

Member of the Canadian Investor Protection Fund

## Metals off to a strong start in 2018

**Base metals** had a strong finish in 2017, a year when the copper and zinc prices increased by over 30%, the highest in over 3 years for copper and in 10 years for zinc. Nickel also outperformed, rising by 28%. The performance in 2017 was underpinned by supply disruptions for copper, lack of production growth for zinc, and declining global inventories, within the context of a positive outlook for Chinese, and global growth.

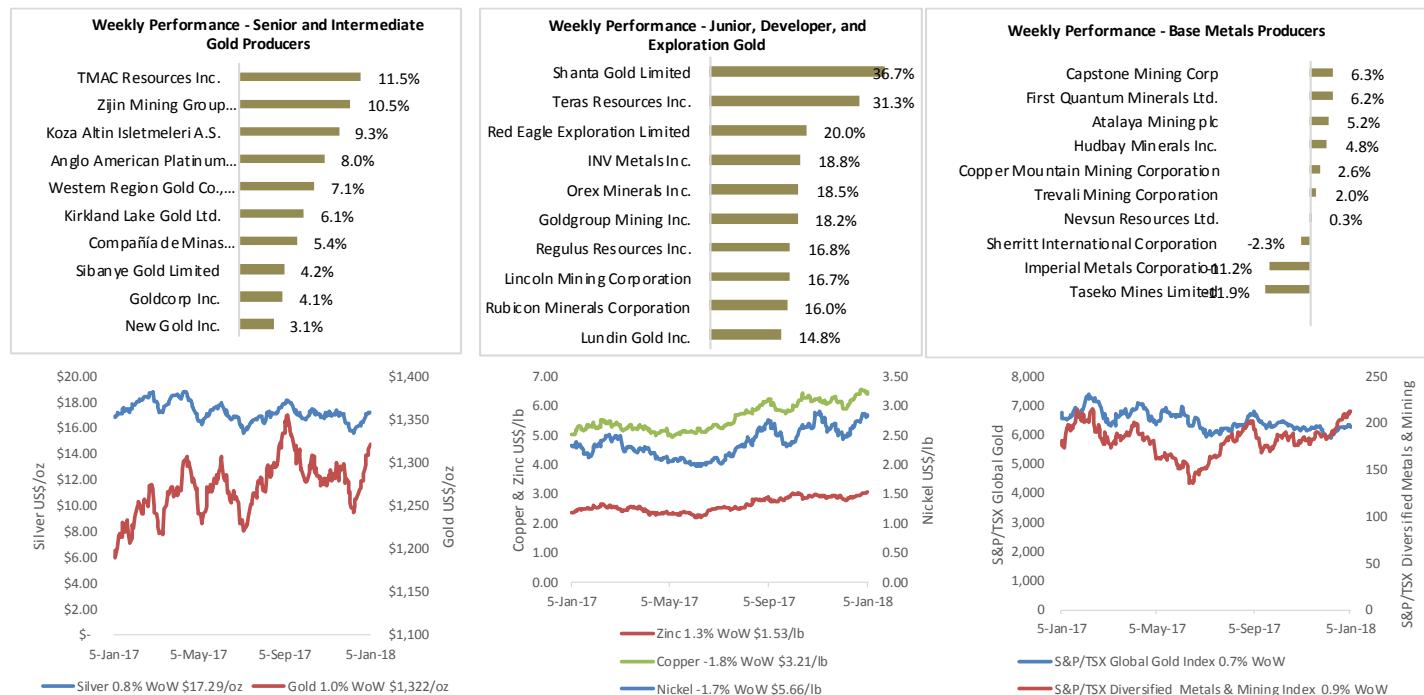
- **Strong copper demand in 2018.** It is estimated that China's copper demand (which accounts for around 50% of global copper demand of 23.5Mt) could grow by up to 3% in 2018, from around 2% in 2017. Codelco, Chile's state-owned copper miner, sees a sustained increase in copper deficits, supported by growing copper deficits. As a result, the company says the copper price may test records above \$10,000/t (\$4.50/lb) in 2018.
- **Potential for supply tightness.** Over 30 labour contracts, covering 5Mt of mine supply of copper are due to expire in 2018, mostly in Chile and Peru. Notably, the Escondida contract expires in June. In China, scrap import restrictions and closures related to winter pollution will contribute to tightness in the copper market.
- **Zinc continues to have the best fundamentals among the base metals.** Global zinc stocks were down 59% in 2017, ending the year at 8.2 days of consumption. Chinese zinc imports increased by 43% in the first 11 months of 2017, and continue to be strong.
- **Outlook is positive.** We expect strong global manufacturing output, supported by resilient European and U.S. PMIs, as well as sustained metals demand from China to provide further impetus for a metals rally in 2018.

**Precious metals** had a strong start to the year, with the price of gold rising above the \$1,300 on December 29th amid a falling U.S. dollar and the prospects of another interest rate hike less following worse-than-expected payroll data this morning. This follows a positive 2010 for precious metals with gold (up 11%) and silver (up 4%) finishing at \$1,320 and \$17.22 per ounce respectively.

- **Palladium soars.** Platinum prices rose almost 50% on the back of robust demand for catalytic converters and limited supply. Palladium prices tested the \$1,100 per ounce level on Thursday, with some commentators speculating it could overtake gold, before settling at \$1,090 (up 2.7%) on Friday. In contrast, platinum prices finished the year where they began at \$907 per ounce.

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## Weekly Performance





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## Haywood Research: The Week in Review – Covered Companies

Publications from the Haywood Research team for the week included the following for covered companies:

- **Mountain Province Diamonds Inc. (MPVD-T, C\$3.38):** Operations summary
- **Roxgold Inc. (ROXG-T, \$1.36):** Receipt of permit for Bagassi South
- **Liberty Gold Corp. (LGD-T, \$0.45):** Assay results from Goldstrike and Black Pine
- **Barkerville Gold Mines Ltd. (BGM-V, C\$1.60):** A new evaluation for the Caribou project

### Research Reports

#### Mountain Province Diamonds Inc. (MPVD-T, \$3.38 [Buy Rating, \$6.30 Target Price]) – November Operations Summary and Tenth Sale Update

Geordie Mark, PhD, FAusIMM, gmark@haywood.com; Alvin Islam, GIT, aislam@haywood.com

**Operations and Sales Summary:** Operations data for Gahcho Kué for the month of November reports diamond production of 470 kct, which equates to a diamond production rate of 5.72 Mct/yr that is marginally less than our expectations for the November-December period and was largely a result of lower than expected plant processing rates. For the November period, the plant processed 223 kt of ore material at an average grade of 2.11 ct per tonne.

See Haywood Securities for the full report

#### Roxgold Inc. (ROXG-T, \$1.36 [Buy Rating, \$1.90 Target Price]) – Bagassi South Receives Permitting Approval

Geordie Mark, PhD, FAusIMM, gmark@haywood.com; Alvin Islam, GIT, aislam@haywood.com

**Bagassi South Permitting Approval** - The Company has reported that they have received approval of the Environmental and Social Impact Assessment to develop Bagassi South from the Ministry of Environment and Sustainable Development. The approval allows for the development of the Bagassi South underground mine that we believe will be completed in late Q4/18 with the concurrent plant expansion activities expected to be completed a little earlier in Q3/18. Bagassi South represents an expansion of mining activities into the QV1 and QV' veins, which before had been conducted on the 55 Zone only.

See Haywood Securities for the full report [8](#)

#### Liberty Gold Corp. (LGD-T, \$0.45 [Buy Rating, \$1.00 Target Price]) – Gold Mineralization Extended Along Historic Open Pits at Goldstrike

Mick Carew, PhD | mcarew@haywood.com; Emma Boggio, MSA, CPA, CA, eboggio@haywood.com

Liberty Gold announced drilling results from its 100% controlled Goldstrike Oxide Gold Project in southwestern Utah, with the current results targeting both the Western and the Dip Slope Zone. Drilling has focused on extending gold mineralization beyond several historic open pits including the Moosehead-Caribou and Beavertail pit areas (Western Zone) and the Hassayampa historic pit (Dip Slope Zone). The Goldstrike Mine which comprised of 12 open pits operated from 1988 to 1994, with 209,000 ounces of gold produced at an average grade of 1.2 g/t gold. Drilling is designed to determine continuity between areas of known gold mineralization and the historic open pits.

See Haywood Securities for the full report



## **Liberty Gold Corp. (LGD-T, \$0.46 [Buy Rating, \$1.00 Target Price]) – A Promising Start for Liberty Gold at Black Pine**

**Mick Carew, PhD** | [mcarew@haywood.com](mailto:mcarew@haywood.com); Emma Boggio, MSA, CPA, CA, [eboggio@haywood.com](mailto:eboggio@haywood.com)

Liberty Gold announced initial drill assay results from its Black Pine oxide gold project in Idaho. Black Pine was acquired by Liberty for US\$800,000, 300,000 shares and a 0.5% NSR to Western Pacific Resources Corp. (WRP-V). Black Pine is a historical gold producer, Producing 435,000 ounces at 0.7 g/t gold from 7 open pits between 1991 and 1998. Liberty commenced a 12-hole drill program in late 2017 designed to confirm historic drilling beyond the open pits, and to test the depth extent of gold mineralization below the limits of shallow drill holes. The longer-term focus for Liberty at Black Pine is a 12 km<sup>2</sup> of soil anomalous that extends well beyond the historic open pits. Two of the 12 holes released today were drilled at the A Basin target that is situated adjacent to and west of the West Pit.

See Haywood Securities for the full report

## **Barkerville Gold Mines Ltd. (BGM-V, \$0.73 [Buy Rating, \$1.60 Target Price]) – Caribou Project Advancement Prompts New Evaluation**

**Mick Carew, PhD** | [mcarew@haywood.com](mailto:mcarew@haywood.com); Emma Boggio, MSA, CPA, CA, [eboggio@haywood.com](mailto:eboggio@haywood.com)

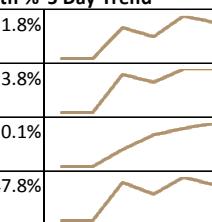
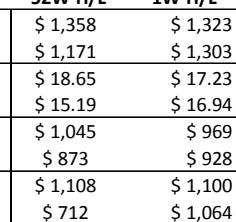
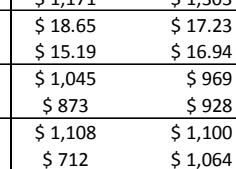
Although we are still awaiting the results of the Company's initial resource estimate for Island, Cow and Barkerville mountain (expected Q1/18), over the past year the Company has conducted a considerable exploration and infill drilling program at its flagship Cariboo Gold Project. With a better understanding of the potential scale of the deposits we have revised our model to incorporate two separate production scenarios:

See Haywood Securities for the full report

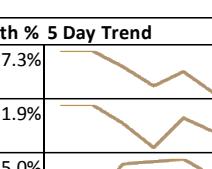
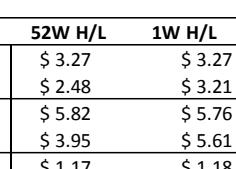
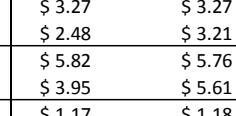
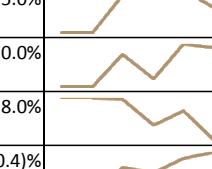
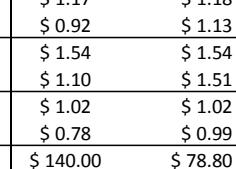


## Weekly Commodities

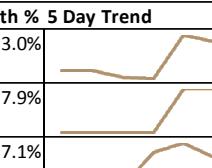
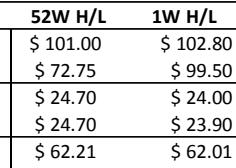
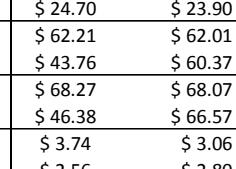
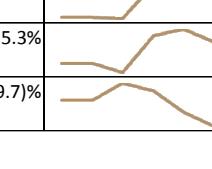
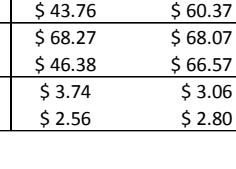
### PRECIOUS METALS

Name	Close	1Wk Δ	1 week %	1 Month %	3 Month %	6 Month %	12 Month %	5 Day Trend	52W H/L	1W H/L
Gold Spot US\$/oz	\$ 1,320	\$ 16.79	1.3%	4.3%	4.1%	7.5%	11.8%		\$ 1,358 \$ 1,171	\$ 1,323 \$ 1,303
Silver Spot US\$/oz	\$ 17.22	\$ 0.28	1.7%	6.9%	3.8%	7.0%	3.8%		\$ 18.65 \$ 15.19	\$ 17.23 \$ 16.94
Platinum Spot US\$/oz	\$ 969	\$ 41.03	4.2%	5.8%	5.9%	6.5%	0.1%		\$ 1,045 \$ 873	\$ 969 \$ 928
Palladium Spot US\$/oz	\$ 1,093	\$ 29.29	2.7%	10.8%	15.9%	29.6%	47.8%		\$ 1,108 \$ 712	\$ 1,100 \$ 1,064

### BASE METALS

Name	Close	1Wk Δ	1 week %	1 Month %	3 Month %	6 Month %	12 Month %	5 Day Trend	52W H/L	1W H/L
Copper Future US\$/lb	\$ 3.21	\$ (0.06)	(1.8%)	8.7%	6.3%	21.7%	27.3%		\$ 3.27 \$ 2.48	\$ 3.27 \$ 3.21
Nickel Spot US\$/lb	\$ 5.66	\$ (0.10)	(1.7%)	15.6%	19.5%	36.9%	21.9%		\$ 5.82 \$ 3.95	\$ 5.76 \$ 5.61
Lead Spot US\$/lb	\$ 1.16	\$ 0.03	2.4%	1.9%	(1.4)%	13.0%	25.0%		\$ 1.17 \$ 0.92	\$ 1.18 \$ 1.13
Zinc Spot US\$/lb	\$ 1.53	\$ 0.02	1.3%	8.0%	0.8%	21.6%	30.0%		\$ 1.54 \$ 1.10	\$ 1.54 \$ 1.51
Aluminum Spot US\$/lb	\$ 0.99	\$ (0.03)	(3.1%)	7.5%	1.9%	14.0%	28.0%		\$ 1.02 \$ 0.78	\$ 1.02 \$ 0.99
Iron Ore Spot US\$/t	\$ 75.00	\$ 3.72	5.0%	10.2%	17.6%	18.7%	(0.4)%		\$ 140.00 \$ 77.70	\$ 78.80 \$ 77.70

### ENERGY

Name	Close	1Wk Δ	1 week %	1 Month %	3 Month %	6 Month %	12 Month %	5 Day Trend	52W H/L	1W H/L
Newcastle Coal US\$/t	\$ 102.25	\$ 2.15	2.1%	8.3%	5.2%	27.4%	23.0%		\$ 101.00 \$ 72.75	\$ 102.80 \$ 99.50
Uranium Spot US\$/lb	\$ 24.00	\$ 0.10	0.4%	(5.5)%	17.1%	17.4%	7.9%		\$ 24.70 \$ 24.70	\$ 24.00 \$ 23.90
WTI US\$/bbl	\$ 61.44	\$ 1.02	1.7%	6.5%	19.0%	31.8%	7.1%		\$ 62.21 \$ 43.76	\$ 62.01 \$ 60.37
Brent US\$/bbl	\$ 67.62	\$ 0.75	1.1%	8.0%	20.1%	36.7%	15.3%		\$ 68.27 \$ 46.38	\$ 68.07 \$ 66.57
Henry Hub US\$/MMBtu	\$ 2.80	\$ (0.16)	(5.7%)	(4.3)%	(13.6)%	(11.8)%	(19.7)%		\$ 3.74 \$ 2.56	\$ 3.06 \$ 2.80

Source: Haywood Securities and Bloomberg

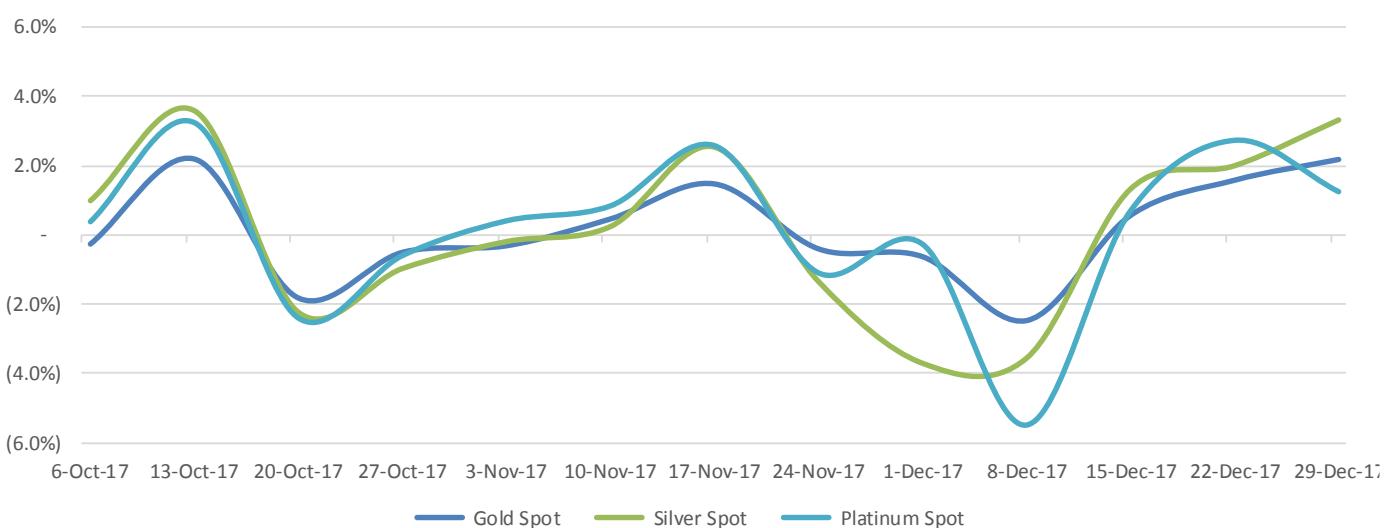


## Commodities Prices and Inventories

**Precious Metals**

Spot Price				
Commodities	LME Spot Price	Weekly Δ	YTD Δ	1 Year Δ
Gold	US\$ 1,319 /oz	1.3%	-1.8%	-1.8%
Silver	US\$ 17.13 /oz	1.1%	1.1%	3.3%
Platinum	US\$ 970 /oz	4.2%	4.1%	0.2%

Precious Metals Weekly Change (12 weeks)



Source: Haywood Securities and Bloomberg



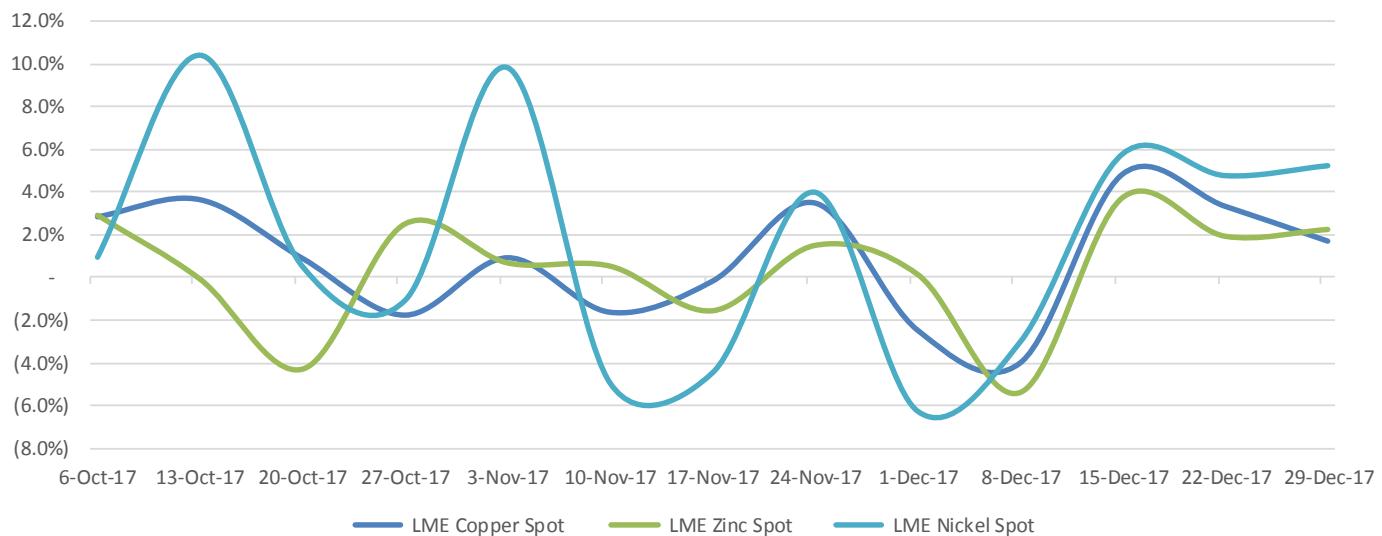
## Base Metals

Spot Price				
Commodities	LME Spot Price	Weekly Δ	YTD Δ	1 Year Δ
Copper	US\$ 3.21 /lb	-1.8%	-1.8%	27.3%
Zinc	US\$ 1.53 /lb	1.3%	1.3%	30.0%
Nickel	US\$ 5.66 /lb	-1.7%	-1.7%	21.9%

LME Inventory		Total Inventory Excluding Bonded Warehouse Inventory			
Commodities	LME Inventory	Weekly Δ	Total (t)	YTD Δ	1 Year Δ
Copper	203,850	0.5%	557,193	2%	2%
Zinc	180,325	-0.9%	257,708	3%	-56%
Nickel	365,070	-0.7%	413,990	0%	-11%

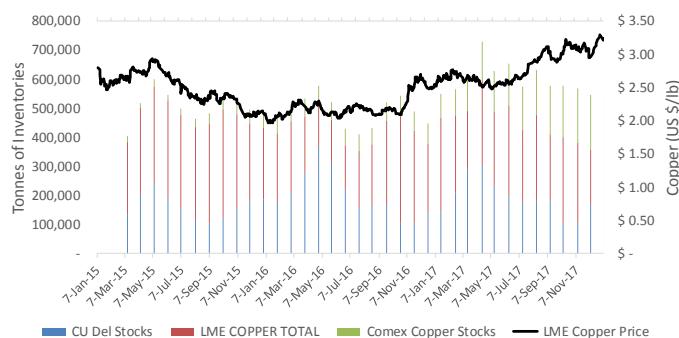
### Base Metals Weekly Change (12 weeks)



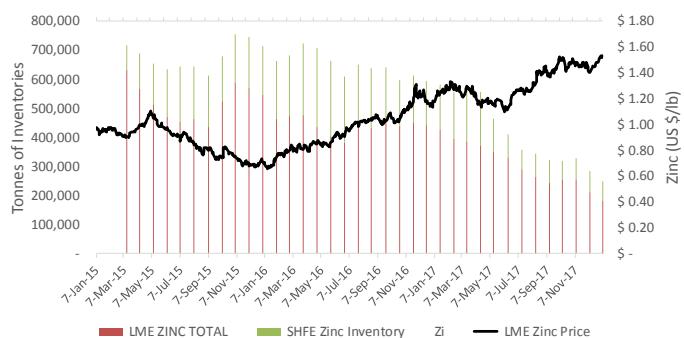
Source: Haywood Securities and Bloomberg



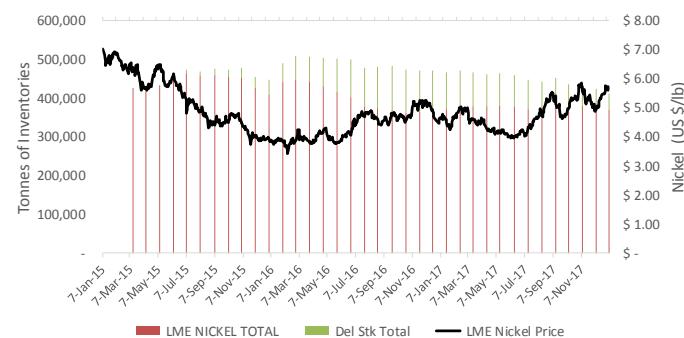
Copper Price &amp; Inventories



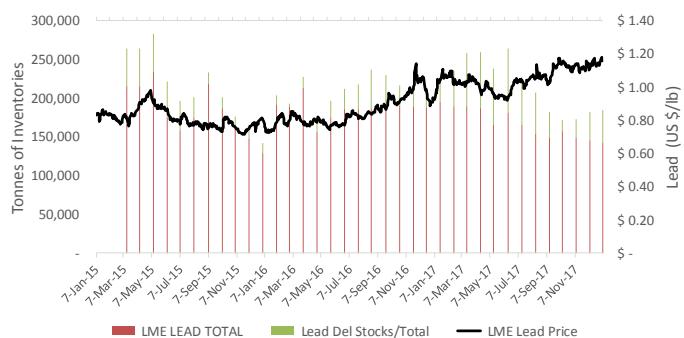
Zinc Price &amp; Inventories



Nickel Price &amp; Inventories



Lead Price &amp; Inventories

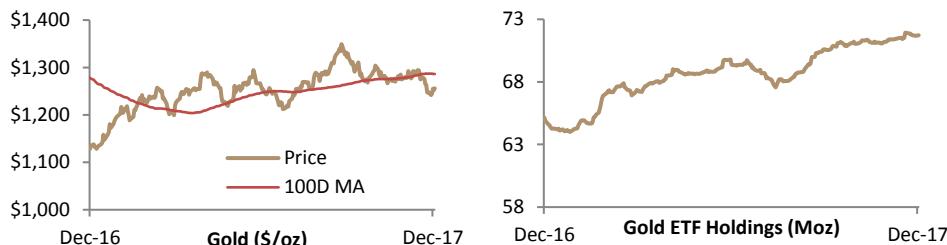


Source: Haywood Securities and Bloomberg



## Commodities and ETFs: A Week in Action

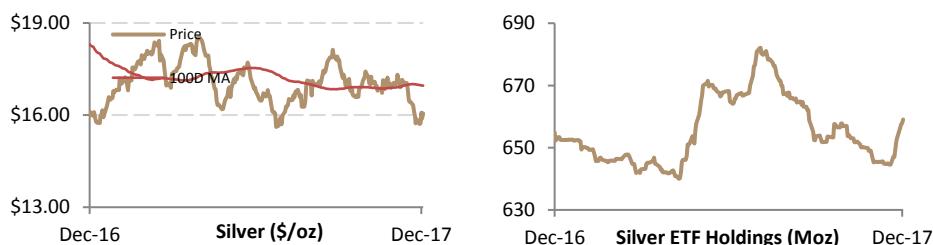
### Gold – 1-Year US\$/oz (left) and Total ETF Holdings (right)



Spot: Gain (+0.6%) for the week

ETF Holdings: 71,715,389 ounces, down 28,531 ounces for the week

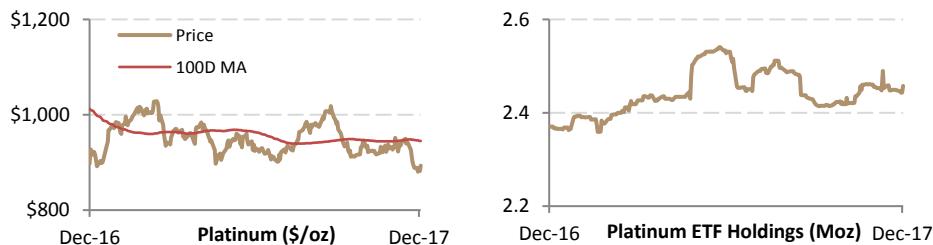
### Silver – 1-Year US\$/oz (left) and Total ETF Holdings (right)



Spot: Gain (+1.2%) for the week

ETF Holdings: 659,037,559 ounces, up 6,929,372 ounces for the week

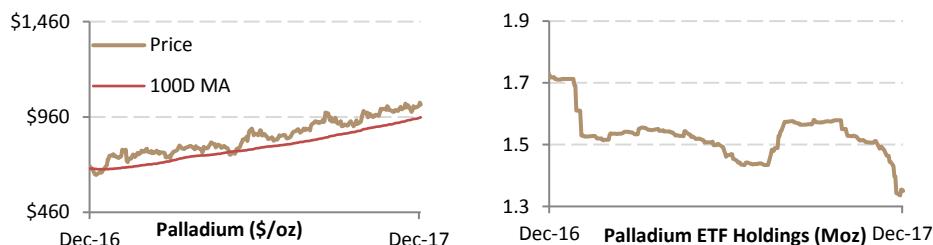
### Platinum – 1-Year US\$/oz (left) and Total ETF Holdings (right)



Spot: Gain (+0.6%) for the week

ETF Holdings: 2,457,403 ounces, up 8,755 ounces for the week

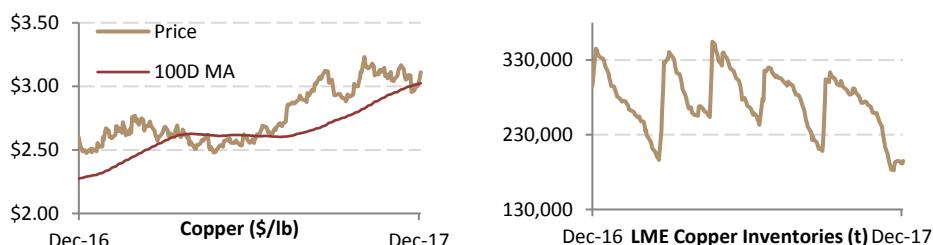
### Palladium – 1-Year US\$/oz (left) and Total ETF Holdings (right)



