Why Do So Many Junior Mining Companies Fail? 8 Reasons Explained.

By CRUX Investor

There are more than 3,000 junior mining companies listed on exchanges globally, with new ones constantly appearing. So how can all of them survive and make money? The short answer: they can't.

Worldwide there are less than 50 major mining companies, so clearly not all juniors can progress to this stage - some must fail. The question is, why?

We discuss the 8 reasons why a mine could fail and how to select the companies that will succeed…

What is a junior mining company?

A junior mining company is a company in the development and exploration phase of the search for new deposits of gold, silver, uranium or other natural resources.

Juniors require substantial capital to get into production and can take 10-20 years to do so, during which time a lot of things can go wrong.

The early stages in the lifecycle of a mine are particularly risky. Junior miners are still a long way from production and will face many obstacles before they get there:

- Can I raise enough money to keep going?
- Will I be able to determine if there's an economically viable resource underground?
- Will I be able to get the permits and licenses required at all stages?
- Does the management team have the prerequisite relevant experience?
- At what stage in the cycle is the market and how do I keep the market interested in my story...

There are many mining companies all hoping for a profitable future, but the vast majority of junior companies are faint-hope propositions and most companies will fail to progress past the first hurdle - exploration.

What are the aims of a junior mining company?

Like all businesses, junior mining companies are set up with the hope of making money. To do this, they need to identify an asset with potential commercial value and assuming the management team has the ability, they will usually receive the financing to continue towards production.

A junior company may start off as private entities but ultimately many decide to IPO (Initial Public Offering) as a means of raising the capital they need to explore extensively, develop and potentially get into production.

Once public, it is incumbent of the management team to deliver the project through the various stages of development to reach production.

And more importantly for investors, to grow the inherent value of the company - which manifests itself in share price, market cap. and enterprise value (EV) appreciation.

Ultimately most juniors aim to be acquired by a larger company for a profit.

What makes a junior mining company successful?

Strong management

Companies management with a proven track record and experience in the mining cycle are more likely to succeed, highlighting the importance of looking at the background and experience of the management and technical team.

It is important for the management team to have relevant experience for the project their about to undertake, just as management teams with exploration experience are unsuited to build and operate a mine, likewise it is unlikely that executives from a major company will be used to the rigours and budget limitations of junior companies.

Whatever stage of project the team is working on, they must advance them in a timely manner, control share structure and complete financings at progressively higher share prices.

Securing financing

The success of a mining company depends upon multiple variables including exploration results, jurisdiction and corporate structure.

Securing finance is a representation of the markets trust in the ability of the management team to deliver what they say they can.

Ultimately though the risk is amplified by the fact that they are trying to find something that is buried deep underground. If the management team is lucky enough for all of the data to indicate a high likelihood of success underground, they will be able to secure financing.

As the management team continues to de-rsisk their business plan, the likelihood of money available to them increases. Typically in the exploration/development stage (pre-revenue) this is done through the issuance of shares in the company.

Once a company gets into a near-term revenue or revenue generating position, it's able to reduce the dilution of issuing shares and instead use debt instruments as a means of financing the development, Capex and Opex of their operation.

It is preferable to have a strong balance sheet, low debt and a positive cash flow, especially when commodity prices are low.

Attractive geology

The geology is fundamental to future success and the more that can be understood about the geology, the less risky the development becomes.

It's about understanding the amount of contained mineral in the ground.

It's debatable whether juniors with exploration targets in an area with geology that is similar to that of nearby producing mines (brownfield sites) are preferable to pure-exploration in new, previously unexplored areas (greenfield sites).

Brownfield exploration

Also known as near-mine exploration, refers to areas where mineral deposits were previously discovered or close to other successful mining areas. In brownfield exploration, geologists look for deposits near or adjacent to an already operating mine. As geologists are able to use existing data, the risk in brownfield exploration is lower than in greenfield exploration.

Greenfield exploration

Occurs in uncharted territory where mineral deposits are not already known to exist. Greenfield exploration relies on the predictive power of ore genesis models to find mineral deposits in previously unexplored areas or in areas where they are not already known to exist. Grassroot exploration projects spend a lot of time finding new deposits and these are the riskiest projects in the mining business.

Why do junior mining companies fail?

