

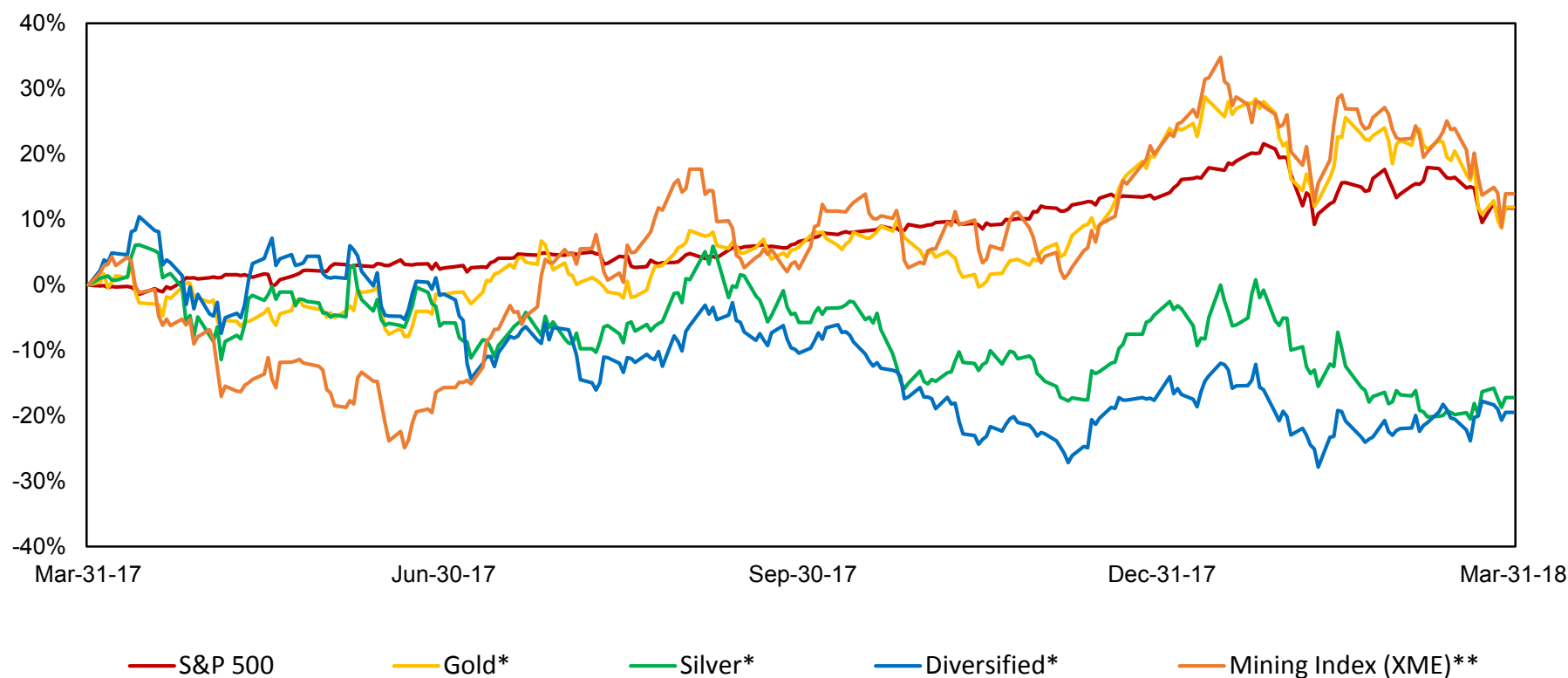


NOBLE CAPITAL MARKETS NEWSLETTER
METALS AND MINING
QUARTERLY REVIEW Q1 2018



MINING SECTOR NEWSLETTER

MINING SECTOR LTM EQUITY PERFORMANCE



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* Noble Proprietary Sector (index composed of companies in the comparable table)
 ** MINING Select Sector SPDR ETF (refer to disclosure section for more information)