Spot: Gain (+1.6%) for the week

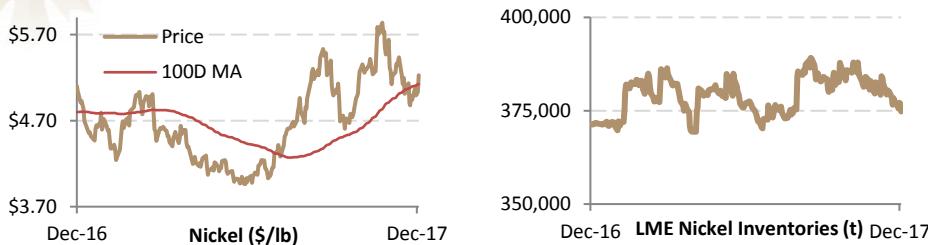
ETF Holdings: 1,349,655 ounces, up 7,235 ounces for the week

### Copper – 1-Year US\$/lb (left) and LME Inventory (right)



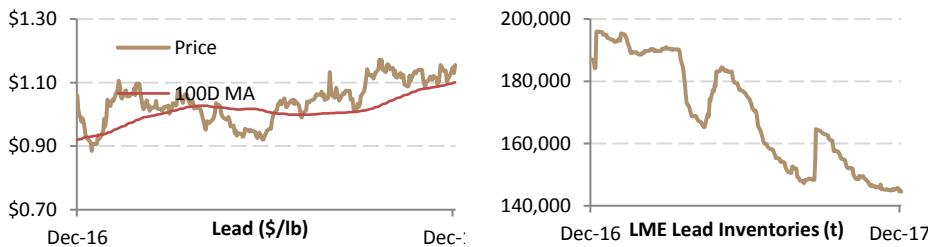
Futures: Gain (+4.9%) for the week

LME Copper: 195,200 tonnes, up 50 tonnes for the week

**Nickel – 1-Year US\$/lb (left) and LME Inventory (right)**

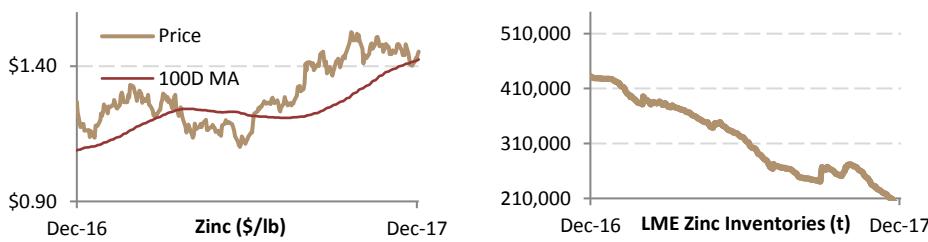
Spot: Gain (+5.8%) for the week

LME Nickel: 374,850 tonnes, down 2,088 tonnes for the week

**Lead – 1-Year US\$/lb (left) and LME Inventory (right)**

Spot: Gain (+4.0%) for the week

LME Lead: 144,550 tonnes, down 750 tonnes for the week

**Zinc – 1-Year US\$/lb (left) and LME Inventory (right)**

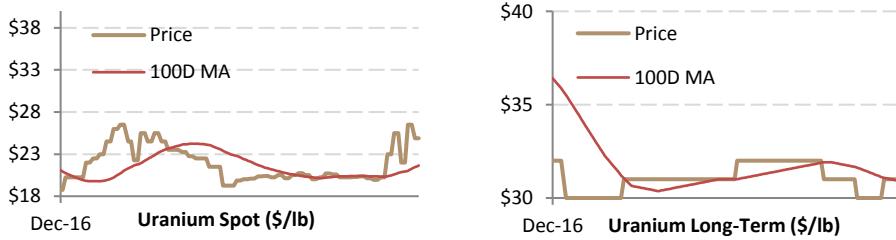
Spot: Gain (+3.7%) for the week

LME Zinc: 193,750 tonnes, down 7,375 tonnes for the week

**Iron – 1-Year US\$/t 62% Fe (left) and 1-Year US\$/t Newcastle (right)**

Newcastle Thermal Futures: Gain (+2.5%) for the week

62% Fe Iron Ore: Gain (+2.2%) for the week

**Uranium – 1-Year US\$/lb Short Term (left) and Long-term (right)**

Uranium Spot: Loss (-1.2%) for the week

Uranium Long: Loss (-2.4%) for the week

Source: Bloomberg, UxC Consulting, and Haywood Securities



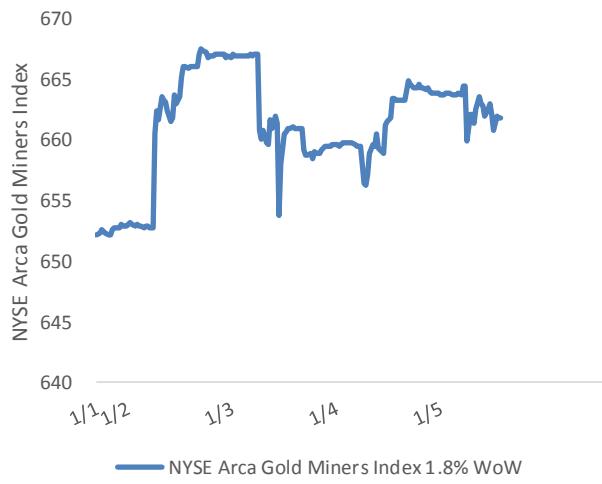
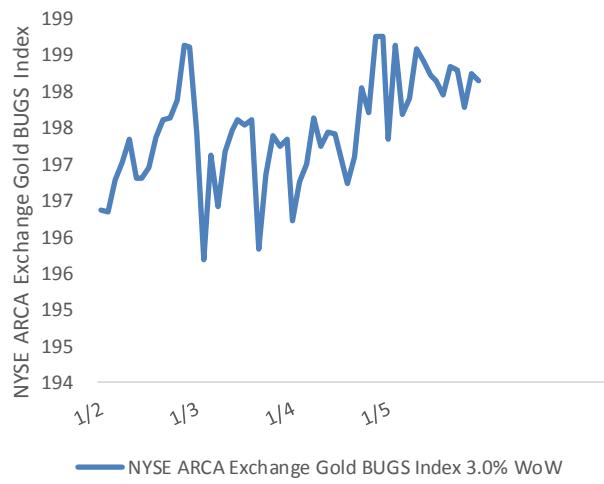
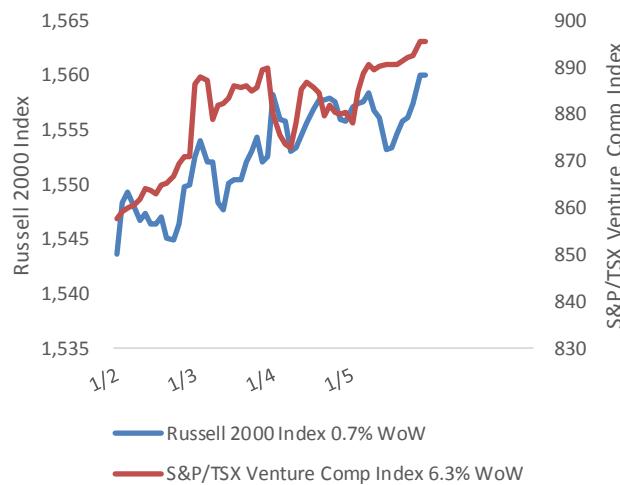
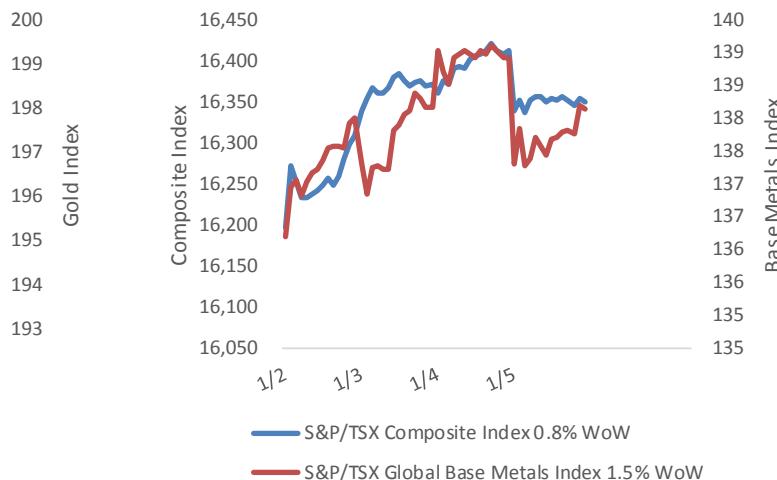
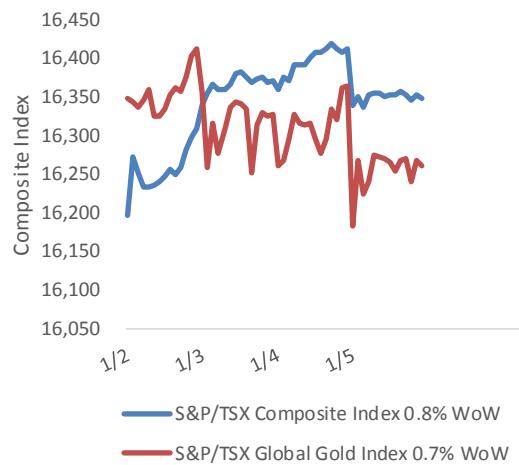
## Upcoming Macroeconomic News and Events

Date	Event	Period	Survey	Prior	Relevance
<b>United States</b>					
01/10/2018	MBA Mortgage Applications	5-Jan	--	0.70%	92
01/10/2018	Wholesale Inventories MoM	Nov F	--	0.70%	81
01/11/2018	Initial Jobless Claims	6-Jan	--	250k	98
01/11/2018	PPI Final Demand MoM	Dec	0.20%	0.40%	87
01/12/2018	CPI MoM	Dec	0.20%	0.40%	96
01/12/2018	Retail Sales Advance MoM	Dec	0.40%	0.80%	92
Date	Event	Period	Survey	Prior	Relevance
<b>Canada</b>					
01/09/2018	Housing Starts	Dec	--	252.2k	80
Date	Event	Period	Survey	Prior	Relevance
<b>China</b>					
01/09/2018	PPI YoY	Dec	4.80%	5.80%	88
01/09/2018	CPI YoY	Dec	1.90%	1.70%	97
01/09/2018	Money Supply M2 YoY	Dec	9.20%	9.10%	82
12/13/2017	Industrial Production YoY	Nov	6.20%	6.20%	79

Source: Bloomberg



## Weekly Indices

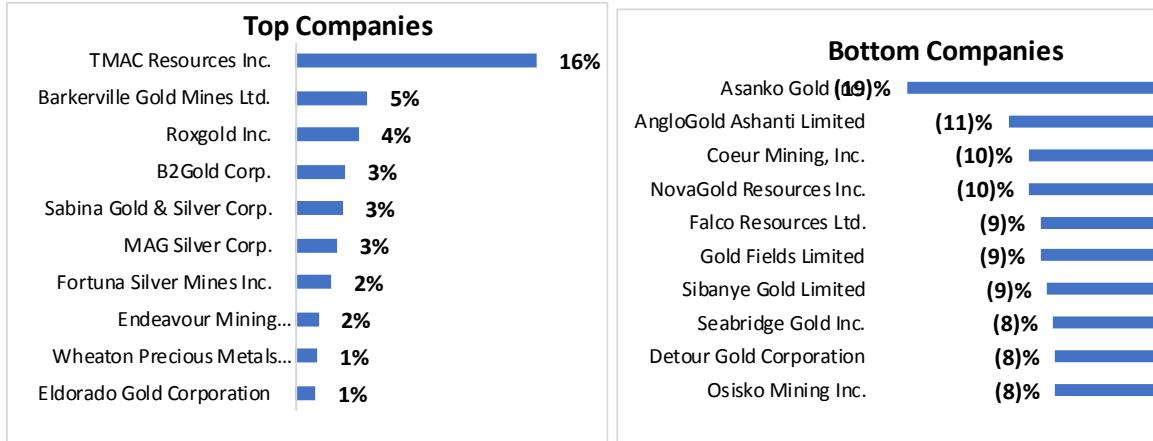


Source: Bloomberg and Haywood Securities



## Weekly Equities

Equity Weekly Performance – Precious Metals Companies (S&P/TSX Global Mining Index and Haywood Covered Companies)



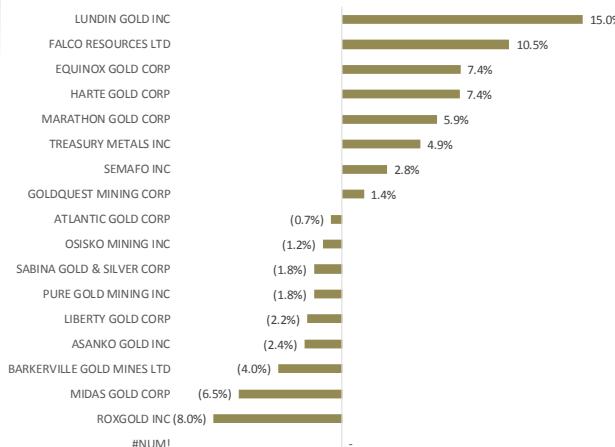
Source: Capital IQ and Haywood Securities

Ticker	Company	Close	1Wk		52Wk		1Wk	52Wk
			\$Δ	%Δ	High	Low		
TSX:AEM	Agnico Eagle Mines Limited	58.29	0.25	0%	68.76	52.36	TSX:LGD	Liberty Gold Corp.
TSX:ASR	Alacer Gold Corp.	2.22	(0.01)	(0)%	3.11	1.95	TSX:LUG	Lundin Gold Inc.
TSX:AGI	Alamos Gold Inc.	8.35	0.16	2%	11.83	7.53	TSX:MAG	MAG Silver Corp.
NYSE:AU	AngloGold Ashanti Limited	10.66	0.47	5%	13.68	8.86	TSX:MOZ	Marathon Gold Corporation
TSX:AR	Argonaut Gold Inc.	2.57	0.17	7%	2.98	1.76	NYSE:MUX	McEwen Mining Inc.
TSX:AZ	Arizona Mining Inc.	3.57	0.11	3%	3.68	1.70	TSX:MAX	Midas Gold Corp.
TSX:AKG	Asanko Gold Inc.	0.83	(0.06)	(7)%	5.07	0.55	TSX:NGD	New Gold Inc.
TSXV:AGB	Atlantic Gold Corporation	1.46	(0.07)	(5)%	1.87	0.85	NYSE:NEM	Newmont Mining Corporation
TSX:BTO	B2Gold Corp.	3.71	(0.17)	(4)%	4.64	2.96	TSX:NG	NovaGold Resources Inc.
TSXV:BGM	Barkerville Gold Mines Ltd.	0.72	(0.03)	(4)%	1.39	0.41	TSX:OGC	OceanaGold Corporation
TSX:ABK	Barrick Gold Corporation	18.53	0.35	2%	27.19	17.07	TSX:OR	Osisko Gold Royalties Ltd.
TSX:CG	Centerra Gold Inc.	6.08	(0.37)	(6)%	9.35	6.02	TSX:OSK	Osisko Mining Inc.
TSX:CGG	China Gold International Resources	2.38	0.03	1%	3.40	1.82	TSX:PAAS	Pan American Silver Corp.
NYSE:CDE	Coeur Mining, Inc.	7.40	(0.10)	(1)%	12.30	6.71	TSX:PG	Premier Gold Mines Limited
NYSE:BVN	Compañía de Minas Buenaventura S.	14.84	0.76	5%	15.12	10.87	TSX:PVG	Premium Resources Inc.
TSX:CNL	Continental Gold Inc.	3.47	0.09	3%	5.75	2.62	TSXV:PGM	Pure Gold Mining Inc.
TSX:DGC	Detour Gold Corporation	14.49	(0.29)	(2)%	21.48	12.50	NasdaqGS:GOLD	Randgold Resources Limited
TSX:ELD	Eldorado Gold Corporation	1.73	(0.09)	(5)%	5.13	1.39	TSX:ROXG	Roxgold Inc.
TSX:EDV	Endeavour Mining Corporation	25.07	(0.56)	(2)%	28.81	19.77	NasdaqGS:RGLD	Royal Gold, Inc.
TSX:EDR	Endeavour Silver Corp.	3.06	0.04	1%	6.44	2.50	TSX:SSB	Sabina Gold & Silver Corp.
TSXV:FPC	Falco Resources Ltd.	0.94	0.07	8%	1.65	0.80	TSX:SSL	Sandstorm Gold Ltd.
TSX:FR	First Majestic Silver Corp.	8.64	0.16	2%	14.36	7.51	NYSE:SA	Seabridge Gold Inc.
TSX:FVI	Fortuna Silver Mines Inc.	6.31	(0.26)	(4)%	9.18	5.13	TSX:SMF	SEMAFO Inc.
TSX:FNV	Franco-Nevada Corporation	97.50	(2.96)	(3)%	110.18	79.81	NYSE:SBGL	Sibanye Gold Limited
NYSE:GFI	Gold Fields Limited	4.31	0.01	0%	4.70	2.86	TSX:SVM	Silvercorp Metals Inc.
TSX:G	Goldcorp Inc.	16.66	0.63	4%	23.35	15.00	TSX:SSRM	SSR Mining Inc.
TSX:GSC	Golden Star Resources Ltd.	1.05	(0.06)	(5)%	1.33	0.76	TSX:THO	Tahoe Resources Inc.
TSX:GUY	Guyana Goldfields Inc.	4.79	(0.29)	(6)%	8.11	3.96	TSX:TMR	TMAC Resources Inc.
NYSE:HMY	Harmony Gold Mining Company Limi	1.85	(0.02)	(1)%	2.99	1.56	TSX:TXG	Torex Gold Resources Inc
TSX:HRT	Harte Gold Corp.	0.51	0.04	9%	0.87	0.30	TSX:TML	Treasury Metals Inc.
NYSE:HL	Hecla Mining Company	4.04	0.07	2%	6.78	3.43	TSX:WDO	Wesdome Gold Mines Ltd.
TSX:IMG	IAMGOLD Corporation	7.42	0.09	1%	8.87	4.54	TSX:WPM	Wheaton Precious Metals Corp.
TSX:IVN	Ivanhoe Mines Ltd.	4.22	(0.02)	(0)%	5.47	2.75	TSX:YRI	Yamana Gold Inc.
TSX:K	Kinross Gold Corporation	5.50	0.08	1%	6.29	4.24		
TSX:KL	Kirkland Lake Gold Ltd.	20.47	1.20	6%	20.44	7.33		
TSX:KDX	Klondex Mines Ltd.	3.05	(0.21)	(6)%	7.73	2.75		

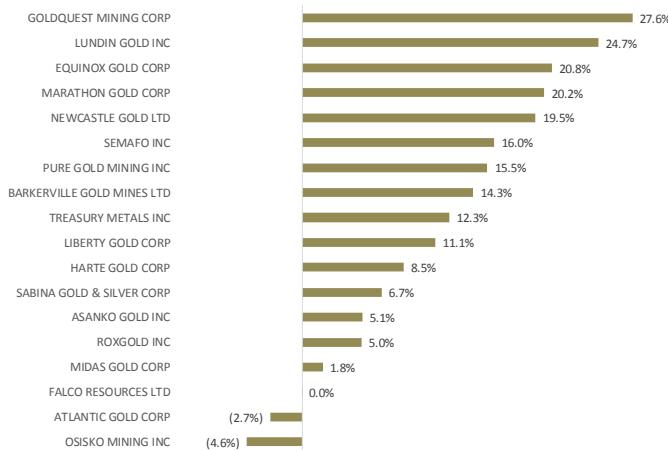
Weekly Performance – Precious Metals Companies (Small Cap)



