EQUITY RESEARCH

RBC Capital Markets

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Gold M&A 2017 - The sleeping giants are stirring

Return of gold majors could spur a pick up in M&A

Declining reserves combined with improved balance sheets point to increased M&A; however, the key challenge remains that there is a lack of quality projects and the market appears to be fairly pricing those few assets. The good news is the gold industry 'eco system' is much healthier following the recapitalization and free cash flow generation in 2016. Most of the larger producers are better positioned for acquisitions, given stronger balance sheets and premium valuations, while juniors have cash to advance projects. If the senior gold producers return to the table, as they have suggested they might, 2017 could become a very interesting year for M&A.

Everyone kicking tires: Barrick has several large scale development projects but is talking more openly about acquisition opportunities. **Goldcorp** and **Agnico-Eagle** have strong internal project pipelines but could be opportunistic as they have in the past. **Kinross, IAMGOLD, Silver Standard and Hecla** can expand existing mines but could also look to add external projects. **Newmont, Yamana, Eldorado, B2Gold and Oceana** could look externally when current mine builds are completed.

Quality projects scarce: Of the pre-production gold companies in our database of 270 companies, only 5 have resources larger than the 8-year takeover target average of 5.2MMoz and grades above 2.4g/t (Exhibit 10). This could force producers to look at earlier stage assets which has been the case with many taking toehold stakes in juniors.

Value can be created through building mines: On average, we calculate an after-tax IRR of 12% to buy and build a project vs. 5% to buy a single asset producer assuming a 40% takeover premium (Exhibit 6). These IRRs are consistent with this time last year. We believe these relatively low IRR's highlight the challenge in creating value through M&A, although there is certainly potential to add value by de-risking a project.

A few opportunities to get large deposits: Within our North American coverage universe we believe **Dalradian, Continental, Integra, and Sabina** are the most likely pre-production takeover candidates due to the scale and grade of those projects. **Pretium** could become a takeover candidate when the mine is operational while any further weakness in **Detour** shares could increase the takeover odds. **Guyana** and **Alacer** appear to offer the most value of the single asset producers we cover.

Potential to get more creative: As Goldcorp recently noted, there could be potential to JV some of the larger assets within the senior company portfolios as a way to lower risk and add meaningful growth. For example, Barrick could bring in a partner to lower the risk for Pascua Lama or Donlin Gold. Asset sales are also likely to continue into 2017 and mining camp area consolidation could offer synergies which are rare in the mining space.

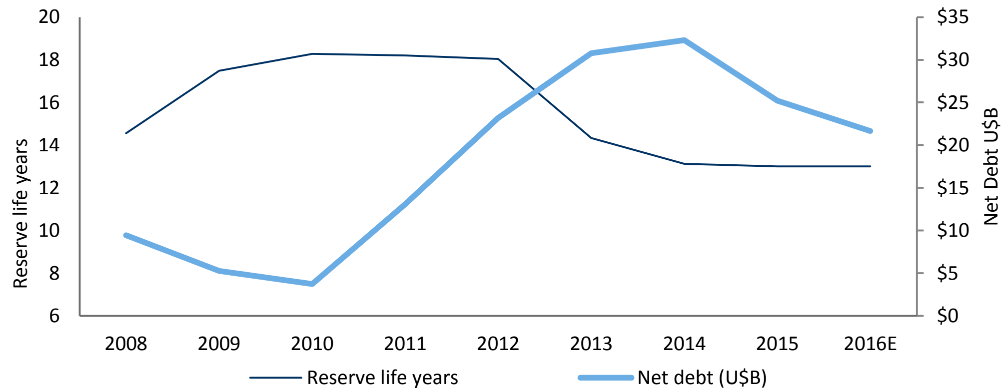
Benefits of scale: We expect further merger of equals transactions as producers look to gain critical mass. Sometimes we struggle with the rationale for these deals;however, we acknowledge there are benefits to scale including increased trading liquidity, inclusion in indices, better access to capital and there appears to be a correlation between P/NAV valuations and market cap (Exhibit 8).

I. Declining reserve lives could spur M&A activity

We believe the combination of declining reserve lives and healthier balance sheets could spur companies to replenish reserves via development of internal projects, exploration, and through acquisitions. Reserve lives declined to 13 years at the end of 2015 from 18 years in 2012 as the industry underwent dramatic cuts to exploration and capital spending, along with lower gold price assumptions (Exhibit 1). The industry also underwent a period of balance sheet deleveraging, with total net debt falling over the past year by ~$4B, due to FCF, equity issuance and non-core asset sales including Barrick (Bald/Round Mountain) and Newmont (Batu Hijau).

Exhibit 1: Reserve lives at low levels amidst reductions in spending and debt reduction

Reserve lives of producing gold companies



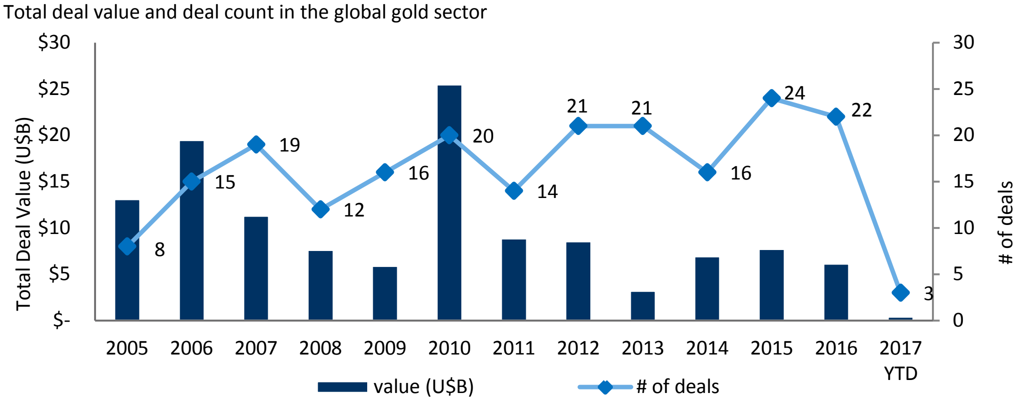
Source: Company Reports, RBC Capital Markets estimates