Source: Capital IQ as of 03/29/2018



MINING – FUNDAMENTAL DATA

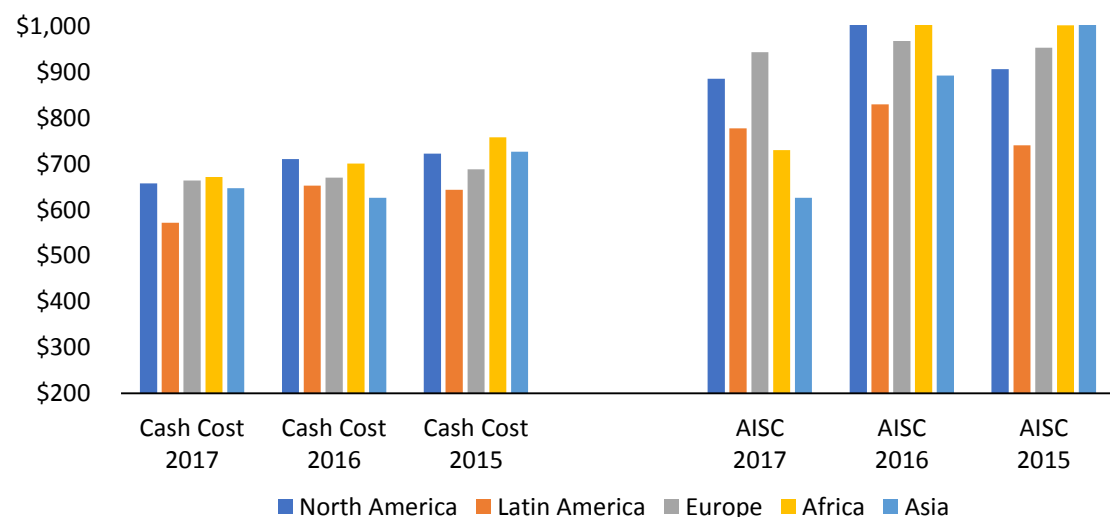
GOLD SPOT PRICE



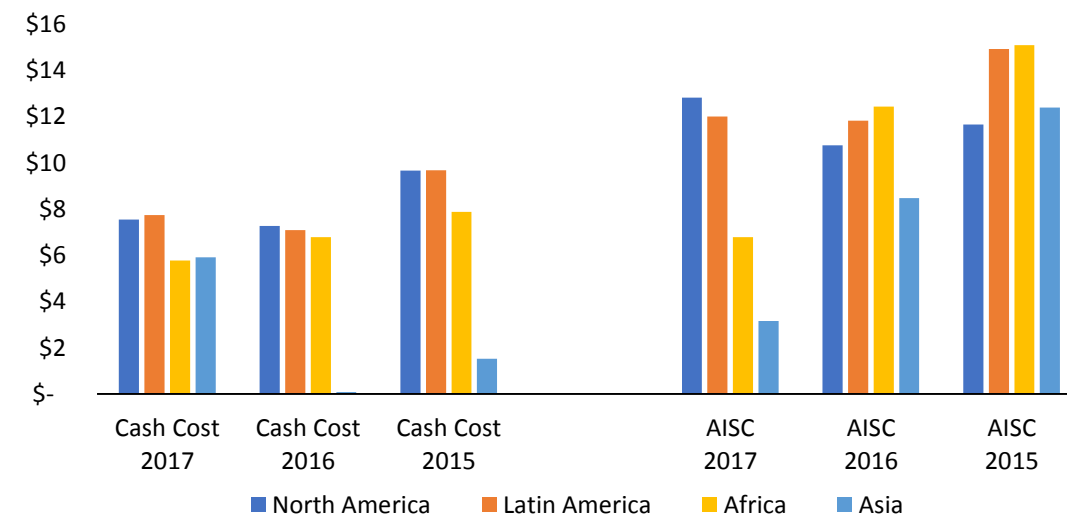
SILVER SPOT PRICE



GOLD CASH COSTS AND AISC BY REGION



SILVER CASH COSTS AND AISC BY REGION



Source: Capital IQ as of 03/29/2018



METALS AND MINING INDUSTRY OUTLOOK

METALS AND MINING INDUSTRY OUTLOOK

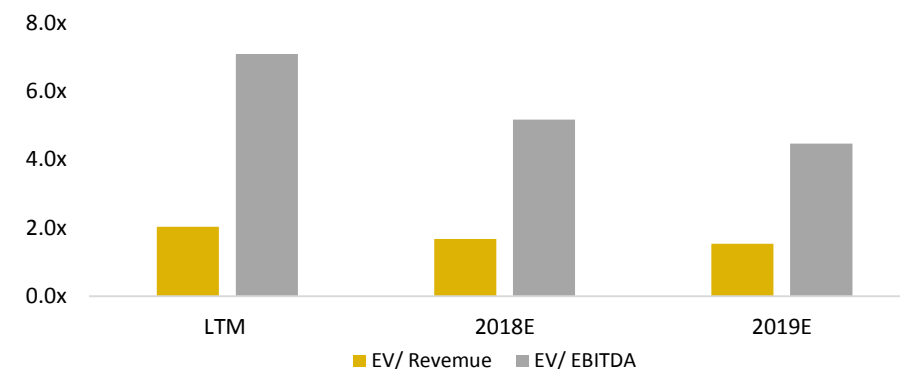
Mining companies (as measured by the XME) declined 6.4% during the March quarter. While the price of gold rose 1.4%, silver declined 5.1%. The gold/silver price ratio at the end of the quarter was 81.6x versus a 15-year average of 62.6x. Given that the current ratio lies above one standard deviation from the mean, silver is arguably undervalued relative to gold. During the same time frame, the ratio reached a low of 32.0x in April 2011 and a high of 84.4x in October 2008.

We continue to have a favorable view of the precious metals & mining sector. We think favorable economic conditions will continue to support industrial demand for silver. Furthermore, potential inflationary pressure keeping real interest rates subdued, rising geopolitical uncertainty, the potential for a weaker dollar and equity market volatility could encourage investors to look to both silver and gold for investment. However, silver prices could be more sensitive to negative changes in the economic outlook (e.g., fear of a recession) although the steep discount to gold could provide a floor on pricing.

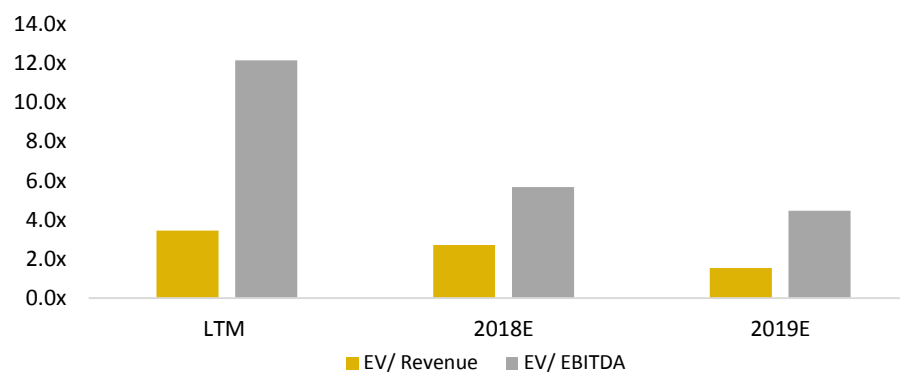
Following several years of underinvestment in precious metals exploration and development, supply growth could be constrained. Given that demand for coins and bullion was down sharply in 2017, resurgence in investment demand could put upward pressure on precious metals prices. Given that silver is trading at steep discount to gold, we think more upside exists in silver in the event both metals experience a surge in demand. We favor companies with high-quality reserves and resources, brownfield exploration potential, a favorable cost structure and the ability to quickly respond to market conditions.

Source: Capital IQ as of 03/29/2018, Noble Capital Markets

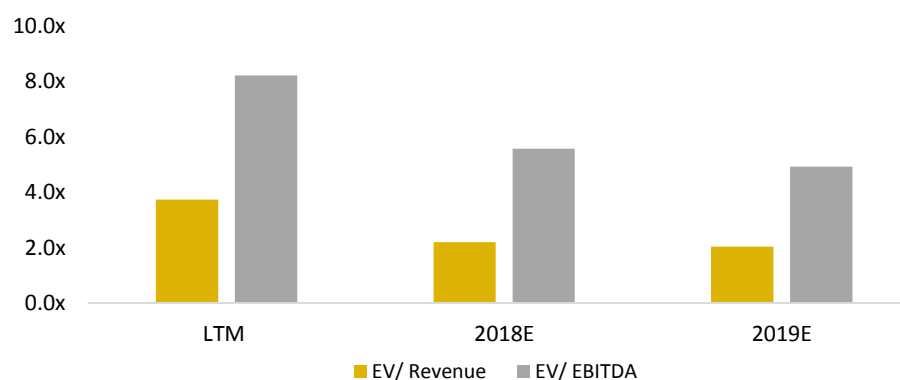
GOLD



SILVER



DIVERSIFIED



GOLD MINING

COMPARABLE TABLES

Major Gold Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Kinross Gold Corporation	TSX:K	-61%	14%	\$3.94	63%	4,930	1,733	5,641	3,303	1,201	1.7x	1.7x	1.7x	4.7x	4.6x	4.4x	36%
B2Gold Corp.	TSX:BTO	-21%	-4%	\$2.74	67%	2,689	702	3,242	639	248	5.1x	2.6x	2.6x	13.1x	5.3x	4.9x	39%
Yamana Gold Inc.	TSX:YRI	41%	-2%	\$2.76	59%	2,618	1,912	4,457	1,804	575	2.5x	2.3x	2.1x	7.8x	5.4x	5.0x	32%
Alamos Gold Inc.	TSX:AGI	-38%	-37%	\$5.19	46%	2,022	8	1,799	543	182	3.3x	2.7x	2.5x	9.9x	6.8x	5.4x	33%
Detour Gold Corporation	TSX:DGC	-20%	-13%	\$10.11	54%	1,767	268	1,897	708	272	2.7x	2.3x	2.6x	7.0x	5.5x	7.4x	38%
Eldorado Gold Corporation	TSX:ELD	-92%	-76%	\$0.84	16%	663	594	842	391	82	2.2x	1.8x	1.4x	10.2x	5.8x	4.0x	21%

Mean	2.9x	2.2x	2.2x	8.8x	5.6x	5.2x	33%
Median	2.6x	2.3x	2.3x	8.8x	5.5x	5.0x	35%

Intermediate Gold Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Premier Gold Mines Limited	TSX:PG	-24%	-5%	\$2.19	53%	443	19	361	208	87	1.7x	2.4x	2.0x	4.2x	10.0x	9.4x	42%
Klondex Mines Ltd.	TSX:KDX	-9%	-41%	\$2.36	44%	425	36	437	241	45	1.8x	1.3x	1.2x	9.8x	3.6x	3.4x	19%
Teranga Gold Corporation	TSX:TGZ	46%	12%	\$3.48	77%	374	14	314	292	111	1.1x	1.1x	1.1x	2.8x	2.9x	3.3x	38%
Argonaut Gold Inc.	TSX:AR	2%	9%	\$1.96	65%	338	8	333	155	43	2.1x	1.5x	1.2x	7.7x	3.8x	2.7x	28%
Golden Star Resources Ltd.	TSX:GSC	-33%	-29%	\$0.59	50%	224	96	226	315	71	0.7x	0.8x	0.7x	3.2x	2.2x	1.6x	23%
Asanko Gold Inc.	TSX:AKG	42%	-61%	\$1.01	27%	205	158	311	243	112	1.3x	1.1x	1.0x	2.8x	3.3x	3.1x	46%