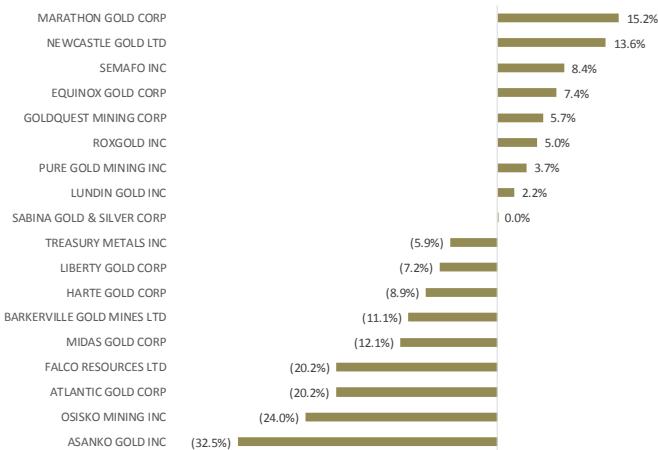
## Weekly Price Change



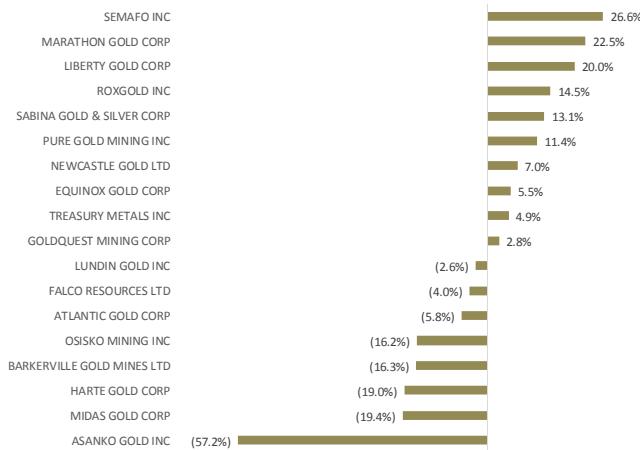
## 1-Month Price Change



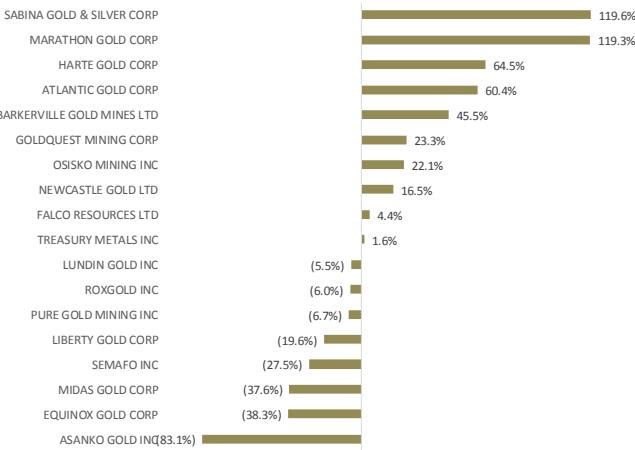
## 3-Month Price Change



## 6-Month Price Change



## 1-Year Price Change

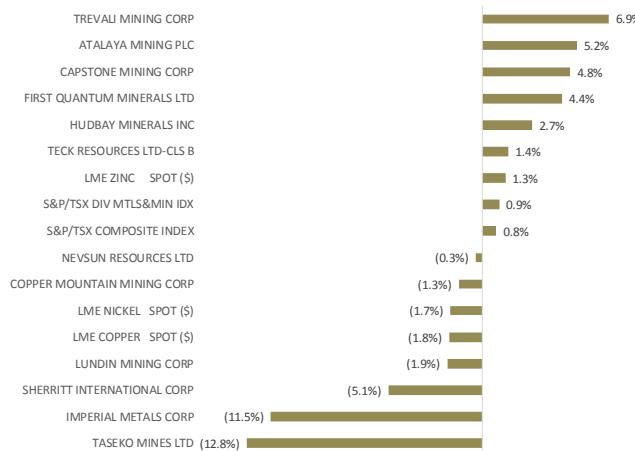


Source: Bloomberg and Haywood Securities

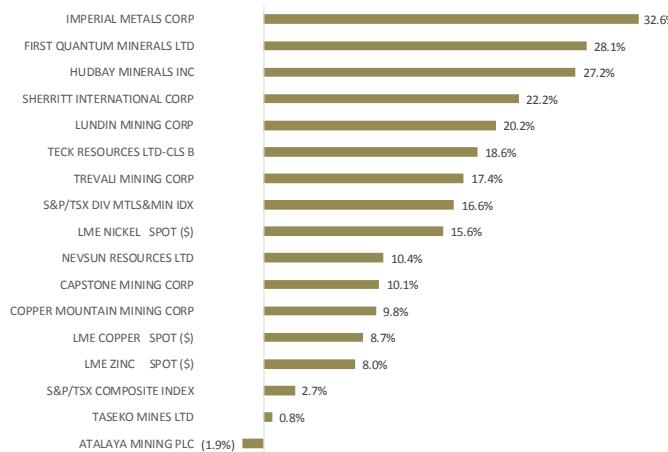


## Equity Weekly Performance – Base Metals Companies

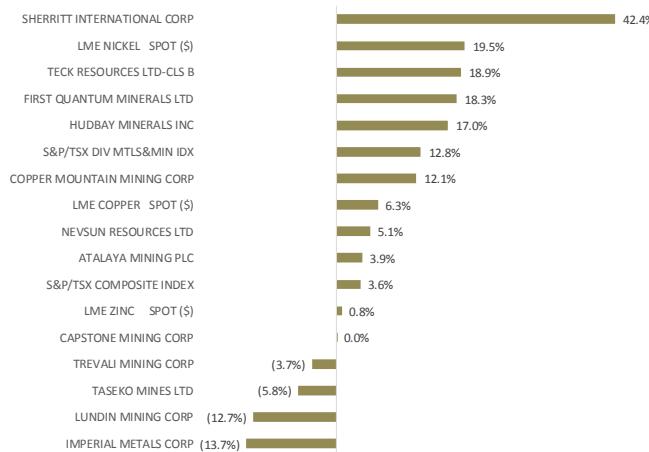
Weekly Price Change



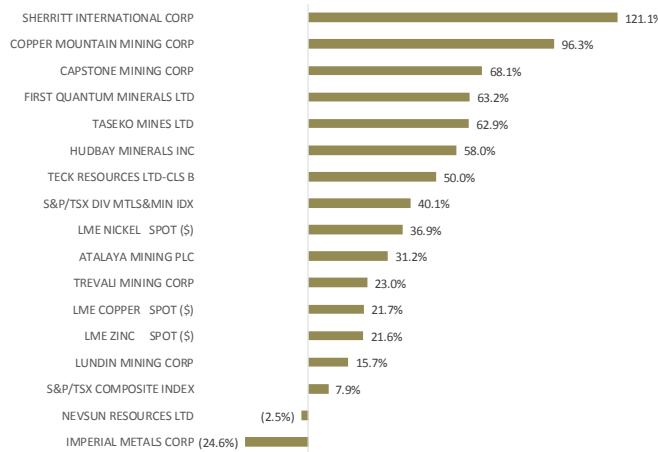
1-Month Price Change



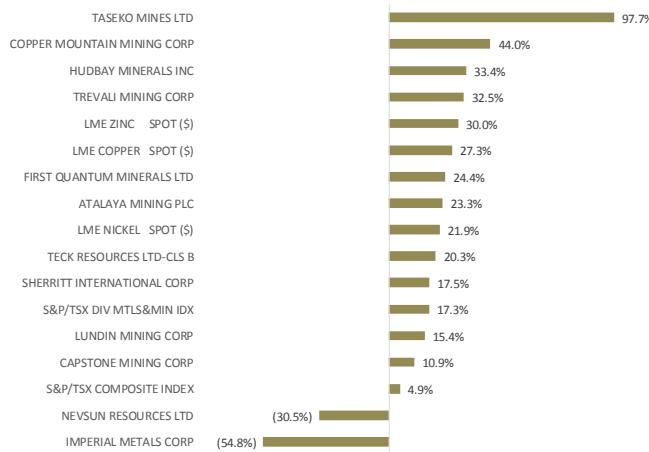
3-Month Price Change



6-Month Price Change



1-Year Price Change

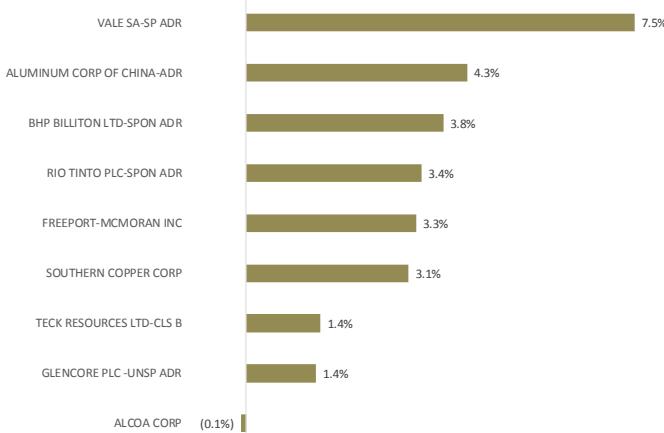


Source: Bloomberg and Haywood Securities

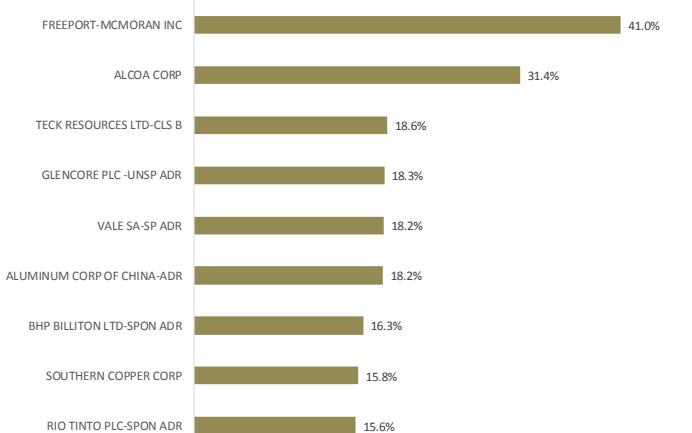


## Equity Weekly Performance – Major International Miners

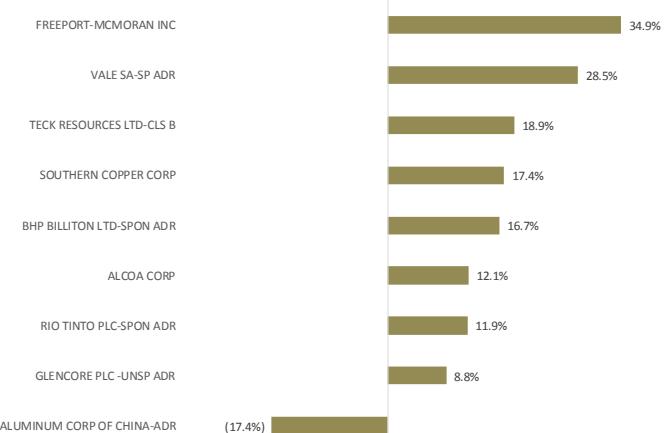
Weekly Price Change



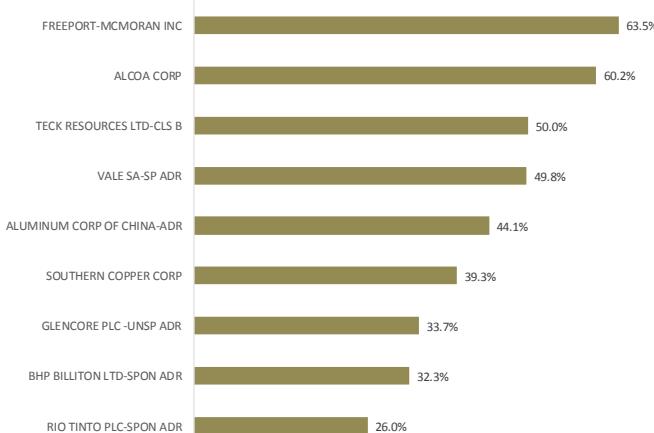
1-Month Price Change



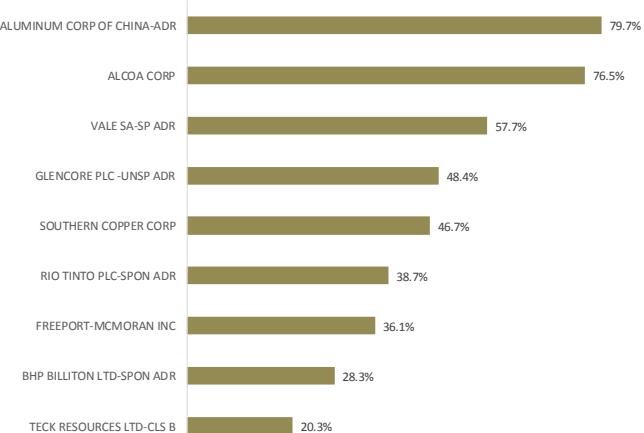
3-Month Price Change



6-Month Price Change



1-Year Price Change



Source: Bloomberg and Haywood Securities



## Comparables Tables – Precious Metals

## Large Cap Precious Metals Companies – Market and Valuation Statistics (Haywood Estimates)

Company	Ticker	Analyst	Last Price (C\$)	Shares O/S (M)	MC (\$C\$M)	Target (C\$)	Return (%)	Rating	NAVPS (US\$)	CFPS (US\$) 2017E	CFPS (US\$) 2018E	Primary Commodity	Production, ounces 000's 2017E	Production, ounces 000's 2018E	TCC, US\$/oz 2017E	TCC, US\$/oz 2018E	AISC, US\$/oz 2017E	AISC, US\$/oz 2018E	Price / NAV 2017E	Target / NAV 2017E	EV / CFPS 2017E	EV / CFPS 2018E	Target / CFPS 2017E	Target / CFPS 2018E	
Alamos Gold Inc.	TSX:AGI	AGI-T	KS \$8.37	389	\$3,256	\$10.00	19%	BUY	\$9.46	\$0.50	\$0.60	Gold	420	495	\$775	\$790	\$960	\$960	0.7x	0.9x	12.8x	10.7x	16.1x	13.4x	
B2Gold Corp.	TSX:BTO	BTO-T	GM \$3.72	977	\$3,636	\$5.00	34%	BUY	\$3.64	\$0.37	\$0.77	Gold	520	936	\$635	\$620	\$964	\$775	0.8x	1.1x	9.9x	4.7x	10.9x	5.2x	
Barrick Gold Corp	TSX:ABX	ABX-T	KS \$18.55	1,166	\$21,629	\$28.00	51%	BUY	\$11.80	\$2.17	\$2.20	Gold	5,340	5,000	\$525	\$430	\$546	\$546	1.3x	1.9x	9.6x	9.4x	10.4x	10.2x	
Detour Gold Corp.	TSX:DGC	DGC-T	KS \$14.54	175	\$2,542	\$26.00	79%	BUY	\$19.10	\$1.40	\$1.80	Gold	575	640	\$750	\$740	\$1,115	\$1,020	0.6x	1.1x	10.6x	8.2x	15.0x	11.7x	
Endeavour Mining Corp.	TSX:EDV	EDV-T	GM \$25.07	106	\$2,653	\$32.00	28%	BUY	\$19.16	\$1.92	\$2.86	Gold	606	745	\$719	\$624	\$892	\$764	1.1x	1.3x	11.9x	8.0x	13.4x	9.0x	
Eldorado Gold Corp.	TSX:ELD	ELD-T	KS \$1.76	792	\$1,394	\$2.50	42%	BUY	\$4.08	\$0.11	\$0.15	Gold	270	332	\$535	\$635	\$546	\$546	0.3x	0.5x	14.5x	10.5x	18.6x	13.4x	
OceanGold Corporation	TSX:OGC	OGC-T	GM \$3.26	615	\$2,005	\$4.20	29%	HOLD	\$1.69	\$0.54	\$0.65	Gold	545	547	\$421	\$538	\$697	\$767	1.6x	2.0x	5.8x	4.8x	6.3x	5.2x	
Osisko Gold Royalties Ltd.	TSX:OR	OR-T	KS \$14.21	157	\$2,231	\$19.00	34%	BUY	\$12.14	\$0.50	\$0.71	Gold	59	88	-	-	-	-	0.9x	1.3x	24.1x	17.0x	30.6x	26.8x	
Tahoe Resources Inc.*	TSX:THO	THO-T	GM \$6.11	313	\$1,911	\$7.25	19%	HOLD	\$4.74	\$0.77	\$0.90	Gold	568	693	\$652	\$710	\$1,221	\$1,177	1.0x	1.2x	6.0x	5.1x	7.6x	6.5x	
<b>Group Average</b>																				<b>0.9x</b>	<b>1.3x</b>	<b>11.7x</b>	<b>8.7x</b>	<b>14.3x</b>	<b>11.3x</b>

C\$/\$US\$ = 1.240

Source: Bloomberg and Haywood Securities

## Small Cap Precious Metals Companies – Market and Valuation Statistics (Haywood Estimates)

Company	Ticker	Analyst	Last Price (C\$)	Shares O/S (M)	MC (\$C\$M)	Target (C\$)	Return (%)	Rating	NAVPS (US\$)	CFPS (US\$) 2017E	CFPS (US\$) 2018E	Primary Commodity	Production, ounces 000's 2017E	Production, ounces 000's 2018E	TCC, US\$/oz 2017E	TCC, US\$/oz 2018E	AISC, US\$/oz 2017E	AISC, US\$/oz 2018E	Price / NAV 2017E	Target / NAV 2017E	EV / CFPS 2017E	EV / CFPS 2018E	Target / CFPS 2017E	Target / CFPS 2018E	
Asanko Gold Inc.	TSX:AKG	AKG-T	GM \$0.83	203	\$169	\$2.00	141%	HOLD	\$3.33	\$0.49	\$0.55	Gold	212	264	\$667	\$801	\$950	\$901	0.2x	0.5x	2.4x	2.1x	3.3x	2.9x	
Atlantic Gold Corporation	TSX:AGB	AGB-V	GM \$1.46	182	\$266	\$1.80	23%	BUY	\$1.45	(\$0.04)	\$0.25	Gold	9	94	-	\$465	-	\$513	0.8x	1.0x	-	6.8x	-	0.8x	
Barkerville Gold Mines Ltd.	TSXV:BGM	BGM-V	MC \$0.71	435	\$309	\$1.60	125%	BUY	\$1.27	(\$0.10)	(\$0.04)	Gold	-	-	-	-	-	-	0.5x	1.0x	-	-	-	-	
Equinox Gold Corp.	TSXV:EQX	EQX-V	KS \$1.16	423	\$491	\$2.80	141%	BUY	\$2.07	-	-	Gold	-	-	-	-	-	-	0.5x	1.1x	-	-	-	-	
Falco Resources Ltd.	TSXV:FPC	FPC-V	PV \$0.94	181	\$170	\$2.00	113%	BUY	\$1.88	(\$0.02)	(\$0.07)	Gold	-	-	-	-	-	-	0.4x	0.9x	-	-	-	-	
Goldquest Mining Corp.	TSXV:GQC	GQC-V	PV \$0.37	254	\$93	\$0.60	64%	BUY	\$0.75	(\$0.03)	(\$0.02)	Gold	-	-	-	-	-	-	0.4x	0.6x	-	-	-	-	
Harte Gold Corp.	TSX:HRT	HRT-T	PV \$0.51	562	\$287	\$0.90	76%	BUY	\$0.59	(\$0.01)	\$0.04	Gold	-	46	-	\$756	-	\$887	0.7x	1.2x	-	8.3x	-	18.1x	
Liberty Gold Corp.	TSX:LGD	LGD-T	MC \$0.46	151	\$69	\$1.00	117%	BUY	\$0.86	(\$0.06)	(\$0.02)	Gold	-	-	-	-	-	-	0.4x	0.9x	-	-	-	-	
Lundin Gold Inc.	TSX:LUJ	LUJ-T	KS \$5.20	120	\$622	\$7.75	49%	BUY	\$6.29	-	-	Gold	-	-	-	-	-	-	0.7x	1.0x	-	-	-	-	
Marathon Gold Corporation	TSX:MOZ	MOZ-T	MC \$1.25	145	\$181	\$1.50	20%	BUY	\$1.36	(\$0.03)	(\$0.09)	Gold	-	-	-	-	-	-	0.9x	1.1x	-	-	-	-	
Midas Gold Corp.	TSX:MAX	MAX-T	GM \$0.58	186	\$108	\$7.75	1236%	BUY	\$1.08	(\$0.05)	(\$0.01)	Gold	-	-	-	-	-	-	0.4x	5.8x	-	-	-	-	
Nighthawk Gold Corp.	TSX:NHK	NHK-T	MC \$0.70	189	\$132	\$1.30	86%	BUY	\$1.00	(\$0.01)	(\$0.10)	Gold	-	-	-	-	-	-	0.6x	1.0x	-	-	-	-	
Osisko Mining Inc.	TSX:OSK	OSK-T	MC \$3.32	208	\$689	\$6.50	96%	BUY	\$4.86	\$0.01	(\$0.02)	Gold	-	-	-	-	-	-	0.6x	1.1x	252.6x	-	563.6x	-	
Pure Gold Mining Inc.	TSX:PGM	PGM-V	MC \$0.56	223	\$125	\$1.00	79%	BUY	\$0.82	(\$0.10)	(\$0.08)	Gold	-	-	-	-	-	-	0.5x	1.0x	-	-	-	-	
RNC Minerals	TSX:RNX	RNX-T	PV \$0.17	308	\$52	\$0.25	47%	HOLD	\$0.25	(\$0.00)	\$0.02	Gold	35	69	\$1,239	\$777	\$1,501	\$952	0.5x	0.8x	-	6.2x	-	8.6x	
Roxgold Inc.	TSX:ROXG	ROXG-T	GM \$1.27	372	\$472	\$1.90	50%	BUY	\$1.24	\$0.26	\$0.25	Gold	126	143	\$481	\$462	\$759	\$716	0.8x	1.2x	3.9x	4.1x	5.9x	6.1x	
Sabina Gold & Silver Corp.	TSX:SSB	SSB-T	GM \$2.24	227	\$508	\$2.50	12%	HOLD	\$2.03	(\$0.01)	(\$0.01)	Gold	-	-	-	-	-	-	0.9x	1.0x	-	-	-	-	
SEMAFO Inc.	TSX:SMF	SMF-T	KS \$3.62	325	\$1,176	\$4.50	24%	BUY	\$3.77	\$0.30	\$0.31	Gold	210	200	\$715	\$700	\$1,015	\$945	0.6x	1.0x	9.0x	8.7x	12.1x	11.7x	
Superior Gold Inc.	TSX:SGI	SGI-V	PV \$1.15	96	\$110	\$1.50	30%	BUY	\$1.18	\$0.21	\$0.22	Gold	79	87	\$922	\$846	\$1,091	\$937	0.8x	1.0x	2.7x	5.7x	5.7x	5.6x	
Treasury Metals Inc.	TSX:TML	TML-T	GM \$0.64	123	\$79	\$1.20	88%	BUY	\$0.97	(\$0.06)	(\$0.02)	Gold	-	-	-	-	-	-	0.7x	1.2x	-	-	-	-	
<b>Group Average</b>																				<b>0.6x</b>	<b>1.2x</b>	<b>54.1x</b>	<b>5.6x</b>	<b>118.1x</b>	<b>7.7x</b>

\* Production &amp; cost figures presented on a gold-equivalent basis

C\$/\$US\$ = 1.240

Source: Bloomberg and Haywood Securities



## Precious Metals Companies - Market and Valuation Statistics (Consensus Estimates)

Company	Symbol	Price	Shares O/S (millions)	Market Capitalization (millions)	Cash (millions)	Working Capital (millions)	Debt (millions)	Enterprise Value (millions)	2017E	2018E	Number of Estimates	P/CF Ratio		EV/CF Ratio		EV/EBITDA Ratio	
									CFPS	CFPS		2017E	2018E	2017E	2018E	2017E	2018E
<b>Senior Precious Metals Producers</b>																	
Agnico Eagle Mines Limited	NYSE:AEM	C\$ 58.29	230.2	US\$ 10,823	US\$ 989	US\$ 1,265	US\$ 1,372	US\$ 10,931	US\$ 3.45	US\$ 3.47	11	13.6x	13.6x	13.7x	13.7x	12.5x	11.4x
AngloGold Ashanti Limited	JSE:ANG	C\$ 13.09	410.0	US\$ 4,330	US\$ 171	US\$ 422	US\$ 2,312	US\$ 6,220	US\$ 2.29	US\$ 3.22	6	4.6x	3.3x	6.6x	4.7x	3.6x	5.0x
Barick Gold Corporation	TSX:ABX	C\$ 18.55	1166.0	US\$ 17,447	US\$ 2,025	US\$ 3,004	US\$ 6,346	US\$ 20,789	US\$ 2.04	US\$ 2.30	9	7.3x	6.5x	8.7x	7.7x	5.2x	5.1x
Compañia de Minas Buenaventura S.A.A.	NYSE:BVN	C\$ 18.40	254.0	US\$ 3,769	US\$ 185	US\$ 114	US\$ 272	US\$ 3,927	US\$ 1.12	US\$ 1.65	3	13.2x	9.0x	13.8x	9.4x	11.6x	10.6x
Eldorado Gold Corporation	TSX:ELD	C\$ 1.76	792.3	US\$ 1,125	US\$ 551	US\$ 700	US\$ 593	US\$ 1,018	US\$ 0.11	US\$ 0.20	13	13.4x	7.1x	12.2x	6.4x	5.2x	7.8x
Evolution Mining Limited	ASX:EVN	C\$ 2.55	1692.6	US\$ 3,484	US\$ 29	US\$ 75	US\$ 294	US\$ 3,703	US\$ 0.30	US\$ 0.31	6	6.8x	6.7x	7.2x	7.1x	7.9x	6.8x
Fresnillo PLC	LSE:FRES	C\$ 23.45	736.9	US\$ 13,937	US\$ 885	US\$ 1,339	US\$ 798	US\$ 13,396	US\$ 1.03	US\$ 1.34	6	18.4x	14.1x	17.7x	13.6x	13.1x	12.3x
Gold Fields Limited	JSE:GFI	C\$ 5.45	820.6	US\$ 3,607	US\$ 493	US\$ 149	US\$ 1,574	US\$ 5,033	US\$ 0.99	US\$ 1.17	4	4.5x	3.7x	6.2x	5.2x	3.7x	4.1x
Goldcorp Inc.	TSX:KG	C\$ 16.68	867.2	US\$ 11,668	US\$ 195	(US\$ 3)	US\$ 2,083	US\$ 13,754	US\$ 1.37	US\$ 1.66	18	9.8x	8.1x	11.6x	9.6x	9.5x	9.2x
Kinross Gold Corporation	TSX:K	C\$ 5.52	1247.0	US\$ 5,553	US\$ 1,050	US\$ 1,731	US\$ 1,732	US\$ 5,553	US\$ 0.75	US\$ 0.85	18	5.9x	5.3x	5.9x	5.3x	5.0x	4.6x
Newcrest Mining Limited	ASX:NCL	C\$ 22.68	766.1	US\$ 14,017	US\$ 493	US\$ 585	US\$ 1,991	US\$ 15,423	US\$ 1.51	US\$ 1.65	7	12.2x	11.1x	13.4x	12.2x	11.3x	10.9x
Newmont Mining Corporation	NYSE:NEM	C\$ 47.60	533.3	US\$ 20,480	US\$ 3,045	US\$ 3,658	US\$ 4,036	US\$ 20,857	US\$ 4.19	US\$ 4.08	9	9.2x	9.4x	9.3x	9.6x	7.2x	8.1x
Randgold Resources Limited	LSE:RRS	C\$ 122.20	94.1	US\$ 9,273	US\$ 622	US\$ 813	US\$ 3	US\$ 8,463	US\$ 5.51	US\$ 6.28	8	17.9x	15.7x	16.3x	14.3x	15.4x	12.6x
Yamana Gold Inc.	TSX:YRI	C\$ 4.03	948.5	US\$ 3,083	US\$ 248	(US\$ 10)	US\$ 1,643	US\$ 4,736	US\$ 0.48	US\$ 0.68	17	6.8x	4.8x	10.5x	7.4x	7.3x	7.5x
<b>Group Average - Senior Producers</b>												10.3x	8.5x	10.9x	9.0x	8.5x	8.3x
<b>Group Average - Senior Producers (excluding high/low)</b>												10.1x	8.3x	10.8x	8.9x	8.3x	8.3x
<b>Intermediate Precious Metals Producers</b>																	
Acacia Mining plc	LSE:ACA	C\$ 3.31	410.1	US\$ 1,096	US\$ 176	US\$ 390	-	US\$ 706	US\$ 0.51	US\$ 1.01	3	5.3x	2.6x	3.4x	1.7x	1.7x	2.5x
Alamos Gold Inc.	TSX:AGI	C\$ 8.37	389.1	US\$ 2,627	US\$ 167.7	US\$ 274.4	US\$ 1.7	US\$ 2,354.1	US\$ 0.57	US\$ 0.67	10	11.8x	10.1x	10.6x	9.1x	16.3x	13.1x
B2Gold Corp.	TSX:BTO	C\$ 3.72	977.5	US\$ 2,933	US\$ 90	US\$ 634	US\$ 3,532	US\$ 0.23	US\$ 0.51	12	13.3x	5.8x	16.0x	7.0x	11.0x	13.2x	
Centamin Plc	LSE:CEY	C\$ 2.63	1150.0	US\$ 2,442	US\$ 313.1	US\$ 402.6	US\$ 0.0	US\$ 2,039.1	US\$ 0.25	US\$ 0.22	5	8.5x	9.8x	7.1x	8.2x	5.5x	6.1x
Centra Gold Inc.	TSX:CG	C\$ 6.08	291.8	US\$ 1,431	US\$ 352	US\$ 616	US\$ 248	US\$ 1,063	US\$ 1.70	US\$ 1.33	10	2.9x	3.7x	2.1x	2.7x	2.4x	1.9x
Detour Gold Corporation	TSX:DGC	C\$ 14.54	174.8	US\$ 2,051	US\$ 113.9	US\$ 170.5	US\$ 297.5	US\$ 2,177.8	US\$ 1.51	US\$ 1.93	17	7.8x	6.1x	8.2x	6.4x	9.6x	8.3x
Endeavour Mining Corporation	TSX:EDV	C\$ 25.07	105.8	US\$ 2,140	US\$ 97	US\$ 142	US\$ 322	US\$ 2,321	US\$ 2.10	US\$ 3.47	6	9.6x	5.8x	10.5x	6.3x	9.6x	10.1x
Guyana Goldfields Inc.	TSX:GYU	C\$ 4.80	173.1	US\$ 670	US\$ 110.5	US\$ 127.9	US\$ 44.5	US\$ 586.6	US\$ 0.44	US\$ 0.66	6	8.7x	5.9x	7.6x	5.2x	6.8x	7.7x
Harmony Gold Mining Company Limited	NYSE:HMY	C\$ 2.28	444.7	US\$ 819	US\$ 95	US\$ 83	US\$ 23	US\$ 758	US\$ 0.67	US\$ 0.58	5	2.7x	3.2x	2.5x	2.3x	2.1x	2.0x
Hecla Mining Company	NYSE:HL	C\$ 5.02	399.0	US\$ 1,616	US\$ 205.9	US\$ 195.5	US\$ 501.9	US\$ 1,922.4	US\$ 0.35	US\$ 0.51	7	11.5x	7.9x	13.6x	9.4x	8.1x	10.2x
IAMGOLD Corporation	TSX:IMG	C\$ 7.42	465.9	US\$ 2,788	US\$ 811	US\$ 852	US\$ 389	US\$ 2,325	US\$ 0.64	US\$ 0.72	15	9.3x	8.3x	7.8x	6.9x	7.2x	7.0x
Kirkland Lake Gold Ltd.	TSX:KXL	C\$ 20.44	207.0	US\$ 3,413	US\$ 210.5	US\$ 102.1	US\$ 0.0	US\$ 3,310.6	US\$ 149	US\$ 203	8	11.0x	8.1x	10.7x	7.9x	20.1x	9.2x
Kondex Mines Ltd.	TSX:KDX	C\$ 3.05	179.6	US\$ 442	US\$ 21	US\$ 17	US\$ 14	US\$ 439	US\$ 0.37	US\$ 0.65	9	6.7x	3.8x	6.7x	3.8x	5.4x	5.2x
New Gold Inc.	TSX:NGD	C\$ 4.26	577.8	US\$ 1,986	US\$ 207.1	US\$ 304.5	US\$ 977.0	US\$ 2,658.1	US\$ 0.49	US\$ 0.70	16	7.0x	4.9x	9.4x	6.6x	8.9x	8.3x
Northern Star Resources Limited	ASX:NST	C\$ 5.89	603.2	US\$ 2,867	US\$ 309	US\$ 239	-	US\$ 2,628	US\$ 0.45	US\$ 0.47	6	10.6x	10.2x	9.7x	9.3x	8.4x	7.8x
OceanaGold Corporation	TSX:OGC	C\$ 3.26	615.1	US\$ 1,618	US\$ 612	US\$ 197	US\$ 200	US\$ 1,798.0	US\$ 0.54	US\$ 0.55	13	4.9x	4.8x	5.4x	5.4x	6.4x	4.9x
Pretium Resources Inc.	TSX:PVG	C\$ 14.29	182.0	US\$ 2,098	US\$ 54	US\$ 7	US\$ 715	US\$ 2,806	US\$ 0.54	US\$ 1.78	7	21.2x	6.5x	28.4x	8.7x	-	27.1x
Premier Gold Mines Limited	TSX:PG	C\$ 3.58	202.2	US\$ 584	US\$ 138.4	US\$ 93.8	US\$ 0.0	US\$ 490.2	US\$ 0.32	US\$ 0.11	9	8.9x	27.5x	7.5x	23.1x	13.2x	6.0x
Regis Resources Limited	ASX:RRL	C\$ 4.22	504.0	US\$ 1,714	US\$ 92	US\$ 108	-	US\$ 1,607	US\$ 0.32	US\$ 0.33	6	10.8x	10.3x	10.1x	9.6x	9.8x	8.4x
Resolute Mining Limited	ASX:RSR	C\$ 1.14	741.5	US\$ 682	US\$ 219.2	US\$ 288.5	US\$ 0.0	US\$ 393.0	US\$ 0.19	US\$ 0.13	4	4.8x	7.3x	2.8x	4.2x	2.5x	2.7x
SEMAFO Inc.	TSX:SMF	C\$ 3.62	325.0	US\$ 949	US\$ 257	US\$ 254	US\$ 115	US\$ 810	US\$ 0.31	US\$ 0.47	9	9.4x	6.2x	8.0x	5.3x	5.5x	7.2x
Tahoe Resources Inc.	TSX:THO	C\$ 6.11	312.8	US\$ 1,542	US\$ 182.4	US\$ 178.1	US\$ 0.0	US\$ 1,363.5	US\$ 0.78	US\$ 0.98	13	6.4x	5.0x	5.6x	4.4x	3.5x	4.7x
TMAC Resources Inc.	TSX:TMR	C\$ 10.77	91.6	US\$ 796	US\$ 14	US\$ 60	US\$ 152	US\$ 888	(US\$ 0.12)	US\$ 1.11	3	-	7.8x	-	8.7x	-	570.4x
Torex Gold Resources Inc.	TSX:TXG	C\$ 10.35	79.9	US\$ 667	US\$ 66.5	US\$ 52.3	US\$ 343.0	US\$ 957.4	US\$ 1.20	US\$ 2.26	5	6.9x	3.7x	10.0x	5.3x	5.6x	8.2x
<b>Group Average - Intermediate Producers</b>												8.7x	7.3x	8.9x	7.0x	7.7x	31.3x
<b>Group Average - Intermediate Producers (excluding high/low)</b>												8.1x	6.6x	8.0x	6.5x	2.4x	8.2x
<b>Junior Precious Metals Producers</b>																	
Alacer Gold Corp.	TSX:ASR	C\$ 2.21	293.1	US\$ 522	US\$ 132	US\$ 143	US\$ 126	US\$ 506	US\$ 0.32	US\$ 0.28	9	5.5x	6.5x	5.4x	6.3x	14.0x	6.1x
Alio Gold Inc.	TSX:ALO	C\$ 4.54	44.7	US\$ 164	US\$ 68.5	US\$ 73.0	US\$ 0.0	US\$ 90.7	US\$ 0.68	US\$ 0.77	11	5.4x	4.8x	3.0x	2.6x	2.1x	3.0x
Argonaut Gold Inc.	TSX:AR	C\$ 2.56	177.2	US\$ 366	US\$ 37	US\$ 78	-	US\$ 288	US\$ 0.28	US\$ 0.45	8	7.4x	4.6x	5.8x	3.7x	7.0x	6.0x
Asanko Gold Inc.	TSX:AKG	C\$ 0.83	203.4	US\$ 136	US\$ 60.8	US\$ 47.4	US\$ 139.3	US\$ 228.1	US\$ 0.55	US\$ 0.34	7	1.2x	2.0x	2.0x	3.3x	3.2x	2.0x
Brio Gold Inc.	TSX:BRO	C\$ 1.97	117.6	US\$ 187	US\$ 10	US\$ 30	US\$ 60	US\$ 217	US\$ 0.38	US\$ 0.89	3	4.2x	1.8x	4.9x	2.1x	2.9x	5.2x
Dundee Precious Metals Inc.	TSX:DPM	C\$ 3.03	178.5	US\$ 436	US\$ 22.0	US\$ 30.0	US\$ 0.0	US\$ 406.2	US\$ 0.48	US\$ 0.62	4	5.1x	4.0x	4.8x	3.7x	6.7x	4.2x
Golden Star Resources Ltd.	TSX:GSC	C\$ 1.05	380.6	US\$ 322	US\$ 30	(US\$ 42)	US\$ 82	US\$ 446	US\$ 0.19	US\$ 0.22	5	4.5x	3.9x	6.2x	5.4x	31.1x	5.3x
Highland Gold Mining Limited	AIM:HGM	C\$ 2.86	325.2	US\$ 750	US\$ 4.3	US\$ 48.9	US\$ 180.4	US\$ 881.4	US\$ 0.41	US\$ 0.45	1	5.6x	5.1x	6.6x	6.0x	6.6x	5.6x
Leagold Mining Corporation	TSX:LMC	C\$ 3.10	151.3	US\$ 378	US\$ 53	US\$ 94	US\$ 143	US\$ 428	US\$ 0.28	US\$ 0.52	3	8.9x	4.8x	10.1x	5.4x	-	11.8x
McEwen Mining Inc.	TSX:MUX	C\$ 2.84	357.9	US\$ 820	US\$ 76.3	US\$ 82.7	US\$ 0.0	US\$ 737.2	-	US\$ 0.03	1	-	76.4x	-	68.7x	-	-
Primer Mining Corp.	TSX:P	C\$ 0.09	192.8	US\$ 14	US\$ 15	US\$ 20	US\$ 47	US\$ 41	US\$ 0.14								