M&A activity remained healthy in 2016

M&A was down slightly in 2016 vs. 2015, marked by consolidation of existing producers including Kirkland Lake–Newmarket, Tahoe-Lakeshore, Silver Standard-Claude, and Centerra-Thompson Creek (Exhibit 2). As well, several non-core asset sales were completed, including Eldorado's divestment of its Chinese assets and Newmont's sale of its stake in Batu Hijau. Some producers took the opportunity to acquire growth projects including Endeavour-True Gold (Karma) and Goldcorp-Kaminak (Coffee). M&A has been sluggish to start 2017 highlighted by non-core asset sales from Goldcorp with the divestment the Los Filos mine to Leagold and the Cerro Blanco mine to Bluestone.

Exhibit 2: Goldcorp asset sales highlight the start to 2017 M&A activity

Total deal value and deal count in the global gold sector



Source: SNL, Bloomberg, Company Reports, RBC Capital Markets

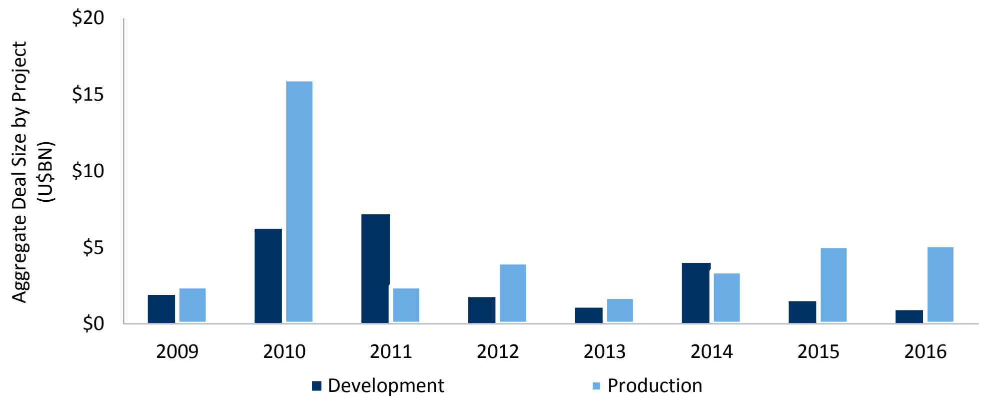
Transactions continue to favour producing assets

M&A in 2016 continued to trend towards producing assets as mid tiers merged to gain critical mass and due to the scarcity of high quality pre-production projects (Exhibit 3).

However, should the gold price strengthen significantly and sustainably, we could see more of a 'risk-on' sentiment with producers prepared to take on construction risk. With the rebound in gold price in 2016, we have slowly begun to see a number of previously shelved projects being advanced via new equity financing and exploration spending.

Exhibit 3: Deals trending towards producing assets with a lower perceived risk

Gold M&A of producing vs. pre-production assets

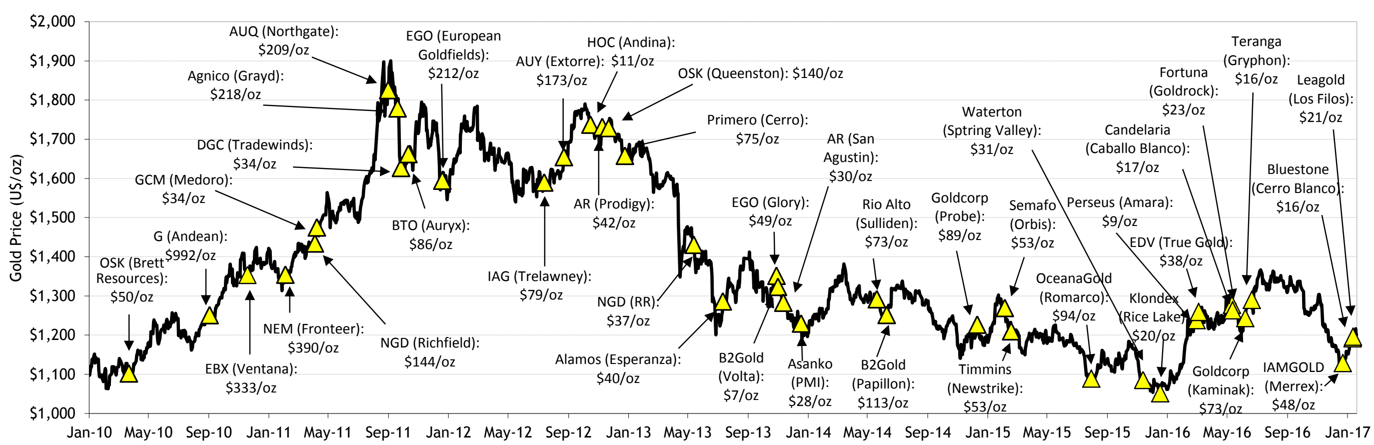


Source: Bloomberg, Company Reports, RBC Capital Markets

There were a handful of pre-production deals in 2016 as producing companies looked to stock the growth pipeline (Exhibit 4). Junior companies acquired by producers included Kaminak (Goldcorp), True Gold (Endeavor), Goldrock (Fortuna), and Gryphon (Teranga).

