: Up to ~29% (EDR) vs. NAVPS: Up to ~23% (EDR)):**  
 Silver producers have also performed well over the past 30 days, generally outperforming their gold-focused peers, a reflection of a ~20% gain (~US\$3/oz) in the Spot silver price (currently trading ~US\$19.20/oz or ~US\$1.70/oz above our base case LT silver price assumption).  
 Silver producers trade at an average of ~1.0 x NAV at US\$19.00/oz Ag and US\$1,500/oz Au (PAAS and EDR trade at premiums over EXN and FVI), compared with junior gold producers (average of ~0.8 x NAV) and intermediate gold producers (average of ~1.2 x NAV), skewed higher by KL and WDO. We note that EDR screens as being most sensitive to the silver price, on the basis of P/NAV multiples. P/NAV multiples for silver developers MAG and SIL trade at a premium over gold developers at US\$19.00/oz and US\$1500/oz (~1.0 x NAV).
- Intermediate Gold Producers (30 Day Performance: Up to ~14% (KL) vs. NAVPS: Up to ~21% (EDV)).** We note that EDV screens as being most sensitive to gold price, on the basis of P/NAV multiples. We note that OGC has underperformed peers over the past 30 days (-6%), a time frame over which gold has gained ~US\$130/oz (from ~US\$1,414/oz to ~US\$1,545/oz).
- Junior Gold Producers: (30 Day Performance: Up to ~14% (JAG) vs. NAVPS: Up to ~31% (JAG)).** Whilst we note that JAG and ALO screen as being highly sensitive to the gold price (on a P/NAV multiple basis), we see both as needing significant capital layout requirements.
- Developers & Explorers: (30 Day Performance: Up to ~56% (VIT) vs. NAVPS: Up to ~23%, ITR).** While precious metals developers and explorers continue to trade at a significant discount to their producer peers (NAVPS: ~0.36x), in most cases they have outperformed producers over the past 30 days, the exceptions being GSV, MAX, BGM, INV, TML, AUG and TLG. We continue to see the precious metals developer / explorer space as primed for M & A, reinforced by see this valuation discount. We note that our NAV estimates for AUG, TLG and RVG show no change as NAVs are generated by EV/oz metrics and aren't linked to gold price.

**Exhibit 3: Average P/CF & P/NAV Multiples at Base Case vs. US\$1,500 Au & US\$19.00 Ag**

	2019 P/CF \$1400 Au	2019 P/CF \$1500 Au	2020 P/CF \$1400 Au	2020 P/CF \$1500 Au	P/NAV \$1400 Au	P/NAV \$1500 Au
	\$17.50 Ag	\$19.00 Ag	\$17.50 Ag	\$19.00 Ag	\$17.50 Ag	\$19.00 Ag
Intermediate Gold Producers	11.3x	10.4x	9.1x	8.0x	1.4x	1.2x
Junior Gold Producers	7.8x	6.6x	6.2x	5.2x	0.9x	0.8x
Silver Producers	62.4x	31.1x	8.4x	7.1x	1.2x	1.0x
Gold Developers	-	-	-	-	0.4x	0.4x
Gold Explorers	-	-	-	-	0.4x	0.4x