Mean	1.5x	1.4x	1.2x	5.1x	4.3x	3.9x	33%
Median	1.5x	1.2x	1.1x	3.7x	3.5x	3.2x	33%

Source: Capital IQ as of 03/29/2018

GOLD MINING

COMPARABLE TABLES

Junior Gold Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Corvus Gold Inc.	TSX:KOR	28%	174%	\$1.68	75%	175	-	170	-	-6	NM	NM	NM	NM	NM	NM	NM
Contango Ore, Inc.	OTCPK:CTGO	2%	1%	\$18.51	90%	111	-	95	-	-	NM	NM	NM	NM	NM	NM	NM
Pershing Gold Corporation	NasdaqGM:PGLC	-15%	-28%	\$2.05	62%	69	-	56	-	-12	NM	NM	0.6x	NM	NM	3.4x	NM
Marlin Gold Mining Ltd.	TSXV:MLN	-61%	-55%	\$0.32	31%	55	46	88	62	28	1.4x	1.1x	NM	3.2x	7.9x	NM	45%
GoGold Resources Inc.	TSX:GGD	-14%	-42%	\$0.31	42%	53	-	39	19	-6	2.0x	0.9x	0.7x	NM	NM	NM	NM
Metanor Resources Inc.	TSXV:MTO	-22%	-32%	\$0.43	34%	44	1	35	43	3	0.8x	NM	NM	13.0x	NM	NM	6%

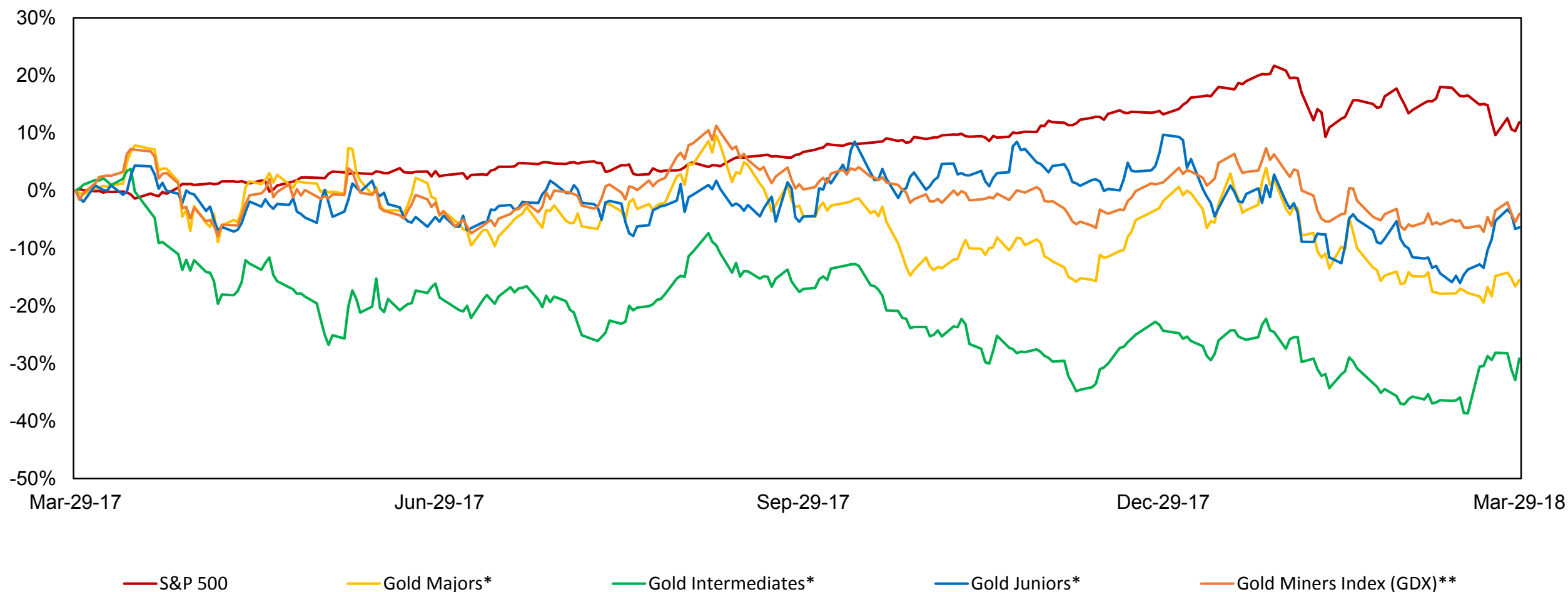
Mean	1.4x	1.0x	0.6x	8.1x	7.9x	3.4x	26%
Median	1.4x	1.0x	0.6x	8.1x	7.9x	3.4x	26%

Source: Capital IQ as of 03/29/2018



GOLD MINING LTM EQUITY PERFORMANCE

(NOBLE INDEX SELECTION)



* Noble Proprietary Sector (index composed of companies in the comparable table)

** SPDR Gold Shares (refer to disclosure section for more information)

Source: Capital IQ as of 03/29/2018

SILVER MINING

COMPARABLE TABLES

Major Silver Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Pan American Silver Corp.	TSX:PAAS	3%	-9%	\$16.10	62%	2,468	31	2,281	817	250	2.8x	2.5x	2.4x	9.1x	7.4x	6.7x	31%
Coeur Mining, Inc.	NYSE:CDE	7%	1%	\$8.00	78%	1,490	411	1,709	710	198	2.4x	2.4x	2.0x	8.6x	10.6x	6.8x	28%
Tahoe Resources Inc.	TSX:THO	-2%	-41%	\$4.69	36%	1,466	43	1,386	734	283	1.9x	1.9x	1.3x	4.9x	5.0x	3.0x	39%
Hecla Mining Company	NYSE:HL	-8%	-29%	\$3.67	59%	1,466	514	1,760	578	187	3.0x	2.5x	2.0x	9.4x	6.7x	5.5x	32%
SSR Mining Inc.	TSX:SSRM	9%	-8%	\$9.62	63%	1,153	233	844	449	175	1.9x	1.5x	1.2x	4.8x	4.7x	3.1x	39%
First Majestic Silver Corp.	TSX:FR	-10%	-23%	\$6.11	48%	1,013	41	927	252	68	3.7x	2.3x	1.9x	13.6x	7.6x	4.2x	27%