Exhibit 4: Pre-production M&A in 2016 highlighted by Goldcorp buying Kaminak for $380M

Notable gold pre-production M&A transactions showing the EV/oz (M&I+I resource) vs. the gold price



Source: Company Reports, Bloomberg, RBC Capital Markets

Dipping toes in the water

Producers (and some better funded juniors) took toeholds in several exploration stage companies as a low risk way to fund exploration and gain optionality. Notable equity stakes are shown below and companies have also entered into several JVs and earn-ins with exploration stage companies (Exhibit 5).

Exhibit 5: Notable equity stakes for producers

Equity stakes in junior companies

Holder	Company	Ticker	% Holding	Value ($M USD)
AEM	Belo Sun	BSX-T	19%	$60
AEM	White Gold	WGO-T	20%	$10
AEM	Cartier Resources	ECR-V	25%	$4
ABX	NuLegacy Gold	NUG-T	11%	$11
ABX	Coral Gold	CLH-T	9%	$9
GG	Gold Standard Ventures	GSV-T	10%	$57
GG	Auryn Resources	AUG-T	14%	$26
GG	Probe Metals	PRB-T	14%	$13
GG	Timmins Gold	TMM-T	8%	$11
KGC	Lundin Gold	LUG-T	17%	$89
KGC	Victoria Gold	VIT-T	11%	$26
KGC	Nighthawk Gold	NHK-V	9%	$6
NEM	TMAC Resources	TMR-T	29%	$297
NEM	Pilot Gold	PLG-T	9%	$6
AUY	Brio Gold	BRIO-T	85%	$223
BTO	Calibre Mining	CXB-T	17%	$8
BTO	RTG Mining	RTG-T	8%	$3
EGO	Integra Gold	ICG-T	13%	$34
IAG	INV Metals	INV-T	36%	$12
OGC	Gold Standard Ventures	GSV-T	18%	$98
OGC	NuLegacy	NUG-T	16%	$10

Source: ThomsonONE, Company Reports, RBC Capital Markets

II. Buy vs. build – market fairly pricing both options

To add to reserves, companies can look at organic growth, early stage exploration projects, advanced projects, or producing assets.

Quality organic growth projects have the potential for the highest returns with the takeover and other costs already sunk. We believe **Agnico-Eagle, Barrick, and Goldcorp** have strong pipelines of internal projects, although many of these come with high capital requirements and other execution risks. Goldcorp recently noted they may look at JV's on large projects to reduce risk. **B2Gold, Eldorado, New Gold, Oceana, Newmont, Yamana** are building (or commissioning) projects and we believe they could then look externally to replenish the pipeline. **Kinross** and **IAMGOLD** can expand around existing mines but we think they could also look to add external projects.

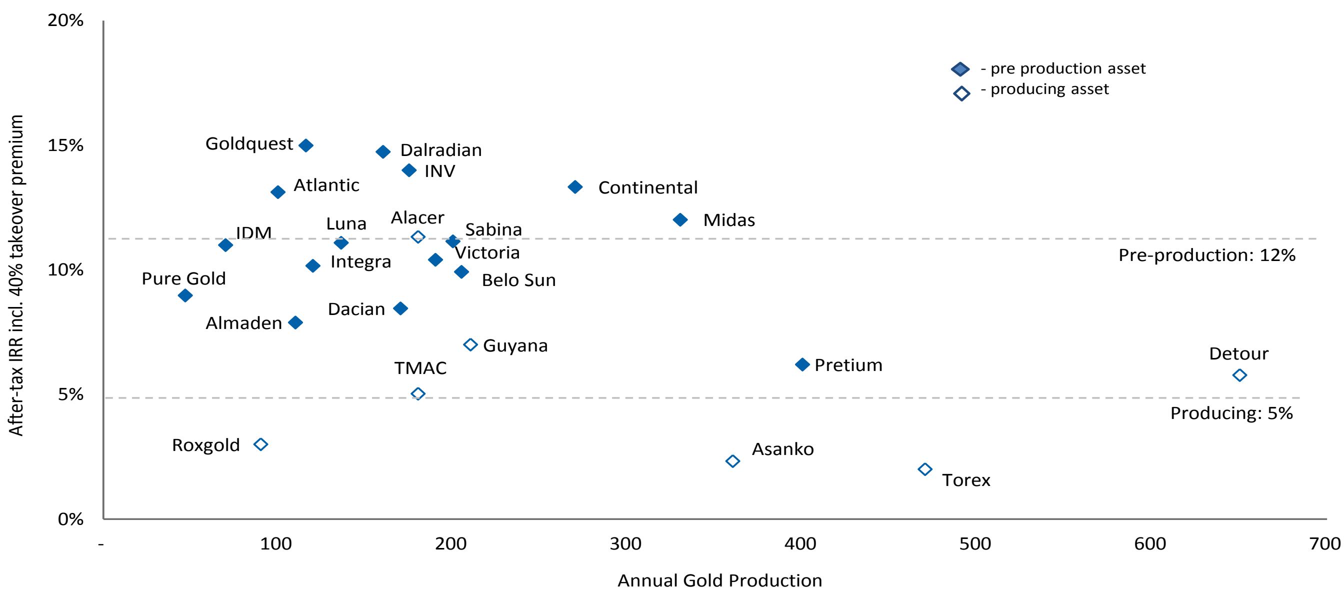
Early stage exploration projects have the potential for big returns with a limited investment but a low probability of success, which explains the toehold strategy.