Source: PI Financial Corp

**Exhibit 4: Base Case vs. US\$1,500 Au & US\$19.00 Ag 2019/2020 CFPS & NAVPS est.**

Company	Ticker	30 Day Performance	2019 CFPS			2020 CFPS			NAVPS			Analyst
			\$1400 Au \$17.50 Ag	\$1500 Au \$19.00 Ag	%	\$1400 Au \$17.50 Ag	\$1500 Au \$19.00 Ag	%	\$1400 Au \$17.50 Ag	\$1500 Au \$19.00 Ag	%	
<b>Intermediate Gold Producers</b>												
Kirkland Lake Gold	KL.TO	14%	C\$4.17	C\$4.40	5%	C\$4.90	C\$5.37	10%	C\$29.45	C\$32.95	12%	PK/AA
B2Gold	BTO.TO	11%	C\$0.55	C\$0.59	7%	C\$0.80	C\$0.87	8%	C\$3.46	C\$3.98	15%	CT/JS
OceanaGold	OGC.TO	-14%	C\$0.62	C\$0.67	8%	C\$0.77	C\$0.88	14%	C\$4.26	C\$4.91	15%	CT/JS
Endeavour Mining	EDV.TO	-1%	C\$3.28	C\$3.57	9%	C\$4.19	C\$4.77	14%	C\$19.77	C\$23.92	21%	CT/JS
SSR Mining	SSRM.TO	6%	C\$1.22	C\$1.40	15%	C\$1.50	C\$1.78	19%	C\$19.18	C\$21.74	13%	CT/JS
<b>Junior Gold Producers</b>												
Wesdome Gold Mines	WDO.TO	7%	C\$0.55	C\$0.58	6%	C\$0.43	C\$0.50	17%	C\$3.78	C\$4.08	8%	PK/AA
K92 Mining	KNT.V	-20%	C\$0.24	C\$0.26	7%	C\$0.55	C\$0.61	11%	C\$2.94	C\$3.26	11%	CT/JS
Alio Gold Corp	ALO.TO	-11%	C\$0.14	C\$0.19	37%	C\$0.15	C\$0.20	32%	C\$1.97	C\$2.31	17%	PK/AA
Superior Gold Inc.	SGI.V	-14%	C\$0.12	C\$0.17	41%	C\$0.67	C\$0.79	18%	C\$1.75	C\$2.09	20%	PK/AA
Jaguar Mining Inc.	JAG.TO	14%	C\$0.08	C\$0.09	15%	C\$0.11	C\$0.13	27%	C\$0.28	C\$0.37	31%	PK/AA
<b>Silver Producers</b>												
Pan American Silver	PAAS.TO	18%	C\$1.77	C\$2.07	17%	C\$3.50	C\$4.02	15%	C\$19.36	C\$21.24	10%	CT/JS
Fortuna Silver	FVI.TO	11%	C\$0.55	C\$0.63	13%	C\$0.96	C\$1.08	13%	C\$6.44	C\$7.35	14%	CT/JS
Endeavour Silver	EDR.TO	29%	C\$0.04	C\$0.08	116%	C\$0.25	C\$0.31	24%	C\$2.78	C\$3.43	23%	CT/JS
Excellon Resources	EXN.TO	1%	C(\$0.02)	C(\$0.01)	79%	C\$0.27	C\$0.29	7%	C\$1.28	C\$1.36	6%	PK/AA
<b>Royalty &amp; Streamers</b>												
Maverix Metals	MMX.TO	1%	C\$0.23	C\$0.24	7%	C\$0.32	C\$0.34	8%	C\$3.68	C\$3.90	6%	JS/CT
Metalla Royalty	MTA.V	9%	C\$0.02	C\$0.02	0%	C\$0.01	C\$0.02	17%	C\$1.02	C\$1.08	6%	JS/CT
<b>Gold Developers</b>												
Gold Standard Ventures	GSV.TO	1%	-	-	-	-	-	-	C\$3.32	C\$3.69	11%	CT/JS
Victoria Gold	VIT.V	56%	C\$0.03	C\$0.03	15%	C\$0.14	C\$0.15	12%	C\$0.87	C\$1.01	16%	CT/JS
Midas Gold	MAX.TO	3%	-	-	-	-	-	-	C\$2.86	C\$3.39	19%	CT/JS
Barkerville Gold	BGM.V	8%	-	-	-	-	-	-	C\$1.25	C\$1.50	20%	PK/AA
Orezone Gold	ORE.V	28%	-	-	-	-	-	-	C\$2.09	C\$2.39	15%	CT/JS
Bonterra Resources	BTR.V	24%	-	-	-	-	-	-	C\$4.69	C\$5.25	12%	PK/AA
Nighthawk Gold	NHK.TO	30%	-	-	-	-	-	-	C\$1.36	C\$1.57	15%	PK/AA
Bluestone Resources	BSR.V	16%	-	-	-	-	-	-	C\$2.87	C\$3.32	16%	PK/AA
Integra Resources	ITR.V	40%	-	-	-	-	-	-	C\$2.07	C\$2.59	25%	PK/AA
INV Metals	INV.TO	-16%	-	-	-	-	-	-	C\$3.17	C\$3.81	20%	CT/JS
Treasury Metals	TML.TO	1%	-	-	-	-	-	-	C\$1.19	C\$1.40	18%	PK/AA
<b>Silver Developers</b>												
MAG Silver	MAG.TO	17%	-	-	-	C\$0.09	C\$0.11	18%	C\$16.83	C\$17.93	7%	CT/JS
SilverCrest Metals	SIL.V	22%	-	-	-	-	-	-	C\$7.93	C\$8.78	11%	PK/AA
<b>Explorers</b>												
Auryn Resources	AUG.TO	-14%	-	-	-	-	-	-	C\$2.53	C\$2.53	0%	PK/AA
GT Gold	GTT.V	9%	-	-	-	-	-	-	C\$5.42	C\$5.81	7%	CT/JS
Troilus Gold	TLG.TO	-17%	-	-	-	-	-	-	C\$2.46	C\$2.46	0%	PK/AA
Revival Gold	RVG.V	23%	-	-	-	-	-	-	C\$1.73	C\$1.73	0%	PK/AA
<b>Base Metals</b>												
ERO Copper	ERO.TO	-20%	C\$1.94	C\$1.96	1%	C\$1.79	C\$1.77	-1%	C\$14.84	C\$14.94	1%	PK/AA