Mean	2.6x	2.2x	1.8x	8.4x	7.0x	4.9x	33%
Median	2.6x	2.3x	1.9x	8.9x	7.1x	4.9x	31%

Intermediate Silver Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
MAG Silver Corp.	TSX:MAG	-21%	-28%	\$9.78	50%	836	-	680	-	-8	NM	NM	NM	NM	NM	NM	NM
Fortuna Silver Mines Inc.	TSX:FVI	0%	5%	\$5.21	70%	831	41	664	268	126	2.5x	2.5x	1.9x	5.3x	5.2x	3.8x	47%
Silvercorp Metals Inc.	TSX:SVM	3%	-21%	\$2.69	49%	451	-	407	166	84	2.5x	2.4x	2.3x	4.8x	4.4x	3.6x	51%
Endeavour Silver Corp.	NYSE:EXK	2%	-23%	\$2.43	65%	309	-	272	150	25	1.8x	1.2x	1.1x	10.9x	4.2x	4.0x	17%
Great Panther Silver Limited	TSX:GPR	-10%	-28%	\$1.17	51%	197	-	142	64	5	2.2x	1.6x	1.4x	30.9x	NM	NM	7%

Mean	2.2x	1.9x	1.7x	13.0x	4.6x	3.8x	30%
Median	2.3x	2.0x	1.6x	8.1x	4.4x	3.8x	32%

Source: Capital IQ as of 03/29/2018

SILVER MINING

COMPARABLE TABLES

Junior Silver Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Bear Creek Mining Corporation	TSXV:BCM	11%	1%	\$1.78	65%	184	-	163	-	-12	NM	NM	NM	NM	NM	NM	NM
Americas Silver Corporation	TSX:USA	-10%	14%	\$3.28	54%	137	15	143	54	4	2.6x	1.0x	1.0x	34.3x	5.2x	4.0x	8%
Alexco Resource Corp.	TSX:AXR	-16%	-19%	\$1.33	58%	135	-	121	9	-5	14.1x	13.0x	1.1x	NM	NM	NM	NM
Excellon Resources Inc.	TSX:EXN	-22%	-6%	\$1.15	50%	109	-	97	21	-2	4.6x	1.6x	1.0x	NM	NM	NM	NM
Avino Silver & Gold Mines Ltd.	TSX:ASM	1%	-20%	\$1.38	55%	73	12	77	33	9	2.3x	1.5x	1.0x	8.9x	1.4x	NM	26%
Kootenay Silver Inc	TSXV:KTN	-15%	-39%	\$0.14	42%	27	-	25	-	-3	NM	NM	NM	NM	NM	NM	NM

Mean	5.9x	4.3x	1.0x	21.6x	3.3x	4.0x	17%
Median	3.6x	1.5x	1.0x	21.6x	3.3x	4.0x	17%

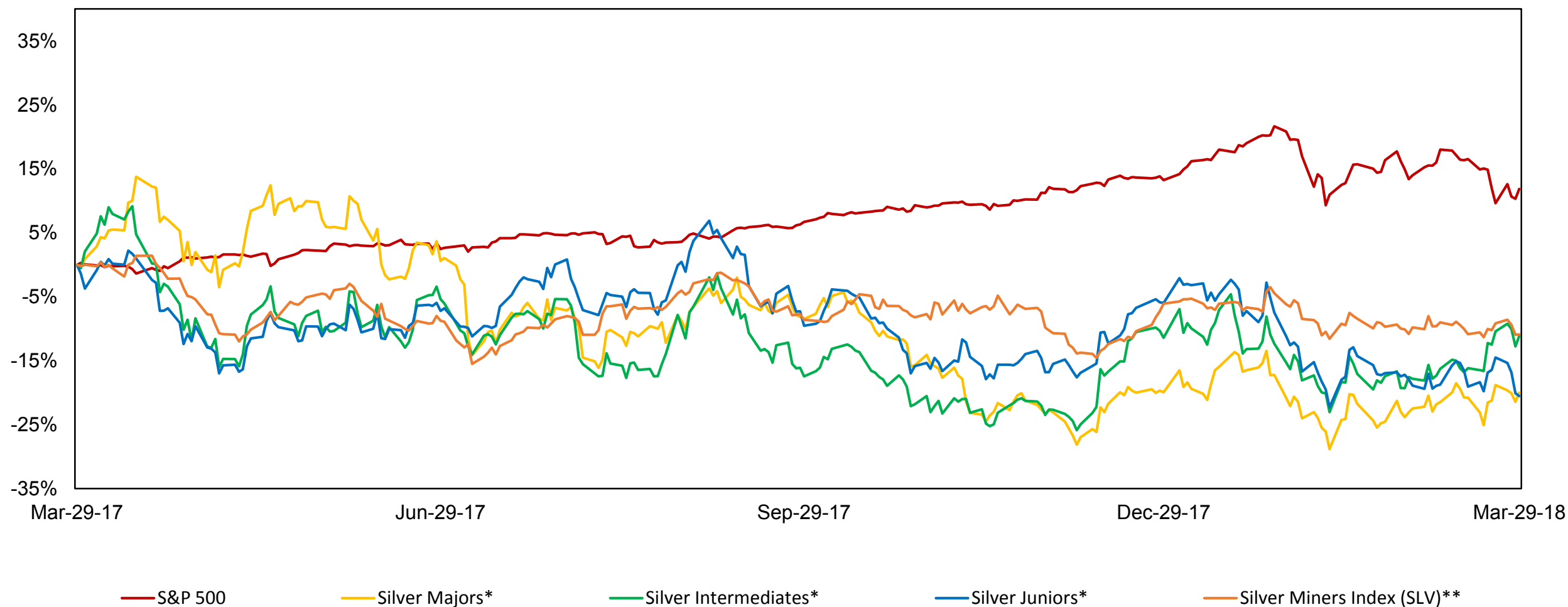
Source: Capital IQ as of 03/29/2018



SILVER MINING

LTM EQUITY PERFORMANCE

(NOBLE INDEX SELECTION)



* Noble Proprietary Sector (index composed of companies in the comparable table)

** SPDR Gold Shares (refer to disclosure section for more information)

Source: Capital IQ as of 03/29/2018

GOLD & SILVER LTM GLOBAL M&A ACTIVITY

Date	Buyer	Seller	Transaction Value (\$M)	EV/Revenue	EV/EBITDA
2/21/2018	PAO VOLGA Capital	OJSC Novosibirsk Refinery	7.2	-	-
2/13/2018	Westgold Resources Limited	Polar Metals Pty Ltd	7.2	-	-
1/17/2018	African Resources Limited	Altyn Plc	4.9	6.1x	-
12/18/2017	Aura Minerals Inc.	Rio Novo Gold Inc.	21.8	-	5.3x
12/18/2017	Greater Success Global Limited	Resolute (West Africa) Ltd.	5.0	-	-
12/11/2017	Arete Capital Partners	Stawell Gold Mine Pty Ltd	6.3	-	-
12/11/2017	GFG Resources Inc	Rapier Gold Inc.	6.2	-	-
11/22/2017	Endomines AB	TVL Gold 1 LLC	31.3	-	-
11/14/2017	Serabi Gold plc	Chapleau Resources Ltd.	52.3	-	-
11/7/2017	Centerra Gold Inc.	AuRico Metals Inc.	239.7	21.5x	-
10/25/2017	Equinox Gold Corp.	NewCastle Gold Ltd.	161.1	-	-
9/29/2017	Osisko Gold Royalties Ltd	Barkerville Gold Mines Ltd.	5.3	-	-
9/11/2017	Alamos Gold Inc.	Richmont Mines Inc.	763.8	4.6x	15.3x
9/11/2017	Coeur Mining, Inc.	JDS Silver Inc.	250.0	-	-
9/1/2017	-	Novo Resources Corp.	15.3	-	-
8/31/2017	PAO VOLGA Capital	OJSC Novosibirsk Refinery	12,115.0	-	-
8/16/2017	Cornerstone Capital Resources Inc.	SolGold plc	8.4	-	-
8/14/2017	Spitfire Materials Limited	Aphrodite Gold Limited	25.0	-	-
7/12/2017	Rich Pro Investments Limited	Asa Resource Group Plc	27.2	-	-
7/4/2017	Cornerstone Capital Resources Inc.	SolGold plc (LSE:SOLG)	50.2	-	-
6/28/2017	Endeavour Mining Corporation	Avnel Gold Mining Limited	106.6	8.6x	-
6/19/2017	Cornerstone Capital Resources Inc.	SolGold plc	41.7	-	-
6/8/2017	Anova Metals Limited	Exterra Resources Limited	16.7	-	-
6/6/2017	Realty Management Center	OJSC Novosibirsk Refinery	15.5	-	-
5/14/2017	Eldorado Gold Corporation	Integra Gold Corp.	391.3	-	-
4/26/2017	Sandstorm Gold Ltd.	Mariana Resources Limited	194.4	-	-
4/10/2017	New Pacific Investment Corp. Limited	Empresa Minera Alcira S.A.	45.0	-	-
4/5/2017	Combined Success Investments Limited	Perfect Major Holdings Limited	41.6	-	-
4/5/2017	Geopacific Resources Limited	Kula Gold Limited	6.1	-	-
3/29/2017	Osisko Gold Royalties Ltd	Barkerville Gold Mines Ltd.	21.0	-	-
		Mean		10.2x	10.3x
		Median		7.3x	10.3x