Exhibit 6 highlights the potential returns for buying development stage projects vs. selected single asset producers. The market appears to be efficient with a lower return for projects which have been de-risked, while there remains potential to create value through building a new mine. While the IRR's seem relatively low, there is potential to add value to each of these projects through exploration and other optimizations; however, there are also execution risks. Within our coverage universe we believe **Dalradian, Continental, Integra**, and **Sabina** are the most likely pre-production takeover candidates due to the scale and grade of their projects. **Pretium** could be when the mine is operational while any further weakness in **Detour** shares could increase the takeover odds. **Guyana** and **Alacer** appear to offer the most value of the producing assets.

On average, we calculate an IRR of 12% to buy and build a project vs. 5% to buy a single asset producer. These IRRs are consistent with this time last year.

Exhibit 6: Potential to create value through building projects

Estimated IRRs at $1,300/oz gold for potential takeout candidates – Including a 40% takeover premium to the current market value



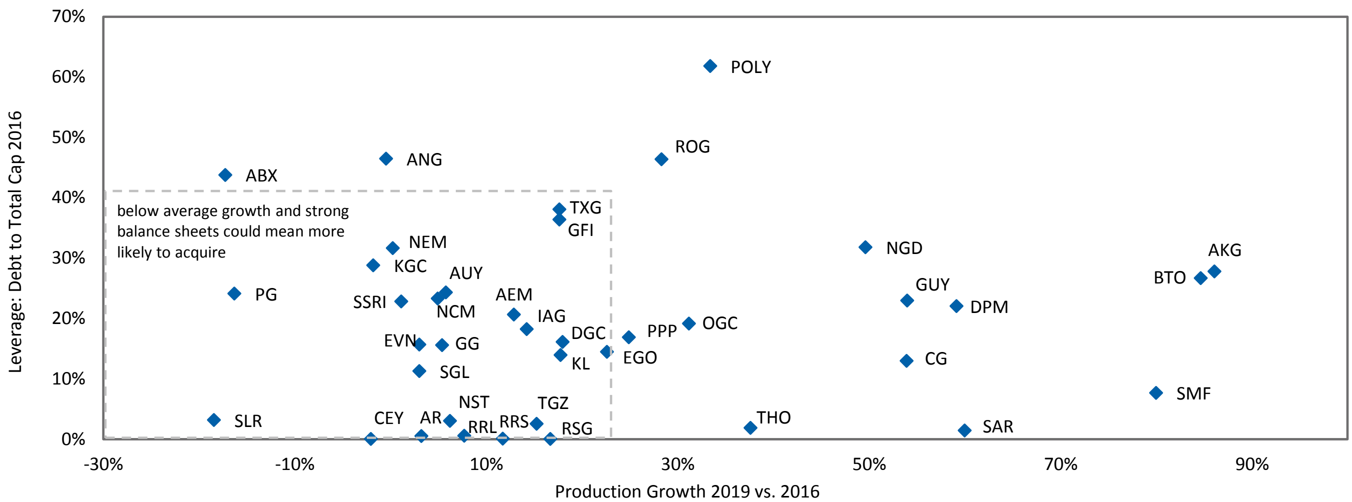
IRRs based on RBC estimates for covered companies; IRRs for AMM, DCN, GQC, IDM, INV, LGC, PGM, AGB, BSX, VIT use the most recent technical report and adjusted to reflect $1,300/oz gold
Source: ThomsonONE, Company Reports, RBC Capital Markets

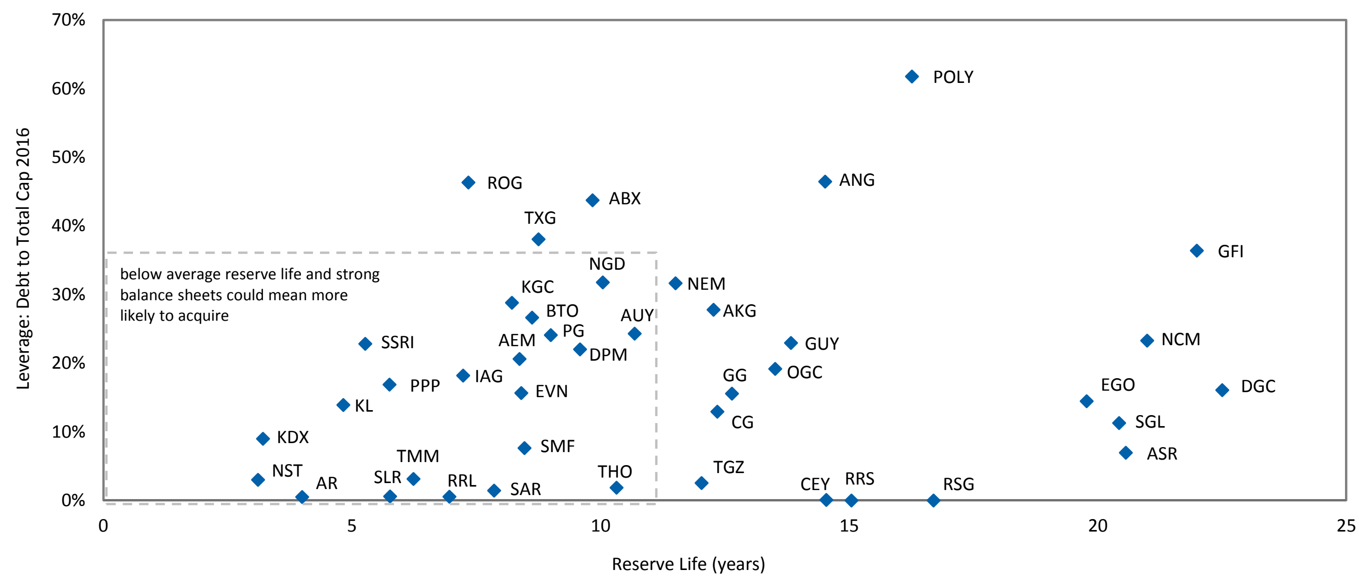
III. Potential buyers – everyone is kicking tires

Below, we identify those with balance sheet capacity and lower growth/reserve lives versus peers, which we believe would be potential acquirers. Companies with below average near term growth and stronger balance sheets include **Kinross, Goldcorp, Newmont, Silver Standard, and Yamana,** while **IAMGOLD, Agnico, and Tahoe,** could look at M&A to extend reserve lives (Exhibit 7).