Notes: BUY - Buy NEUT - Neutral SELL - Sell R - Restricted | AVG - Average ABV - Above Average SPEC - Speculative | CT - Chris Thompson PK - Phil Ker JS - Justin Stevens AA - Akinyemi Akinwale

Source: Thomson Reuters Eikon, PI Financial Corp

**Exhibit 5: US\$1,500 Au & US\$19.00 Ag 2019/2020 P/CF & P/NAV est.**

Company	Ticker	Share Price	Target Price	Return %	Stock Rating	CFPS		P/CF		TP/CF		NAV		Analyst	
						2019 E	2020 E	2019 E	2020 E	2019 E	2020 E	NAVPS	P/NAV		TP/NAV
<b>Intermediate Gold Producers</b>															
Kirkland Lake Gold	KL.TO	C\$66.24	C\$55.75	-16%	NEUTRAL	C\$4.40	C\$5.37	15.1x	12.3x	12.7x	10.4x	C\$32.95	1.96x	1.66x	PK/AA
B2Gold	BTO.TO	C\$4.81	C\$5.60	16%	BUY	C\$0.59	C\$0.87	8.2x	5.5x	9.6x	6.4x	C\$3.98	1.21x	1.41x	CT/JS
OceanaGold	OGC.TO	C\$3.21	C\$5.70	78%	BUY	C\$0.67	C\$0.88	4.8x	3.7x	8.5x	6.5x	C\$4.91	0.67x	1.15x	CT/JS
Endeavour Mining	EDV.TO	C\$26.91	C\$32.00	19%	BUY	C\$3.57	C\$4.77	7.5x	5.6x	9.0x	6.7x	C\$23.92	1.10x	1.27x	CT/JS
SSR Mining	SSRM.TO	C\$22.71	C\$24.50	8%	BUY	C\$1.40	C\$1.78	16.2x	12.8x	17.5x	13.8x	C\$21.74	1.06x	1.16x	CT/JS
Group Average								10.4x	8.0x	11.4x	8.8x		1.20x	1.33x	
<b>Junior Gold Producers</b>															
Wesdome Gold Mines	WDO.TO	C\$7.42	C\$5.65	-24%	NEUTRAL	C\$0.58	C\$0.50	12.8x	14.8x	9.7x	11.3x	C\$4.08	1.87x	1.41x	PK/AA
K92 Mining	KNT.V	C\$1.94	C\$3.00	55%	BUY	C\$0.26	C\$0.61	7.4x	3.2x	11.5x	4.9x	C\$3.26	0.57x	0.92x	CT/JS
Alto Gold Corp	ALO.TO	C\$0.97	C\$1.15	19%	NEUTRAL	C\$0.19	C\$0.20	5.2x	4.9x	6.2x	5.8x	C\$2.31	0.29x	0.39x	PK/AA
Superior Gold Inc.	SGL.V	C\$0.84	C\$1.55	85%	BUY	C\$0.17	C\$0.79	4.8x	1.1x	8.9x	2.0x	C\$2.09	0.39x	0.73x	PK/AA
Jaguar Mining Inc.	JAG.TO	C\$0.25	C\$0.20	-20%	NEUTRAL	C\$0.09	C\$0.13	2.8x	1.9x	2.3x	1.5x	C\$0.37	0.66x	0.51x	PK/AA
Group Average								6.6x	5.2x	7.7x	5.1x		0.75x	0.79x	
<b>Silver Producers</b>															
Pan American Silver	PAAS.TO	C\$25.13	C\$25.25	0%	BUY	C\$2.07	C\$4.02	12.1x	6.2x	12.2x	6.3x	C\$21.24	1.21x	1.21x	CT/JS
Fortuna Silver	FVLT.TO	C\$5.77	C\$7.10	23%	BUY	C\$0.63	C\$1.08	9.2x	5.3x	11.4x	6.5x	C\$7.35	0.79x	0.97x	CT/JS
Endeavour Silver	EDR.TO	C\$4.05	C\$3.00	-26%	NEUTRAL	C\$0.08	C\$0.31	53.0x	12.9x	39.2x	9.6x	C\$3.43	1.20x	0.86x	CT/JS
Excellon Resources	EXN.TO	C\$1.17	C\$1.15	-2%	NEUTRAL	C(\$0.01)	C\$0.29	n.m.	4.0x	n.m.	3.9x	C\$1.36	0.86x	0.85x	PK/AA
Group Average								31.1x	7.1x	25.3x	6.6x		1.01x	0.97x	
<b>Royalty &amp; Streamers</b>															
Maverix Metals	MMX.TO	C\$6.71	C\$7.00	4%	BUY	C\$0.24	C\$0.34	27.9x	19.7x	29.1x	20.5x	C\$3.90	1.82x	1.91x	JS/CT