Source: Capital IQ as of 03/29/2018

DIVERSIFIED MINING

COMPARABLE TABLES

Major Diversified Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Teck Resources Limited	TSX:TECK.B	-2%	16%	\$25.71	66%	14,768	5,079	19,076	9,607	4,068	2.0x	1.5x	1.6x	4.7x	3.3x	3.8x	42%
First Quantum Minerals Ltd.	TSX:FM	0%	33%	\$14.02	64%	9,664	6,871	16,218	3,310	1,130	4.9x	3.9x	3.1x	14.4x	7.9x	5.8x	34%
Turquoise Hill Resources Ltd.	TSX:TRQ	-11%	-3%	\$3.05	68%	6,144	4,159	7,914	940	255	8.4x	6.6x	6.5x	31.1x	17.7x	18.1x	27%
Lundin Mining Corporation	TSX:LUN	-2%	16%	\$6.55	64%	4,787	450	4,171	2,077	1,082	2.0x	2.1x	2.1x	3.9x	4.8x	4.3x	52%
Hudbay Minerals Inc.	TSX:HBM	-20%	2%	\$7.07	56%	1,847	1,064	2,534	1,363	596	1.9x	1.7x	1.8x	4.3x	3.8x	3.6x	44%

Mean	3.8x	3.2x	3.0x	11.6x	7.5x	7.1x	40%
Median	2.0x	2.1x	2.1x	4.7x	4.8x	4.3x	42%

Intermediate Diversified Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Nevsun Resources Ltd.	TSX:NSU	-2%	-5%	\$2.38	67%	719	-	743	289	-1	2.6x	1.9x	2.0x	NM	5.1x	5.7x	0%
Sierra Metals Inc.	AMEX:SMTS	4%	1%	\$2.57	83%	417	65	482	205	75	2.4x	1.5x	1.3x	6.4x	NM	NM	37%
Capstone Mining Corp.	TSX:CS	-19%	-3%	\$0.93	57%	371	271	629	542	128	1.2x	1.2x	1.3x	4.9x	3.5x	3.6x	24%
Taseko Mines Limited	TSX:TKO	-50%	-12%	\$1.18	40%	268	263	459	302	117	1.5x	1.2x	1.1x	3.9x	3.2x	2.9x	39%
Imperial Metals Corporation	TSX:III	-39%	-65%	\$1.66	26%	194	680	812	361	70	2.2x	1.7x	1.5x	11.7x	6.8x	3.6x	19%
Energy Fuels Inc.	AMEX:UUUU	-3%	-20%	\$1.74	76%	127	27	140	31	-14	4.5x	2.9x	4.5x	NM	NM	NM	NM

Mean	2.4x	1.7x	2.0x	6.7x	4.7x	3.9x	24%
Median	1.8x	1.5x	3.0x	5.0x	3.6x	0.4x	24%

Source: Capital IQ as of 03/29/2018

DIVERSIFIED MINING

COMPARABLE TABLES

Junior Diversified Miner Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2018E	2019E	LTM	2018E	2019E	
Panoramic Resources Limited	ASX:PAN	9%	51%	\$0.35	60%	173	-	175	1	-30	NM	3.9x	0.9x	NM	NM	3.3x	NM
Falco Resources Ltd.	TSXV:FPC	-12%	-7%	\$0.61	37%	116	8	100	-	-5	NM	NM	NM	NM	NM	NM	NM
Tinka Resources Limited	TSXV:TK	-39%	-17%	\$0.35	41%	79	-	74	-	-2	NM	NM	NM	NM	NM	NM	NM
Western Copper and Gold	TSX:WRN	-21%	-42%	\$0.79	44%	79	-	75	-	-	NM	NM	NM	NM	NM	NM	NM
Atico Mining Corporation	TSXV:ATY	-18%	-24%	\$0.49	54%	48	8	57	54	18	1.1x	0.7x	0.7x	3.1x	1.8x	1.7x	34%
Tasman Resources Ltd	ASX:TAS	-34%	-70%	\$0.05	19%	19	1	25	1	-10	24.3x	NM	NM	NM	NM	NM	NM

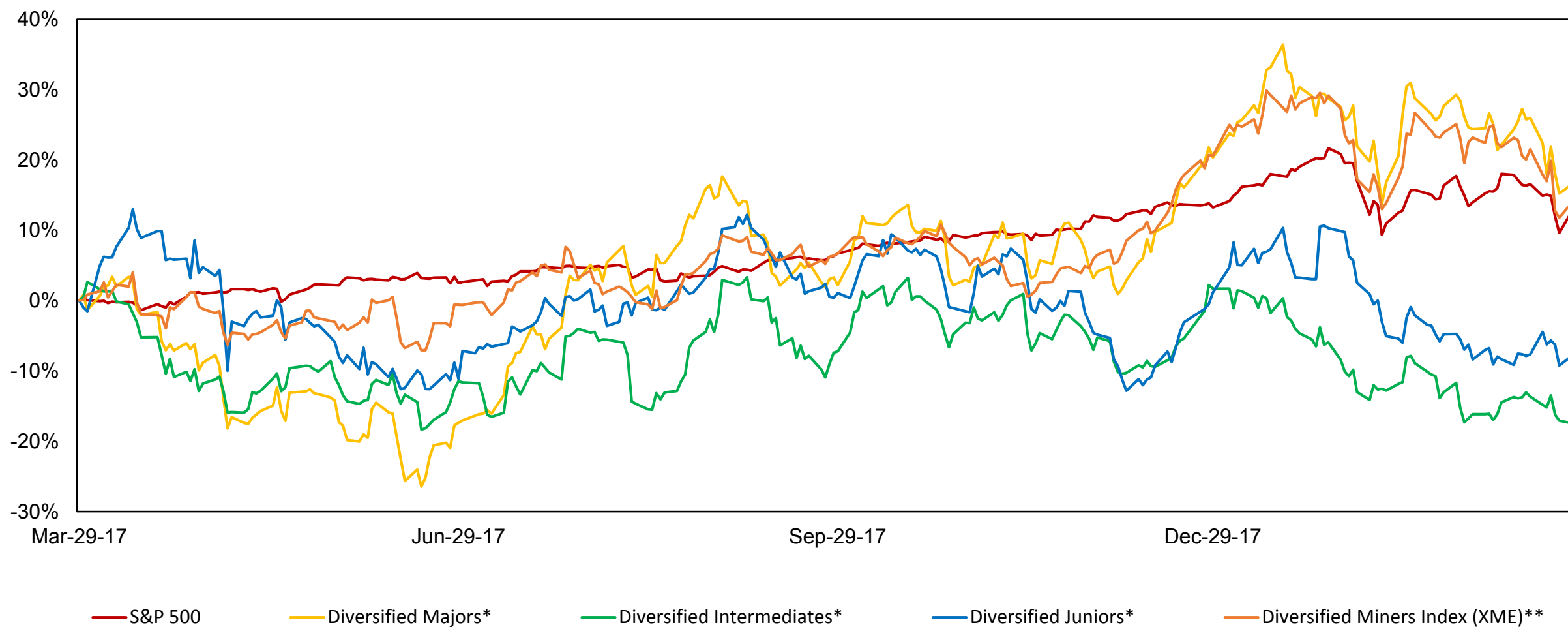
Mean	12.7x	2.3x	0.8x	3.1x	1.8x	2.5x	34%
Median	12.7x	2.3x	0.8x	3.1x	1.8x	2.5x	34%

