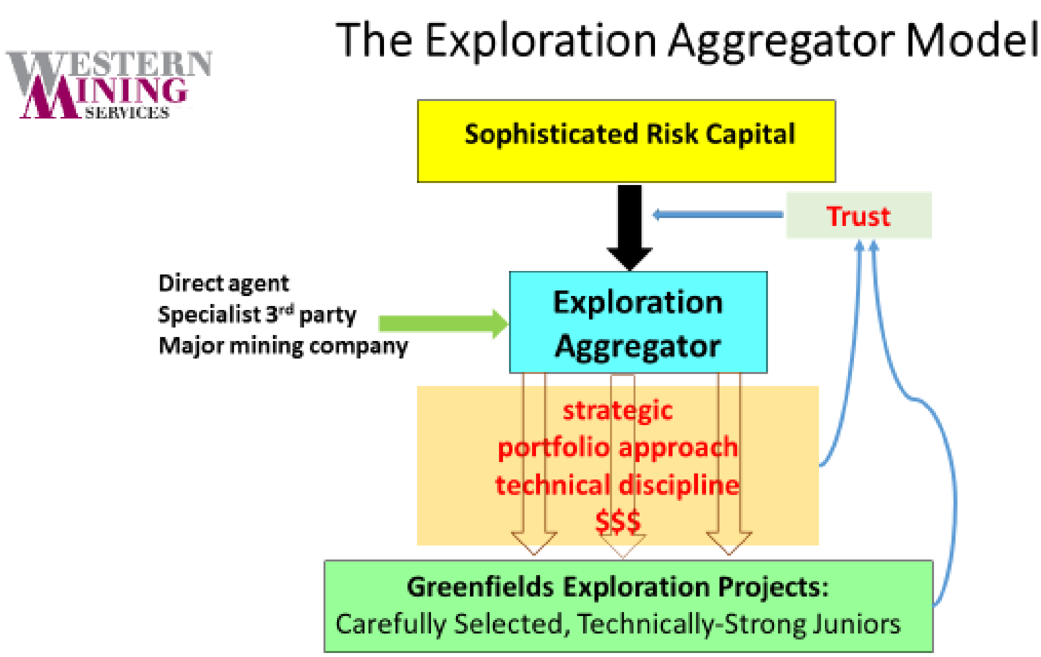
Mineral Exploration Financing – we need a new model

The “capital strike” that currently affects the junior exploration sector continues to deepen with the result that exploration risk capital is currently very difficult to obtain. The reason? The way we, as an industry, finance early stage exploration in the global junior sector is inefficient, wastes capital and is no longer working.

Our incentive is to tap into the large amount of sophisticated risk capital that currently avoids early stage exploration like the plague. To do so, we need a new approach that links this risk capital to strong projects through an interface of trust -- **trust** that capital will be allocated effectively and that less reputable parts of our industry will be screened out.

Exploration Aggregator

The approach that WMS proposes is the Exploration Aggregator Model:



The key to this model is that within the Aggregator, between sophisticated risk capital and a portfolio of early stage exploration projects operated by junior companies, there sits a trusted third party. The role of the Aggregator is twofold:

1. Select, carefully and with skill, the best exploration projects for investment, then
2. Ensure these projects are advanced with the best science and technical discipline.

The Aggregator may be directly owned by the sophisticated risk capital, it may be a specialist third party or perhaps could be a division of a major mining company that is dedicated to this function (in that case, also tapping capital from the parent company).

What is important is that the Aggregator must possess and integrate these capabilities: financial literacy, strong strategic understanding of mineral exploration, and ***world-class*** technical skills. Collectively, these capabilities earn the trust of the investor.

Aggregator Obligations

- ✓ Manage its investments as an integrated portfolio with a dominant strategy of lessons learned -- successive projects to learn from previous ones.
- ✓ Ensure collaborative knowledge sharing between the Aggregator and the various junior companies involved.
- ✓ Focus its portfolio on making the next generation of discoveries rather than fruitlessly trying to recreate the last.

Obligations of the Junior

In order to earn capital investment from the Aggregator,

- ✓ The Junior must be strongly focused on new exploration search space – a contrast to much recent effort by the sector which has focused on secondary evaluation of existing sub-economic deposits.
- ✓ The Junior must also apply the latest technology and concepts, at all relevant scales.

Support for the Aggregator Model

WMS advocates this Aggregator Model because the current context for greenfields exploration investment is so persuasive. From a strategic perspective, the value proposition for investing in mineral exploration has never been stronger. The global mining industry urgently needs new high-quality mineral resource discoveries.

- Over the last decade, massive increases in production to meet China-driven demand have led to rapid depletion of high quality resources, which of course are always mined first.
- Most of the existing global resource inventory only really makes sense for future development if we assume the unlikely – that boom-time metal prices might come back someday and last for a decade or more.

This current industry downturn is not the time to turn away from quality exploration. Cyclical fluctuations in our sector are nothing new. The problem is lack of exploration project quality -- we continue to see, especially during the booms, large amounts of capital spent on exploration with relatively little return. In fact, over the last three decades culminating in the last so-called “super-cycle”, each successive boom cycle has spent increasingly more on exploration. No wonder exploration investors have given up!

Worse for the mining industry as a whole is the fact that poor use of growth capital in the mining industry is not restricted to the exploration sector. As reported by Citi Bank in June 2015, over 90% of the value of mining industry acquisitions made since 2007 has been written off – an unambiguous indictment of the prevailing strategic paradigm that mining companies can grow by selectively buying from the current pool of known assets.