## Other Precious Metals Companies – Market and Valuation Statistics (Consensus Estimates)

Company	Symbol	Price	Shares O/S (millions)	Market Capitalization (millions)	Cash (millions)	Working Capital (millions)	Debt (millions)	Enterprise Value (millions)	2017E CFPS	2018E CFPS	Number of Estimates	P/CF Ratio	EV/CF Ratio	EV/EBITDA Ratio		
												2017E	2018E	2017E	2018E	
<b>PGM Producers</b>																
Impala Platinum Holdings Limited	JSE:IMP	C\$ 3.34	702.3	US\$ 1,891	US\$ 599	US\$ 946	US\$ 544	US\$ 1,489	US\$ 0.25	US\$ 0.43	4	10.6x	6.3x	8.4x	5.0x	
Lonmin plc	LSE:LMI	C\$ 1.44	283.1	US\$ 328	US\$ 229	US\$ 472	US\$ 154	US\$ 10	(US\$ 0.03)	US\$ 0.28	3	-	4.1x	-	0.1x	
North American Palladium Ltd.	TSX:PDL	C\$ 9.34	58.1	US\$ 438	US\$ 10	US\$ 9	US\$ 35	US\$ 464	-	-	0	-	-	-	-	
<b>Group Average - PGM Producers</b>												10.6x	5.2x	8.4x	2.5x	
<b>Silver Producers</b>																
Americas Silver Corporation	TSX:USA	C\$ 5.21	41.1	US\$ 173	US\$ 9	US\$ 15	US\$ 12	US\$ 170	US\$ 0.22	US\$ 0.91	2	19.2x	4.6x	18.9x	4.6x	
Aurcana Corporation	TSXV:AUN	C\$ 0.26	84.7	US\$ 18	US\$ 1	US\$ 1	-	US\$ 17	-	-	0	-	-	-	-	
Coeur Mining, Inc.	NYSE:CDE	C\$ 9.20	185.6	US\$ 1,377	US\$ 236	US\$ 345	US\$ 245	US\$ 1,277	US\$ 0.84	US\$ 1.38	4	8.9x	5.4x	8.2x	5.0x	
Endeavour Silver Corp.	TSX:EDR	C\$ 3.06	127.5	US\$ 315	US\$ 44	US\$ 70	-	US\$ 244	US\$ 0.17	US\$ 0.31	6	14.6x	7.9x	11.4x	6.1x	
First Majestic Silver Corp.	TSX:FR	C\$ 8.64	165.7	US\$ 1,155	US\$ 133	US\$ 126	US\$ 26	US\$ 1,055	US\$ 0.47	US\$ 0.72	5	14.7x	9.7x	13.5x	8.8x	
Fortuna Silver Mines Inc.	TSX:FVI	C\$ 6.30	159.6	US\$ 811	US\$ 197	US\$ 198	US\$ 40	US\$ 653	US\$ 0.50	US\$ 0.59	5	10.2x	8.6x	8.2x	7.0x	
Hecla Mining Company	NYSE:HL	C\$ 5.02	399.0	US\$ 1,616	US\$ 206	US\$ 196	US\$ 40	US\$ 502	US\$ 1,922	US\$ 0.35	US\$ 0.51	7	11.5x	7.9x	13.6x	9.4x
Mandalay Resources Corporation	TSX:MND	C\$ 0.27	451.3	US\$ 96	US\$ 25	US\$ 35	US\$ 16	US\$ 77	US\$ 0.07	US\$ 0.07	2	3.2x	2.9x	2.6x	2.4x	
Pan American Silver Corp.	TSX:PAAS	C\$ 19.37	153.2	US\$ 2,393	US\$ 186	US\$ 410	US\$ 21	US\$ 2,004	US\$ 1.41	US\$ 1.84	8	11.1x	8.5x	9.3x	7.1x	
SSR Mining Inc.	TSX:SSRM	C\$ 10.62	119.7	US\$ 1,025	US\$ 534	US\$ 684	US\$ 230	US\$ 571	US\$ 1.10	US\$ 0.99	7	7.8x	8.6x	4.3x	4.8x	
Silvercorp Metals Inc.	TSX:SVM	C\$ 3.50	168.2	US\$ 475	US\$ 99	US\$ 78	-	US\$ 397	US\$ 0.42	US\$ 0.45	1	6.7x	6.3x	5.6x	5.2x	
<b>Group Average - Silver Producers</b>												9.9x	7.3x	9.6x	6.0x	
<b>Group Average - Silver Producers (excluding high/low)</b>												10.7x	7.2x	9.3x	6.1x	
<b>Diamond Producers</b>																
Lucara Diamond Corp.	TSX:LUC	C\$ 2.88	382.6	US\$ 889	US\$ 91	US\$ 93	-	US\$ 796	US\$ 0.25	US\$ 0.23	4	9.5x	10.2x	8.5x	9.1x	
Mountain Province Diamonds Inc.	TSX:MPVD	C\$ 3.51	160.2	US\$ 454	US\$ 12	(US\$ 78)	US\$ 246	US\$ 778	US\$ 0.37	US\$ 0.87	2	7.6x	3.2x	13.1x	5.6x	
Petra Diamonds Limited	LSE:PDL	C\$ 1.35	532.5	US\$ 581	US\$ 190	US\$ 60	US\$ 698	US\$ 1,219	US\$ 0.27	US\$ 0.33	4	4.1x	3.3x	8.6x	6.8x	
Stornoway Diamond Corporation	TSX:SWY	C\$ 0.67	835.3	US\$ 451	US\$ 42	US\$ 33	US\$ 154	US\$ 573	US\$ 0.05	US\$ 0.06	4	11.8x	8.6x	15.0x	11.0x	
<b>Group Average - Diamond Producers</b>												8.2x	6.3x	11.3x	8.1x	
<b>Royalty Companies</b>																
Anglo Pacific Group plc	LSE:APF	C\$ 2.72	180.0	US\$ 395	US\$ 7	US\$ 8	US\$ 8	US\$ 395	US\$ 0.26	US\$ 0.21	2	8.6x	10.4x	8.6x	10.4x	
Altius Minerals Corporation	TSX:ALS	C\$ 14.56	43.2	US\$ 507	US\$ 31	US\$ 23	US\$ 44	US\$ 528	US\$ 0.44	US\$ 0.79	2	26.5x	14.8x	27.6x	15.4x	
Franco-Nevada Corporation	TSX:FNV	C\$ 97.68	185.7	US\$ 14,634	US\$ 546	US\$ 632	-	US\$ 14,003	US\$ 2.67	US\$ 2.73	15	29.5x	28.8x	28.2x	27.6x	
Maverix Metals Inc.	TSXV:MMX	C\$ 1.77	153.6	US\$ 219	US\$ 26	US\$ 28	US\$ 10	US\$ 201	US\$ 0.06	US\$ 0.11	3	25.6x	13.0x	23.4x	11.8x	
Osisko Gold Royalties Ltd.	TSX:OR	C\$ 14.21	157.0	US\$ 1,800	US\$ 88	US\$ 91	US\$ 155	US\$ 1,864	US\$ 0.33	US\$ 0.50	12	35.0x	23.0x	36.2x	23.9x	
Royal Gold, Inc.	US:RGLD	C\$ 103.10	65.5	US\$ 5,444	US\$ 89	US\$ 116	US\$ 540	US\$ 5,868	US\$ 4.14	US\$ 4.47	9	20.1x	18.6x	21.7x	20.0x	
Sandstorm Gold Ltd.	TSX:SSL	C\$ 6.50	182.7	US\$ 958	US\$ 18	US\$ 20	-	US\$ 937	US\$ 0.26	US\$ 0.26	10	19.8x	19.9x	19.4x	19.5x	
Wheaton Precious Metals Corp.	TSX:WPM	C\$ 27.24	442.4	US\$ 9,721	US\$ 70	US\$ 65	US\$ 854	US\$ 10,510	US\$ 1.20	US\$ 1.30	16	18.3x	16.9x	19.8x	18.0x	
<b>Group Average - Royalty Companies</b>												23.6x	18.4x	23.6x	18.4x	
<b>Group Average - Royalty Companies (excluding high/low)</b>												24.3x	17.9x	24.1x	18.1x	

All data sourced from Capital IQ

Source: Capital IQ and Haywood Securities



## Senior Gold Producers - Production Statistics

	Symbol	Market	Working	Enterprise	Global Reserves & Resources						Reserves			Resources (M&I and Inferred)						Global				
		Capitalization (millions)	Capital (millions)	Value (millions)	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	EV/oz Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Inferred	Inferred	EV/oz Au	EV/oz AuEq
Agnico Eagle Mines Limited	NYSE:AEM	US \$10,823	US \$1,265	US \$10,934	53.8	1.95	59.9	2.17	90%	19.9	2.31	21.4	2.49	93%	US \$548	33.9	1.79	38.4	2.03	88%	51%	55%	US \$203	US \$183
AngloGold Ashanti Limited	JSE:ANG	US \$4,330	US \$422	US \$6,220	214.7	1.34	241.2	1.51	89%	50.1	0.91	52.2	0.95	96%	US \$124	164.7	1.57	189.0	1.80	87%	31%	35%	US \$29	US \$26
B2Gold Corp.	TSX:BTO	US \$2,933	US \$35	US \$3,532	22.5	0.74	28.9	0.96	78%	6.9	1.34	6.9	1.34	100%	US \$511	15.6	0.62	22.0	0.88	71%	46%	58%	US \$157	US \$122
Barrick Gold Corporation	TSX:ABX	US \$17,447	US \$3,004	US \$20,858	187.2	0.79	312.5	1.32	60%	89.9	1.22	123.2	1.68	73%	US \$232	97.4	0.60	189.3	1.16	51%	35%	34%	US \$111	US \$67
Compañía de Minas Buenaventura S.A.A.	NYSE:BVN	US \$3,769	US \$114	US \$4,353	22.1	0.21	111.4	1.05	20%	3.6	0.11	27.0	0.85	13%	US \$1,217	15.7	0.26	75.2	1.23	21%	30%	24%	US \$197	US \$39
Detour Gold Corporation	TSX:DGC	US \$2,051	US \$170	US \$2,178	21.5	0.96	21.5	0.96	100%	16.5	0.97	16.5	0.97	100%	US \$132	5.1	0.96	5.1	0.96	100%	23%	23%	US \$101	US \$101
Eldorado Gold Corporation	TSX:ELD	US \$1,125	US \$700	US \$1,018	42.4	0.91	59.3	1.28	71%	18.4	1.23	26.9	1.80	68%	US \$55	24.0	0.76	32.4	1.03	74%	54%	54%	US \$24	US \$17
Evolution Mining Limited	ASX:EVN	US \$3,484	US \$77	US \$3,707	18.3	0.95	23.7	1.22	77%	7.9	1.24	8.1	1.28	97%	US \$471	10.5	0.83	15.6	1.23	67%	34%	31%	US \$202	US \$156
Fresnillo PLC	LSE:FRES	US \$13,937	US \$1,339	US \$13,396	37.9	0.79	83.9	1.75	45%	9.6	0.76	21.9	1.74	44%	US \$1,403	28.0	0.79	61.7	1.74	45%	34%	51%	US \$353	US \$160
Gold Fields Limited	JSE:GFI	US \$3,607	US \$149	US \$5,033	105.7	2.01	127.2	2.41	83%	47.6	2.81	48.7	2.87	98%	US \$106	58.1	1.63	78.4	2.19	74%	48%	57%	US \$48	US \$40
Goldcorp Inc.	TSX:G	US \$11,668	US (\$3)	US \$13,998	136.7	0.64	242.9	1.14	56%	52.0	0.67	104.3	1.34	50%	US \$269	90.9	0.67	144.8	1.07	63%	28%	30%	US \$102	US \$58
IAMGOLD Corporation	TSX:IMG	US \$2,788	US \$852	US \$2,325	35.2	1.22	35.5	1.23	99%	14.3	1.22	14.3	1.22	100%	US \$163	20.8	1.21	21.2	1.23	98%	45%	46%	US \$66	US \$65
Kinross Gold Corporation	TSX:K	US \$5,553	US \$1,731	US \$5,553	59.0	0.71	60.3	0.73	98%	25.2	0.73	25.5	0.74	99%	US \$221	34.6	0.71	35.6	0.73	97%	16%	15%	US \$94	US \$92
Newcrest Mining Limited	ASX:NCM	US \$14,017	US \$585	US \$15,423	129.5	0.60	235.3	1.09	55%	65.0	0.60	122.9	1.14	53%	US \$237	64.5	0.59	111.5	1.02	58%	22%	22%	US \$119	US \$66
Newmont Mining Corporation	NYSE:NEM	US \$20,480	US \$3,658	US \$20,869	124.0	0.79	167.8	1.07	74%	68.6	0.96	75.8	1.06	90%	US \$304	55.3	0.65	91.8	1.09	60%	29%	20%	US \$168	US \$124
Randgold Resources Limited	LSE:RRS	US \$9,273	US \$813	US \$8,463	25.6	3.35	25.6	3.35	100%	14.5	3.85	14.5	3.85	100%	US \$584	11.1	2.86	11.1	2.86	100%	53%	53%	US \$330	US \$330
Yamana Gold Inc.	TSX:YRI	US \$3,083	US (\$10)	US \$4,736	59.0	0.54	121.5	1.10	49%	20.6	0.39	57.7	1.08	36%	US \$230	40.5	0.71	65.9	1.16	61%	40%	51%	US \$80	US \$39
<b>Group Average - Total</b>		<b># Companies: 17</b>						<b>US \$400</b>						<b>US \$140</b>						<b>US \$140</b>		<b>US \$99</b>		

Equivalency assumptions (US\$/12-15-17): \$1,320/oz Au, \$17.22/oz Ag, \$969/oz Pt, \$1,093/oz Pd, \$3.21/lb Cu, \$1.53/lb Zn, \$1.16/lb Pb, \$5.66/lb Ni, \$8.80/lb Mo, \$34.10/lb Co, \$8,150/lb Sb, \$20.20/lb U3O8, \$0.20/lb Sn, \$93.00/lb HCC, \$75.39/lb 62% Fe

Source: SNL Financial retrieved on January 5, 2018



## Intermediate Gold Producers – Production Statistics

Company	Symbol	Market Capitalization	Working Capital	Enterprise Value	Global Reserves & Resources						Reserves			Resources (M&I and Inferred)						Global			
		(millions)	(millions)	(millions)	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Inferred	EV/oz Au	EV/oz AuEq	
Acacia Mining plc	LSE:ACA	US \$1,096	US \$0	US \$1,182	27.9	3.97	30.2	4.31	92%	7.6	3.91	8.2	4.21	93%	US \$155	20.2	4.00	22.0	4.35	92%	57%	US \$42	US \$39
Alamos Gold Inc.	TSX:AGI	US \$2,627	US \$274	US \$2,354	21.6	1.21	22.3	1.25	97%	7.7	1.30	8.1	1.36	96%	US \$306	13.9	1.17	14.3	1.20	98%	33%	US \$109	US \$105
B2Gold Corp.	TSX:BTO	US \$2,933	US \$35	US \$3,532	22.5	0.74	28.9	0.96	78%	6.9	1.34	6.9	1.34	100%	US \$511	15.6	0.62	22.0	0.88	71%	46%	US \$157	US \$122
Centamin Plc	LSE:CEY	US \$2,442	US \$403	US \$2,039	11.4	1.19	11.4	1.19	100%	4.4	1.08	4.4	1.08	100%	US \$463	7.0	1.27	7.0	1.27	100%	40%	US \$178	US \$178
Centerra Gold Inc.	TSX:CG	US \$1,431	US \$616	US \$1,095	29.4	0.51	52.2	0.90	56%	16.1	0.74	21.1	0.97	76%	US \$68	13.2	0.36	31.1	0.85	43%	44%	US \$37	US \$21
China Gold International Resources Corp. Ltd.	TSX:CGG	US \$761	US \$131	US \$1,788	9.7	0.15	66.6	1.01	15%	5.0	0.28	25.3	1.43	20%	US \$359	4.7	0.10	41.4	0.86	11%	28%	US \$185	US \$27
Endeavour Mining Corporation	TSX:EDV	US \$2,140	US \$142	US \$2,328	15.1	1.63	15.1	1.63	100%	6.1	1.65	6.1	1.65	100%	US \$385	9.1	1.61	9.1	1.61	100%	34%	US \$154	US \$154
Guyana Goldfields Inc.	TSX:GUY	US \$670	US \$128	US \$587	8.6	2.94	8.6	2.94	100%	3.5	2.99	3.5	2.99	100%	US \$166	5.1	2.91	5.1	2.91	100%	41%	US \$68	US \$68
Harmony Gold Mining Company Limited	JSE:HAR	US \$819	US \$88	US \$753	81.2	1.04	113.5	1.45	72%	23.7	0.66	36.9	1.03	64%	US \$32	57.5	1.35	75.7	1.78	76%	36%	US \$9	US \$7
Kirkland Lake Gold Ltd.	TSX:KL	US \$3,413	US \$102	US \$3,345	17.9	4.36	17.9	4.36	100%	4.2	8.54	4.2	8.54	100%	US \$788	13.4	3.69	13.4	3.69	100%	42%	US \$187	US \$187
Klondex Mines Ltd.	TSX:KDX	US \$442	US \$17	US \$440	4.1	1.95	4.3	2.02	96%	0.7	7.22	0.7	7.68	94%	US \$639	3.4	1.70	3.5	1.76	97%	56%	US \$107	US \$103
New Gold Inc.	TSX:NGD	US \$1,986	US \$305	US \$2,658	23.3	0.75	32.1	1.03	73%	14.7	0.78	18.4	0.98	80%	US \$181	8.6	0.69	13.7	1.10	63%	24%	US \$114	US \$83
Northern Star Resources Limited	ASX:NST	US \$2,867	US \$244	US \$2,631	11.2	3.37	23.2	6.99	48%	3.5	4.17	3.5	4.17	100%	US \$756	7.0	2.94	19.0	7.97	37%	61%	US \$235	US \$113
OceanaGold Corporation	TSX:OGC	US \$1,618	US \$20	US \$1,841	14.9	1.58	16.3	1.73	91%	6.4	1.46	7.3	1.68	87%	US \$289	8.5	1.68	9.0	1.78	95%	46%	US \$124	US \$113
Premier Gold Mines Limited	TSX:PG	US \$584	US \$95	US \$489	10.8	1.67	10.9	1.70	99%	2.8	1.17	2.9	1.19	98%	US \$174	8.0	1.97	8.0	1.99	99%	50%	US \$45	US \$45
Pretium Resources Inc.	TSX:PVG	US \$2,098	US \$7	US \$2,806	22.9	0.83	28.0	1.01	82%	8.7	14.63	9.1	15.33	95%	US \$323	14.2	0.52	18.8	0.69	75%	91%	US \$122	US \$100
Regis Resources Limited	ASX:RRL	US \$1,714	US \$110	US \$1,606	9.7	0.92	9.7	0.92	100%	2.5	1.14	2.5	1.14	100%	US \$645	7.2	0.86	7.2	0.86	100%	28%	US \$165	US \$165
Resolute Mining Limited	ASX:RSG	US \$682	US \$295	US \$413	11.5	1.40	11.5	1.40	100%	5.2	1.50	5.2	1.50	100%	US \$80	6.4	1.32	6.4	1.32	100%	39%	US \$36	US \$36
SEMAFO Inc.	TSX:SMF	US \$949	US \$254	US \$835	7.8	2.76	7.8	2.76	100%	2.7	3.31	2.7	3.31	100%	US \$309	5.1	2.54	5.1	2.54	100%	47%	US \$107	US \$107
Tahoe Resources Inc.	TSX:THO	US \$1,542	US \$178	US \$1,373	18.2	0.68	30.8	1.16	59%	4.0	0.48	10.3	1.26	38%	US \$347	14.2	0.77	20.5	1.11	69%	55%	US \$76	US \$45
TMAC Resources Inc.	TSX:TMR	US \$796	US \$60	US \$887	6.6	8.12	6.6	8.12	100%	3.6	7.72	3.6	7.72	100%	US \$246	3.0	8.66	3.0	8.66	100%	57%	US \$134	US \$134
Torex Gold Resources Inc	TSX:TXG	US \$667	US \$52	US \$957	8.6	2.65	12.1	3.71	71%	3.3	2.57	3.4	2.62	98%	US \$290	5.3	2.69	8.7	4.43	61%	85%	US \$111	US \$79
<b>Group Average - Total</b>		<b># Companies: 22</b>						<b>US \$341</b>						<b>US \$114</b>						<b>US \$92</b>			

Equivalency assumptions (US\$/12-15-17): \$1,320/oz Au, \$17.22/oz Ag, \$969/oz Pt, \$1,093/oz Pd, \$3.21/lb Cu, \$1.53/lb Zn, \$1.16/lb Pb, \$5.66/lb Ni, \$8.80/lb Mo, \$34.10/lb Co, \$8,150/t Sb, \$20.20/lb U3O8, \$0.20/lb Sn, \$93.00/t HCC, \$75.39/t 62% Fe

Source: SNL Financial retrieved on January 5, 2018



## Junior Gold Producers – Production Statistics

Company	Symbol	Market Capitalization	Working Capital	Enterprise Value	Global Reserves & Resources						Reserves			Resources (M&I and Inferred)						Global			
		(millions)	(millions)	(millions)	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	EV/oz Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Inferred	EV/oz Au	EV/oz AuEq
Alacer Gold Corp.	TSX:ASR	US \$522	US \$143	US \$506	7.6	0.39	18.8	0.97	40%	3.7	2.07	5.3	2.97	70%	US \$137	3.9	0.22	13.5	0.77	29%	52%	US \$67	US \$27
Alio Gold Inc.	TSX:ALO	US \$164	US \$73	US \$91	3.1	0.91	3.1	0.93	99%	1.9	0.89	2.0	0.90	99%	US \$46	1.1	0.96	1.2	0.97	99%	8%	US \$29	US \$29
Argonaut Gold Inc.	TSX:AR	US \$366	US \$78	US \$288	9.6	0.70	10.5	0.76	91%	3.3	0.81	3.3	0.81	100%	US \$87	6.3	0.65	7.2	0.74	87%	26%	US \$30	US \$27
Asanko Gold Inc.	TSX:AKG	US \$136	US \$47	US \$228	7.3	1.45	7.3	1.45	100%	4.6	1.58	4.6	1.58	100%	US \$50	2.7	1.26	2.7	1.26	100%	22%	US \$31	US \$31
Azumah Resources Limited	ASX:AZM	US \$12	US \$0	US \$12	1.9	1.55	1.9	1.55	100%	0.6	2.14	0.6	2.14	100%	US \$21	1.3	1.38	1.3	1.38	100%	47%	US \$6	US \$6
Ho Chi Minh City Investment Fund	0	US \$0	US \$0	US \$0	12.1	1.60	12.1	1.60	100%	3.2	2.03	3.2	2.03	100%	-	8.9	1.49	8.9	1.49	100%	57%	-	-
Beadell Resources Limited	ASX:BDR	US \$174	US \$1	US \$188	4.0	0.44	15.9	1.78	25%	1.6	1.74	1.6	1.74	100%	US \$119	-	-	11.9	1.78	-	-	US \$47	US \$12
Brio Gold Inc.	TSX:BRIO	US \$187	US \$30	US \$218	7.4	1.77	7.4	1.77	100%	3.0	1.33	3.0	1.33	100%	US \$73	4.5	2.25	4.5	2.25	100%	57%	US \$29	US \$29
Dundee Precious Metals Inc.	TSX:DPM	US \$436	US \$30	US \$406	9.8	0.40	19.7	0.80	50%	2.8	3.35	3.8	4.58	73%	US \$145	7.0	0.29	15.9	0.66	44%	56%	US \$41	US \$21
Golden Star Resources Ltd.	TSX:GSC	US \$322	US \$(42)	US \$448	8.3	3.26	8.3	3.26	100%	1.7	3.05	1.7	3.05	100%	US \$261	6.5	3.32	6.5	3.32	100%	46%	US \$54	US \$54
Goldgroup Mining Inc.	TSX:GGA	US \$10	US \$(1)	US \$12	0.5	0.76	0.9	1.52	50%	-	-	-	-	-	-	0.5	0.76	0.9	1.52	50%	41%	US \$25	US \$13
Highland Gold Mining Limited	AIM:HGM	US \$750	US \$49	US \$885	15.6	3.33	15.6	3.33	100%	3.7	7.53	3.7	7.53	100%	US \$239	11.8	2.83	11.8	2.83	100%	20%	US \$57	US \$57
Leagold Mining Corporation	TSX:LMC	US \$378	US \$94	US \$428	15.7	0.84	17.9	0.95	88%	1.7	1.30	1.8	1.40	93%	US \$251	14.0	-	16.0	-	87%	29%	US \$27	US \$24
McEwen Mining Inc.	NYSE:MUX	US \$772	US \$83	US \$689	9.5	0.16	59.3	0.97	16%	0.6	1.57	0.8	1.99	79%	US \$1,071	8.9	0.15	58.5	0.96	15%	47%	US \$72	US \$12
Medusa Mining Limited	ASX:MML	US \$78	US \$14	US \$68	1.4	4.13	1.4	4.13	100%	0.4	7.00	0.4	7.00	100%	US \$181	0.4	1.74	0.4	1.74	100%	103%	US \$48	US \$48
Metanor Resources Inc.	TSXV:MTO	US \$62	US \$6	US \$56	1.7	1.54	1.7	1.54	100%	0.2	7.38	0.2	7.38	100%	US \$281	1.5	1.40	1.5	1.40	100%	79%	US \$33	US \$33
Minera IRL Limited	BVL:MIRL	US \$20	US \$(75)	US \$97	2.6	2.62	2.6	2.63	100%	1.0	3.38	1.0	3.38	100%	US \$97	1.6	2.30	1.6	2.31	100%	73%	US \$38	US \$38
Orosur Mining Inc.	TSX:OMI	US \$19	US \$2	US \$17	1.6	0.68	2.5	1.03	66%	0.1	1.43	0.1	1.43	100%	US \$136	1.5	0.65	2.4	1.02	64%	5%	US \$11	US \$7
Orvana Minerals Corp.	TSX:ORV	US \$26	US \$1	US \$33	3.3	2.43	4.1	2.97	82%	0.4	3.03	0.5	4.18	73%	US \$93	3.1	2.38	3.7	2.88	83%	45%	US \$10	US \$8
Perseus Mining Limited	ASX:PRU	US \$329	US \$10	US \$333	16.1	1.25	16.1	1.25	100%	6.3	1.46	6.3	1.46	100%	US \$52	9.8	1.15	9.8	1.15	100%	37%	US \$21	US \$21
Primero Mining Corp.	TSX:P	US \$14	US \$20	US \$118	6.6	0.82	10.4	1.30	63%	1.3	1.12	2.2	1.86	60%	US \$88	5.2	0.76	8.2	1.20	64%	25%	US \$18	US \$11
Roxgold Inc.	TSX:ROXG	US \$381	US \$45	US \$379	1.2	16.71	1.2	16.71	100%	0.6	11.46	0.6	11.46	100%	US \$635	0.6	29.77	0.6	29.77	100%	60%	US \$311	US \$311
Shanta Gold Limited	AIM:SHG	US \$62	US \$30	US \$81	3.2	2.90	3.2	2.90	100%	0.7	4.60	0.7	4.60	100%	US \$109	2.4	2.60	2.4	2.61	100%	56%	US \$26	US \$26
Teranga Gold Corporation	TSX:TGZ	US \$258	US \$61	US \$212	8.6	1.51	8.6	1.51	100%	3.3	1.39	3.3	1.39	100%	US \$65	5.3	1.59	5.3	1.59	100%	30%	US \$25	US \$25
Torex Gold Resources Inc	TSX:TXG	US \$667	US \$52	US \$957	8.6	2.65	12.1	3.71	71%	3.3	2.57	3.4	2.62	98%	US \$290	5.3	2.69	8.7	4.43	61%	85%	US \$111	US \$79
Wesdome Gold Mines Ltd.	TSX:WDO	US \$231	US \$10	US \$226	6.3	1.42	6.3	1.42	100%	0.4	5.00	0.4	5.00	100%	US \$507	5.9	1.34	5.9	1.34	100%	58%	US \$36	US \$36
<b>Group Average - Total</b>		<b># Companies: 26</b>						<b>US \$210</b>						<b>US \$48</b>						<b>US \$39</b>			

Equivalency assumptions (US\$/12-15-17): \$1,320/oz Au, \$17.22/oz Ag, \$969/oz Pt, \$1,093/oz Pd, \$3.21/lb Cu, \$1.53/lb Zn, \$1.16/lb Pb, \$5.66/lb Ni, \$8.80/lb Mo, \$34.10/lb Co, \$8,150/t Sb, \$20.20/lb U3O8, \$0.20/lb Sn, \$93.00/t HCC, \$75.39/t 62% Fe