Source: Capital IQ as of 03/29/2018



DIVERSIFIED MINING LTM EQUITY PERFORMANCE

(NOBLE INDEX SELECTION)



* Noble Proprietary Sector (index composed of companies in the comparable table)

** SPDR Gold Shares (refer to disclosure section for more information)

Source: Capital IQ as of 03/29/2018

DIVERSIFIED MINING LTM GLOBAL M&A ACTIVITY

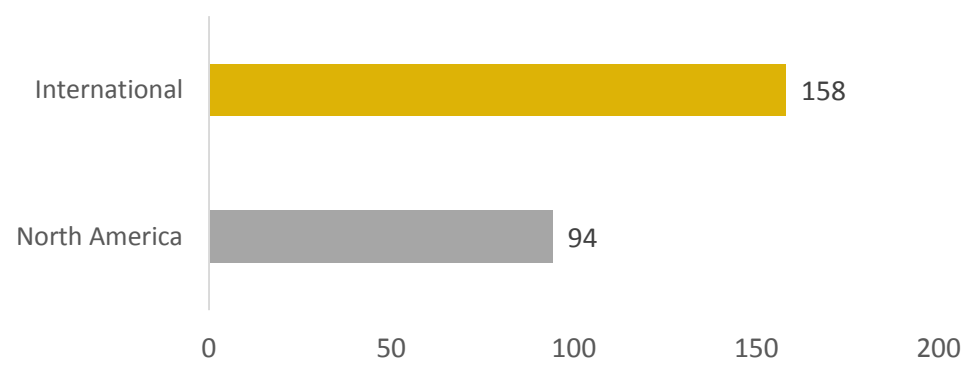
Date	Buyer	Seller	Transaction Value (\$M)	EV/Revenue	EV/EBITDA
3/14/2018	First Cobalt Corp.	US Cobalt Inc.	105.5	-	-
2/27/2018	POSCO	Pilbara Minerals Limited	124.3	-	-
2/19/2018	-	Public Joint Stock Company Mining	1,477.5	5.0x	11.4x
2/7/2018	Beijing GeoEnviron Engineering & Technology, Inc.	Guizhou Hongda Environmental Technology	40.7	2.2x	-
1/16/2018	-	Wanguo International Mining Group	7.2	3.9x	9.8x
12/28/2017	Itafos	GB Minerals Ltd.	58.0	-	-
12/22/2017	Abattis Bioceticals Corp.	Winston Resources Inc.	13.7	-	-
12/18/2017	Tibet Summit Resources Co., Ltd.	Lithium X Energy Corp.	201.0	-	-
12/18/2017	Osisko Metals Incorporated	Pine Point Mining Limited	25.6	-	-
12/15/2017	Moly Mines Limited	Queensland Mining Corporation Limited	38.6	-	-
12/11/2017	-	Fly Ascent Group Limited	9.8	-	-
11/28/2017	Yongxing Special Stainless Steel Co., Ltd.	H-zone Lithium Technology Co., Ltd.	94.2	4.2x	-
11/10/2017	International Nickel Supply SA	Mayaniquel, S.A.	13.0	-	-
10/25/2017	Yunnan State - Owned Capital Operation Limited	Yunnan Tin Company Limited	331.5	0.7x	9.5x
10/10/2017	-	Arizona Mining Inc.	26.0	-	-
10/3/2017	Glencore Plc	Volcan Compañía Minera S.A.A.	732.7	6.1x	17.4x
9/27/2017	Hitachi Metals, Ltd.	MMC Superalloy Corporation	53.2	0.7x	-
9/22/2017	Central Asia Metals Plc	Lynx Resources Ltd	405.1	-	-
9/15/2017	Yongxing Special Stainless Steel Co., Ltd.	H-zone Lithium Technology Co., Ltd.	16.0	-	-
9/7/2017	Sambo E&C Co., Ltd.	Heesung Metal LTD.	68.8	0.4x	58.1x
7/5/2017	Zijin Mining Group Company Limited	Bayannaer Zijin Nonferrous Metal Co. Ltd.	36.6	-	-
6/21/2017	First Cobalt Corp.	Cobalt One Limited	46.7	-	-
6/21/2017	First Cobalt Corp.	CobalTech Mining Inc.	10.5	-	-
6/15/2017	Kutcho Copper Corp.	Kutcho Copper Corp.	22.6	-	0.6x
5/27/2017	Macrolink Holding Co., Ltd	Guangdong Jiana Energy Technology	25.1	0.3x	-
5/9/2017	Western Mining Group Technology Development.	Qinghai West Mining Technology Co., Ltd.	6.6	9.7x	-
5/5/2017	Primorskugol OAO	Germanium and Applications LLC	20.6	-	-
4/28/2017	Jiangxi Ganfeng Lithium Co., Ltd.	Pilbara Minerals Limited	20.0	-	-
4/27/2017	Solitario Zinc Corp.	Zazu Metals Corporation	16.4	-	-
4/18/2017	Group Sense (International) Limited	China Rare Earth Magnesium Technology	251.5	2.6x	-
		Mean		3.3x	17.8x
		Median		2.6x	10.6x