Metalla Royalty	MTA.V	C\$1.27	C\$1.50	18%	BUY	C\$0.02	C\$0.02	67.6x	79.4x	79.9x	93.8x	C\$1.08	1.18x	1.41x	JS/CT
Group Average								47.8x	49.6x	54.5x	57.2x		1.5x	1.7x	
<b>Gold Developers</b>															
Gold Standard Ventures	GSV.TO	C\$1.37	C\$2.60	90%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$3.69	0.36x	0.70x	CT/JS
Victoria Gold	VIT.V	C\$0.63	C\$0.90	43%	BUY	C\$0.03	C\$0.15	19.3x	4.1x	27.6x	5.9x	C\$1.01	0.69x	0.91x	CT/JS
Midas Gold	MAX.TO	C\$0.77	C\$1.40	82%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$3.39	0.20x	0.39x	CT/JS
Barkerville Gold	BGM.V	C\$0.42	C\$1.00	138%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$1.50	0.28x	0.67x	PK/AA
Orezone Gold	ORE.V	C\$0.86	C\$1.35	57%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$2.39	0.30x	0.53x	CT/JS
Bonterra Resources	BTR.V	C\$2.97	C\$3.50	18%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$5.25	0.52x	0.63x	PK/AA
Nighthawk Gold	NHK.TO	C\$0.70	C\$1.00	43%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$1.57	0.40x	0.61x	PK/AA
Bluestone Resources	BSR.V	C\$1.35	C\$2.40	78%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$3.32	0.39x	0.71x	PK/AA
Integra Resources	ITR.V	C\$1.23	C\$1.75	42%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$2.59	0.45x	0.66x	PK/AA
INV Metals	INV.TO	C\$0.31	C\$1.40	359%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$3.81	0.07x	0.36x	CT/JS
Treasury Metals	TML.TO	C\$0.39	C\$0.60	56%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$1.40	0.29x	0.44x	PK/AA
Group Average													0.36x	0.60x	
<b>Silver Developers</b>															
MAG Silver	MAG.TO	C\$17.55	C\$19.50	11%	BUY	-	C\$0.11	n.m.	157.4x	n.m.	174.9x	C\$17.93	0.98x	1.10x	CT/JS
SilverCrest Metals	SIL.TO	C\$8.64	C\$9.50	10%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$8.78	0.98x	1.09x	PK/AA
Group Average													0.98x	1.09x	
<b>Explorers</b>															
Auryn Resources	AUG.TO	C\$1.70	C\$2.50	47%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$2.53	0.65x	0.99x	PK/AA
GT Gold	GTT.V	C\$1.23	C\$2.60	111%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$5.81	0.18x	0.43x	CT/JS
Troilus Gold	TLG.TO	C\$0.69	C\$1.45	110%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$2.46	0.25x	0.57x	PK/AA
Revival Gold	RVG.V	C\$0.69	C\$1.05	52%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$1.73	0.38x	0.59x	PK/AA
Group Average													0.36x	0.64x	
<b>Base Metals</b>															
ERO Copper	ERO.TO	C\$19.73	C\$22.50	14%	NEUTRAL	C\$1.96	C\$1.77	10.1x	11.1x	11.5x	12.7x	C\$14.94	1.29x	1.46x	PK/AA