There are 8 key reasons why a junior mining company may fail:

1. Choice of jurisdiction

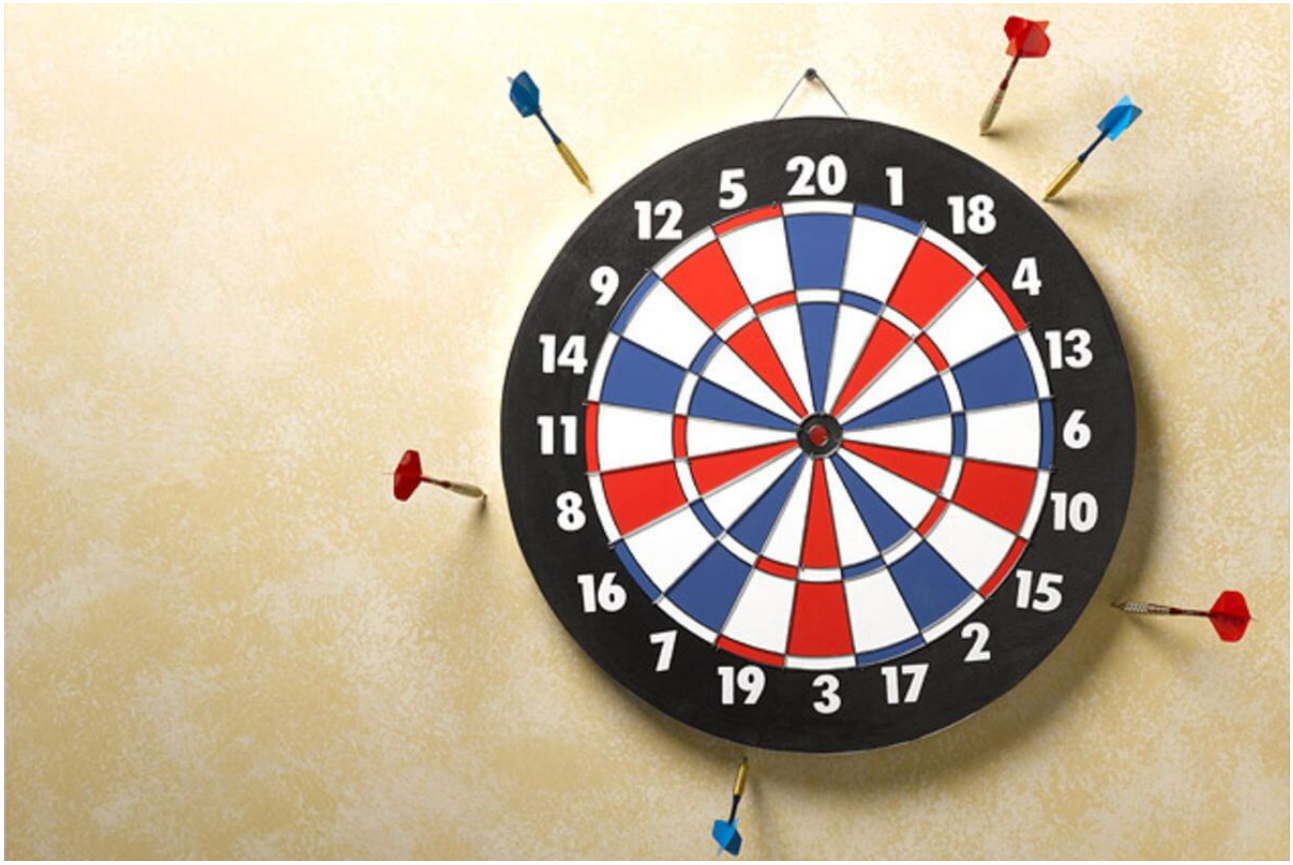
Pure-exploration junior mines in new unexplored areas are exciting, but more likely to fail than juniors in areas with geology that is similar to that of nearby producing mines. Some statistics indicate that only 1 in 5,000 to 1 in 10,000 grassroot exploration projects ever reach the production stage.

Important considerations:

- State, province, municipality
- Infrastructure
- Accessibility

- Federal state and provincial government policy
- Tax and royalty structures
- Local communities
- Environmental and Social Governance (ESG)

Failure to acknowledge and address any one of these issues could seriously impact a projects ability to ever get into production.



2. Poor exploration drilling results

Exploration drilling and sampling provides information to estimate ore quantity and grade, and should be a priority of a junior as some investors and funders will wait for drill results to decide if the company is worth investing in.

Mineral exploration and drilling is required to estimate potential orebodies and is ultimately where investors hope to see the majority of their money spent. A well funded and robust drill program allows the company to produce a maiden resource estimate.

This maiden resource is usually associated with an initial scoping study called a Preliminary Economic Assessment (PEA) and after further scoping work, drilling and interpretation, the

company will produce a Preliminary Feasibility Study (PFS) to confirm the robustness of the economic assumptions made in the PEA. It is unusual for a company to be funded at this stage, but it does lend more comfort to the market as the chance of success.

If the deposit continues to show attractive economics the company will start to firm up on the capital costs required to develop the asset through a Feasibility Study (FS). At this point the company has a much better understanding of what's happening underground and what's happening above ground in terms of financing costs.

However to make sure the lenders of the money are comfortable, the company will be required to produce a final scoping study called a Definitive Feasibility Study (DFS) with rigorous detail, exacting technological analysis and final costings at prevailing market prices.