Source: SNL Financial retrieved on January 5, 2018



## Gold Development-Stage Companies (Engineering Study Complete) – Production Statistics

Company	Symbol	Market Capitalization (millions)	Working Capital (millions)	Enterprise Value (millions)	Global Reserves & Resources						Reserves				Resources (M&I and Inferred)				Global				
					Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	EV/oz Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Inferred	EV/oz Au	EV/oz AuEq
African Gold Group, Inc.	TSXV:AGG	US \$13	US \$2	US \$12	2.0	1.01	2.0	1.01	100%	0.5	1.25	0.5	1.25	100%	US \$25	1.5	0.96	1.5	0.96	100%	59%	US \$6	US \$6
Almaden Minerals Ltd.	TSX:AMM	US \$103	US \$14	US \$90	2.4	0.42	5.0	0.87	49%	1.3	0.62	2.3	1.11	56%	US \$69	1.1	0.31	2.6	0.73	43%	40%	US \$37	US \$18
Amarillo Gold Corporation	TSXV:AGC	US \$21	US \$(1)	US \$31	2.1	1.22	2.1	1.22	100%	1.0	1.63	1.0	1.63	100%	US \$31	1.1	0.99	1.1	0.99	100%	57%	US \$15	US \$15
ATAC Resources Ltd.	TSXV:ATC	US \$70	US \$13	US \$57	0.7	2.35	0.7	2.39	99%	-	-	-	-	-	-	0.7	2.35	0.7	2.39	99%	28%	US \$84	US \$83
Atlantic Gold Corporation	TSXV:AGB	US \$215	US \$(13)	US \$322	2.0	1.31	2.0	1.31	100%	0.6	1.43	0.6	1.43	100%	US \$532	1.4	1.26	1.4	1.26	100%	31%	US \$159	US \$159
Avesoro Resources Inc.	TSX:ASO	US \$197	US \$4	US \$304	2.5	2.48	2.5	2.48	100%	0.8	3.38	0.8	3.38	100%	US \$365	1.7	2.19	1.7	2.19	100%	68%	US \$120	US \$120
Barkerville Gold Mines Ltd.	TSXV:BGM	US \$249	US \$42	US \$208	3.9*	-	3.9	-	100%	-	-	-	-	-	-	3.9*	-	3.9	-	100%	-	US \$53	US \$53
Belo Sun Mining Corp	TSX:BSX	US \$137	US \$47	US \$90	6.8	1.04	6.8	1.04	100%	3.8	1.02	3.8	1.02	100%	US \$24	3.0	1.07	3.0	1.07	100%	52%	US \$13	US \$13
Chaarat Gold Holdings Limited	AIM:CGH	US \$100	US \$14	US \$101	7.1	2.53	7.2	2.58	98%	-	-	-	-	-	-	7.1	2.53	7.2	2.58	98%	15%	US \$14	US \$14
Chalice Gold Mines Limited	ASX:CHN	US \$36	US \$40	US \$(4)	0.2	4.10	0.2	4.10	100%	-	-	-	-	-	-	0.2	4.10	0.2	4.10	100%	83%	-	-
Chesapeake Gold Corp.	TSXV:CKG	US \$120	US \$17	US \$104	19.8	0.49	31.9	0.80	62%	18.3	0.52	29.5	0.83	62%	US \$6	1.5	0.33	2.4	0.52	64%	53%	US \$5	US \$3
Continental Gold Inc.	TSX:CNL	US \$528	US \$117	US \$458	9.1	9.91	9.7	10.60	94%	3.7	8.41	3.8	8.73	96%	US \$123	5.4	11.31	5.9	12.33	92%	86%	US \$50	US \$47
Dacian Gold Limited	ASX:DCN	US \$479	US \$59	US \$420	3.3	2.31	3.3	2.31	100%	1.2	2.01	1.2	2.01	100%	US \$350	2.1	2.52	2.1	2.52	100%	53%	US \$127	US \$127
Dalradian Resources Inc.	TSX:DNA	US \$361	US \$35	US \$326	4.4	10.74	4.4	10.74	100%	1.4	8.54	1.4	8.54	100%	US \$227	3.0	12.28	3.0	12.28	100%	78%	US \$74	US \$74
Falco Resources Ltd.	TSXV:FPC	US \$143	US \$19	US \$132	5.6	1.54	10.0	2.73	56%	-	-	-	-	-	-	5.6	1.54	10.0	2.73	56%	19%	US \$23	US \$13
First Mining Finance Corp.	TSX:FF	US \$254	US \$19	US \$235	12.4	1.49	12.8	1.54	97%	-	-	-	-	-	-	12.4	1.49	12.8	1.54	97%	41%	US \$19	US \$18
Gabriel Resources Ltd.	TSX:GBU	US \$112	US \$37	US \$124	16.4	1.05	17.4	1.12	95%	8.1	1.46	8.7	1.55	94%	US \$15	8.3	0.83	8.7	0.87	95%	27%	US \$8	US \$7
Gold Road Resources Limited	ASX:GOR	US \$493	US \$234	US \$259	3.4	1.11	3.5	1.14	97%	1.8	1.20	1.8	1.20	100%	US \$147	1.6	1.03	1.7	1.09	95%	60%	US \$77	US \$74
Golden Queen Mining Co. Ltd.	TSX:QGM	US \$20	US \$(9)	US \$58	0.9	0.53	1.1	0.65	82%	0.5	0.66	0.6	0.81	82%	US \$119	0.4	0.43	0.5	0.53	81%	30%	US \$65	US \$53
Goldquest Mining Corp.	TSXV:GQC	US \$75	US \$19	US \$56	2.2	2.60	3.5	4.10	63%	0.8	3.72	1.2	5.24	71%	US \$67	1.4	2.19	2.1	3.39	64%	16%	US \$26	US \$16
Hummingbird Resources PLC	AIM:HUM	US \$172	US \$67	US \$179	6.3	1.63	6.3	1.63	100%	0.6	3.14	0.6	3.14	100%	US \$316	5.8	1.56	5.8	1.56	100%	53%	US \$29	US \$29
International Tower Hill Mines Ltd.	TSXV:ITH	US \$72	US \$3	US \$69	12.6	0.68	12.6	0.68	100%	9.0	0.71	9.0	0.71	100%	US \$8	3.6	0.60	3.6	0.60	100%	31%	US \$5	US \$5
INV Metals Inc.	TSX:INV	US \$61	US \$18	US \$43	3.1	3.34	3.9	4.24	79%	1.9	4.98	2.2	5.82	85%	US \$23	1.2	2.23	1.7	3.17	70%	44%	US \$14	US \$11
K92 Mining Inc.	TSXV:KNT	US \$61	US \$(5)	US \$69	1.4	8.22	2.0	11.68	70%	-	-	-	-	-	-	1.4	8.22	2.0	11.68	70%	84%	US \$48	US \$34
KEFI Minerals Plc	AIM:KEFI	US \$12	US \$3	US \$10	1.6	1.66	1.6	1.86	100%	0.8	2.12	0.8	2.12	100%	US \$13	0.8	1.65	0.8	1.65	100%	21%	US \$7	US \$7
Lundin Gold Inc.	TSX:LUG	US \$502	US \$66	US \$599	9.5	8.33	9.7	8.49	98%	4.8	9.67	4.9	9.84	98%	US \$124	4.7	7.29	4.8	7.44	98%	46%	US \$63	US \$62
Lupaka Gold Corp.	TSXV:LPK	US \$16	US \$(2)	US \$19	2.8	1.17	3.2	1.36	86%	-	-	-	-	-	-	2.8	1.17	3.2	1.36	86%	42%	US \$7	US \$6
Lydian International Limited	TSX:LYD	US \$223	US \$43	US \$328	4.8	0.69	5.1	0.74	94%	2.6	0.79	2.8	0.84	94%	US \$126	2.1	0.60	2.3	0.64	93%	60%	US \$69	US \$65
Metals Exploration Plc	AIM:MTL	US \$95	US \$(45)	US \$187	1.7	1.62	2.0	1.91	85%	0.9	1.86	1.0	2.11	88%	US \$209	0.8	1.43	1.0	1.74	82%	82%	US \$108	US \$92
Midas Gold Corp.	TSX:MAX	US \$87	US \$24	US \$86	6.5	1.57	7.2	1.72	91%	4.6	1.60	5.1	1.77	91%	US \$19	2.0	1.49	2.1	1.62	92%	55%	US \$13	US \$12
Moneta Porcupine Mines Inc.	TSX:ME	US \$35	US \$5	US \$30	0.8	3.46	0.8	3.63	95%	-	-	-	-	-	-	0.8	3.46	0.8	3.63	95%	47%	US \$37	US \$35
NewCastle Gold Ltd.	TSX:NCA	US \$152	US \$5	US \$146	5.4	0.24	15.1	0.67	35%	-	-	-	-	-	-	5.4	0.24	15.1	0.67	35%	17%	US \$27	US \$10
NovaGold Resources Inc.	TSX:NG	US \$1,243	US \$87	US \$1,245	28.7	0.96	45.8	1.52	63%	19.6	1.18	28.6	1.72	69%	US \$63	9.1	0.67	17.2	1.28	53%	58%	US \$43	US \$27
Orca Gold Inc.	TSXV:ORG	US \$89	US \$7	US \$82	1.6	1.80	1.6	1.80	100%	-	-	-	-	-	-	1.6	1.80	1.6	1.80	100%	23%	US \$50	US \$50
Orrezone Gold Corporation	TSXV:ORE	US \$96	US \$13	US \$83	5.6	0.71	5.6	0.71	100%	-	-	-	-	-	-	5.6	0.71	5.6	0.71	100%	18%	US \$15	US \$15
Red Eagle Mining Corporation	TSX:R	US \$104	US \$(13)	US \$175	0.6	3.35	0.6	3.35	100%	0.4	5.19	0.4	5.19	100%	US \$432	0.2	1.98	0.2	1.98	100%	64%	US \$286	US \$286
RTG Mining Inc.	TSX:RTG	US \$35	US \$6	US \$29	0.4	1.64	0.9	3.88	42%	0.2	2.04	0.5	5.41	38%	US \$141	0.2	1.34	0.3	2.68	50%	84%	US \$77	US \$33
Rubicon Minerals Corporation	TSX:RMX	US \$79	US \$21	US \$68	0.4	6.39	0.4	6.39	100%	-	-	-	-	-	-	0.4	6.39	0.4	6.39	100%	74%	US \$166	US \$166
Sabina Gold & Silver Corp.	TSX:SBB	US \$410	US \$29	US \$381	7.2	6.21	7.2	6.21	100%	2.5	6.30	2.5	6.30	100%	US \$152	4.7	6.16	4.7	6.16	100%	40%	US \$53	US \$53
Sandspring Resources Ltd.	TSXV:SSP	US \$39	US \$(1)	US \$40	10.4	0.85	11.9	0.97	88%	4.1	1.00	4.6	1.13	89%	US \$10	6.3	0.77	7.2	0.87	88%	53%	US \$4	US \$3
Seabridge Gold Inc.	TSX:SEA	US \$643	US \$16	US \$627	98.2	0.49	194.0	0.96	51%	45.3	0.61	73.7	1.00	61%	US \$14	53.0	0.41	120.2	0.93	44%	71%	US \$6	US \$3
Shihayu Gold Limited	ASX:SHI	US \$22	US \$(0)	US \$22	1.1	2.60	1.1	2.60	100%	0.4	2.41	0.4	2.41	100%	US \$53	0.7	2.73	0.7	2.73	100%	43%	US \$20	US \$20
Solitarío Zinc Corp.	AMEX:XPL	US \$38	US \$15	US \$23	-	-	6.4	8.90	-	-	-	-	-	-	-	-	6.4	8.90	-	-	-	US \$4	US \$4
Sulliden Mining Capital Inc.	TSX:SMC	US \$15	US \$14	US \$1	1.4	1.20	1.7	1.38	87%	-	-	-	-	-	-	1.4	1.20	1.7	1.38	87%	26%	US \$1	US \$1
Terraco Gold Corp.	TSXV:TEM	US \$10	US \$1	US \$17	1.0	0.70	1.0	0.70	100%	-	-	-	-	-	-	1.0	0.70	1.0	0.70	100%	8%	US \$17	US \$17
Equinox Gold Corp.	TSXV:EOX	US \$379	US \$51	US \$343	2.5	0.23	11.4	1.04	22%	1.0	1.52	1.0	1.52	100%	US \$353	1.6	0.15	10.4	1.01	15%	51%	US \$135	US \$30
Vast Resources plc	AIM:VAST	US \$38	US \$(5)	US \$68	2.4	1.31	3.2	1.73	76%	0.6	1.83	1.1	3.36	55%	US \$118	1.8	1.27	2.1	1.44	88%	55%	US \$28	US \$21
Victoria Gold Corp.	TSXV:VIT	US \$181	US \$28	US \$153	4.5	0.65	4.6	0.66	99%	2.7	0.67	2.7	0.67	100%	US \$57	1.9	0.61	1.9	0.63	97%	30%	US \$34	US \$33
<b>Group Average - Total</b>					<b># Companies: 47</b>					<b>US \$135</b>					<b>US \$50</b>					<b>US \$43</b>			
<b>Group Average - 0 - 20 million ounces</b>					<b># Companies: 45</b>					<b>US \$135</b>					<b>US \$51</b>					<b>US \$</b>			



## Gold Exploration-Stage Companies (Resource Only) – Production Statistics

Company	Symbol	Market Capitalization	Working Capital	Enterprise Value	Global Reserves & Resources						Reserves				Resources (M&I and Inferred)						Global	
		(millions)	(millions)	(millions)	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Au (Moz)	Au (g/t)	AuEq (Moz)	AuEq (g/t)	% Au	Inferred	EV/oz Au	EV/oz AuEq
Alexandria Minerals Corporation	TSXV:AZX	US \$31	US \$2	US \$28	1.6	1.82	2.2	2.50	73%	-	-	-	-	-	1.6	1.82	2.2	2.50	73%	41%	US \$18	US \$13
Antler Gold Inc.	TSXV:ANTL	US \$7	US \$2	US \$5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acacama Pacific Gold Corporation	TSXV:ATM	US \$46	US \$2	US \$44	5.9	0.37	5.9	0.37	100%	3.7	0.40	3.7	0.40	100%	2.1	0.33	2.1	0.33	100%	29%	US \$7	US \$7
Aurion Resources Ltd.	TSXV:AU	US \$115	US \$18	US \$97	0.8	0.70	0.8	0.70	100%	-	-	-	-	-	0.8	0.70	0.8	0.70	100%	-	US \$119	US \$119
Auris Minerals Limited	ASX:AUR	US \$18	US \$2	US \$15	-	-	0.2	1.78	-	-	-	-	-	-	-	-	0.2	1.78	-	-	-	US \$79
Auryn Resources Inc.	TSX:AUG	US \$123	US \$6	US \$111	2.3	5.73	2.6	6.54	88%	-	-	-	-	-	2.3	5.73	2.6	6.54	88%	72%	US \$49	US \$43
Balmoral Resources Ltd	TSX:BAR	US \$57	US \$7	US \$49	0.6	0.76	1.2	1.60	48%	-	-	-	-	-	0.6	0.76	1.2	1.60	48%	68%	US \$87	US \$42
Bellhaven Copper & Gold Inc.	TSXV:BHV	US \$10	US \$(0)	US \$10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calibre Mining Corp.	TSXV:CXB	US \$32	US \$3	US \$28	1.9	0.99	2.7	1.40	71%	-	-	-	-	-	1.9	0.99	2.7	1.40	71%	98%	US \$15	US \$11
Cardinal Resources Limited	ASX:CDV	US \$155	US \$11	US \$139	4.6	1.14	4.6	1.14	100%	-	-	-	-	-	4.6	1.14	4.6	1.14	100%	80%	US \$30	US \$30
Columbus Gold Corp.	TSX:CGT	US \$91	US \$1	US \$90	3.4	0.78	4.1	0.95	83%	1.2	1.58	1.2	1.58	100%	2.2	0.61	2.9	0.81	75%	55%	US \$26	US \$22
Condor Gold PLC	AIM:CNR	US \$38	US \$3	US \$35	3.7	3.08	4.1	3.34	92%	0.7	3.04	0.7	3.11	98%	3.1	3.09	3.4	3.39	91%	65%	US \$9	US \$9
Coral Gold Resources Ltd.	TSXV:CLH	US \$13	US \$15	US \$(2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Corvus Gold Inc.	TSX:KOR	US \$135	US \$4	US \$132	1.8	0.26	1.9	0.28	95%	-	-	-	-	-	1.8	0.26	1.9	0.28	95%	64%	US \$75	US \$71
Eastmain Resources Inc.	TSX:ER	US \$52	US \$7	US \$44	1.8	4.37	1.8	4.37	100%	-	-	-	-	-	1.8	4.37	1.8	4.37	100%	34%	US \$24	US \$24
Eco Oro Minerals Corp	CNSX:EOM	US \$39	US \$(4)	US \$41	3.5	4.38	3.7	4.61	95%	-	-	-	-	-	3.5	4.38	3.7	4.61	95%	37%	US \$12	US \$11
GobiMin Inc.	TSXV:GMN	US \$16	US \$27	US \$(9)	2.9	1.49	2.9	1.50	99%	-	-	-	-	-	2.9	1.49	2.9	1.50	99%	63%	-	-
Gold Standard Ventures Corp	TSX:GSV	US \$396	US \$24	US \$370	2.7	0.67	2.9	0.71	94%	-	-	-	-	-	2.7	0.67	2.9	0.71	94%	67%	US \$138	US \$130
Golden Reign Resources Ltd.	TSXV:GRR	US \$36	US \$1	US \$33	0.9	7.81	1.0	7.98	98%	-	-	-	-	-	0.9	7.81	1.0	7.98	98%	84%	US \$35	US \$35
Granada Gold Mine Inc.	TSXV:GGM	US \$10	US \$(4)	US \$11	5.0	1.23	5.1	1.25	99%	-	-	-	-	-	5.0	1.23	5.1	1.25	99%	69%	US \$2	US \$2
Harte Gold Corp.	TSX:HRT	US \$205	US \$5	US \$191	0.5	9.47	0.5	9.47	100%	-	-	-	-	-	0.5	9.47	0.5	9.47	100%	33%	US \$403	US \$403
IDIM Mining Ltd.	TSXV:IDM	US \$34	US \$6	US \$25	0.6	8.41	0.7	8.70	97%	0.5	7.53	0.5	7.82	96%	0.2	12.23	0.2	12.58	97%	37%	US \$39	US \$38
Jaxon Mining Inc.	TSXV:JAX	US \$14	US \$1	US \$13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kasbah Resources Limited	ASX:KAS	US \$12	US \$(1)	US \$12	0.2	0.55	0.3	0.63	88%	-	-	0.0	0.09	-	0.2	0.90	0.2	0.96	93%	-	US \$50	US \$44
Kenady Mining (Holdings) Corp.	TSXV:KEN	US \$10	US \$9	US \$6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Liberty Gold Corp.	TSX:LGD	US \$56	US \$4	US \$61	2.0	0.36	4.5	0.81	45%	-	-	-	-	-	2.0	0.36	4.5	0.81	45%	35%	US \$30	US \$13
Lincoln Mining Corporation	TSXV:LMG	US \$1	US \$(2)	US \$2	0.2	2.14	0.2	2.14	100%	-	-	-	-	-	0.2	2.14	0.2	2.14	100%	54%	US \$10	US \$10
Lion One Metals Limited	TSXV:LIO	US \$48	US \$21	US \$28	0.7	0.09	14.4	1.85	5%	-	-	-	-	-	0.7	0.09	14.4	1.85	5%	60%	US \$37	US \$2
Marathon Gold Corporation	TSX:MOZ	US \$146	US \$13	US \$132	2.2	2.06	2.2	2.06	100%	-	-	-	-	-	2.2	2.06	2.2	2.06	100%	35%	US \$60	US \$60
Monarques Gold Corporation	TSXV:MQR	US \$50	US \$3	US \$46	0.5	7.73	0.5	7.73	100%	0.1	6.77	0.1	6.77	100%	0.3	8.13	0.3	8.13	100%	50%	US \$99	US \$99
New Pacific Metals Corp.	TSXV:NUG	US \$157	US \$11	US \$146	0.5	6.12	0.6	7.31	84%	-	-	-	-	-	0.5	6.12	0.6	7.31	84%	45%	US \$287	US \$240
Nighthawk Gold Corp.	TSX:NHK	US \$106	US \$22	US \$84	2.4	1.74	2.4	1.74	100%	-	-	-	-	-	2.4	1.74	2.4	1.74	100%	88%	US \$35	US \$35
Novo Resources Corp.	OTCPK:NSRP.F	US \$462	US \$59	US \$406	0.8	3.46	0.8	3.63	95%	-	-	-	-	-	0.8	3.46	0.8	3.63	95%	47%	US \$505	US \$482
Orex Minerals Inc.	TSXV:REX	US \$15	US \$3	US \$11	0.1	0.32	0.3	1.52	21%	-	-	-	-	-	0.1	0.32	0.3	1.52	21%	47%	US \$178	US \$38
Osisko Mining Inc.	TSX:OSK	US \$556	US \$68	US \$476	7.4	2.21	7.4	2.21	100%	-	-	-	-	-	7.4	2.21	7.4	2.21	100%	42%	US \$64	US \$64
Osprey Gold Development Ltd.	TSXV:OS	US \$2	US \$1	US \$2	0.4	3.81	0.4	3.81	100%	-	-	-	-	-	0.4	3.81	0.4	3.81	100%	92%	US \$4	US \$4
Puma Exploration Inc.	TSXV:PUM	US \$14	US \$(0)	US \$14	0.1	0.44	0.2	0.65	7%	-	-	-	-	-	0.1	0.44	0.1	0.65	7%	5%	US \$105	US \$7
Pure Gold Mining Inc.	TSXV:PGM	US \$101	US \$(1)	US \$98	1.8	8.91	1.8	8.91	100%	-	-	-	-	-	1.8	8.91	1.8	8.91	100%	10%	US \$54	US \$54
Red Eagle Exploration Limited	TSXV:XR	US \$28	US \$(0)	US \$27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Pine Exploration Inc.	TSXV:RPX	US \$22	US \$2	US \$20	0.7	1.75	0.7	1.75	100%	-	-	-	-	-	0.7	1.75	0.7	1.75	100%	96%	US \$30	US \$30
Redstar Gold Corp.	TSXV:RGC	US \$16	US \$3	US \$13	0.5	2.94	0.7	3.85	76%	-	-	-	-	-	0.5	2.94	0.7	3.85	76%	7%	US \$23	US \$18
Regulus Resources Inc.	TSXV:REG	US \$129	US \$7	US \$122	5.7	0.37	19.9	1.28	29%	-	-	-	-	-	5.7	0.37	19.9	1.28	29%	89%	US \$21	US \$6
Reunion Gold Corporation	TSXV:RGD	US \$40	US \$9	US \$30	0.7	2.10	0.7	2.10	100%	-	-	-	-	-	0.7	2.10	0.7	2.10	100%	-	US \$43	US \$43
Rupert Resources Ltd.	TSXV:RUP	US \$77	US \$5	US \$77	0.2	1.74	0.2	1.74	100%	0.1	1.70	0.1	1.70	100%	0.1	1.77	0.1	1.77	100%	100%	US \$476	US \$476
Rye Patch Gold Corp.	TSXV:RPM	US \$88	US \$(19)	US \$104	4.4	0.42	4.9	0.47	89%	-	-	-	-	-	4.4	0.42	4.9	0.47	89%	29%	US \$24	US \$21
Sarama Resources Ltd.	TSXV:SWA	US \$12	US \$0	US \$11	0.7	1.67	0.7	1.67	100%	-	-	-	-	-	0.7	1.67	0.7	1.67	100%	100%	US \$16	US \$16
Spanish Mountain Gold Ltd.	TSXV:SPA	US \$26	US \$2	US \$24	8.0	0.33	8.2	0.34	98%	-	-	-	-	-	8.0	0.33	8.2	0.34	98%	51%	US \$3	US \$3
Teras Resources Inc.	TSXV:TRA	US \$15	US \$1	US \$14	1.1	0.48	1.3	0.56	87%	-	-	-	-	-	1.1	0.48	1.3	0.56	87%	10%	US \$12	US \$11
Treasury Metals Inc.	TSX:TML	US \$64	US \$(0)	US \$65	1.6	1.88	1.9	2.28	82%	-	-	-	-	-	1.6	1.88	1.9	2.28	82%	24%	US \$42	US \$34
TrinMetals Mining Inc.	TSX:TMJ	US \$22	US \$2	US \$22	1.9	0.07	16.6	0.64	11%	-	-	-	-	-	1.9	0.07	16.6	0.64	11%	40%	US \$12	US \$1
Vendette Mining Corp.	TSXV:VTT	US \$25	US \$1	US \$23	-	-	1.5	5.65	-	-	-	-	-	-	-	-	1.5	5.65	-	-	-	US \$16
West Kirkland Mining Inc.	TSXV:WKM	US \$18	US \$0	US \$18	0.8	0.46	1.0	0.55	83%	0.6	0.58	0.7	0.68	85%	0.2	0.30	0.3	0.38	80%	45%	US \$22	US \$19

# Companies: 44

Equivalency assumptions (US\$ / 12-15-17): \$1,320/oz Au, \$17.22/oz Ag, \$969/oz Pt, \$1,093/oz Pd, \$3.21/lb Cu, \$1.53/lb Zn, \$1.16/lb Pb, \$5.66/lb Ni, \$8.80/lb Mo, \$34.10/lb Co, \$8,150/t Sb, \$20.20/lb U3O8, \$0.20/lb Sn, \$93.00/t HCC, \$75.39

Source: SNL Financial retrieved on January 5, 2018



## Silver – Production Statistics

Company	Symbol	Market	Working	Enterprise	Global Reserves & Resources						Reserves				Resources (M&I and Inferred)						Global		
		Capitalization (millions)	Capital (millions)	Value (millions)	Ag (Moz)	Ag (g/t)	AgEq (Moz)	AgEq (g/t)	% Ag	Ag (Moz)	Ag (g/t)	AgEq (Moz)	AgEq (g/t)	% Ag	EV/oz Ag	Ag (Moz)	Ag (g/t)	AgEq (Moz)	AgEq (g/t)	% Ag	Inferred	EV/oz Ag	EV/oz AgEq
Alexco Resource Corp.	TSX:AXR	US \$157	US \$19	US \$138	76	475	146	905	52%	-	-	-	-	-	76	475	146	905	52%	24%	US \$1.81	US \$0.95	
Americas Silver Corporation	TSX:USA	US \$173	US \$15	US \$170	118	137	317	368	37%	31	185	82	486	38%	US \$5.46	87	125	235	339	37%	39%	US \$1.44	US \$0.54
Arizona Mining Inc.	TSX:AZ	US \$902	US \$70	US \$831	435	82	2,269	427	19%	-	-	-	-	-	435	82	2,269	427	19%	28%	US \$1.91	US \$0.37	
Athena Silver Corp	OTCPK:AHNR	US \$7	US \$(2)	US \$10	43	67	43	67	100%	-	-	-	-	-	43	67	43	67	100%	-	US \$0.22	US \$0.22	
Aurcana Corporation	TSXV:AUN	US \$18	US \$1	US \$17	18	290	18	290	100%	-	-	-	-	-	18	290	18	290	100%	37%	US \$0.94	US \$0.94	
Bear Creek Mining Corporation	TSXV:BCM	US \$172	US \$21	US \$151	523	41	1,222	95	43%	291	52	696	124	42%	US \$0.52	232	32	525	73	44%	33%	US \$0.29	US \$0.12
Coeur Mining, Inc.	NYSE:CDE	US \$1,377	US \$345	US \$1,321	571	32	1,148	64	50%	176	21	374	45	47%	US \$7.50	395	42	774	81	51%	28%	US \$2.31	US \$1.15
Defiance Silver Corp.	TSXV:DEF	US \$27	US \$1	US \$26	17	182	18	192	95%	-	-	-	-	-	-	17	182	18	192	95%	100%	US \$1.55	US \$1.47
Dolly Varden Silver Corporation	TSXV:DV	US \$29	US \$5	US \$24	43	333	43	333	100%	-	-	-	-	-	-	43	333	43	333	100%	25%	US \$0.56	US \$0.56
Endeavour Silver Corp.	TSX:EDR	US \$315	US \$70	US \$246	158	198	281	353	56%	38	198	64	337	59%	US \$6.54	120	198	217	358	55%	57%	US \$1.56	US \$0.88
First Majestic Silver Corp.	TSX:FR	US \$1,155	US \$126	US \$1,058	361	142	606	239	60%	95	158	149	247	64%	US \$11.14	266	138	457	237	58%	69%	US \$2.93	US \$1.75
Fortuna Silver Mines Inc.	TSX:FVI	US \$811	US \$198	US \$655	91	12	543	71	17%	46	16	213	74	21%	US \$14.30	45	9	330	69	14%	83%	US \$7.20	US \$1.21
Golden Arrow Resources Corporation	TSXV:GRG	US \$56	US \$15	US \$40	51	93	99	178	52%	17	148	25	222	67%	US \$2.39	18	58	57	184	32%	59%	US \$0.78	US \$0.41
Golden Minerals Company	AMEX:AUMN	US \$42	US \$5	US \$37	82	159	115	223	72%	-	-	-	-	-	-	82	159	115	223	72%	40%	US \$0.46	US \$0.33
Hecla Mining Company	NYSE:HL	US \$1,616	US \$196	US \$1,936	808	72	2,708	241	30%	172	256	549	815	31%	US \$11.23	635	60	2,160	205	29%	73%	US \$2.40	US \$0.71
Investigator Resources Limited	ASX:IVR	US \$11	US \$2	US \$9	42	140	50	168	84%	-	-	-	-	-	-	42	140	50	168	84%	45%	US \$0.22	US \$0.18
Kootenay Silver Inc	TSXV:KTN	US \$32	US \$2	US \$30	76	62	126	103	60%	-	-	-	-	-	-	76	62	126	103	60%	19%	US \$0.39	US \$0.24
Lewon Resources Ltd.	TSX:LVN	US \$31	US \$7	US \$24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MacPhersons Resources Limited	ASX:MRP	US \$32	US \$3	US \$29	20	35	64	111	31%	8	178	17	371	48%	US \$3.45	12	22	47	88	25%	29%	US \$1.41	US \$0.44
MAG Silver Corp.	TSX:MAG	US \$1,007	US \$125	US \$882	114	50	532	234	21%	-	-	-	-	-	-	114	50	532	234	21%	68%	US \$7.75	US \$1.66
Mandalay Resources Corporation	TSX:MND	US \$96	US \$35	US \$77	65	33	310	157	21%	9	23	76	195	12%	US \$8.73	56	36	233	148	24%	19%	US \$1.19	US \$0.25
Minco Silver Corporation	TSX:MSV	US \$42	US \$38	US \$4	162	158	268	261	61%	50	189	64	243	78%	US \$0.07	112	148	203	267	55%	52%	US \$0.02	US \$0.01
Mineworx Technologies Ltd.	TSXV:MWX	US \$51	US \$1	US \$49	22	9	387	154	6%	-	-	-	-	-	-	22	9	387	154	6%	-	US \$2.20	US \$0.13
MK2 Ventures Ltd.	TSXV:MK.H	US \$4	US \$1	US \$3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pan American Silver Corp.	TSX:PAAS	US \$2,393	US \$410	US \$2,012	1,432	88	2,665	163	54%	289	83	673	193	43%	US \$6.97	1,144	89	1,992	155	57%	22%	US \$1.40	US \$0.75
Silver Bear Resources Plc	TSX:SBR	US \$135	US \$8	US \$199	60	720	61	726	99%	-	-	-	-	-	-	60	720	61	726	99%	41%	US \$3.29	US \$3.27
Silver Bull Resources, Inc.	OTCPK:SVBL	US \$40	US \$1	US \$39	91	48	549	288	17%	-	-	-	-	-	-	91	48	549	288	17%	0%	US \$0.43	US \$0.07
Silvercorp Metals Inc.	TSX:SVM	US \$475	US \$78	US \$397	228	126	652	362	35%	91	202	204	452	45%	US \$4.36	137	101	448	331	31%	66%	US \$1.74	US \$0.61
SSR Mining Inc.	TSX:SSRM	US \$1,025	US \$684	US \$571	839	34	2,140	86	39%	58	9	338	53	17%	US \$9.88	732	40	1,753	96	42%	17%	US \$0.68	US \$0.27
<b>Group Average - Total</b>		# Companies: 27										<b>US \$6.61</b>				<b>US \$1.74</b>				<b>US \$0.72</b>			

