RESEARCH REPORT

STREAMING COMPANIES PART 3

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KEY METRICS AND VALUE BENCHMARKS

In Streaming Companies Part 1 we outlined the key characteristics of streaming companies and highlighted the main risk involved – project risk.

In Part 2 we showed the approach we take in valuing streaming companies. The final Part 3 provides valuation summaries of the streaming companies and an overview of key metrics we use in the valuation of individual streaming deals.

Our review showed that Return on Invested Capital (calculated as Cash from Operations/Share Cap + Net Debt) of 10% - 15% on average yields market value of 20 times Cash Flow from Operations (CFO).

A decrease in the multiple is expected when CFO drops as a result of lower gold prices or underperforming operations (i.e. Sandstorm - Luna Gold). While streaming & royalty companies cannot impact gold market price, asset risk can be mitigated by disciplined and diligent selection. Diversification is another key feature in mitigating asset risk. A good example again is Franco Nevada with highly diversified streams and royalties, in contrast to Sandstorm owning fewer streams and royalties hence subject to greater asset risk.

Silver Wheaton is also exposed to a higher asset risk. Over the life of the company 36% from total revenue have been sourced from two mines (the first two streaming agreements made). Today these two mines contribute 25% of the annual revenue; a small interruption in production at either could dramatically impact revenues.

In conclusion our benchmark value multiple for streaming and royalty companies is set at 20 times Cash Flow from Operations (CFO). Premiums/discounts are applied based on asset quality, asset diversification and metal price expectations.

Average for the Life of the Company					
Ratio	**Royal Gold**	**Silver Wheaton**	**Franco Nevada**	**Sandstorm**	**Average**
ROIC (CFO/Share Cap + Net Debt)	9.6%	25.5%	10.7%	14.8%	15.1%
ROIC (NI/Share Cap + Net Debt)	4.3%	18.3%	3.0%	-0.3%	6.3%
EV/CFO	21.7	21.2	19.9	16.1	19.7
MC/CFO	20.9	20.6	22.6	18.3	20.6
EV/Revenues	13.9	14.8	13.3	10.1	13.0
MC/Revenues	13.4	14.3	15.1	11.5	13.6
Dividends as % of CFO	24.5%	18.6%	26.5%	-	23.2
Dividend Yield (Dividend/MC)	0.8%	1.1%	1.2%	-	1.0%

Current financial reporting period (Q3 2015)					
Ratio	**Royal Gold**	**Silver Wheaton**	**Franco Nevada**	**Sandstorm**	**Average**
ROIC (CFO/Share Cap + Net Debt)	3.8%	11.8%	10.0%	8.2%	8.5%
ROIC (NI/Share Cap + Net Debt)	-2.2%	0.3%	-0.6%	-5.2%	-1.9%
EV/CFO	15.1	15.5	23.3	8.96	15.7
MC/CFO	11.8	14.1	25.4	10.17	15.4
EV/Revenues	4.8	10.4	16.5	5.41	9.3
MC/Revenues	3.7	9.4	18.0	6.14	9.3
Dividends as % of CFO	52.6%	17.0%	30.8	-	33.4%
Dividend Yield (Dividend/MC)	2.2%	1.0%	1.3%	-	1.5%

Our valuation summaries for each company are as follows:

Royal Gold
- Longest history
- Approximately $2.88 Bi in total invested capital
- Lowest average Return on Invested Capital (ROIC) - current ROIC of only 3.8% and recent years average of 9.6% - well below historic industry averages
- Greatest diversity of revenue streams
- Significant decrease in Cash Flow from Operations in the final 6 months of 2015
- Net debt of approximately $700 million
- Current Enterprise Value (EV) /Cash Flow from Operations (CFO) of 11.8 times – reflective of the high net debt (Market Cap (MC)/CFO is 15 times)
- Rising gold price will increase revenues and CFO's and should allow MC/CFO to rise to 20.0 times, however debt needs to be reduced and/or gold prices need to rise considerably before full valuations are expected

Silver Wheaton
- Founded in late 2004
- Approximately $3.35 Bi in total invested capital
- Highest average ROIC
- Current ROIC of 11.8% - well below its historic average of 25.5%
- CRA review of tax treatment could result in significant taxes and penalties
- Revenue stream largely dependent on 2 key assets
- Net debt of approximately $530 million
- Current EV/CFO of 20.0 times – it may not reflect the net debt (MC/CFO is 14.1 times)