Exhibit 7: Companies with below average growth or reserve lives could be more likely to acquire

Balance sheet leverage vs. production growth (top) and reserve lives (bottom)





Source: Company Reports, ThomsonONE, RBC Capital Markets estimates

Potential for more consolidation amongst the mid-tiers

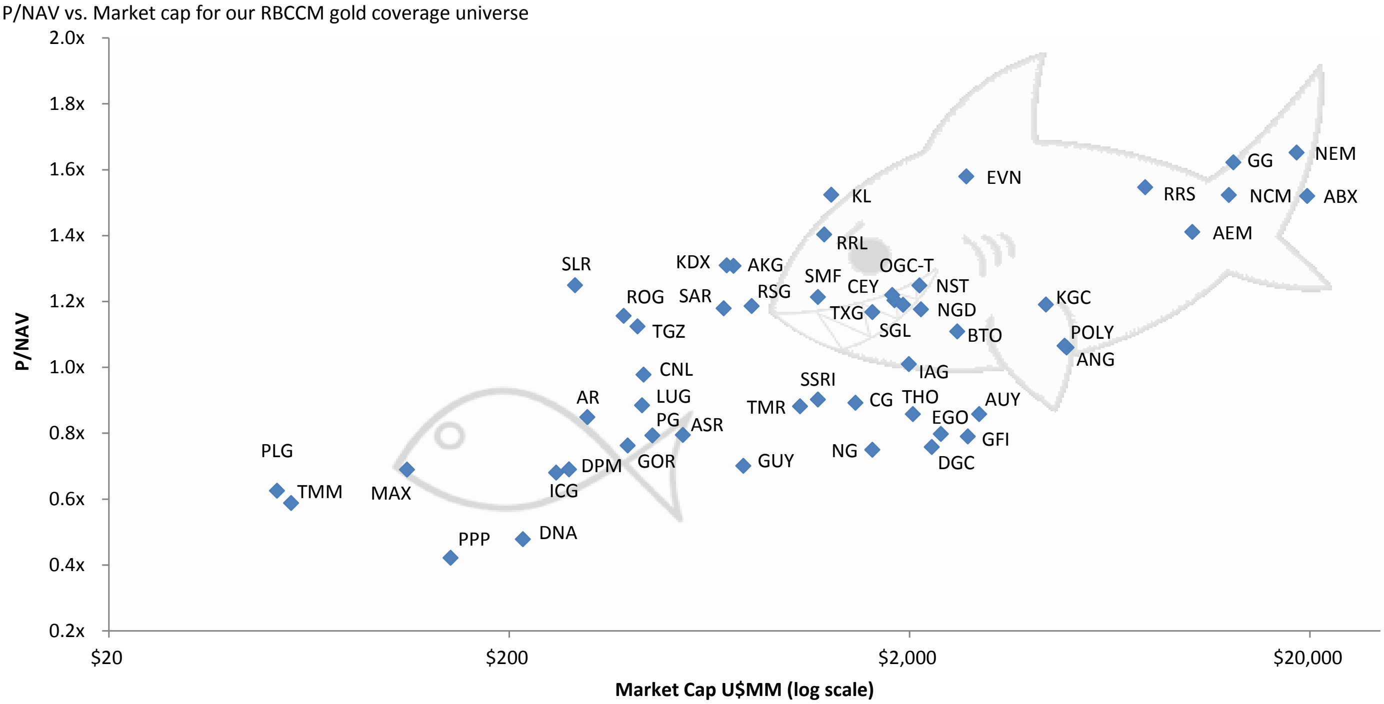
We have seen several merger of equals transactions done in the gold space in recent years to gain critical mass. While there aren't many synergies in mining we do believe there are benefits to scale including increased trading liquidity, inclusion in indices, better access to capital and there appears to be a correlation between P/NAV valuations and market cap (Exhibit 8).

The majors trade at premium valuations on a P/NAV basis which we attribute to a liquidity premium, lower risk through diversification and more certainty around the NAVs. This could allow companies with stronger paper to acquire smaller peers for an accretive acquisition; however, we caution that the valuation gap could close quickly after a takeover premium and the typical negative reaction in the acquirer's share price.

Area plays could provide synergies: There is some potential for synergies in the mining sector, particularly around camp consolidation. **Barrick** and **Newmont** could revisit the combination of the Nevada operations and there could be further consolidation in the Abitibi if **Tahoe Resources** and/or **Kirkland Lake Gold** look to consolidate the Timmins and Kirkland Lake camps, respectively. While on the other side of the border, **Integra Gold** and some of the other juniors like **Probe Metals** could eventually make sense for the larger Val D'Or operators **Agnico, Yamana or IAMGOLD**. Certain areas in West Africa could benefit from consolidation where **Asanko** and **Roxgold** could be targets, while there are numerous attractive growth projects in Turkey.