Equivalency assumptions (US\$/12-15-17): \$1,320/oz Au, \$17.22/oz Ag, \$969/oz Pt, \$1,093/oz Pd, \$3.21/lb Cu, \$1.53/lb Zn, \$1.16/lb Pb, \$5.66/lb Ni, \$8.80/lb Mo, \$34.10/lb Co, \$8,150/lb Sb, \$20.20/lb U3O8, \$0.20/lb Sn, \$93.00/t HCC, \$75.39/t 62% Fe

Source: SNL Financial retrieved on January 5, 2018



## Comparables Tables – Base Metals

## Base Metal Companies – Haywood Estimates

Company	Ticker	Analyst	Last Price (C\$)	Shares O/S	MC (C\$M)	Target (C\$)	Return (%)	Rating	NAVPS (US\$)	CFPS (US\$) 2017E	CFPS (US\$) 2018E	Primary Commodity	Production, million pound	Total Cash Costs, US\$/lb	Price / NAV	Target / NAV	EV / CFPS 2017E	EV / CFPS 2018E	Target / CFPS 2017E	Target / CFPS 2018E		
Capstone Mining	CS-T	PV	\$1.53	398	\$609	\$1.75	14%	HOLD	\$2.20	\$0.31	0.56	Copper	199	204	\$1.90	\$1.67	0.6x	0.6x	6.5x	3.56	4.6x	2.51
Copper Mountain Min	CMMC-T	PV	\$1.57	134	\$210	\$2.00	27%	BUY	\$1.88	\$0.53	0.67	Copper	76	83	\$1.74	\$1.69	0.7x	0.9x	6.9x	5.42	3.1x	2.41
HudBay Minerals	HBM-T	PV	\$11.66	261	\$3,046	\$12.50	7%	BUY	\$10.47	\$2.05	2.41	Copper	338	301	\$0.66	\$0.60	0.9x	1.0x	6.0x	5.14	4.9x	4.18
Lundin Mining	LUN-T	PV	\$8.33	728	\$6,061	\$9.00	8%	HOLD	\$7.46	\$1.07	0.86	Copper	456	367	\$1.13	\$1.54	0.9x	1.0x	5.4x	6.80	6.8x	8.46
Nevsun Resources	NSU-T	PV	\$3.07	302	\$928	\$4.00	30%	BUY	\$6.69	\$0.31	0.48	Zinc	192	140	\$0.97	\$0.94	0.4x	0.5x	8.3x	5.25	10.5x	6.69
Trevali Mining	TV-T	PV	\$1.55	826	\$1,280	\$2.30	48%	BUY	\$1.14	\$0.22	0.35	Zinc	381	432	\$0.74	\$0.68	1.1x	1.6x	6.4x	4.09	8.3x	5.29
<b>Group Average</b>																<b>0.8x</b>	<b>0.9x</b>	<b>6.6x</b>	<b>5.0x</b>	<b>6.4x</b>	<b>4.9x</b>	

C\$/US\$ = 1.240

Source: Haywood Securities

## Valuation and Production Data, Based on Haywood Estimates

Market and Balance Sheet Data for Haywood Base Metals Equities Coverage												5-Jan-18				
Company	Symbol	Price	Shares O/S (millions)	Market Capitalization (millions)	Cash (millions)	Working Capital (millions)	Debt (millions)	Enterprise Value (millions)	NAV8% per Share (US\$)	NAV10% per Share (US\$)	Price / NAV8%	Price / NAV10%	Debt / Equity	Debt / Market Cap		
<b>Base Metals</b>																
CAPSTONE MINING CORP	TSX:CS	C\$ 1.53	398.3	US\$ 491	US\$ 114	US\$ 178	US\$ 294	US\$ 783	US\$ 2.20	US\$ 1.95	0.56x	0.63x	0.4x	0.6x		
COPPER MOUNTAIN MINING CORP	TSX:CMMC	C\$ 1.57	133.9	US\$ 169	US\$ 34	(US\$ 6)	US\$ 249	US\$ 441	US\$ 1.88	US\$ 1.54	0.67x	0.82x	1.7x	1.5x		
HUDBAY MINERALS INC	TSX:HBM	C\$ 11.66	261.3	US\$ 2,454	US\$ 329	US\$ 260	US\$ 978	US\$ 3,104	US\$ 10.47	US\$ 8.48	0.90x	1.11x	0.6x	0.4x		
LUNDIN MINING CORP	TSX:LUN	C\$ 8.33	727.6	US\$ 4,883	US\$ 2,153	US\$ 3,229	US\$ 994	US\$ 4,196	US\$ 7.46	US\$ 6.78	0.90x	0.99x	0.3x	0.2x		
NEVSUN RESOURCES LTD	TSX:NSU	C\$ 3.07	302.2	US\$ 747	US\$ 151	US\$ 179	-	US\$ 755	US\$ 6.69	US\$ 5.76	0.37x	0.43x	-	-		
TREVALI MINING CORP	TSX:TV	C\$ 1.55	825.6	US\$ 1,031	US\$ 106	US\$ 135	US\$ 228	US\$ 1,153	US\$ 1.14	US\$ 1.01	1.10x	1.24x	0.9x	0.2x		
<b>Group Average - Base Metals</b>													0.75x	0.87x	0.8x	0.6x
<b>Group Average - Base Metals (excluding high/low)</b>													0.76x	0.89x	0.5x	0.4x

All data sourced from Bloomberg and Haywood Securities

C\$/US\$ FX Rate: \$1.24

Enterprise Value includes non-controlling interest (CS, CMMC, LUN, NSU)

Cash Flow, EBITDA Estimates with Multiples for Haywood Base Metals Equities Coverage												5-Jan-18						
Company	Symbol	Price	2016E CFPS	2017E CFPS	2018E CFPS	2016E EBITDA	2017E EBITDA	2018E EBITDA	P/CF Ratio 2017E	P/CF Ratio 2018E	EV/CF Ratio 2017E	EV/CF Ratio 2018E	EV/EBITDA Ratio 2017E	EV/EBITDA Ratio 2018E				
<b>Base Metals</b>																		
CAPSTONE MINING CORP	TSX:CS	C\$ 1.53	US\$ 0.41	US\$ 0.31	US\$ 0.56	US\$ 154	US\$ 176	US\$ 237	5.0x	2.7x	6.4x	3.5x	4.5x	3.3x				
COPPER MOUNTAIN MINING CORP	TSX:CMMC	C\$ 1.57	US\$ 0.43	US\$ 0.53	US\$ 0.67	(US\$ 10)	US\$ 73	US\$ 111	3.0x	2.3x	6.2x	4.9x	6.0x	4.0x				
HUDBAY MINERALS INC	TSX:HBM	C\$ 11.66	US\$ 1.65	US\$ 2.05	US\$ 2.41	US\$ 469	US\$ 601	US\$ 829	5.7x	4.8x	5.8x	4.9x	5.2x	3.7x				
LUNDIN MINING CORP	TSX:LUN	C\$ 8.33	US\$ 0.67	US\$ 1.07	US\$ 0.86	US\$ 628	US\$ 1,130	US\$ 782	7.8x	9.7x	5.4x	6.7x	3.7x	5.4x				
NEVSUN RESOURCES LTD	TSX:NSU	C\$ 3.07	US\$ 0.14	US\$ 0.31	US\$ 0.48	US\$ 95	US\$ 91	US\$ 143	10.0x	6.4x	8.1x	5.2x	8.3x	5.3x				
TREVALI MINING CORP	TSX:TV	C\$ 1.55	US\$ 0.12	US\$ 0.22	US\$ 0.35	US\$ 42	US\$ 122	US\$ 372	6.9x	4.4x	6.2x	4.0x	9.4x	3.1x				
<b>Group Average - Base Metals</b>													6.4x	5.1x	6.4x	4.9x	6.2x	4.1x
<b>Group Average - Base Metals (excluding high/low)</b>													6.3x	4.6x	6.2x	4.8x	6.0x	4.1x

All data sourced from Bloomberg and Haywood Securities

C\$/US\$ FX Rate: \$1.24

Enterprise Value includes non-controlling interest (CS, CMMC, LUN, NSU)



Source: Bloomberg and Haywood Securities

## Production Estimates for Haywood Base Metals Equities Coverage

5-Jan-18

Company	2017 Haywood Estimates						2018 Haywood Estimates					
	Revenue US\$m	Copper Mlb	Zinc Mlb	Nickel Mlb	Gold koz	Silver koz	Revenue US\$m	Copper Mlb	Zinc Mlb	Nickel Mlb	Gold koz	Silver koz
<b>Base Metals</b>												
CAPSTONE MINING CORP	US\$ 530	192	8	-	29.5	1,437	US\$ 583	196	8	-	23.5	1,388
COPPER MOUNTAIN MINING CORP	US\$ 235	76	-	-	25.7	276	US\$ 283	83	-	-	29.7	441
HUDBAY MINERALS INC	US\$ 1,329	338	303	-	101.4	3,321	US\$ 1,515	301	302	-	163.8	3,423
LUNDIN MINING CORP	US\$ 2,110	439	330	46	88.3	4,035	US\$ 1,998	355	329	31	77.4	4,101
NEVSUN RESOURCES LTD	US\$ 286	21	192	-	9.3	480	US\$ 293	29	140	-	9.8	555
TREVALI MINING CORP	US\$ 594	-	381	-	0.6	1,740	US\$ 754	-	432	-	1.1	1,718

All data sourced from Bloomberg and Haywood Securities

C\$/US\$ FX Rate: \$1.24

## Ratio Estimates for Haywood Base Metals Equities Coverage

5-Jan-18

Company	P/E Ratio		P/CF Ratio		EV/CF Ratio		EV/EBITDA Ratio		Price / NAV8%		Debt/Equity	
	2017E	2018E	2017E	2018E	2017E	2018E	2017E	2018E	Price / NAV8%	Price / NAV10%	Debt/Equity	Debt/Market Cap
<b>Base Metals</b>												
CAPSTONE MINING CORP	21.9x	5.5x	5.0x	2.7x	6.4x	3.5x	4.5x	3.3x	0.56x	0.63x	0.4x	0.6x
COPPER MOUNTAIN MINING CORP	11.2x	4.9x	3.0x	2.3x	6.2x	4.9x	6.0x	4.0x	0.67x	0.82x	1.7x	1.5x
HUDBAY MINERALS INC	25.3x	10.7x	5.7x	4.8x	5.8x	4.9x	5.2x	3.7x	0.90x	1.11x	0.6x	0.4x
LUNDIN MINING CORP	13.2x	22.5x	7.8x	9.7x	5.4x	6.7x	3.7x	5.4x	0.90x	0.99x	0.3x	0.2x
NEVSUN RESOURCES LTD	-	61.4x	10.0x	6.4x	8.1x	5.2x	8.3x	5.3x	0.37x	0.43x	-	-
TREVALI MINING CORP	19.4x	7.4x	6.9x	4.4x	6.2x	4.0x	9.4x	3.1x	1.10x	1.24x	0.9x	0.2x
<b>Group Average - Base Metals</b>	18.2x	18.7x	6.4x	5.1x	6.4x	4.9x	6.2x	4.1x	0.75x	0.87x	0.8x	0.6x
<b>Group Average - Base Metals (excluding high/low)</b>	16.4x	11.5x	6.3x	4.6x	6.2x	4.8x	6.0x	4.1x	0.76x	0.89x	0.5x	0.4x

All data sourced from Bloomberg and Haywood Securities

C\$/US\$ FX Rate: \$1.24

Enterprise Value includes non-controlling interest (CS, CMMC, LUN, NSU)

Source: Bloomberg and Haywood Securities



As of December 15, 2017																				
Company	Symbol	Price	1-Day %	7-Day %	YTD (%)	Shares O/S (millions)	Market Capitalization (US\$ M)	Cash (US\$ M)	Working Capital (US\$ M)	Debt (US\$ M)	Enterprise Value (US\$ M)	2016 CFPS	2017E CFPS	2018 E CFPS	P/CF Ratio	EV/CF Ratio	EV/EBITDA Ratio			
<b>Large-Cap Base Metals Producers</b>																				
ANGLO AMERICAN PLC	LSE:AAL	GBp 1410	1.5	3.4	21.6	1292	\$24,273	\$6,051	\$5,924	\$13,169	\$35,303	\$3.67	\$4.69	\$4.76	4.0x	3.9x	5.8x	5.7x	4.2x	4.4x
ANTOFAGASTA PLC	LSE:ANTO	GBp 930.5	1.7	4.1	37.9	986	\$12,220	\$716	\$1,881	\$3,120	\$14,843	\$1.18	\$1.67	\$1.43	7.4x	8.7x	9.0x	10.6x	6.2x	6.2x
BHP BILLITON LIMITED	ASX:BHP	AUD 27.71	0.0	2.0	10.6	3212	\$108,049	\$14,153	\$9,690	\$30,474	\$129,779	\$3.16	\$2.89	\$3.03	7.3x	7.0x	14.0x	13.3x	6.3x	5.9x
FIRST QUANTUM MINERALS LTD	TSX:FM	CAD 17.12	4.6	13.4	28.2	689	\$9,193	\$1,463	\$849	\$5,844	\$15,366	\$1.35	\$1.49	\$2.20	8.9x	6.1x	14.9x	10.1x	13.6x	8.2x
FREEPORT-MCMORAN INC	NYSE:FCX	USD 16.98	4.9	13.4	28.7	1448	\$24,580	\$4,245	\$6,170	\$16,027	\$37,662	\$2.83	\$2.71	\$3.33	6.3x	5.1x	9.6x	7.8x	6.8x	5.2x
GLENCORE PLC	LSE:GLEN	GBp 362.75	1.5	5.0	33.0	14395	\$69,558	\$2,508	\$45	\$33,218	\$96,393	\$0.40	\$0.72	\$0.82	6.7x	5.9x	9.3x	8.2x	6.6x	6.1x
KGHM POLSKA MIEDZ SA	WSE:KGH	PLN 103.9	(0.1)	1.5	12.3	200	\$5,805	\$206	\$90	\$1,939	\$7,715	\$5.16	\$6.09	\$6.43	4.8x	4.5x	6.3x	6.0x	4.8x	4.3x
RIO TINTO PLC	LSE:RIO	GBp 3624.5	1.8	4.5	14.8	1343	\$87,074	\$8,201	\$5,686	\$17,630	\$101,393	\$4.71	\$7.36	\$7.00	6.6x	6.9x	10.3x	10.8x	5.5x	6.1x
TECK RESOURCES LTD-CLS B	TSX:TCK.B	CAD 30.68	2.7	3.7	15.7	570	\$13,819	\$1,046	\$1,905	\$6,203	\$18,076	\$3.26	\$6.37	\$5.22	3.7x	4.6x	5.0x	6.1x	4.1x	4.9x
TURQUOISE HILL RESOURCES LTD	TSX:TRQ	CAD 3.94	0.0	1.8	(8.6)	2012	\$6,175	\$1,418	\$2,434	\$4,139	\$7,945	\$0.11	\$0.05	\$0.10	59.0x	30.1x	75.9x	38.7x	35.6x	23.0x
VALE SA-SP ADR	NYSE:VALE	USD 11.17	2.6	3.6	46.6	5284	\$59,028	\$4,268	\$11,349	\$29,363	\$81,605	-	2.07	\$1.85	5.5x	6.2x	7.4x	8.3x	5.5x	5.9x
BOLIDEN AB	SSE:BOL	SEK 270	0.6	3.3	13.5	274	\$8,684	\$165	\$591	\$1,112	\$9,318	\$2.99	\$4.71	\$4.96	6.8x	6.4x	7.2x	6.9x	6.2x	5.9x
SOUTHERN COPPER CORP	NYSE:SCCO	USD 43.32	1.0	3.2	35.6	773	\$33,488	\$546	\$1,567	\$5,954	\$38,655	\$1.19	\$2.57	\$3.01	16.9x	14.4x	19.5x	16.6x	12.1x	10.1x
<b>Group Average - Large-Cap Producers</b>															10.9x	8.1x	15.2x	11.4x	9.0x	7.3x
<b>Group Average - Large-Cap Producers (excluding high/low)</b>															6.4x	6.1x	9.6x	9.0x	6.6x	5.9x
<b>Mid Tier Base Metals Producers</b>																				
HUDBAY MINERALS INC	TSX:HBM	CAD 9.87	2.2	10.0	28.5	261	\$2,009	\$147	\$122	\$1,232	\$2,738	\$1.48	\$1.93	\$1.94	4.0x	4.0x	5.4x	5.4x	4.6x	4.0x
KAZ MINERALS PLC	LSE:KAZ	GBp 778.5	3.3	6.4	117.9	447	\$4,634	\$1,108	\$866	\$3,777	\$7,081	(\$0.20)	\$1.46	\$1.65	7.1x	6.3x	10.9x	9.6x	7.3x	5.7x
LUNDIN MINING CORP	TSX:LUN	CAD 7.45	1.4	5.5	16.4	728	\$4,222	\$715	\$2,052	\$983	\$3,452	\$0.40	\$1.08	\$0.82	5.4x	7.1x	4.4x	5.8x	3.2x	4.7x
MMG LTD	SEHK:1208	HKD 3.4	0.3	1.2	70.9	7960	\$3,463	\$553	\$422	\$10,253	\$13,957	\$0.05	\$0.19	\$0.19	2.3x	2.3x	9.4x	9.1x	7.3x	6.3x
OZ MINERALS LTD	ASX:OZL	AUD 8.5	3.2	6.5	7.7	299	\$1,942	\$473	\$555	\$0	\$1,461	\$0.80	\$0.85	\$0.62	7.5x	10.3x	5.7x	7.9x	3.9x	4.7x
VEDANTA RESOURCES PLC	LSE:VED	GBp 723	4.8	13.2	(17.8)	271	\$2,614	\$2,565	(\$1,588)	\$18,229	\$18,461	\$5.76	-	\$11.96	-	0.8x	-	5.7x	5.8x	4.3x
<b>Group Average - Mid Tier Producers</b>															5.3x	5.1x	7.2x	7.2x	5.4x	5.0x
<b>Group Average - Mid Tier Producers (excluding high/low)</b>															5.5x	4.9x	6.8x	7.1x	5.4x	4.8x
<b>Small Cap Base Metals Producers</b>																				
AMERIGO RESOURCES LTD	TSX:ARG	CAD 1.04	1.0	6.1	201.4	176	\$143	\$16	\$1	\$70	\$186	\$0.11	\$0.11	\$0.19	7.4x	4.4x	9.6x	5.7x	-	-
ATALAYA MINING PLC	TSX:AYM	CAD 2.65	(0.7)	5.2	25.6	135	\$279	\$1	(\$27)	\$0	\$272	-	\$0.26	\$0.34	7.9x	6.1x	7.8x	5.9x	5.3x	4.2x
CAPSTONE MINING CORP	TSX:CS	CAD 1.4	1.4	3.7	11.1	398	\$434	\$130	\$171	\$325	\$724	\$0.29	\$0.29	\$0.39	3.7x	2.8x	6.2x	4.7x	5.1x	4.1x
COPPER MOUNTAIN MINING CORP	TSX:CMMC	CAD 1.485	3.1	10.8	58.0	132	\$153	\$23	(\$1)	\$272	\$428	\$0.18	\$0.45	\$0.47	2.6x	2.5x	7.2x	6.9x	5.9x	5.1x
IMPERIAL METALS CORP	TSX:III	CAD 2.25	(1.3)	(0.9)	(52.4)	95	\$168	\$11	(\$66)	\$645	\$876	\$0.69	\$0.44	\$0.73	4.0x	2.4x	20.9x	12.6x	12.3x	5.9x
WESTERN AREAS LTD	AU:WSA	AUD 2.95	(0.3)	2.4	(3.9)	273	\$615	\$108	\$116	\$0	\$508	\$0.18	\$0.21	\$0.17	11.2x	13.1x	9.0x	11.0x	10.5x	8.4x
SHERITT INTERNATIONAL CORP	TSX:S	CAD 1.5	0.0	7.9	12.8	297	\$347	\$200	\$368	\$1,657	\$1,837	(\$0.01)	(\$0.14)	\$0.13	-	9.3x	-	48.8x	14.8x	13.5x
NEVSUN RESOURCES LTD	TSX:NSU	CAD 2.84	(0.7)	1.1	(31.6)	302	\$668	\$199	\$201	\$0	\$674	\$0.18	\$0.23	\$0.43	9.6x	5.1x	9.7x	5.1x	10.6x	4.7x
TASEKO MINES LTD	TSX:TKO	CAD 2.67	4.3	4.3	130.2	227	\$472	\$66	\$82	\$289	\$659	\$0.12	\$0.58	\$0.37	3.6x	5.7x	5.0x	8.0x	4.8x	5.8x
TREVALI MINING CORP	TSX:TV	CAD 1.44	0.0	9.9	27.4	826	\$926	\$11	\$8	\$80	\$1,072	\$0.09	\$0.19	\$0.33	6.0x	3.4x	7.0x	4.0x	8.1x	3.2x
<b>Group Average - Small Cap Producers</b>															6.2x	5.5x	3.9x	11.3x	8.6x	6.1x
<b>Group Average - Small Cap Producers (excluding high/low)</b>															6.0x	4.9x	7.7x	7.5x	8.3x	5.5x

C\$/US\$ FX Rate: \$1.29

Source: Bloomberg and Haywood Securities



## Copper Non-Producers – Resource and Market Statistics

Company	Symbol	Price	Shares O/S (million)	Market Capitalization (million)	Working Capital (million)	LTD Value (million)	Enterprise Value (million)	Primary / Secondary Metal	Copper Ratio*** (% Contained)	Reserves & Resources* - Attributable Reserve (P&P) (CuEq** Mlb)	Resource (Total) (CuEq** Mlb)	EV/lb CuEq** (US\$) Reserve	Total
Bellhaven Copper and Gold Inc	TSXV:BHV	C\$ 0.43	28.3	US\$ 10	US\$ (0.4)	US\$ 0.0	US\$ 10	Au / Cu	40%	-	1,036	-	\$0.010
Candente Copper Corp.	TSX:DNT	C\$ 0.15	177.7	US\$ 22	US\$ (1.1)	US\$ 0.0	US\$ 23	Cu / Au	89%	-	12,427	-	\$0.002
Colorado Resources Ltd.	TSXV:CXO	C\$ 0.19	121.7	US\$ 19	US\$ 7.1	US\$ 0.0	US\$ 12	Cu / Au	59%	-	1,165	-	\$0.010
Copper Fox Metals Inc	TSXV:CUU	C\$ 0.14	437.0	US\$ 48	US\$ 0.5	US\$ 0.0	US\$ 47	Cu / Au	68%	2,375	5,648	\$0.020	\$0.008
Coro Mining Corp.	TSX:COP	C\$ 0.12	651.3	US\$ 63	US\$ (0.6)	US\$ 0.3	US\$ 64	Cu / Au	84%	195	965	\$0.328	\$0.066
Foran Mining Corporation	TSXV:FOM	C\$ 0.39	109.9	US\$ 35	US\$ 0.4	US\$ 0.0	US\$ 34	Cu / Zn	46%	-	1,756	-	\$0.019
Getty Copper Inc.	TSXV:GTC	C\$ 0.03	108.4	US\$ 2	US\$ (0.4)	US\$ 0.8	US\$ 3	Cu / Mo	96%	620	969	\$0.006	\$0.004
Gold Reach Resources Ltd.	TSXV:GRV	C\$ 0.24	55.0	US\$ 10	US\$ (0.1)	US\$ 0.0	US\$ 11	Cu / Mo	68%	-	5,444	-	\$0.002
Highland Copper Co Inc.	TSXV:HI	C\$ 0.15	467.5	US\$ 57	US\$ 8.3	US\$ 7.8	US\$ 56	Cu / Ag	96%	871	6,019	\$0.064	\$0.009
Indico Resources Ltd.	TSXV:IDI	C\$ 0.03	147.0	US\$ 3	US\$ (4.0)	US\$ 0.0	US\$ 7	Cu / -	100%	-	410	-	\$0.017
Los Andes Copper Limited	TSXV:LA	C\$ 0.35	244.9	US\$ 68	US\$ 2.4	US\$ 0.0	US\$ 66	Cu / Mo	89%	-	12,305	-	\$0.005
Nevada Copper Corp.	TSX:NCU	C\$ 0.71	93.2	US\$ 53	US\$ (2.7)	US\$ 162.7	US\$ 219	Cu / Au	91%	5,791	7,917	\$0.038	\$0.028
NGEx Resources Inc.	TSX:NGQ	C\$ 1.03	213.8	US\$ 178	US\$ 3.6	US\$ 0.0	US\$ 174	Cu / Au	76%	-	27,655	-	\$0.006
Northern Dynasty Minerals Ltd.	TSX:NDM	C\$ 2.20	304.7	US\$ 541	US\$ 20.3	US\$ 0.0	US\$ 520	Cu / Au	57%	-	142,635	-	\$0.004
Northisle Copper and Gold Inc.	TSXV:NCX	C\$ 0.11	114.5	US\$ 10	US\$ 0.4	US\$ 0.0	US\$ 10	Cu / Au	51%	-	4,358	-	\$0.002
NovaCopper Inc.	TSX:TMQ	C\$ 1.66	0.0	US\$ 0	US\$ 1.2	US\$ 0.0	US\$ (1)	Cu / Zn	83%	-	9,685	-	-
Panoro Minerals Ltd.	TSXV:PML	C\$ 0.40	260.0	US\$ 84	US\$ (1.7)	US\$ 2.0	US\$ 88	Cu / Au	77%	-	10,114	-	\$0.009
Polymet Mining Corp.	TSX:POM	C\$ 1.24	319.3	US\$ 319	US\$ (130.2)	US\$ 0.0	US\$ 450	Cu / Ni	49%	3,145	10,139	\$0.143	\$0.044
Quaterra Resources Inc.	TSXV:QTA	C\$ 0.07	201.0	US\$ 11	US\$ 2.0	US\$ 0.0	US\$ 9	Cu / Ag	96%	-	8,247	-	\$0.001
Redhawk Resources, Inc.	TSX:RDK	C\$ 0.03	160.0	US\$ 4	US\$ (1.4)	US\$ 1.4	US\$ 7	Cu / Mo	92%	-	3,835	-	\$0.002
Regulus Resources Inc	TSXV:REG	C\$ 2.16	74.2	US\$ 129	US\$ 6.2	US\$ 0.0	US\$ 123	Cu / Au	0%	-	-	-	-
Serengeti Resources Inc.	TSXV:SIR	C\$ 0.16	86.4	US\$ 11	US\$ 0.9	US\$ 0.0	US\$ 10	Cu / Au	67%	-	4,153	-	\$0.002
St Augustine Gold and Copper	TSX:SAU	C\$ 0.03	726.8	US\$ 18	US\$ (2.7)	US\$ 0.0	US\$ 20	Cu / Au	58%	2,131	3,263	\$0.010	\$0.006
Tintina Resources Inc.	TSXV:TAU	C\$ 0.11	503.3	US\$ 43	US\$ 0.1	US\$ 0.0	US\$ 43	Cu / Co	86%	-	1,538	-	\$0.028
Western Copper and Gold Cor	TSX:WRN	C\$ 1.24	96.7	US\$ 97	US\$ 3.9	US\$ 0.0	US\$ 93	Cu / Au	45%	10,033	22,599	\$0.009	\$0.004
<b>Group Average - Total</b>												\$0.077	\$0.013

\*All reserve and resource data sourced from InterraRMG, additional data sourced from Capital IQ and Market Q.