Franco Nevada
- Founded in late 2007
- Approximately $3.0 Bi in total invested capital
- Current ROIC of 10% - in line with historic averages of 11%
- Very diverse revenue stream
- Current assets of $700 Mi vs debt of only $65 Mi
- Current EV/CFO of 23.3 times (MC/CFO is 25.4 times) significantly higher than its historic average of 19.9%
- Appears to be fully valued at present
- Cash on hand should allow for fast movement on future deals to provide upside

Sandstorm

- Founded in late 2008
- Approximately $450 Mi in total invested capital
- Current ROIC of 8.2% well below historic averages of 14.8%
- Not very diverse revenue stream
- Current assets of $11 Mi vs debt of $9 Mi
- Current EV/CFO of 9.0 times (MC/CFO is 10.0 times) well below its historic average of 16.1%
- Rising gold prices will only partially offset impact of mine closure on revenues and CFO
- Lack of cash on hand means money will need to be raised (dilution for shareholders) to acquire additional streams

KEY METRICS IN THE VALUATION OF INDIVIDUAL STREAMING DEALS

The following table summarizes the key financial metrics we consider in our valuation of individual streaming deals.

The group of six on the top is a sample from recent deals completed in the period 2014 to present and bottom one, Silver Wheaton's first three deals (2004-2006)

Streaming Company	Mining Company	Upfront Payment (US$/oz)	Delivery Payment (US$/oz)	Total Payment (US$/oz)	Upfront Payment (% of Au)	Delivery Payment (% of Au)	Total Payment (%/Au)	CoC (IRR)	Expected Term ROIC	Term (yrs)	Expected Annualized ROIC	TOTAL Upfront (US$ Mi)
Franco Nevada	Teranga	$297	$240	$537	25%	20%	45%	13.9%	323%	>20	16.0%	135
Orion&Blackstone	Pretium	$254	$400	$654	21%	33%	54%	16.5%	317%	18	17.6%	150
Baiyin	Banro	$342	$150	$492	28%	13%	41%	14.7%	307%	>20	15.7%	67.5
Silver Wheaton*	Glencore	$330	$240	$570	27%	20%	47%	4.4%	248%	>20	6.3%	900
Franco Nevada	Glencore	$255	$303	$558	21%	25%	46%	10.3%	243%	>20	11.8%	500
Royal Gold	Barrick	$317	$360	$677	26%	30%	56%	8.5%	189%	>20	11.4%	610
Average:		**$299**	**$287**	**$562**	**22%**	**25%**	**46%**	**11.4%**	**271%**	**>20**	**13.1%**	
Silver Wheaton*	Wheaton River	$276	$660	$936	23%	55%	78%	7.2%	192%	>20	9.6%	200
Silver Wheaton*	Lunidin Mining	$336	$660	$996	28%	55%	83%	4.9%	159%	>20	7.9%	78
Silver Wheaton*	Glencore	$342	$330	$672	29%	28%	56%	9.1%	220%	20	11.0%	285
Average:		**$318**	**$550**	**$868**	**27%**	**46%**	**72%**	**7.1%**	**190%**	**>20**	**9.5%**	

*Silver stream converted to gold using US$ 15/oz for Ag and US$ 1200/oz Au

Upfront Payment (US$/oz) – the upfront payment per oz of metal attributable to the streaming company
Delivery Payment (US$/oz) – the ongoing delivery payment per oz of metal from the streaming company to the miner
**Total Payment (US$/oz) =** Upfront Payment (US$/oz) + Delivery Payment (US$/oz)
CoC (IRR) – The Cost of Capital for the miner, conversely the Internal Rate of Return for the streaming company are derived by a standard calculation of the Internal Rate of Return of a stream of cash flows
Expected Term ROIC here is calculated as Total Gross Profits/Upfront Payment (note: no TVM discount for Total Gross Profit over the full term)
Expected Annualized Term ROIC here is calculated as (Total Gross Profits/Upfront Payment)/Term (yrs) (note: no TVM discount for Total Gross Profit over the full term)

In conclusion, the key things to consider in the valuation of streaming companies are:

- Fundamentals of the underlying assets
- Streams diversification
- Specific deal covenants (i.e security over the asset, buy out options)
- CoC/IRR (healthy range - 8%-12%)
- Annualized ROIC (healthy range -10%-15%)

- Expected Term ROIC (healthy range - 200%-300%)

Finally, our Enetrprice Value benchmark for streaming companies is 20 time Cash Flow from Operations.

For more information on this and other topics related to the metals and mining markets, please contact info@cipherresearch.com