This tells us that the better growth strategy is more, not less, exploration, BUT it must be high quality exploration and we must tap into well-informed, sophisticated financing to direct us to that goal.

Finding the Capital

The problem isn't lack of investment capital. We live in a world awash with capital looking for a home, much of it sitting in sovereign wealth funds or managed by the burgeoning private equity industry. The challenge for this capital is to find investments that provide an appropriate return, particularly in an environment of historically low interest rates.

The good news for mineral exploration should be that it is one of the few sectors in the global economy that consistently offers the genuine prospect of a many multiples return on investment.

Commodity Price Correlation

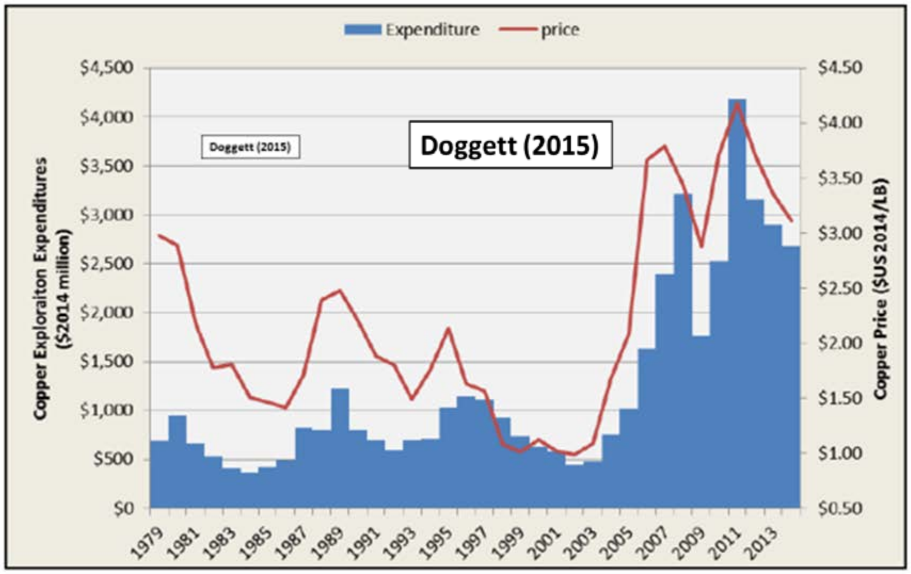
A pattern that seems to govern global investment in mineral exploration is the strong correlation between capital availability and commodity price.

This pattern is understandable in the case of an operating mining company which finances exploration out of cash flow.

The pattern does not make sense, however, in the context of junior company risk capital. There is no rational correlation between today's metal price and the probability of a positive return from an investment in a junior company focused on early stage exploration. The junior is searching for deposits that may well not be in production until the next decade.

Thus, the real risk for the exploration investor isn't commodity price – rather the risk is linked directly to the quality of the team that is managing the exploration and the quality of that team's project portfolio.

Thus, the fact of this pattern, i.e., a strong correlation between risk capital availability and commodity prices, tells us that risk capital investment in junior explorers is sentiment driven and not strategic. Since the late 70s, when metal prices are high and/or there has been a particular high profile discovery in a region, money tends to flood into the sector. When metal prices tumble, money floods out.



Price-expenditure correlation indicates exploration finance is irrationally sentiment driven

Why This Pattern?

One explanation may be the traditional source of exploration risk capital. Investors in juniors that are focused on early stage mineral exploration are pre-dominantly high net worth individuals who invest through their stock brokers.

Institutional investors, i.e., those who might take a more strategic perspective, avoid early stage exploration investment because it is seen to be riskier than investment in companies with defined resource projects (commonly referred to as "advanced projects").

We at WMS don't agree. If we filter out the large proportion of early stage exploration that is low quality, i.e., not focused on new search space, then investment in advanced stage projects may actually be much riskier.

Advanced Projects

These are usually projects that are marketed as being imminent candidates for mine development, with usually well defined mineral resources, and therefore relatively low risk investment opportunities. However, in many cases this perception of proximity to mine development is an illusion.

First, because of the long period of under-investment by the global industry in quality early stage exploration, the quality of the inventory of available advanced projects has systematically declined (and, if nothing changes, will continue to decline). This means that, in many cases, the large expenditures on delineation drilling and feasibility studies, which are called for by an advanced project, only serve to demonstrate that what was thought to be a less risky project is actually unlikely to be economic under any set of plausible future conditions.

Second, and this is key, it is a common error in our industry to confuse certainty (we know a lot about the deposit) with risk (the probability we will make a profit). This error is a major source of wealth destruction. For many advanced projects, the investment requires the irreversible commitment of large amounts of capital, and the risk for the investor is in fact extremely high.

Early Stage Exploration Projects

Although the probability of success for an individual early stage exploration project is very low, the amount of money required to test the viability of the project is also low or should be if the project is the result of knowledgeable, strategic project generation and is well-managed. In a portfolio of such exploration projects, capital needs to be committed only as long as the project is returning positive results.

The Proper Comparison

In making investment decisions, we should compare the risks associated with investing in a high quality well-managed early-stage exploration portfolio with the large, high risk investment required to test the viability of single advanced project, that, if it is actually available for investment, has in most cases already been unfavourably assessed by the previous owner.

This is the comparison that should attract the sophisticated risk capital investor to early stage mineral exploration.