Exhibit 8: Several smaller producers continue to trade at a significant discount to larger companies

P/NAV vs. Market cap for our RBCCM gold coverage universe

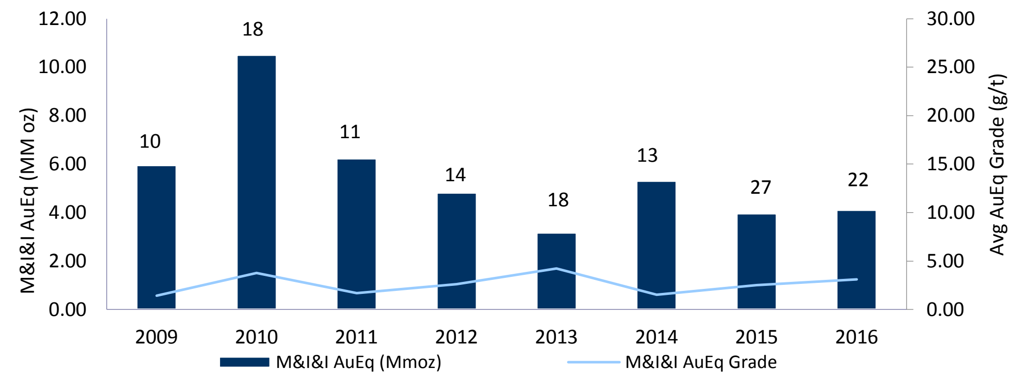


Source: ThomsonONE, RBC Capital Markets estimates

IV. Potential targets – quality assets remain scarce

Since 2009, the average M&A target had a total resource of 5.5Moz at 2.5g/t and the average takeover resource in 2016 of 4.1Moz at 3.1 g/t (Exhibit 9). As shown, below these large high grade projects are rare which forces any would be acquirer to look at smaller projects with potential for exploration upside.

Exhibit 9: The average takeover target had an average of 4.1MMoz at 3.1g/t in 2016

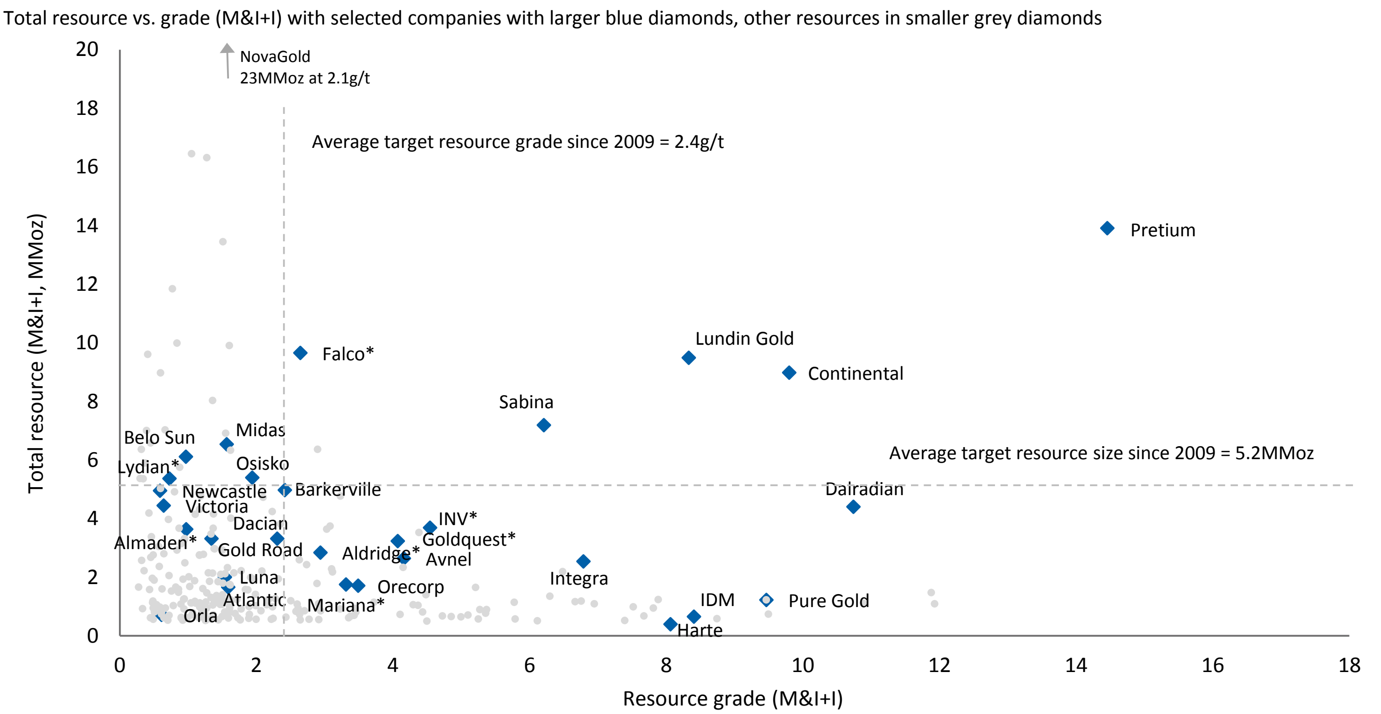


Source: Company Reports, Bloomberg, RBC Capital Markets

Large, high grade projects extremely scarce

We continue to highlight the scarcity of large, high grade projects. Of the pre-production gold companies in our database, only 5 have resources larger than the 8-year takeover target average of 5.2MMoz and grades above 2.4g/t (Exhibit 10).