Notes: BUY - Buy NEUT - Neutral SELL - Sell R - Restricted | AVG - Average ABV - Above Average SPEC - Speculative | CT - Chris Thompson PK - Phil Ker JS - Justin Stevens AA - Akinyemi Akinwale

Source: Thomson Reuters Eikon, PI Financial Corp

**Exhibit 6: Base Case (US\$1,400 Au & US\$17.50 Ag) 2019/2020 P/CF & P/NAV est.**

Company	Ticker	Share Price	Target Price	Return %	Stock Rating	CFPS		P/CF		TP/CF		NAV		Analyst	
						2019 E	2020 E	2019 E	2020 E	2019 E	2020 E	NAVPS	P/NAV		TP/NAV
<b>Intermediate Gold Producers</b>															
Kirkland Lake Gold	KL.TO	C\$66.24	C\$55.75	-16%	NEUTRAL	C\$4.17	C\$4.90	15.9x	13.5x	13.4x	11.4x	C\$29.45	2.18x	1.84x	PK/AA
B2Gold	BTO.TO	C\$4.81	C\$5.60	16%	BUY	C\$0.55	C\$0.80	8.8x	6.0x	10.2x	7.0x	C\$3.46	1.40x	1.63x	CT/JS
OceanaGold	OGC.TO	C\$3.21	C\$5.70	78%	BUY	C\$0.62	C\$0.77	5.2x	4.2x	9.2x	7.4x	C\$4.26	0.77x	1.32x	CT/JS
Endeavour Mining	EDV.TO	C\$26.91	C\$32.00	19%	BUY	C\$3.28	C\$4.19	8.2x	6.4x	9.8x	7.6x	C\$19.77	1.28x	1.47x	CT/JS
SSR Mining	SSRM.TO	C\$22.71	C\$24.50	8%	BUY	C\$1.22	C\$1.50	18.6x	15.2x	20.1x	16.4x	C\$19.18	1.25x	1.37x	CT/JS
Group Average								11.3x	9.1x	12.5x	10.0x		1.37x	1.53x	
<b>Junior Gold Producers</b>															
Wesdome Gold Mines	WDO.TO	C\$7.42	C\$5.65	-24%	NEUTRAL	C\$0.55	C\$0.43	13.6x	17.3x	10.3x	13.2x	C\$3.78	2.02x	1.53x	PK/AA
K92 Mining	KNT.V	C\$1.94	C\$3.00	55%	BUY	C\$0.24	C\$0.55	8.0x	3.5x	12.3x	5.4x	C\$2.94	0.64x	1.02x	CT/JS
Alto Gold Corp	ALO.TO	C\$0.97	C\$1.15	19%	NEUTRAL	C\$0.14	C\$0.15	7.1x	6.4x	8.4x	7.6x	C\$1.97	0.35x	0.47x	PK/AA
Superior Gold Inc.	SGL.V	C\$0.84	C\$1.55	85%	BUY	C\$0.12	C\$0.67	6.8x	1.3x	12.6x	2.3x	C\$1.75	0.47x	0.88x	PK/AA
Jaguar Mining Inc.	JAG.TO	C\$0.25	C\$0.20	-20%	NEUTRAL	C\$0.08	C\$0.11	3.3x	2.4x	2.6x	1.9x	C\$0.28	0.87x	0.68x	PK/AA
Group Average								7.8x	6.2x	9.3x	6.1x		0.87x	0.92x	
<b>Silver Producers</b>															
Pan American Silver	PAAS.TO	C\$25.13	C\$25.25	0%	BUY	C\$1.77	C\$3.50	14.2x	7.2x	14.2x	7.2x	C\$19.36	1.34x	1.35x	CT/JS
Fortuna Silver	FVLT.O	C\$5.77	C\$7.10	23%	BUY	C\$0.55	C\$0.96	10.4x	6.0x	12.8x	7.4x	C\$6.44	0.90x	1.10x	CT/JS
Endeavour Silver	EDR.TO	C\$4.05	C\$3.00	-26%	NEUTRAL	C\$0.04	C\$0.25	114.5x	16.1x	84.8x	11.9x	C\$2.78	1.52x	1.09x	CT/JS
Excellon Resources	EXN.TO	C\$1.17	C\$1.15	-2%	NEUTRAL	C(\$0.02)	C\$0.27	n.m.	4.3x	n.m.	4.2x	C\$1.28	0.91x	0.90x	PK/AA
Group Average								62.4x	8.4x	48.8x	7.7x		1.17x	1.11x	
<b>Royalty &amp; Streamers</b>															
Maverix Metals	MMX.TO	C\$6.71	C\$7.00	4%	BUY	C\$0.23	C\$0.32	29.7x	21.2x	31.0x	22.1x	C\$3.68	1.95x	2.04x	JS/CT
Metalla Royalty	MTA.V	C\$1.27	C\$1.50	18%	BUY	C\$0.02	C\$0.01	67.6x	92.9x	79.9x	109.7x	C\$1.02	1.26x	1.50x	JS/CT
Group Average								48.7x	57.0x	55.4x	65.9x		1.6x	1.8x	
<b>Gold Developers</b>															
Gold Standard Ventures	GSV.TO	C\$1.37	C\$2.60	90%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$3.32	0.40x	0.78x	CT/JS
Victoria Gold	VIT.V	C\$0.63	C\$0.90	43%	BUY	C\$0.03	C\$0.14	22.2x	4.6x	31.7x	6.6x	C\$0.87	0.78x	1.03x	CT/JS
