

The 13th Annual Americas School of Mines Mining and Financing: post-Bubble

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Financing and mining: after the “bubble”

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2. Trends on managing assets (including “humans”)
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4. Looking forward: “blue skies”
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First Section

Financing and mining: after the “bubble”

- **Quo Vadis: demand, supply, industry, the banks**
- Trends on managing assets (including “humans”)
- Trends on managing capital
- Looking forward: “blue skies”
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First and foremost, we need a theme.

- When managing uncertainty, three mottos come to mind:
 - In good times, plan for bad; in bad, plan for good (Jesuits).
 - Minimise the down-side (Pascal, a church-going scientist).
 - “Be prepared” (Lord Baden-Powell of the Boy Scouts).

Choose **one** in the next 35 minutes.

Quo Vadis “models”

- In the beginning.....there were the “models” which said....
 - inflation drove precious metal prices,
 - GDP, durable goods, housing starts all drove base metals, and
 - OECD markets would always pull Emerging Markets along.
- Currently however.....we have.....
 - Strong precious metal markets with no inflation in sight.
 - Good oil, copper and nickel markets and no GDP growth.
 - The BRICs are doing well, without the OECD markets.
.....all the while Boomers will begin cashing out after 2011.

Quo Vadis, Demand

- Precious metals are currently greenback-driven;
 - To avoid another “dip”; \$ may remain low for awhile.
- The demand for Ni, Cu, Pt is becoming more “green-driven”;
 - For electric/hybrid cars, batteries, catalytic converters, etc.
 - With oil at \$70 in a recession, it’s no longer a fad.
- The 25% drop in durable goods orders suggests some base metals may not rebound for awhile.
 - all the while the other 75% requires metal replenishment.
- The BRIC’s are now growing a domestic middle class;
 - PRC + India=36%of population; OECD has but 10% and no growth.

Quo Vadis Supply

- The gestation period of a typical greenfield project increased from three to six years (from P+P reserve to ground-breaking).
- The environmental assessments are more demanding.
- The new projects involve increasingly fragile frameworks.
- Compounding the above three, the development risk soars.
- Only 30% of projects foreseen for 1995-2005 made it (C. Suisse).
- The cost of remote infrastructure is high, with “geometric” costs.
- The WACC is increasing, raising the hurdle rate. ETFs don’t help.
- The “meltdown” has deferred new supply for several years.

Quo Vadis Industry

- The seniors consolidated well before the “bubble”.
 - fewer buyers of new projects from juniors, and more selective.
 - less capital available thus higher hurdle rates.
 - more triage of assets and the development of “ strategic options”.
 - cash and liquidity have returned to the fore.
- The juniors have to go further afield to find new assets/capital.
 - more permitting/assessment requires more capital and risk.
 - fewer buyers (they face an oligopsony, if not monopsony).
 - less capital available with a much higher cost.
 - “junior” may need to become an “intermediate”.
 - the decision becomes a double-challenge (hire and triage).

Quo Vadis- The Banks

- The TED-spread has finally returned to levels of June 2007.
- Banks are extremely shy on new risk and when in uncharted waters.
 - Deutsche Bank predicts ½ of mortgage borrowers to be underwater by end of 2011 (2x current level).
 - 15% of const'n loans 90+days overdue (vs.3% in 2007).
- Much bank lending in mining has been for debt restructurings.
 - Does a bank want be a mine operator ? (and face NGOs?)
- Pressure on EPCs to share risk puts their B/S (and banks) under pressure.
- Hedging with derivatives is more capital-constrained.
- Lenders however are hungry; loans are being paid down.
 - BMO suggests the mining industry is underleveraged.

Quo Vadis- The (Old) Bank Relationship

What the Banks Want (“ICE”)-

- Information is key, so update those Feas. Studies, data rooms.
 - and accept more look-in rights, step-in rights, etc.
- Commitment on the risk matrix- find a EPC/off-take partner.
- Equity up-front, to “book-end” the lender’s funding.
 - equity is first, and then the cost-completion guarantee last.