Exhibit 10: Large, high grade resources extremely scarce



* AuEq basis. Source: Company Reports, SNL, Bloomberg, RBC Capital Markets

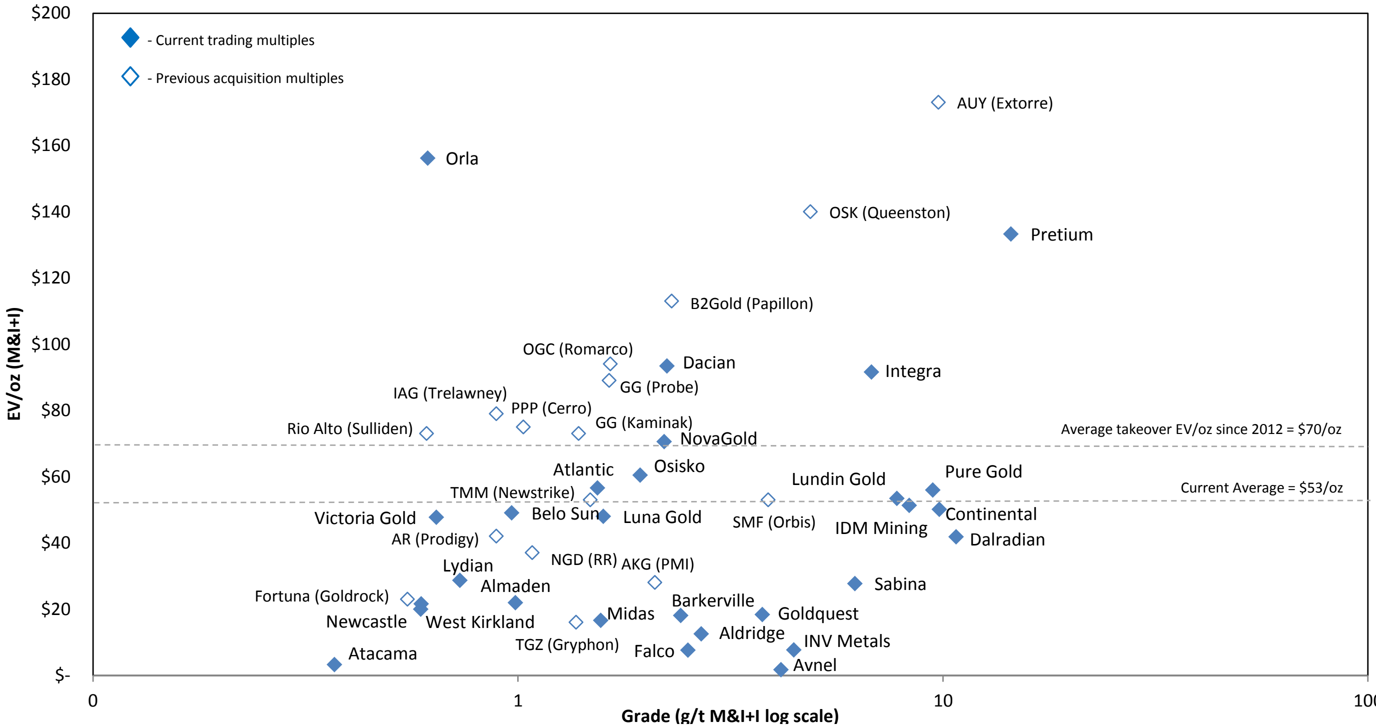
Current trading range below historical takeover valuation but spread has tightened

The junior gold stocks we track currently trade at $53/oz (M&I+I) which remains below the average takeover multiple of $70/oz for deals since the start of 2012 (Exhibit 11). However, valuations have rebounded significantly over the past year, which saw juniors trading at $22/oz at the beginning of 2016 when gold was below $1,100/oz.

We continue to highlight high grade pre-production projects, which we believe could provide insulation to lower gold prices. Advanced high grade projects include **Pretium** (14.5 g/t, $139/oz), **Continental** (9.8 g/t, $50/oz), **Dalradian** (10.7 g/t, $47/oz), **Integra** (6.8 g/t, $92/oz), **Sabina** (6.2 g/t, $29/oz), and **Lundin Gold** (8.3 g/t, $52/oz).

Exhibit 11: Exploration stage companies trade at $53/oz compared to the average takeover multiple of $70/oz

Current trading EV/oz (M&I+I) of selected junior companies vs. past takeover multiples



Source: Company Reports, Bloomberg, RBC Capital Markets

The good news is the junior sector is healthier

Following several small equity raises in 2016, the junior gold sector is in a much healthier state than this time last year. And while many of the projects have been around for a while, a fresh set of eyes and increased funding could lead to discoveries which could turn these projects into more viable projects. Our watch list of junior gold stocks is shown on the next page which includes selected junior gold stocks with a published resource or economic study (Exhibit 12).

Exhibit 12: RBCCM Junior Gold Watch List

Completed Resource

Company	Sym-Exch	Share Price $/sh	YTD Performance	Shares O/S MM	Mkt. Cap US$MM	EV US$MM	M&I 000 oz	M&I+I 000 oz	Gold Grade g/t	EV/ M+I oz	EV/ M&I+I oz	Wkg Cap** ($mm)	Area of Major Exploration
Algold Resources	ALG-V	$0.25	2%	127	$24	$24	29	270	1.71	815	87	$0	Mauritania
Barsele	BME-V	$1.48	41%	103	$121	$121	251	540	1.08	482	224	$0	Sweden
Cardinal	CDV-AU	$0.25	6%	304	$59	$55	250	4,050	1.15	219	14	$2	Ghana
Calibre	CXB-V	$0.22	54%	309	$49	$49	0	1,099	2.53	n.a.	44	$1	Nicaragua
Eastmain Resources	ER-T	$0.49	-4%	175	$63	$50	1,207	1,840	4.37	41	27	$9	Quebec
Gold Standard Ventures	GSV-V	$3.56	24%	222	$601	$593	630	2,087	0.56	941	284	$7	Nevada
Marathon Gold	MOZ-T	$0.80	36%	118	$68	$66	1,060	1,259	2.28	63	53	$2	Newfoundland
Nighthawk	NHK-V	$0.62	43%	155	$63	$61	0	2,101	1.64	n.a.	29	$1	NWT
Probe Metals	PRB-V	$1.41	4%	86	$92	$78	0	770	2.62	n.a.	101	$14	Quebec, Ontario
Skeena*	SKE-V	$0.10	27%	536	$37	$35	4,212	6,424	0.91	8	5	$1	British Columbia
West African Resources	WAF-V	$0.30	36%	484	$103	$100	670	1,296	2.07	149	77	$2	Burkina Faso
								Average		**96**	**86**		