\*\*CuEq = copper equivalent. Calculated based on Haywood's formal long-term metal price forecasts.

\*\*\*Copper Ratio = value of in situ copper / total value of in situ metals.



## Nickel Non-Producers – Resource and Market Statistics

Company	Symbol	Price	Shares O/S (million)	Market Capitalization (million)	Working Capital (million)	LTD Value (million)	Enterprise Value (million)	Primary / Secondary Metal	Nickel Ratio*** (% Contained)	Reserves & Resources* - Attributable Reserve (P&P) (NiEq** Mlb)	Resource (Total) (NiEq** Mlb)	EV/lb NiEq** (US\$) Reserve	EV/lb NiEq** (US\$) Total
Asian Mineral Resources Limited	TSXV:ASN	C\$ 0.02	795.9	US\$ 13	US\$ (3.3)	US\$ 0.0	US\$ 16	Ni / Cu	86%	85	146	\$0.191	\$0.110
Canadian Arrow Mines Ltd.	TSXV:CRO	C\$ 0.01	140.0	US\$ 1	US\$ (0.7)	US\$ 0.0	US\$ 2	Ni / Cu	82%	-	141	-	\$0.013
FPX Nickel Corp.	TSXV:FPX	C\$ 0.10	133.8	US\$ 10	US\$ 0.6	US\$ 5.6	US\$ 15	Ni / Fe	100%	-	5,570	-	\$0.003
Mustang Minerals Corp.	TSXV:MUM	C\$ 0.41	38.1	US\$ 13	US\$ (0.6)	US\$ 0.0	US\$ 13	Co / Ni	38%	2	1,176	\$5.623	\$0.011
Noront Resources Ltd.	TSXV:NOT	C\$ 0.36	345.0	US\$ 99	US\$ (9.9)	US\$ 24.2	US\$ 133	Ni / Cu	78%	498	851	\$0.267	\$0.156
North American Nickel Inc.	TSXV:NAN	C\$ 0.08	122.2	US\$ 8	US\$ 3.5	US\$ 0.0	US\$ 4	Ni / Cu	0%	-	-	-	-
Northern Shield Resources Inc.	TSXV:NRN	C\$ 0.03	205.1	US\$ 5	US\$ 1.2	US\$ 0.0	US\$ 4	Ni / Cu	0%	-	-	-	-
Poseidon Nickel Limited	ASX:POS	C\$ 0.05	1100.6	US\$ 44	US\$ (2.0)	US\$ 14.8	US\$ 61	Ni / Au	98%	171	1,284	\$0.354	\$0.047
Royal Nickel Corporation	TSX:RNX	C\$ 0.17	307.8	US\$ 42	US\$ (10.4)	US\$ 14.1	US\$ 67	Ni / Cu	0%	-	-	-	-
Sama Resources Inc.	TSXV:SME	C\$ 0.44	154.6	US\$ 54	US\$ 3.3	US\$ 0.0	US\$ 51	Ni / Cu	71%	-	195	-	\$0.261
Strongbow Exploration Inc.	TSXV:SBW	C\$ 0.17	77.9	US\$ 11	US\$ 1.6	US\$ 1.0	US\$ 10	Ni / Cu	86%	-	417	-	\$0.024
Talon Metals Corporation	TSX:TLO	C\$ 0.06	129.6	US\$ 6	US\$ 0.7	US\$ 19.6	US\$ 25	Ni / Fe	56%	-	125	-	\$0.202
<b>Group Average - Total</b>												<b>\$1.608</b>	<b>\$0.092</b>

\*All reserve and resource data sourced from InterraRMG, additional data sourced from Capital IQ and Market Q.

\*\*NiEq = nickel equivalent. Calculated based on Haywood's formal long-term metal price forecasts.

\*\*\*Nickel Ratio = value of in situ nickel / total value of in situ metals.

## Zinc Non-Producers – Resource and Market Statistics

Company	Symbol	Price	Shares O/S (million)	Market Capitalization (million)	Working Capital (million)	LTD Value (million)	Enterprise Value (million)	Primary / Secondary Metal	Zinc Ratio*** (% Contained)	Reserves & Resources* - Attributable Reserve (P&P) (ZnEq** Mlb)	Resource (Total) (ZnEq** Mlb)	EV/lb ZnEq** (US\$) Reserve	EV/lb ZnEq** (US\$) Total
Aquila Resources Inc.	TSX:AQA	C\$ 0.26	331.0	US\$ 69	US\$ 0.6	US\$ 0.0	US\$ 69	Au / Zn	19%	-	1,587	-	\$0.043
Canada Zinc Metals Corp.	TSXV:CZX	C\$ 0.29	167.2	US\$ 39	US\$ 4.7	US\$ 0.0	US\$ 34	Zn / Pb	82%	-	6,096	-	\$0.006
Canadian Zinc Corporation	TSX:CNZ	C\$ 0.18	266.1	US\$ 39	US\$ 1.6	US\$ 0.0	US\$ 37	Zn / Pb	40%	2,525	10,077	\$0.015	\$0.004
El Nino Ventures Inc.	TSXV:ELN	C\$ 0.05	61.6	US\$ 2	US\$ 0.4	US\$ 0.0	US\$ 2	Zn / Cu	45%	-	1,357	-	\$0.001
Firestone Ventures Inc.	TSXV:FV	C\$ 0.11	53.7	US\$ 5	US\$ (0.8)	US\$ 0.0	US\$ 6	Zn / Pb	73%	-	454	-	\$0.012
Foran Mining Corporation	TSXV:FOM	C\$ 0.39	109.9	US\$ 35	US\$ 0.4	US\$ 0.0	US\$ 34	Cu / Zn	33%	-	4,962	-	\$0.007
InZinc Mining Ltd.	TSXV:IZN	C\$ 0.17	105.2	US\$ 14	US\$ 0.1	US\$ 0.0	US\$ 14	Zn / Cu	77%	-	3,873	-	\$0.004
Rathdowney Resources Ltd.	TSXV:RTH	C\$ 0.18	161.7	US\$ 23	US\$ (0.6)	US\$ 0.0	US\$ 23	Zn / Pb	80%	-	3,437	-	\$0.007
Wolfden Resources Corp.	TSXV:WLF	C\$ 0.60	110.0	US\$ 53	US\$ 1.4	US\$ 0.0	US\$ 52	Au / Zn	29%	-	4,516	-	\$0.011
<b>Group Average - Total</b>												<b>\$0.015</b>	<b>\$0.011</b>

\*All reserve and resource data sourced from InterraRMG, additional data sourced from Capital IQ and Market Q.

\*\*ZnEq = zinc equivalent. Calculated based on Haywood's formal long-term metal price forecasts.

\*\*\*Zinc Ratio = value of in situ zinc / total value of in situ metals.



## Comparables Tables – Other (Uranium, Diamond, Cobalt, Uranium, Coal, Iron)

### Uranium Companies – Haywood Estimates

Company	Ticker	Analyst	Last Price	Shares O/S	MC (\$C\$M)	Target (\$C\$)	Return (%)	Rating	NAVPS (US\$)	CFPS (US\$) 2017E 2018E	Primary Commodity	Production, million pounds	2017E 2018E	Total Cash Costs, US\$/lb	Price / NAV	Target / NAV	EV / CFPS 2017E 2018E	Target / CFPS 2017E 2018E	
Denison Mines	DML-T	CH	\$0.75	559	\$419	\$1.80	140%	BUY	C\$1.77	(\$0.01) (\$0.02)	Uranium	-	-	-	0.4x	1.0x	- -	- -	
Energy Fuels	UUUU-US	CH	US\$1.91	72	\$138	US\$4.80	151%	BUY	\$4.84	(\$0.14) (\$0.05)	Uranium	0.7	1.1	\$29 \$35	0.4x	1.0x	- -	- -	
NexGen Energy	NXE-T	CH	\$3.48	339	\$1,180	\$6.00	72%	BUY	C\$5.98	(\$0.01) (\$0.01)	Uranium	-	-	-	0.6x	1.0x	- -	- -	
Uranium Energy	UEC-US	CH	US\$1.97	156	US\$308	US\$2.90	47%	BUY	\$2.87	(\$0.13) \$0.00	Uranium	-	0.8	-	\$29	0.7x	1.0x	- 778.0x	- -
Uranium Participation	U-T	CH	\$4.40	132	\$583	\$5.10	16%	BUY	C\$5.13	- -	Uranium	-	-	-	0.9x	1.0x	- -	- -	
<b>Group Average</b>															<b>0.6x</b>	<b>1.0x</b>	<b>- 778.0x</b>	<b>- -</b>	

C\$/US\$ = 1.24

A\$/US\$ = 1.27

£/US\$ = 0.74

Source: Bloomberg and Haywood Securities

### Diamond Companies – Haywood Estimates

Company	Ticker	Analyst	Last Price (C\$)	Shares O/S (M)	MC (\$C\$M)	Target (C\$)	Return (%)	Rating	NAVPS (US\$)	CFPS (US\$) 2017E 2018E	Primary Commodity	Production, 000's carats	2017E 2018E	TCC, US\$/ct	AISC, US\$/ct	Price / NAV	Target / NAV	EV / CFPS 2017E 2018E	Target / CFPS 2017E 2018E
Mountain Province Diamonds Inc.	TSX:MPVD	MPVD-T	GM	\$3.51	160	\$562	\$6.30	79%	BUY	\$4.44 \$0.47	\$1.10	Diamonds	5,995 6,904	\$39 \$35	\$93 \$92	0.6x	1.1x	10.4x 4.4x	10.8x 4.6x
Lucara Diamond Corp.	TSX:LUC	LUC-T	GM	\$2.88	383	\$1,102	\$3.20	11%	BUY	\$1.90 \$0.25	\$0.24	Diamonds	276 297	\$310 \$437	\$639 \$588	1.2x	1.4x	8.4x 8.8x	10.3x 10.8x
<b>Group Average</b>															<b>0.9x</b>	<b>1.3x</b>	<b>9.4x 6.6x</b>	<b>10.6x 7.7x</b>	

C\$/US\$ = 1.24

Source: Bloomberg and Haywood Securities

### Cobalt Companies – Haywood Estimates

Company	Ticker	Analyst	Last Price (C\$)	Shares O/S (M)	MC (\$C\$M)	Target (C\$)	Return (%)	Rating	NAVPS (C\$)	CFPS (C\$) FY2018E FY2019E	Primary Commodity	Inventory (T)	G&A (C\$M)	Price Deck (US\$)	Price / NAV	Target / NAV	EV / CFPS 2017E 2018E	Target / CFPS 2017E 2018E
Cobalt 27 Capital Corp.	TSXV:KBLT	KBLT-V	CH	\$12.15	34	\$417	\$11.50	(5%)	BUY	\$11.50 -	- Cobalt	1,488 671	\$2.0 \$2.0	\$45.50 \$44.00	0.9x	0.8x	- -	- -
<b>Group Average</b>																	- -	- -

Source: Bloomberg and Haywood Securities



## Uranium Comparables - Consensus Estimates

Consensus Targets										In-Situ Comps - EV/lb U3O8										NAV Comps						Cash Flow Comps						Earnings Comps					
PRODUCERS	Company (Ticker)	Share Price	IBES			Shares Outst.	Market Capitalization (millions)	Enterprise Value (USD millions)	Total Reserves & Resources (M lb)	USD EV/lb Resource	IBES			Consensus Price / NAV	Price / Nav	CFPS (LoC)			P/CFPS			EPS (LoC)			P/EPS												
			Consensus Target	Implied Return												2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018										
	Cameco Corporation (CCO-T)	\$12.14	\$14.63	21%		396	\$4,805			\$4,797				\$14.28	0.85x	\$0.98	\$1.29	\$1.36	12.4x	9.4x	8.9x	\$0.44	\$0.08	\$0.41	27.6x	143.2x	30.0x										
	Uranium Energy (UEC-US)	\$1.98	\$3.08	55%		156	\$309.2			\$310.2				\$3.11	0.64x	(\$0.16)	(\$0.08)	(\$0.08)				(\$0.16)	(\$0.10)	(\$0.07)													
	Energy Fuels (UUUU-US)	\$1.90	\$4.10	116%		72	\$136.8			\$150.9				\$3.88	0.49x	(\$0.05)	(\$0.10)	(\$0.16)				(\$0.51)	(\$0.28)	(\$0.20)													
	Peninsula Energy (PEN-AU)	\$0.95	\$1.33	39%		146	\$138.7			\$130.5				\$1.58	0.60x	\$0.03	\$0.08	\$0.08	36.1x	12.4x	12.3x	(\$0.03)	\$0.01	\$0.00		146.2x	203.4x										
	Energy Resources (ERA-AU)	\$0.45	\$0.77	73%		232	\$103.1			\$94.5				\$0.63	0.71x	(\$0.03)	(\$0.02)	(\$0.02)				(\$0.07)	(\$0.03)	(\$0.01)													
	<b>Group Average - Producers</b>	<b>\$0.92</b>				518	\$476.3			\$50.1				\$0.56	1.64x	\$0.02	(\$0.02)	(\$0.02)				(\$0.37)	(\$0.05)	(\$0.05)													
	<b>Group Average - Producers</b>										<b>0.82x</b>										<b>33.1x</b>						<b>10.9x</b>			<b>15.6x</b>							
																											<b>27.6x</b>			<b>144.7x</b>							
																											<b>116.7x</b>										
																											</										



## Coal Comparables – Consensus Estimates

Company (Ticker)	Bloomberg			Shares Outstanding (millions)	Market Capitalization (millions)	Daily Volume (millions)	Weekly Liquidity	WACC	Debt (millions)	Enterprise Value (millions)	CFPS (LoC)			P/CFPS			P/EPS			EV/EBITDA					
	Share Price	Consensus Target	Implied Return %								2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017			
<b>Large Cap USA</b>																									
CNX RESOURCES (CNX-US)	US\$ 14.79	US\$ 16.80	13.6%	1.93	230	US\$ 3,403	3.4	7.0%	11.0%	US\$ 2,774	US\$ 5,800	2.35	3.17	3.69	6.3x	4.7x	4.0x	83.1x	39.3x	32.9x	7.7x	6.8x	6.4x		
FORESIGHT ENERGY (FELP-US)	US\$ 4.21	US\$ 4.75	12.8%	1.31	78	US\$ 600	0.0	0.4%	6.8%	US\$ 1,391	US\$ 1,911									6.6x	6.6x	6.4x			
CORSA COAL (CSO-V)	C\$ 2.00		2.66	95	C\$ 189	0.0	0.3%	20.4%	C\$ 43	C\$ 205															
WESTMORELAND COAL (WLB-US)	C\$ 1.65	C\$ 4.00	142.4%	0.93	19	C\$ 31	0.3	7.4%	4.8%	C\$ 1,109	C\$ 1,055									4.1x	5.2x	5.2x			
WALTER ENERGY (WLT-US)	US\$ 0.01		4.16	81	US\$ 1	0.1	0.8%	33.3%	US\$ 3,136	US\$ 181															
CLOUD PEAK (CLD-US)	US\$ 4.83	US\$ 4.40	(8.9)%	1.71	75	US\$ 363	1.2	7.6%	8.2%	US\$ 483	US\$ 655	0.92	0.76	0.65	5.3x	6.4x	7.4x				6.0x	6.4x	7.3x		
<b>Group Average - Large Cap USA</b>												Avg. ->			4.5x	4.8x	5.1x	83.1x	28.6x	36.3x	5.6x	6.1x	6.4x		
<b>Limited Partnerships</b>																									
ALLIANCE RESOURCE (ARLP-US)	US\$ 20.10	US\$ 25.00	24.4%	1.30	131	US\$ 2,627	0.3	1.0%	10.7%	US\$ 662	US\$ 3,192									7.0x	9.5x	9.9x	5.1x	5.3x	5.4x
NATURAL RESOURCE (NRP-US)	US\$ 29.30	US\$ 30.00	2.4%	1.13	12	US\$ 358	0.0	1.5%	4.5%	US\$ 1,126	US\$ 1,553									6.0x	5.4x	5.1x	7.0x	7.6x	7.6x
<b>Group Average - Limited Partnerships</b>												Avg. ->								6.5x	7.4x	7.5x	6.1x	6.5x	6.5x
<b>Large Cap Non-North America</b>																									
NEW HOPE (NHC-AU)	A\$ 2.55	A\$ 2.29	(10.3)%	0.69	831	A\$ 2,119	1.5	0.2%	7.0%		A\$ 1,895	0.36	0.27	0.17	7.1x	9.4x	15.0x	10.5x	16.0x	18.8x	4.9x	6.9x	8.4x		
WHITEHAVEN COAL (WHC-AU)	A\$ 4.52	A\$ 3.84	(15.1)%	1.71	1,026	A\$ 4,638	6.2	2.0%	12.4%	A\$ 398	A\$ 4,949	0.72	0.54	0.44	6.3x	8.3x	10.4x	10.6x	16.1x	18.1x	6.3x	8.5x	9.4x		
BANPU PUBLIC (BANPU-SET)	฿ 20.80	฿ 23.13	11.2%	1.42	5,162	฿ 107,368	57.1	18.1%	6.4%	฿ 114,111	฿ 225,830	3.30	4.10	4.20	6.3x	5.1x	5.0x	10.4x	10.6x	10.7x	9.0x	9.1x	9.3x		
CHINA COAL (1898-HK)	HK\$ 3.63	HK\$ 4.29	18.1%	1.38	4,107	HK\$ 80,637	17.9	2.1%	8.1%	HK\$ 98,178	HK\$ 160,679	1.10	1.13	1.22	2.7x	2.7x	2.5x	9.2x	10.4x	9.6x	8.7x	8.9x	8.6x		
CHINA SHENHUA (1088-HK)	HK\$ 21.50	HK\$ 22.96	6.8%	1.28	3,399	HK\$ 543,248	18.2	3.6%	10.8%	HK\$ 105,981	HK\$ 550,352	4.12	3.87	3.78	4.3x	4.6x	4.7x	7.9x	8.7x	8.9x	5.7x	5.9x	6.0x		
NINE ENTERTAINMENT (NEC-AU)	A\$ 1.54	A\$ 1.43	(6.6)%	1.21	871	A\$ 1,338	3.6	1.3%	8.9%	A\$ 291	A\$ 1,562	0.17	0.14	0.16	9.3x	10.9x	9.8x	10.5x	12.0x	12.8x	7.0x	7.6x	8.0x		
YANZHOU COAL (1171-HK)	HK\$ 10.14	HK\$ 9.11	(10.1)%	1.36	1,952	HK\$ 76,365	19.8	9.0%	7.6%	HK\$ 65,578	HK\$ 125,665	2.10	2.40	2.11	4.0x	3.5x	4.0x	6.6x	7.5x	7.8x	8.2x	8.1x	8.7x		
<b>Group Average - Large Cap Non-North-America</b>												Avg. ->			5.7x	6.4x	7.3x	9.4x	11.6x	12.4x	6.8x	7.9x	8.3x		
<b>Developer/Explorers</b>																									
FORTUNE MINERALS (FT-T)	C\$ 0.35	C\$ 0.40	14.3%	3.56	331	C\$ 116.0	1.9	6.5%	32.2%	C\$ 5	C\$ 117														
JAMESON RESOURCES (JAL-AU)	A\$ 0.17			0.84	257	A\$ 42.3	0.2	0.0%	8.0%	A\$ 0	A\$ 38														
<b>Group Average - Developers / Explorers</b>												Avg. ->													
<b>Sundry Companies</b>																									
ADARO ENERGY (ADRO-JKSE)	¥ 1,990	¥ 2,318	16.5%	1.15	31,986	¥ 63,652,064	37.4	0.9%	11.4%	¥ 1,434	¥ 5,198	0.03	0.03	0.02	5.9x	5.7x	6.2x	9.9x	9.9x	9.3x	4.0x	3.9x	4.1x		
NLC INDIA (NEYVELILIG-NSEI)	₹ 111.55		0.86	1,678	₹ 187,149	1.4	0.8%	10.5%	₹ 86,674	₹ 275,413															
SOUTHGOBI RESOURCES (SGQ-T)	C\$ 0.18		(0.82)	273	C\$ 49	0.0	0.0%	4.6%	C\$ 118	C\$ 151															
BUKIT ASAM (PTBA-JKSE)	¥ 2,610	¥ 2,870	9.9%	1.11	11,521	¥ 30,068,921	21.9	1.4%	12.2%	¥ 2,368,524	¥ 27,390,566	336.24	337.66	326.85	7.8x	7.7x	8.0x	8.8x	9.2x	9.2x	5.5x	5.7x	5.8x		
<b>Group Average - Sundry Companies</b>												Avg. ->			6.8x	6.7x	7.1x	9.4x	9.5x	9.3x	4.7x	4.6x	4.8x		

All data sourced from Bloomberg



## Iron Comparables – Consensus Estimates

Company (Ticker)	Bloomberg				Shares Outstanding (millions)	Market Capitalization (millions)	Daily Volume (millions)	Weekly Liquidity	WACC	Debt (millions)	Enterprise Value (millions)	CFPS (LoC)			P/CFPS			P/EPS						
	Consensus Share Price	Target	Implied Return	β								2018	2019	2020	2018	2019	2020	2018	2019	2020				
<b>Diversified Mining Houses</b>																								
VALE SA (VALE3-BZ)	R\$ 42.29	R\$ 43.50	2.9%	1.48	5,284	R\$ 223,480	19.3	1.2%	14.6%	R\$ 95,563	R\$ 294,905	6.12	6.36	4.21	6.9x	6.6x	10.0x	11.0x	11.2x	9.8x	6.6x	6.5x	6.3x	
BHP BILLITON (BHP-AU)	A\$ 30.58	A\$ 29.06	(5.0)%	1.67	3,212	A\$ 155,136	8.6	1.0%	10.7%	A\$ 30,474	A\$ 143,768	3.83	4.01	4.14	8.0x	7.6x	7.4x	16.1x	19.2x	18.6x	6.5x	7.1x	6.9x	
RIO TINTO (RIO-AU)	A\$ 78.25	A\$ 76.21	(2.6)%	1.27	412	A\$ 123,939	2.4	1.8%	9.7%	A\$ 17,630	A\$ 112,085	8.97	9.04	10.09	8.7x	8.7x	7.8x	14.7x	15.6x	14.1x	6.7x	6.9x	6.3x	
<b>Group Average - Diversified Mining</b>															<b>Avg.-&gt;</b>	<b>7.9x</b>	<b>7.6x</b>	<b>8.4x</b>	<b>13.9x</b>	<b>15.3x</b>	<b>14.1x</b>	<b>6.6x</b>	<b>6.9x</b>	<b>6.5x</b>
<b>Producers</b>																								
KUMBA IRON (KIO-SJE)	ZAR 39,429	ZAR 19,070	(51.6)%	1.41	322	ZAR 126,995	1.0	0.6%	13.4%	ZAR 4,500	ZAR 123,590	3002	2014		13.1x	19.6x		18.8x	25.6x	26.1x	8.4x	11.2x	10.7x	
FORTESCUE METALS (FMG-AU)	A\$ 5.35	A\$ 5.21	(2.6)%	1.82	3,114	A\$ 16,659	21.3	2.9%	11.3%	A\$ 4,471	A\$ 15,745	0.87	0.98	1.04	6.2x	5.5x	5.2x	9.5x	11.8x	11.5x	4.5x	5.0x	4.9x	
CLEVELAND CLIFFS INC (CLF-US)	US\$ 8.13	US\$ 7.50	(7.7)%	2.79	297	US\$ 2,411	11.3	21.2%	14.9%	US\$ 2,231	US\$ 3,886							8.8x	12.5x	10.4x	7.7x	9.1x	7.3x	
MMX MINERACAO (MMXM3-BRZ)	R\$ 3.32			0.57	6	R\$ 22	0.0	1.3%	10.8%	R\$ 134	R\$ 156													
FERREXPO PLC (FXPO-LSE)	GBp 296	GBp 230.18	(22.3)%	1.48	589	GBp 1,745	2.3	1.2%	6.9%	GBp 734	GBp 2,849	39.42	37.26	38.49	7.5x	8.0x	7.7x	8.7x	12.1x	12.1x	6.7x	9.1x	10.0x	
MOUNT GIBSON (MGX-AU)	A\$ 0.45	A\$ 0.45	(0.7)%	1.11	1,097	A\$ 493	1.7	0.4%	9.8%	A\$ 0	A\$ 47	0.02	0.03	0.08	21.4x	15.5x	6.0x							
GRANGE RESOURCES (GRR-AU)	A\$ 0.22			0.98	1,157	A\$ 255	2.5	0.6%	8.7%	A\$ 9	A\$ 106													
BCI MINERALS (BCI-AU)	A\$ 0.19			2.25	395	A\$ 73	1.2	3.9%	17.1%	A\$ 0	A\$ 37													
<b>Group Average - Producers</b>															<b>Avg.-&gt;</b>	<b>12.1x</b>	<b>12.1x</b>	<b>6.3x</b>	<b>11.5x</b>	<b>15.5x</b>	<b>15.0x</b>	<b>6.9x</b>	<b>8.6x</b>	<b>8.2x</b>
<b>Advanced Development / Exploration (Select Group)</b>																								
SUNDANCE RESOURCES (SDL-AU)	A\$ 0.01			0.74	7,774	A\$ 38.9	11.1	0.7%	4.5%	A\$ 100	A\$ 109													
NEW MILLENNIUM (NML-T)	C\$ 0.13			1.62	181	C\$ 22.6	0.2	0.7%	17.1%	C\$ 0	C\$ 10													
ZANAGA IRON (ZIOC-LSE)	GBp 15			0.01	279	GBp 42.9	6.3	7.2%	8.8%	GBp 0	GBp 54													
CENTURY GLOBAL (CNT-T)	C\$ 0.24				98	C\$ 23.6	0.0	0.0%	11.3%	C\$ 0	C\$ 18													
CHAMPION IRON (CIA-T)	C\$ 1.42			1.61	425	C\$ 603.7	0.6	0.4%	10.8%	C\$ 44	C\$ 661													
BLACK IRON (BK1-T)	C\$ 0.11			1.01	160	C\$ 17.6	0.3	0.6%	11.4%	C\$ 0	C\$ 9													
OCEANIC IRON (FEO-T)	C\$ 0.10			1.75	67	C\$ 6.4	0.0	0.1%	16.1%	C\$ 2	C\$ 7													
MACARTHUR MINERALS (MMS-T)	C\$ 0.06			0.28	231	C\$ 13.9	1.0	1.3%	6.8%	C\$ 0	C\$ 14					<b>Avg.-&gt;</b>								
<b>Group Average - Developers / Explorers</b>																								

All data sourced from Bloomberg



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	Ticker	Company	1	2	3	4	5	6	7	8
	TSX:AGI	Alamos Gold Inc.			X	X				
	TSX:AKG	Asanko Gold Inc.		X	X					
	TSXV:AGB	Atlantic Gold Corp.			X	X		X		
	TSX:BTO	B2Gold Corp.	X		X					
	TSXV:BGM	Barkerville Gold Mines Ltd.			X	X				
	TSX:ABX	Barrick Gold Corporation			X					
	TSX:CS	Capstone Mining Corp.			X					
	TSXV:KBLT	Cobalt 27 Capital Corp.				X				
	TSX:CMMC	Copper Mountain Mining Corp.			X					
	TSX:DML	Denison Mines Corp.			X			X		
	TSX:DGC	Detour Gold Corporation	X		X					
	TSX:ELD	Eldorado Gold Corporation	X		X					
	TSX:EDV	Endeavour Mining Corp.	X		X					
	TSX:EFR	Energy Fuels Inc.			X			X		



	TSXV:EQX	Equinox Gold Corp.	X	X	X	X	X		
	TSXV:FPC	Falco Resources Ltd.			X	X			
	TSXV:GQC	GoldQuest Mining Corp.	X						
	ASX:GOR	Gold Road Resources Limited			X				
	TSX:HRT	Harte Gold Corp.			X	X			
	TSX:HBM	Hudbay Minerals, Inc.			X	X			
	TSX:LGD	Liberty Gold Corp.	X		X				
	TSX:LUC	Lucara Diamond Corp.		X	X				
	TSX:LUG	Lundin Gold Inc.			X				
	TSX:LUN	Lundin Mining Corporation			X				
	TSX:MOZ	Marathon Gold Corp.	X	X	X	X			
	TSX:MAX	Midas Gold Corp.		X	X			X	
	TSX:MPVD	Mountain Province Diamonds Inc.	X	X	X				
	TSX:NXE	NexGen Energy Ltd.	X	X	X				
	TSX:NSU	Nevsun Resources Ltd.		X	X				
	TSX:NHK	Nighthawk Gold Corp.	X		X				
	TSX:OGC	OceanaGold Corporation			X				
	TSX:OR	Osisko Gold Royalties Ltd.			X	X			
	TSX:OSK	Osisko Mining Corp.			X	X			
	TSXV:PGM	Pure Gold Mining Inc.	X	X	X	X			
	TSXV:ROG	Roxgold Inc.	X		X				
	TSX:RNX	RNC Minerals		X	X		X		
	TSX:SBB	Sabina Gold and Silver Corp.			X	X			
	TSXV:SGI	Superior Gold Inc.				X			
	TSX:SMF	SEMAFO Inc.			X				
	TSX:THO	Tahoe Resources Inc.			X				
	TSX:TML	Treasury Metals Inc.			X	X			
	TSX:TV	Trevali Mining Corp.	X		X	X			
	AMEX:UEC	Uranium Energy Corp.			X	X		X	
	TSX:U	Uranium Participation Corporation	X			X			
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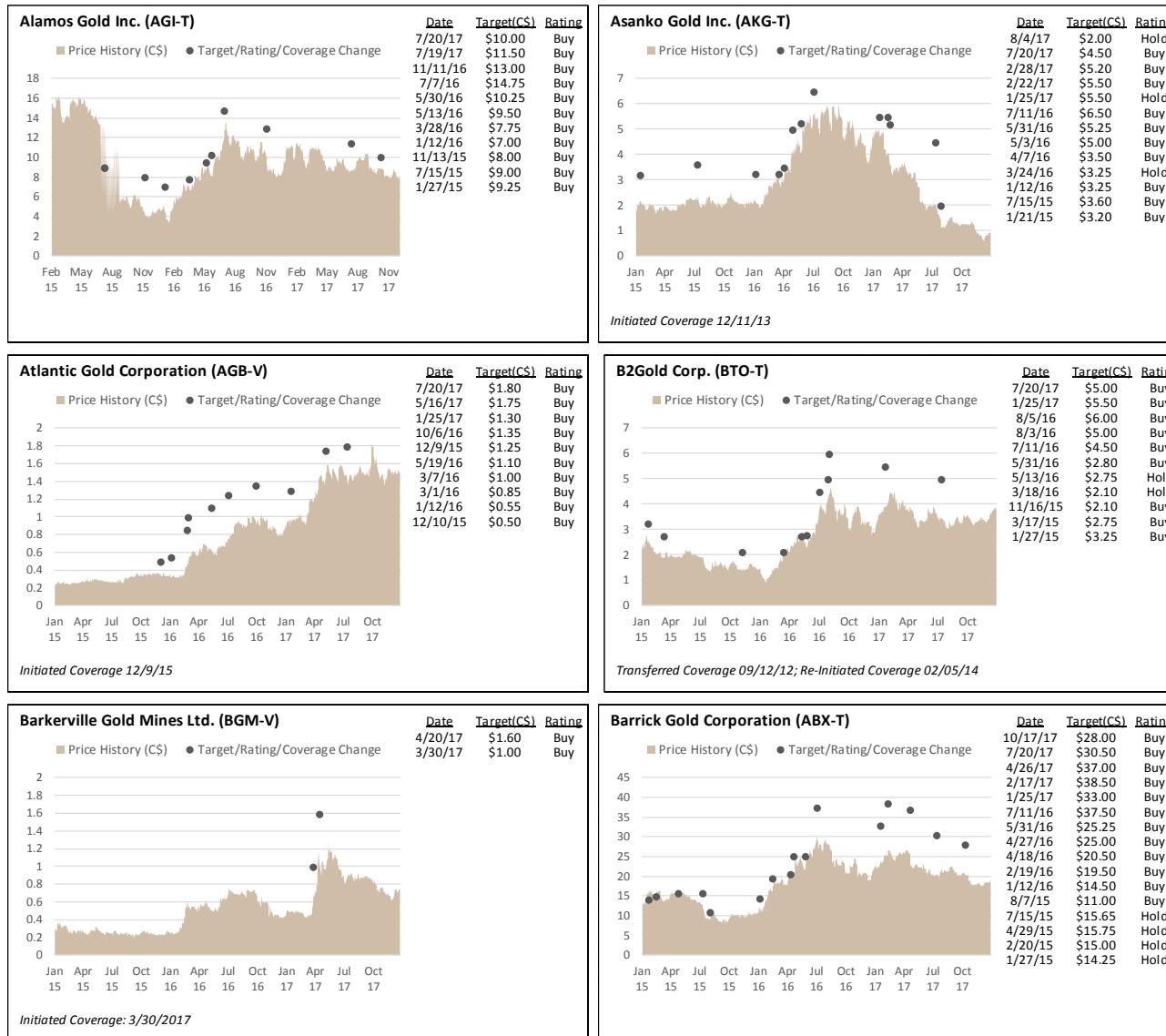


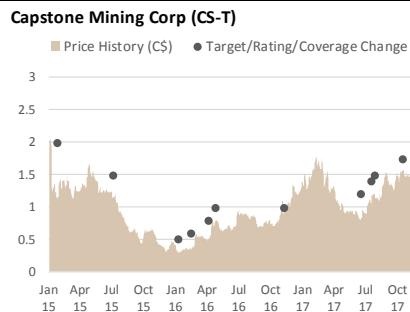
medium tolerance for risk and volatility and who are prepared to accept general stock market risk including the risk of a temporary or permanent loss of some of their investment capital.