Source: Capital IQ as of 03/29/2018

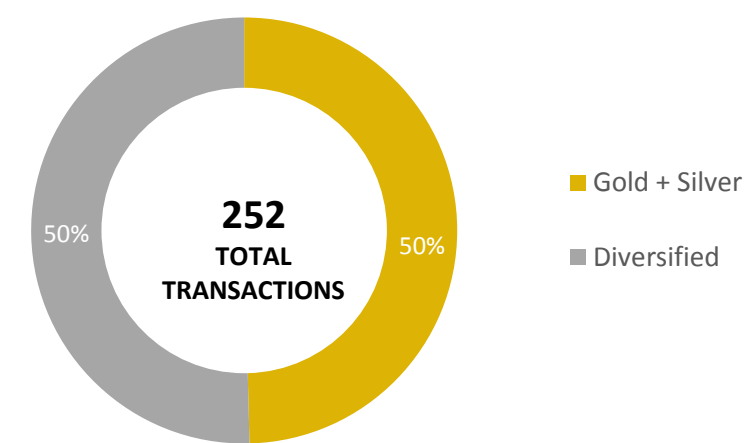


LTM MINING INDUSTRY M&A SUMMARY

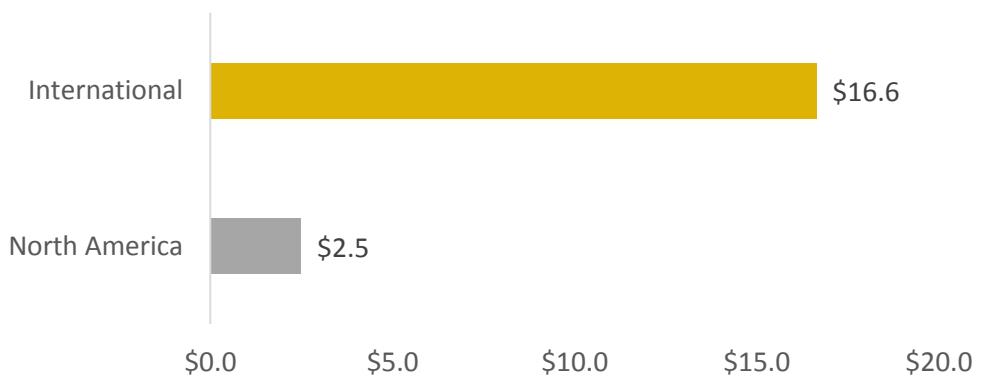
NORTH AMERICA VS INTERNATIONAL TOTAL TRANSACTIONS (Number of transactions)



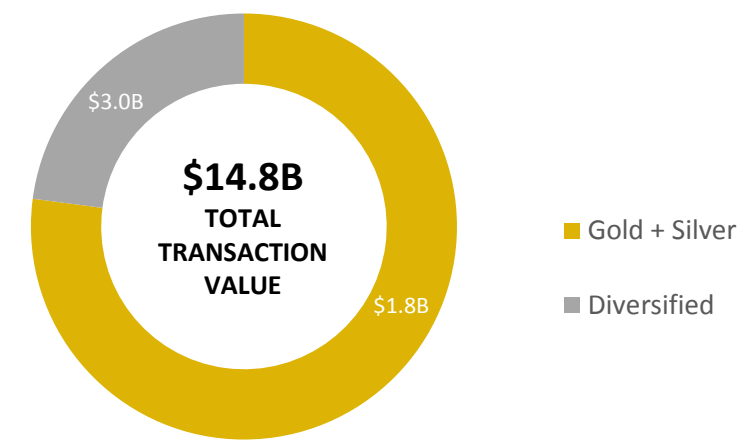
DEAL VALUE PER SECTOR (Number of transactions)



NORTH AMERICA VS INTERNATIONAL TOTAL TRANSACTIONS (Values in \$B)



TOTAL TRANSACTION VALUE (Values in \$B)



Source: Capital IQ as of 03/29/2018



NOBLE QUARTERLY HIGHLIGHTS

Aurania Resources Ltd. (TSXV:ARU)

Industry: Metals and Mining – Diversified Materials

Aurania Resources Ltd. is a Canadian based exploration mining company with a focus on precious metals and copper. Its main asset, The Lost Cities- Cutucu, is located in the eastern foothills to the Andes mountain of southeastern Ecuador. This project contains 26 million oz of gold and almost 40 billion lbs of copper.

1st Quarter News Highlight: 03/15/2018:

Aurania Resources Ltd. gains more confidence in their lost cities- Cutucu project by finding evidence of porphyry deposits similar to the copper and copper-gold deposits of the adjacent Cordillera del Condor. This discovery has extended their Awacha Target Cluster to include 13 magnetic centres, three more than were described in previous press releases.



Avalon Advanced Materials Inc. (TSX:AVL)

Industry: Metals and Mining – Diversified Materials

Avalon Advanced Materials is a Canadian mineral development company with three advanced projects. The Separation Rapids Lithium Project, in Ontario, and East Kemptonville Tin-Indium Project, in Nova Scotia, are their top priorities. The company holds a diverse specialty metals and minerals property portfolio, including lithium, tin, indium, tantalum, niobium, zirconium, rubidium, cesium, beryllium, gallium, germanium and REE.

1st Quarter News Highlight: 02/23/2018:

Avalon Advanced Materials completed their diamond drilling program on its Separation Rapids Lithium Project near Kenora, Ontario. Six holes totaling 1,500 metres were drilled in under one month with no delays. The objective of the drill program was to expand lithium resources of both the lepidolite and petalite-rich mineralization and better define near surface resource geometry for mine planning purposes.



Nano One Materials Corp. (TSXV:NNO)

Industry: Metals and Mining – Diversified Materials

Nano One Materials Corp. is a Canadian based company that develops patented technology for high performance nano-structured materials for use in lithium ion batteries. The processing technology addresses fundamental supply chain constraints by enabling wider raw materials specifications for use in lithium ion batteries. These batteries can be used in emerging technology trends including electric vehicles, energy storage, consumer electronics and next generation batteries

1st Quarter News Highlight: 02/14/2018:

Nano One has increased their intellectual property portfolio by obtaining a Japanese Battery Patent and a Canadian Process Patent. The Japanese Battery Patent is directed at a lithium ion battery using cathode materials made by Nano Ones' proprietary process. The Canadian Process patent is directed at a method for forming a mixed metal powder, particularly for use as a cathode material in next generation lithium ion. Nano One now has six patents granted and over 30 pending worldwide.



Source: Company Press Releases



$$R + (e^2 + p^2) = \text{TF}$$

NOBLE CAPITAL MARKETS

NOBLE CAPITAL MARKETS

NOBLE CAPITAL MARKETS is a research-driven investment and merchant bank focused on small cap, emerging growth companies in the healthcare, technology, media and natural resources sectors. That's what we are. Who we are is what makes us different.

Our people are talented, dedicated, experienced professionals who come together with a common cause; advising on long-term client solutions by employing innovative, collaborative and responsive strategies. We're passionate and personable. We approach things from our clients' perspective.

We know that developing lasting relationships is reliant upon putting our clients' interests before ours. We understand the impact of our services. Insightful advisory and effective capital procurement can change lives. Empowering our clients to create employment, engineer technological and medical breakthroughs, producing products and services that lay the foundation for the future. For more than 30 years these have been our guiding principles. While much has changed over the three decades since we began, these core values and our reputation have not. Our clients must know what to expect from us. Then we can strive to exceed expectations.

A SIMPLE FORMULA OUR VALUE PROPOSITION.

It starts with research With a fundamental belief that information guides the management process, NOBLE understands that there is no short-path to success. With this as a solid foundation, apply experience and execution delivered by people with passion. This is our formula to add value to your creation.

Research + Experience & Execution + People with Passion = Value

FULL-SERVICE INVESTMENT BANK

- Established 1984.
- Private firm, employee owned.
- Built on commitment to provide value and support for our clients.

FOCUSED INSTITUTIONAL SALES AND TRADING

- Seasoned sales and sales trading team.
- Long standing relationships with premier growth- focused investors.

INVESTMENT BANKING COMMITMENT

- Proven track record.
- Senior level attention to every client and transaction.
- Ability to deliver complete "mind share" of NOBLE on all transactions.