Completed PEA/Pre-Feasibility Study

Company	Sym-Exch	Share Price $/sh	YTD Performance	Shares O/S MM	Mkt. Cap US$MM	EV US$MM	M&I 000 oz	M&I+I 000 oz	Gold Grade g/t	EV/ M+I oz	EV/ M&I+I oz	Wkg Cap** ($mm)	Area of Major Exploration
Almaden Minerals*	AMM-T	$1.35	3%	86	$87	$82	3,051	3,677	0.99	27	22	$4	Mexico
Barkerville	BGM-V	$0.48	10%	306	$110	$90	2,902	4,972	2.42	31	18	$21	British Columbia
Falco Resources*	FPC-V	$0.97	9%	147	$104	$97	7,757	9,621	2.64	12	10	($2)	Quebec
Goldquest Corp*	GQC-V	$0.40	48%	216	$66	$62	2,826	3,233	4.07	22	19	$3	Dominican Republic
Harte Gold	HRT-T	$0.36	20%	431	$105	$105	302	398	8.06	347	264	($1)	Ontario
IDM Mining	IDM-V	$0.15	4%	283	$29	$29	584	649	8.41	49	44	($1)	British Columbia
INV Metals*	INV-T	$0.70	0%	65	$35	$26	3,020	3,690	4.55	9	7	$9	Ecuador
Luna Gold	LGC-T	$1.79	13%	39	$48	$77	1,599	1,661	1.59	48	46	$4	Brazil
Mariana Resources*	MARL-V	$1.34	35%	124	$128	$127	1,567	1,756	3.32	81	72	$1	Turkey, Argentina
Midas Gold Corp	MAX-T	$0.86	-1%	180	$118	$115	5,465	6,531	1.57	21	18	$3	Idaho
Newcastle Gold	NCA-V	$0.73	0%	184	$99	$99	4,191	4,951	0.59	24	20	($2)	California
Orla Mining	OLA-V	$1.30	4%	118	$116	$115	698	710	0.61	165	163	$0	Panama
Orecorp	ORR-V	$0.54	34%	173	$70	$57	1,414	1,705	3.49	40	33	$13	Tanzania
Osisko Mining	OSK-T	$3.37	38%	162	$419	$369	3,533	5,396	1.94	105	68	$49	Quebec
Pure Gold	PGM-V	$0.56	8%	173	$76	$72	928	1,225	9.47	78	59	$3	Red Lake
								Average		**71**	**58**		

Completed Feasibility/In Construction

Company	Sym-Exch	Share Price $/sh	YTD Performance	Shares O/S MM	Mkt. Cap US$MM	EV US$MM	M&I 000 oz	M&I+I 000 oz	Gold Grade g/t	EV/ M+I oz	EV / M&I+I oz	Wkg Cap** ($mm)	Area of Major Exploration
Aldridge Minerals*	AGM-V	$0.28	2%	107	$24	$34	2,792	2,825	2.93	12	12	($11)	Turkey
Atlantic Gold Corp	AGB-V	$0.96	14%	168	$122	$113	982	1,995	1.54	115	57	$7	Nova Scotia
Avnel	AVK-T	$0.29	21%	310	$24	$7	2,448	2,644	4.16	3	3	$7	Mali
Belo Sun Mining	BSX-T	$0.89	31%	465	$319	$312	4,956	6,107	0.97	63	51	$4	Brazil
Continental Gold	CNL-T	$4.33	-2%	142	$461	$439	4,480	8,980	9.80	98	49	$19	Colombia
Dacian Gold	DCN-AU	$2.33	13%	146	$257	$250	2,200	3,315	2.31	114	75	$5	Australia
Dalradian Resources	DNA-T	$1.33	14%	243	$245	$212	2,094	4,400	10.74	101	48	$30	N. Ireland
Gold Road Resources	GOR-AU	$0.58	1%	871	$382	$313	2,355	3,315	1.34	133	94	$65	W.Australia
Integra Gold Corp	ICG-V	$0.74	32%	478	$262	$232	1,182	2,536	6.79	197	92	$31	Quebec
Lundin Gold Inc	LUG-T	$5.67	8%	119	$502	$486	7,350	9,480	8.33	66	51	$12	Ecuador
Lydian International*	LYD-T	$0.37	11%	699	$195	$173	3,232	5,372	0.73	53	32	$2	Armenia
NovaGold (Donlin only)	NG-T	$6.90	12%	322	$1,655	$1,639	19,504	22,500	2.21	84	73	$80	Alaska
Pretium Resources	PVG-T	$14.02	26%	180	$1,861	$1,893	10,000	13,900	14.46	189	136	$275	British Columbia
Sabina Gold & Silver	SBB-T	$1.34	37%	220	$223	$209	5,333	7,184	6.21	39	29	$14	Nunavut
Victoria Gold Corp	VIT-V	$0.61	9%	504	$231	$220	3,960	4,446	0.64	56	49	$6	Yukon
								Average		**88**	**57**		

* Gold equivalent basis

** Working capital as of the most recent reported quarter

Source: Company Reports, Bloomberg, ThomsonONE, RBC Capital Markets

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			Investment Banking Serv./Past 12 Mos.	
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