## Distribution of Ratings (as of January 5, 2018)

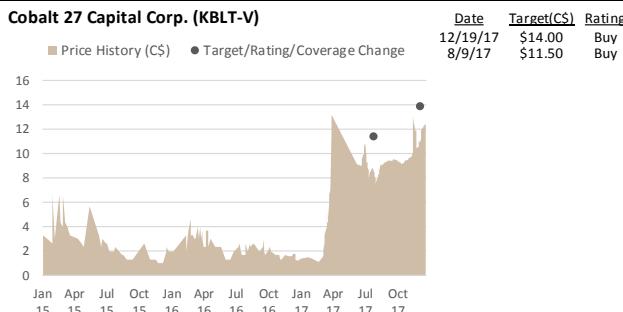
	%	#	IB Clients (TTM)
<b>Buy</b>	76.5%	75	97.1%
<b>Hold</b>	8.2%	8	2.9%
<b>Sell</b>	0.0%	0	0.0%
<b>Tender</b>	0.0%	0	0.0%
<b>UR (Buy)</b>	0.0%	0	0.0%
<b>UR (Hold)</b>	0.0%	0	0.0%
<b>UR (Sell)</b>	0.0%	0	0.0%
<b>Dropped (TTM)</b>	15.3%	15	0.0%

## Price Chart, Rating and Target Price History (as of January 5, 2018)

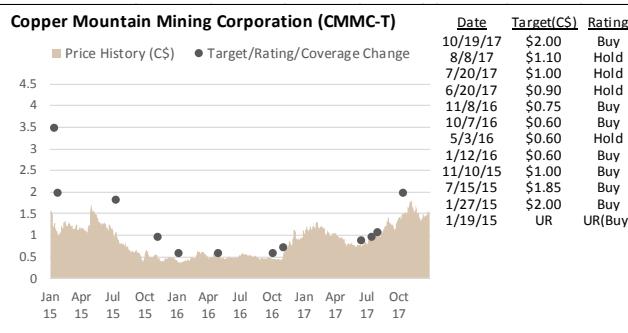




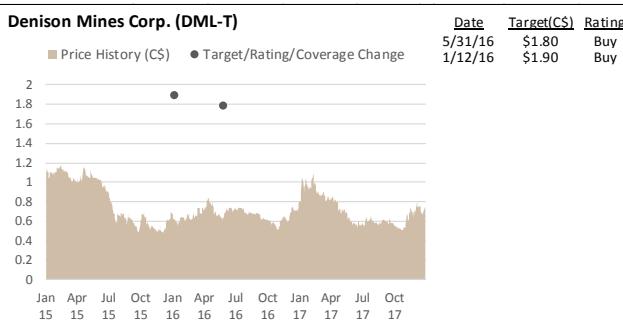
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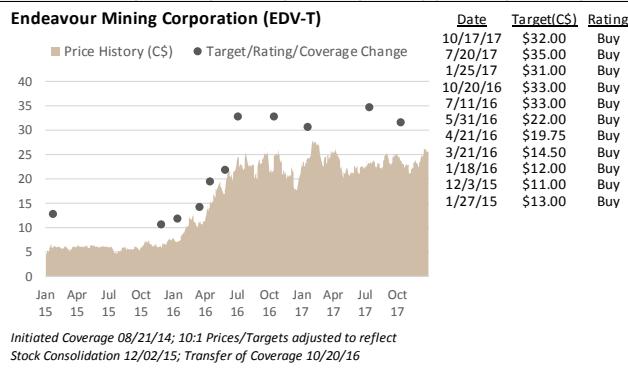
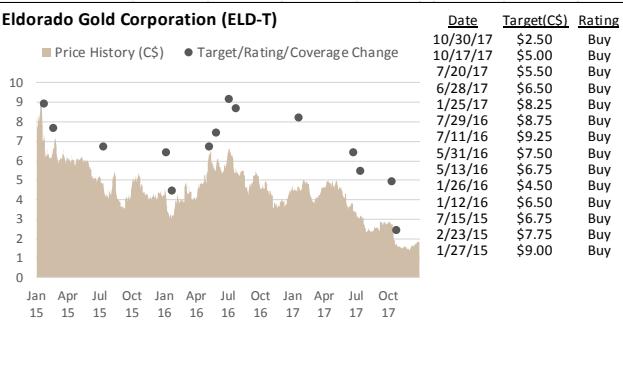
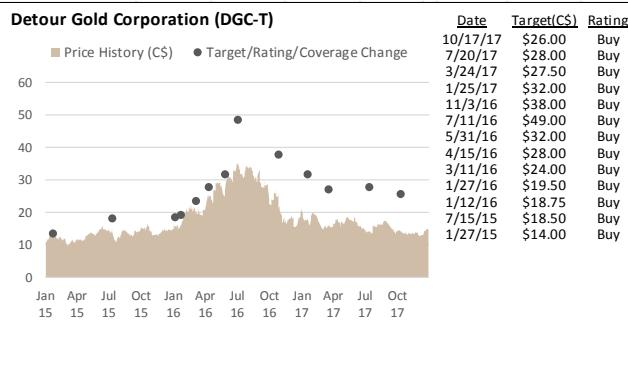
Initiated Coverage: 8/9/2017



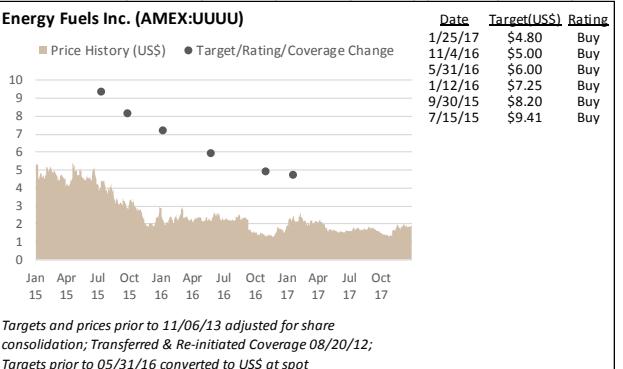
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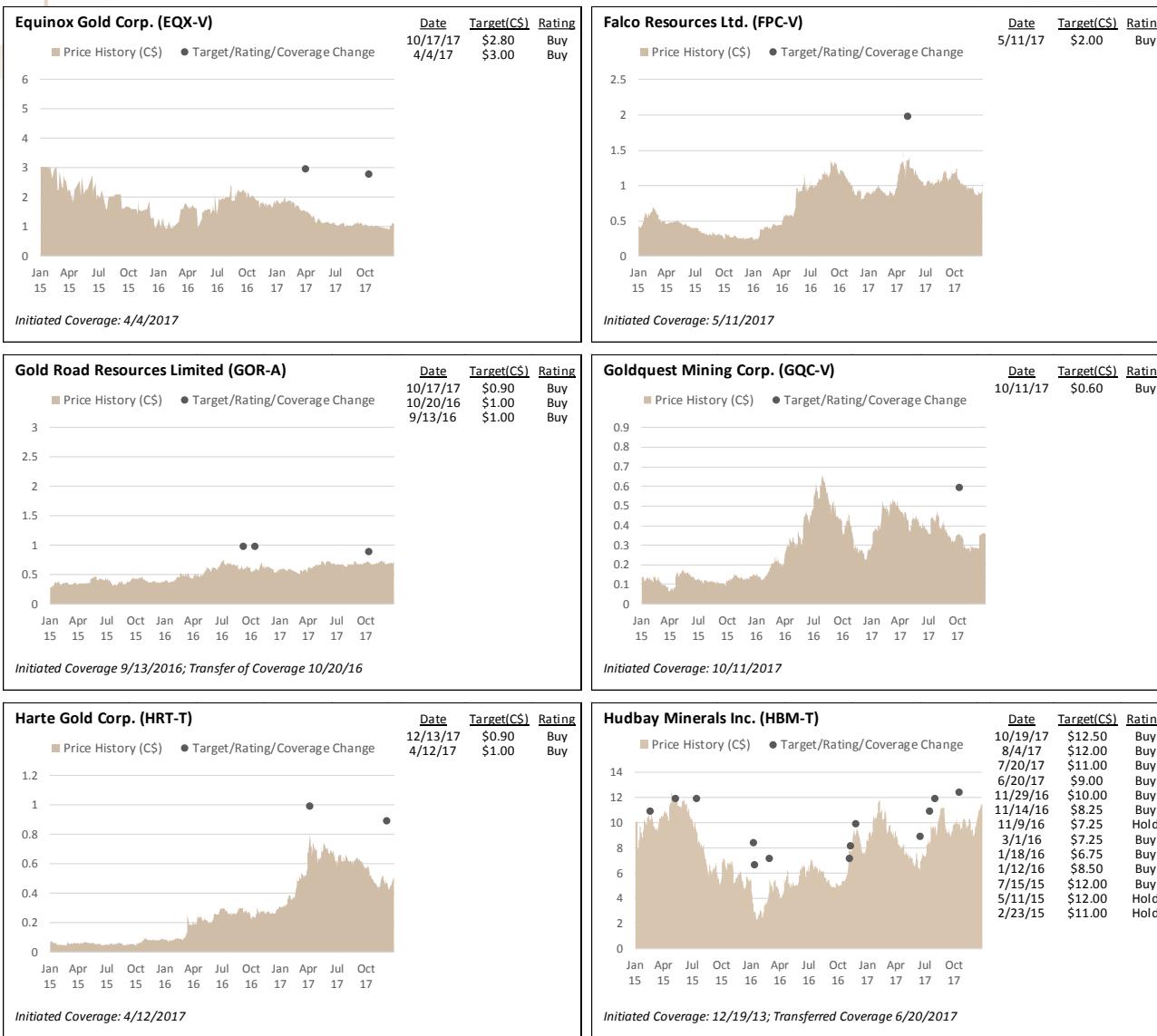
Transferred & Re-initiated Coverage 08/20/12

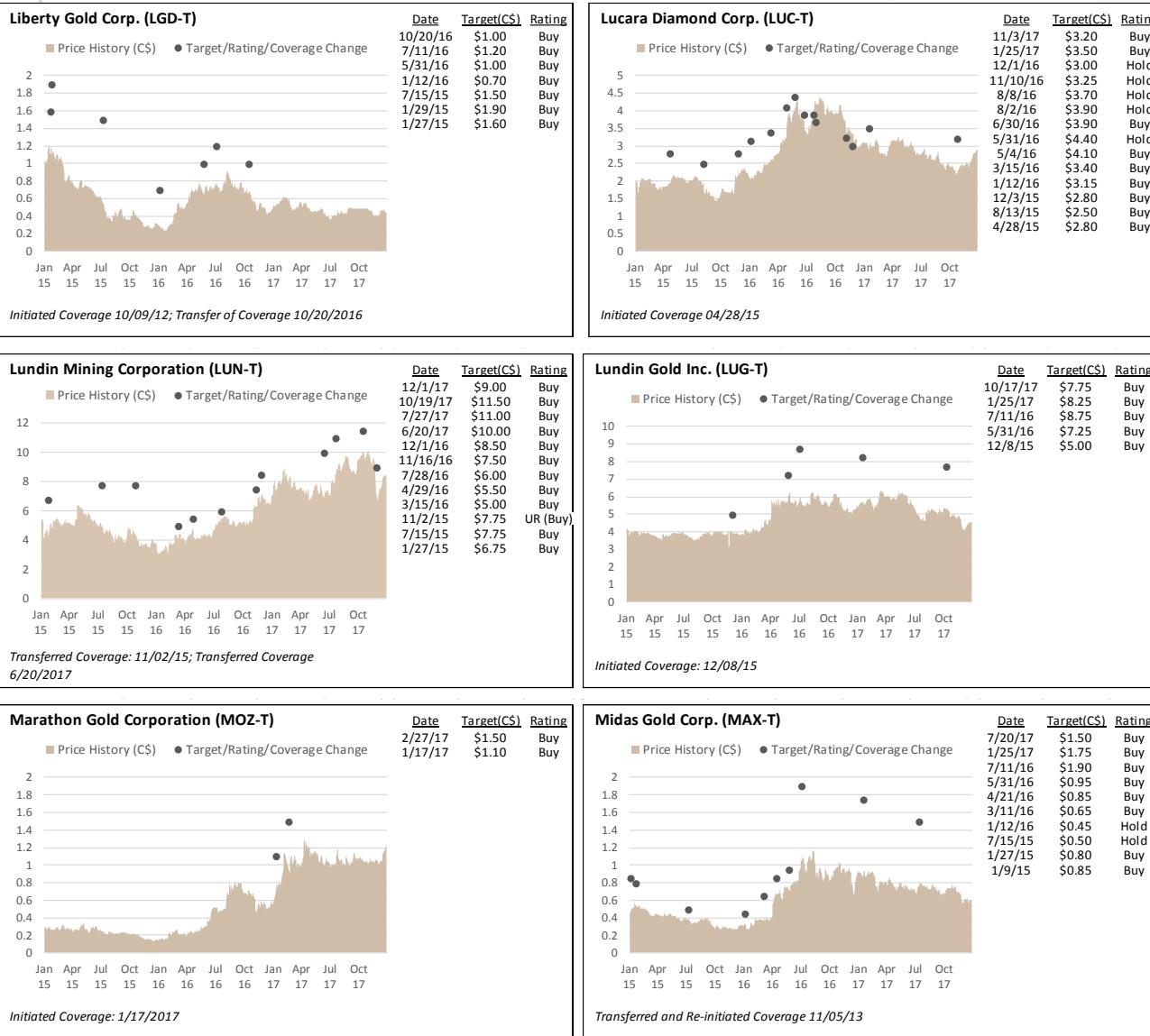


Initiated Coverage 08/21/14; 10:1 Prices/Targets adjusted to reflect Stock Consolidation 12/02/15; Transfer of Coverage 10/20/16



Targets and prices prior to 11/06/13 adjusted for share consolidation; Transferred & Re-initiated Coverage 08/20/12; Targets prior to 05/31/16 converted to US\$ at spot

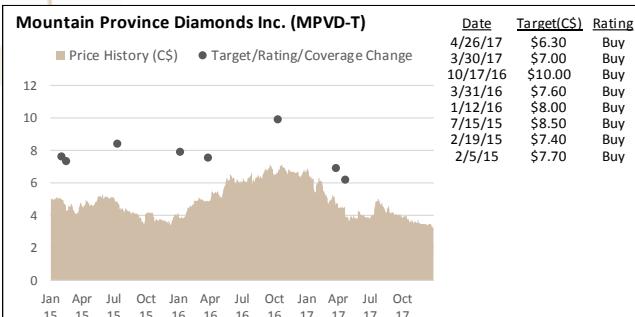




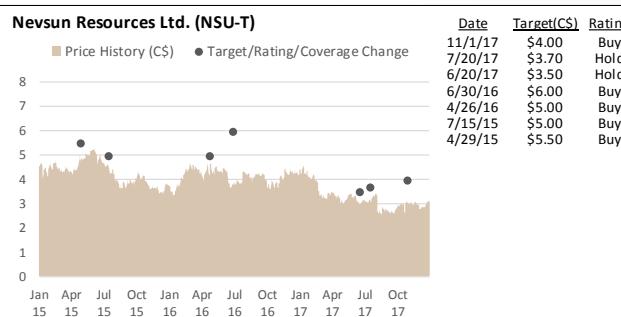


The Weekly Dig

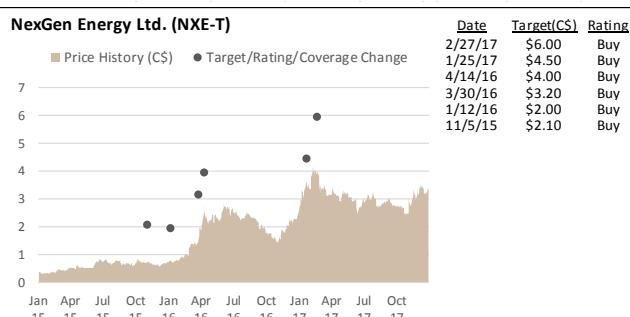
1/5/18



*Initiated Coverage 02/05/15*



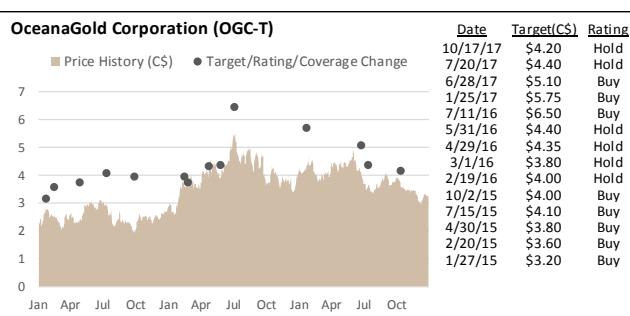
*Initiated Coverage: 08/27/04; Transferred Coverage 6/20/2017*



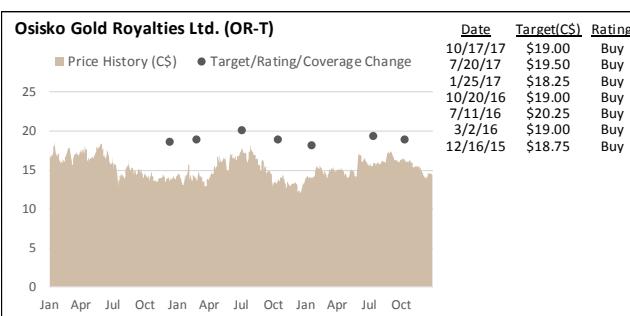
*Initiated Coverage 11/05/15*



*Initiated Coverage: 10/20/2017*

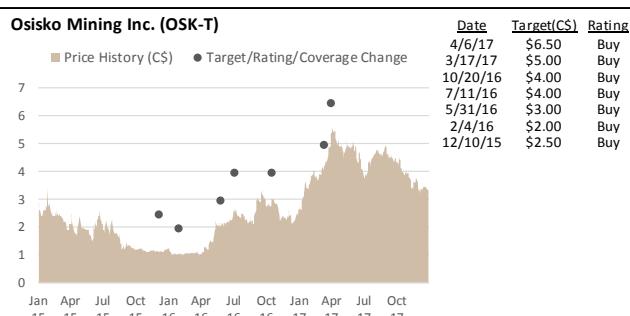


Initiated Coverage 09/22/14



*Initiated Coverage 12/16/2015; Transfer of Coverage*

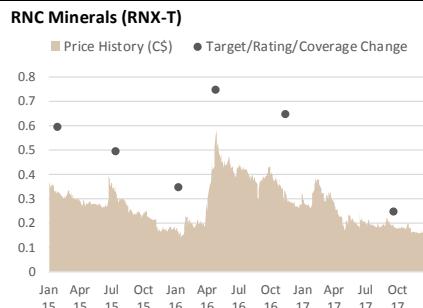
10/20/2016



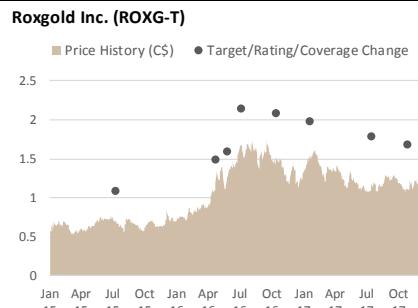
*Initiated Coverage 12/10/2016; Transfer of Coverage  
10/20/2016*



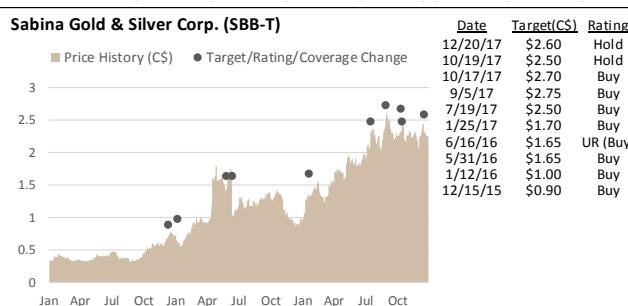
15 15 15 15 16



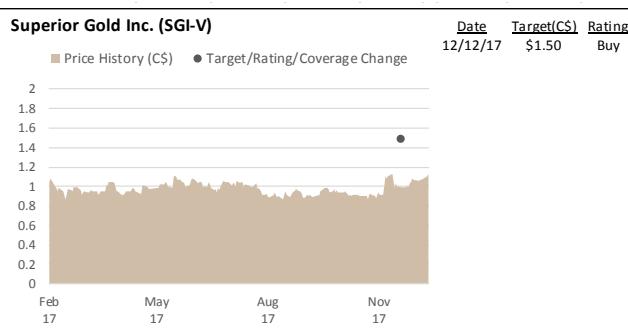
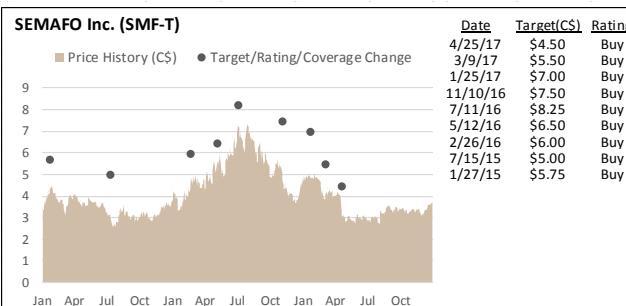
Initiated Coverage: 07/05/11; Name Change to RNC Minerals  
9/13/2016; Transferred Coverage 9/26/2017



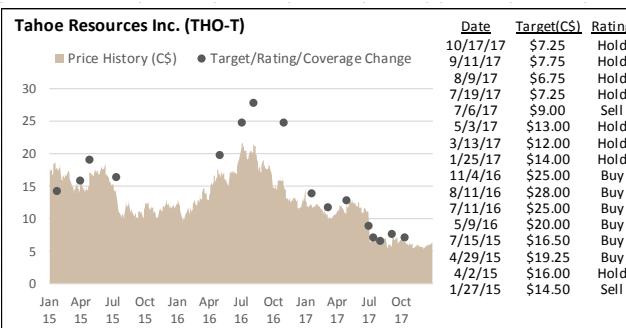
Initiated Coverage 01/27/14; Transfer of Coverage 10/20/2016



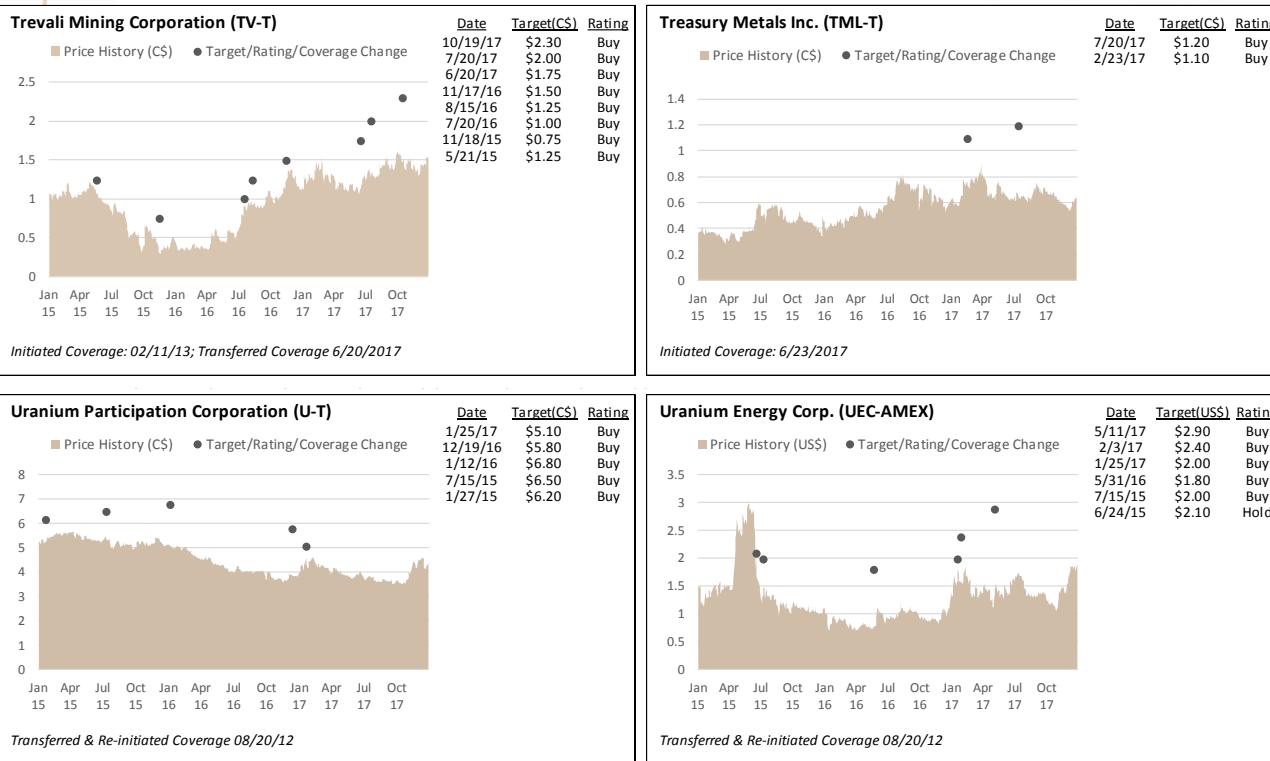
Initiated Coverage 12-15-15



Initiated Coverage: 12/12/2017



Initiated Coverage 11/05/13



B: Buy; H: Hold; S: Sell; T: Tender; UR: Under Review

Source: Capital IQ and Haywood Securities