RESEARCH DRIVEN CAPITAL MARKETS PLATFORM

- Experience team of Research Analysts covering approximately 100 companies.
- Focus on Technology, Media, Healthcare and Natural Resources.
- Strong Institutional Sponsorship.

$$R + (e^2 + p^2) = \text{TF}$$

INVESTMENT BANKING

Our investment banking team, together with our well-recognized equity research analysts and the equity capital markets group, provide our clients with fundamental capital markets advisory and support - prior, during and most importantly, after a transaction. NOBLE's investment banking team works closely with the management and Board of our corporate clients in order to fully understand operational and financial objectives. With this knowledge our banking team will develop an efficient and effective advisory program which offers a variety of services including:

EQUITY CAPITAL MARKETS

- Secondary and Follow-on Offerings
- Registered Direct Offerings
- Initial Public Offerings
- At the market Offerings (ATM's)
- PIPEs/Private Sale Offerings

DEBT CAPITAL MARKETS

- Senior Debt
- Mezzanine
- Convertible Debt
- Bridge Financings

ADVISORY SERVICES

- Merger & Acquisitions
- Fairness Opinions
- Valuation Services

SELECT NATURAL RESOURCES TRANSACTIONS

 ORCHLIGHT <small>ENERGY</small> (TRCH)	 SIERRA <small>METALS</small>	 MARLIN <small>GOLD MINING LTD.</small> (MLN)	 SES <small>SYNTHESIS ENERGY SYSTEMS</small> (SYMX)	 AVINO SILVER & GOLD MINES LTD. (ASM)	 PETROSHARE (PRHR)	 pershing gold (PGLC)
Advisory	\$55,000,000	Advisory	Advisory	\$800,000	\$4,600,000	\$11,500,000
Corporate Advisory	At-The-Market Offering (ATM) Agent	Corporate Advisory	Corporate Advisory	Private Placement of Registered Securities Sole Placement Agent	Initial Public Offering (IPO) Lead Underwriter	Private Placement Sole Placement Agent
						
March 2018	October 2017	February 2017	January 2017	March 2016	November 2015	April 2015

$$R + (e^2 + p^2) = \pi$$

VALUATION SERVICES

NOBLE's Valuation and Advisory Services team specializes in providing business and intangible asset valuations, fairness opinions, financial and strategic analysis, and transaction support services covering a broad spectrum of industries and situations from early stage, middle market and Fortune 500 companies and capital market constituents. NOBLE's team is made up of professionals with numerous accreditations and bring excellence in accounting, taxation, and financial due diligence to provide companies with valuation advice for a multitude of purposes.

Valuation – NOBLE's professionals have significant experience in the valuation of privately owned and public businesses across a wide range of industries. We perform an extensive analysis of the business as well as evaluate industry trends and various other factors in order to inform our clients as to the likely range of value they can expect. Our services are characterized by intellectual and analytical rigor and our conclusions are backed by thorough documentation.

Chief Accounting Officers, Corporate Controllers, CFOs, and Corporate Boards rely on Noble's experienced valuation professionals to produce sophisticated, supportable, and timely valuations to assist in complying with financial reporting requirements, including:

- Purchase price allocation and fresh start accounting
- Goodwill and long-lived asset impairment testing
- Tangible asset valuation
- Fair Value measurement of financial assets & liabilities

Opinions - Whether our clients are looking to fulfill their fiduciary duties, mitigate risk or determine corporate value, we are there throughout the transaction process to offer objective advice based on rigorous analysis. We work on behalf of boards of directors, investors, trustees and other corporate leaders to advise and provide opinions on a wide range of transactions.

We have advised Corporate Boards, special transaction committees, independent trustees, management and other fiduciaries of middle market public and private companies on the financial aspects of a transaction. Our independent advice withstands scrutiny from shareholders, bondholders, the SEC, IRS, or counterparties to a transaction

MERCHANT BANKING

Our Principal Investment focus is primarily on private and small-cap public (\$10mill to \$50mill market caps) companies in industries within NOBLE's research verticals. Investments are made directly by NOBLE and its affiliates and may also involve syndicate participants. We work to identify those companies with game-changing or superior products and technologies that have management teams with proven track-records of success. NOBLE structures investments to meet a company's capital needs whether its growth capital, liquidity or debt repayment. Capital commitment ranges from \$200k to \$2million principal and \$2million above with syndicate.

The scope of our Merchant Banking activities includes:

- Targeting domestic companies within our areas of focus and expertise
- Analyzing a company's opportunities and assessing its risks within their respective industry
- Structuring, negotiating and executing the transaction
- Work in assessing the appropriate time and manner in which to harvest the investment

NOBLE's Merchant Banking Team works continuously with our portfolio companies to assist the management team and Board of Directors to create value and grow their businesses to facilitate long-term shareholder value. Through our extensive sector research coverage, institutional investor non-deal road shows, equity conferences and market making, we blend a powerful mix of capital markets acumen to procure success.

$$R + (e^2 + p^2) = \pi$$

INVESTMENT BANKING TEAM

Richard Giles, Managing Director

rgiles@noblefcm.com - 617.692.9346

- Joined NOBLE in 2010 as Head of the Technology, Media & Telecommunications Investment Banking Group
- 25 years of investment banking experience.
- Executed more than 100 M&A and capital raising transactions totaling \$10+ billion
- Former head of Stifel Nicolaus' Technology Group.
- Former head of A.G. Edwards' Emerging Growth Group and member of Investment Committee for A.G. Edwards Capital
- A.B. Harvard College; M.B.A., Harvard Business School

Francisco Penafiel, Managing Director

fpenafiel@noblefcm.com - 561.994.5740

- Executed M&A and capital raising transactions totaling over \$1 billion dollars in value
- 7 years of sell side equity research experience, covering enterprise & infrastructure software, business services, media, communications, and banks
- 6 years of portfolio managing experience
- Manage the business development efforts in LATAM for NOBLE
- Engineering, IT & Statistics, Escuela Superior Politecnica (Guayaquil, Ecuador); M.S. Economics, Florida Atlantic University

Juan Arvelo, Director

jarvelo@noblecapitalmarkets - 561.994.5731

- More than 18 years of corporate finance and capital markets experience, with a special focus on M&A, restructuring and capital raising transactions.
- Previous Director at Enkeros Investments and Activa Capital Markets
- Former CFO of LS Energia
- Main focus in the QSR, financial institutions and energy sectors
- Managed corporate finance and recoveries division at PricewaterhouseCoopers (PwC)
- B.S. Economics UCAB; M.S. Finance IESA; MBA Babson College

Joseph Hain - Director

jhain@noblecapitalmarkets.com - 561.999.2265

- Prior experience holding senior positions at Robotti & Company, Wynston Hill Capital, SternAegis Ventures, WestPark Capital, and Tejas Securities
- Experience working with institutional, retail and HNW clients
- B.S. SUNY Albany with concentration in Biology, Chemistry, and Physics
- Holds various FINRA licenses

John Connery, Analyst

jconnery@noblecapitalmarkets.com - 561.998.5478

- Joined Noble Capital Markets as an Investment Banking Analyst in 2016
- Worked previously as a private equity analyst for the family office of Marc Bell
- B.S. Investment Management, Lynn University

Brittnee Fatigate, Analyst

bfatigate@noblecapitalmarkets.com - 561-999-2264

- Joined Noble Capital Markets in January 2017
- Has completed multiple M&A and capital raising assignments, accounting for nearly \$150 million+ of transaction value
- Held previous position as an accounting assistant at a privately held manufacturing company
- B.S. Finance, Florida Atlantic University

$$R + (e^2 + p^2) = \pi$$

SALES & TRADING

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