What the Banks Must Provide-

- Capital adequacy (their capital=your LIBOR; your hedge).
- Mining fluency (their knowledge and data base= flexibility).
- ECA fluency can help (fixed rates + terms).
- Regional market access is a value-added (ie: Jo’burg/Bovespa)

Second Section

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Some Models for Managing New Assets

- Sell assets or sell one-time, non-extendable development options.
 - value is created with a competitive, transparent, 2-envelope process.
 - one-shot, IP transfer, no extensions allowed on options;
 - (some examples: Moatize Coal (Moz.); Eleanore (CA)).
- De-risk your future assets with better feas. study work.
 - focus on level Free Cash Flow for better capital access, not max. IRR.
 - include real infrastructure, working capital, transport needs.
 - include realistic permitting processes and an interim action list.
 - include pragmatic issues as capital rationing, risk-adjusted-return-on-capital.
 - drop the “after-tax IRR” calculations, please, and spend the money elsewhere.
 - if done pre-permits, an update is essential post-permit. .

Some Models for Managing Uncertainty

- Drop the word “traditional” with regard to any model or process.
- Cut the internal “silo” nonsense; the cost is time and blunders.
 - with cross-training of managers, better quality decisions.
 - stop searching the “home run”, when a “double” will do.
- De-risk your assets with a focus on cash flow, not size/IRR.
 - advance the drill and design work.
 - advance the Environmental Assessment work.
 - advance the internal cross-review work (anti-silo!).
 - advance the third-party reviews for objectivity.
 - To advance a potential target, use a corp loan, or a bank loan with a corp. guarantee & back-in equity option.

Third Section

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Good Financial Management Practice

- Review the Revolver; remember the “unmapped quadrant”.
- Convertible sub debt may be necessary, albeit expensive.
- Limited-recourse financing is conservative, use only if needed.
- Review the hedge book and the opportunity cost of caps (ABX).
- Review risk matrices: EPC’s may be pricey, but certain.
- Review the j/v option: some “vertical” equity may provide stability.
- Recent examples of good management for liquidity:
 - AEM’s pre-empting move with a re-fi+equity combination.
 - First Quantum’s revolver+ sub. debt combination.
 - Teck’s refi+bond issuance combination.
 - GG’s convertible deb with a risk-free coupon+ 30% premium.

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If Project-Finance Needed, Some Guidelines

- ICE definitely prevails in terms of a mineco's commitment.
- Club lending is the only structure currently in play.
 - “overbook” the number of banks and reduce the “weakest-link” risk .
- Capital adequacy will reduce LIBOR levels and hedging costs.
- Conservative terms prevail; a mini-perm structure is key for an early exit.
- DSCRs @ 1.5x +; Reserve Tails @ 30%+; Asset/Loan ratios @ 2x +.
- Look for ECA and leasing fluency-
 - Procurement can bring cheap currency, financing.
- Bank fluency with mines will bring flexibility, data base and expertise.
 - Market data in past two yrs is a void while the banks lived it.

Fourth Section

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Looking forward: “blue skies”.....

Nothing but blue skies (plus or minus a cloud)

- Per McKinsey (2009), the relationship between base metals and global GDP will be historically high, and remain constant.
- Gold will be a currency as governments will err on the side of low interest rate-setting so as to stimulate economies.
- Banks will not be in strong positions for awhile.
- Pre-bubble was tough for 70% of new projects; the same, going forward.
- New demand from the green movement will boost some metals.
- The major and the junior must cross-train their managers and processes for fewer blunders.
- The junior will find itself with an interesting “fork” (a chess term).

Final Section

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In Closing

- The unmapped quadrant means “traditional model” is doubtful.
- The greenback, the “greens” & BRICs are the change agents.
- The dearth of new projects is good for metal prices, yet bad for growth opportunities so work both the asset and capital “hard”.
- The dearth of capital means every dollar and asset counts.
 - Size, share, ounces no longer counts; “cash-flow” does.
- The banker/minero relationship must be re-calibrated.
 - The minero must keep numerous funding options open.
- Closing Motto: “Be prepared”.

Thank You

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