Midas Gold	MAX.TO	C\$0.77	C\$1.40	82%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$2.86	0.23x	0.47x	CT/JS
Barkerville Gold	BGM.V	C\$0.42	C\$1.00	138%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$1.25	0.33x	0.80x	PK/AA
Orezone Gold	ORE.V	C\$0.86	C\$1.35	57%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$2.09	0.35x	0.61x	CT/JS
Bonterra Resources	BTR.V	C\$2.97	C\$3.50	18%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$4.69	0.59x	0.72x	PK/AA
Nighthawk Gold	NHK.TO	C\$0.70	C\$1.00	43%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$1.36	0.47x	0.71x	PK/AA
Bluestone Resources	BSR.V	C\$1.35	C\$2.40	78%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$2.87	0.45x	0.83x	PK/AA
Integra Resources	ITR.V	C\$1.23	C\$1.75	42%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$2.07	0.57x	0.84x	PK/AA
INV Metals	INV.TO	C\$0.31	C\$1.40	359%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$3.17	0.08x	0.43x	CT/JS
Treasury Metals	TML.TO	C\$0.39	C\$0.60	56%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$1.19	0.34x	0.52x	PK/AA
Group Average													0.42x	0.70x	
<b>Silver Developers</b>															
MAG Silver	MAG.TO	C\$17.55	C\$19.50	11%	BUY	-	C\$0.09	n.m.	185.2x	n.m.	205.7x	C\$16.83	1.05x	1.18x	CT/JS
SilverCrest Metals	SIL.TO	C\$8.64	C\$9.50	10%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$7.93	1.10x	1.22x	PK/AA
Group Average													1.07x	1.20x	
<b>Explorers</b>															
Auryn Resources	AUG.TO	C\$1.70	C\$2.50	47%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$2.53	0.65x	0.99x	PK/AA
GT Gold	GTT.V	C\$1.23	C\$2.60	111%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$5.42	0.20x	0.46x	CT/JS
Troilus Gold	TLG.TO	C\$0.69	C\$1.45	110%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$2.46	0.25x	0.57x	PK/AA
Revival Gold	RVG.V	C\$0.69	C\$1.05	52%	BUY	-	-	n.m.	n.m.	n.m.	n.m.	C\$1.73	0.38x	0.59x	PK/AA
Group Average													0.37x	0.65x	
<b>Base Metals</b>															
ERO Copper	ERO.TO	C\$19.73	C\$22.50	14%	NEUTRAL	C\$1.94	C\$1.79	10.2x	11.0x	11.6x	12.6x	C\$14.84	1.30x	1.47x	PK/AA

Notes: BUY - Buy NEUT - Neutral SELL - Sell R - Restricted | AVG - Average ABV - Above Average SPEC - Speculative | CT - Chris Thompson PK - Phil Ker JS - Justin Stevens AA - Akinyemi Akinwale

Source: Thomson Reuters Eikon, PI Financial Corp.

## Disclosure Fact Sheet

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**BUY** : recommendation: stock is expected to appreciate from its current price level at least 10-20% in the next 12 months.

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**SELL** : recommendation: stock is expected to decline from its current price level at least 10-20% in the next 12 months.

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### Research Disclosures

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Alio Gold	4	
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Superior Gold Corp.	4	
Treasury Metals	4	

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N/R	0	0.00%
<b>TOTAL</b>	<b>66</b>	

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