3. The technical limitations of the orebody

Technical issues are many, and arise from a number of sources when it comes to understanding an orebody. Some miners feel comfortable mining lower-grade ore on a much larger scale, because the amount of contained metals can be economically mined eg: Equinox processing ore of less 0.5g/t in California. Headline grabbing high-grade narrow veins can also be mined economically despite the volume of overburden that needs to be removed under the tight conditions. However, even these scenarios struggle if is the

metallurgy does not allow effective recovery rates, or indeed if the price of the commodity is lower than the All In Cost of mining it.

Issues can arise when miners seek out smaller scale, lower-grade ore that is far more difficult to reach and extract as it is often hidden so far underground.

Location of the orebody comes into play too. If it is inaccessible due to rain or ice for months of the year, making it technically hard to access, the economics are affected. If it is deep underground and is technically hard to access, then the economics will be affected.

So it is important to remember that high-grade doesn't always equal a high-margin project. It's about the volume of recoverable metals at a price that is sustainable and profitable.

4. Mining permits not granted

Mine permits and licences at all stages of the companies life are required for the exploration, development, extraction and processing of minerals to name but a few. Permits are aimed at controlling prospecting and mining.

Permit considerations:

- Health and safety
- Environmental and social management
- The responsible extraction of minerals

There are many stories of companies that have been unable to begin exploration projects as they have failed to gain the necessary permits from the relevant authorities to develop, construct production facilities or mine. Investors money is spent instead on the overheads of salaries whilst they wait for permissions that may never come.

5. Running out of cash

Junior mines need to be well-financed at all stages. If money needs to be raise in the equity markets ie: issuing new shares, management will aim to do so at a higher price than the last raise. This is the ideal scenario, but is not always the case. As an investor, one must always have a view on the cost of the money and a belief that the money will be spent in a way that will increase the value of the company for you as a shareholder.

Exploration and development is expensive, and if companies fail to raise enough cash during these phases then they will not be able to make it to production and will have to seek alternative strategies like bringing in a partner, merging, farming the project out to another company or selling the asset or company.

6. Change in the commodity price.

Current commodity market price significantly affects share prices for near-term producers and mining companies in production. The lower the cost of producing and the higher the commodity price, the more money the company makes. The cash generated gives the company optionality to do different things, such as issue dividends to shareholders, make accretive acquisitions, pay down debt, buy equipment to increase productivity or hire better people.

Mining companies must maintain operational mines even during downturns in commodity prices. The the commodity price falls and the mine becomes unsustainable the company may choose to put the mine in to care & maintenance.

7. Social and environmental conflict

Mining can be a politically vulnerable business, so exploration assets in difficult areas or politically unstable countries can be problematic. Whilst mining companies bring jobs and boost the economy to rural areas, they can be the source of social and environmental conflict.

In September 2020, Chile's environmental court confirmed definitive closure of Canadian company Barrick Gold's Pascua Lama mining project which had been on hold since 2013 over environmental concerns and also imposed a C$9 million fine on the company.

Local groups protested and started a legal battle to halt its construction, citing concerns over the threat of damage to waterways from the massive open-pit mining project, one of the largest in the world. The court dismissed a legal challenge from the company and confirmed a 2018 environmental authority ruling, ordering the "total and definitive closure" of the mine project.

8. Poor Management decisions

This is the core risk for any investor as it's ultimately the management of these companies who are responsible for its success or failure. Look for management teams with relevant experience for that stage of the companies development. There is no point in investing in a company where the management team is telling you that they will get in to production, if they are prospectors or explorers and have never built a mine before.

What to look for in Management teams:

1. A business plan and the ability to articulate it clearly to investors.

2. Be able to solve the technical geological problems for their stage of development.

3. Be able to talk to the financial markets and raise capital.

4. They must be able to manage and spend their money prudently and effectively.

5. To promote their story consistently and regularly.

How to avoid the mining companies that fail

These are the things you should analyse when selecting the right company to invest in:

1. Company managements relevant experience
2. Attractiveness of the geology and economics
3. Financing available
4. The permitting and licensing process
5. Potential mergers and acquisitions
6. Jurisdictional risk
7. Corporate structure

High risk or high reward?

The early stages in the lifecycle of a mining company is especially risky. Junior mining companies are still a long way from production and procashfit, and will face many obstacles before they get there.

Junior mining companies are a high-risk investment but can result in high-reward for those who seek to do their own due diligence and ask the right questions. And most importantly seek honest answers to those questions. Do not get caught up in your own confirmation bias. Be unemotional about investing and you will do better. Emotion will cloud your ability to make clear decisions.

Anything which reduces your ability to sell your shares at a profit must be identified, assessed and then they have to make an honest decision about how you move forward. The are many companies that can make you money, and you may kiss a few frogs, but you will learn from your mistakes. We will try to reduce the frog kissing required along the way.