

Journalists Education Seminar: Mining Finance 101

Peter van Kerckhoven
Co-Head: Mining & Resources



MAKE THINGS HAPPEN

NEDBANK | CAPITAL

A Member of the  OLD MUTUAL Group



Presentation Overview

1. Mining Finance Overview
2. Project Finance
3. Project Risks & Credit Considerations
4. Clarifying Roles and Titles
5. The Special Purpose Vehicle
6. Mining Value Curve
7. The Bankable Feasibility Study
8. Financing Milestones
9. Example Press Releases
10. Resource Classification
11. Hedging



Mining Finance

- Nedbank Capital: Mining & Resources
 - Project Finance
 - Acquisition Finance
 - BEE Finance
 - Corporate Facilities
- Multi-disciplinary
 - Geology, engineering
 - Financial modelling
 - Commodity dynamics – supply/demand
 - Legal structuring
- Diverse team
 - Geologist, engineers, accountants



Project Finance: The glamorous financing

- The financing of long-term projects based upon a **non-recourse** financial structure where project debt is repaid from the **cashflow** generated by the project.
- Utilised to fund large mining projects around the globe
- Prolific use by Junior Mining companies listed on ASX, TSX, LSE & JSE
- Complex, time consuming funding with significant risks and extensive documentation
- e.g. Eland Platinum: Platinum Project on South Africa's Western Limb
 - Arranged and Underwritten by Nedbank
 - R924 Project Debt, R100m standby debt
- e.g. Paladin Langer Heinrich: Uranium Project in Namibia
 - Arranged and Underwritten by Nedbank, Standard Bank and SocGen:
 - \$71m Project Debt



Project Risks & Credit Considerations

Completion Risk	Management, Plant and mine construction (EPC contractors), Completion Guarantees, Cost overrun facilities, standby equity
Market Risk	Position on Cost Curve, sales contracts, hedging
Resource Risk	Resource & Reserve, grade, geological complexity, scale (reserve tail)
Operating Risk	Management experience
Environmental Risk	Equator Principals (World Bank Standards), EIA
Technology Risk	Proven Technology, Pilot testing
Currency Risk	US\$ revenue stream, Offshore accounts
Political and Sovereign Risk	Political Risk insurance Developmental Finance Institutions (IFC, EIB)



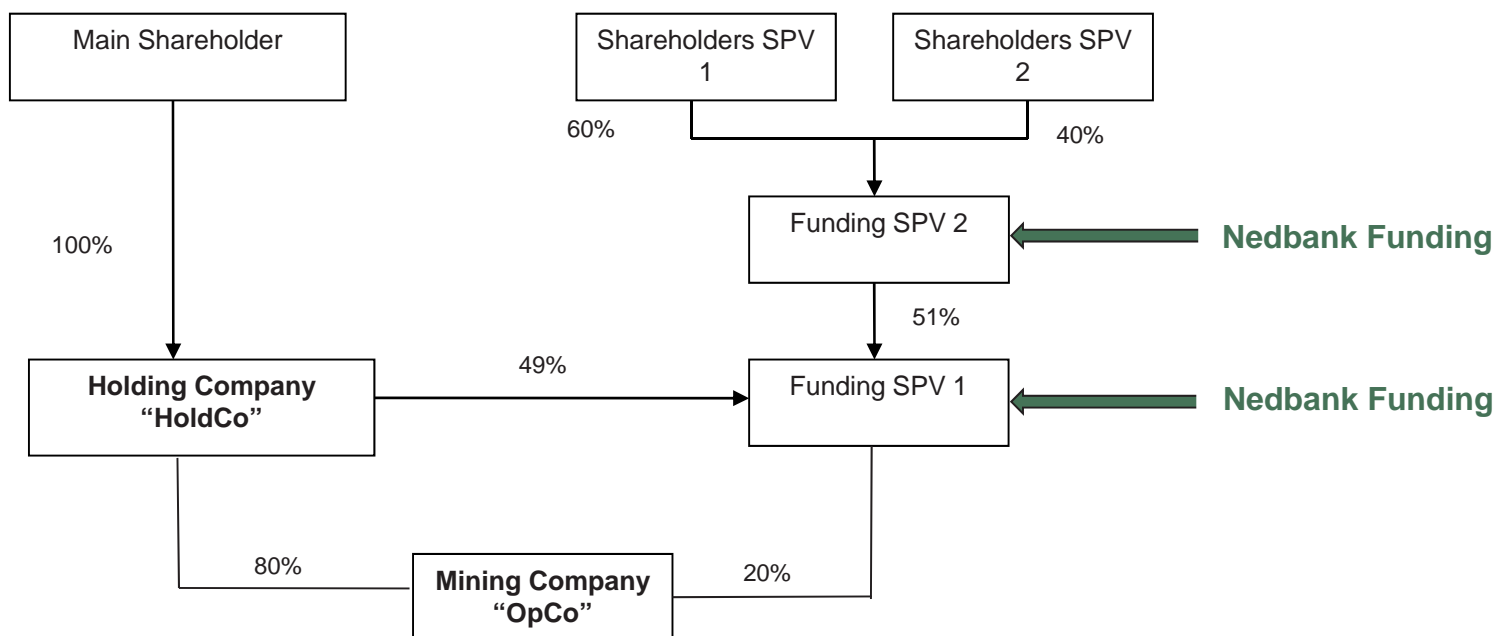
Clarifying Roles and Titles: Advisor, Lead Arranger, Underwriter ???

- **Project Finance Advisory** is the provision of advice on the whole structure of a project financing, including bid strategy, provision of equity, advantages of different types of debt, hedging techniques, contractual structuring, financial modelling and macroeconomic assumptions. Often includes seeking an Arranger.
- **Project Debt Arranging** is the structuring, organisation and provision of a package of financing instruments to finance a project. This may involve sole underwriting or seeking sub-underwriting positions from various lenders.
- **Underwriting** is a commitment to provide the debt should certain conditions be met.
- E.g. Mandated Lead Arranger and Underwriter; Co-Lead Arranger;



The Special Purpose Vehicle “SPV”

- A key legal tool in Project Finance and leveraged transactions including BEE transactions
- A "bankruptcy-remote entity" whose operations are limited to the acquisition and financing of specific assets.
- The SPV is usually a subsidiary company with an asset/liability structure and legal status that makes its obligations secure even if the parent company goes bankrupt.
- e.g. Micawber 234, Pybus 567, Morning Tide 789, Holdco, FundCo



Mining Value Curve and Financing



Acquired property & secured Exploration Permit;

Raised seed capital to finance exploratory work;

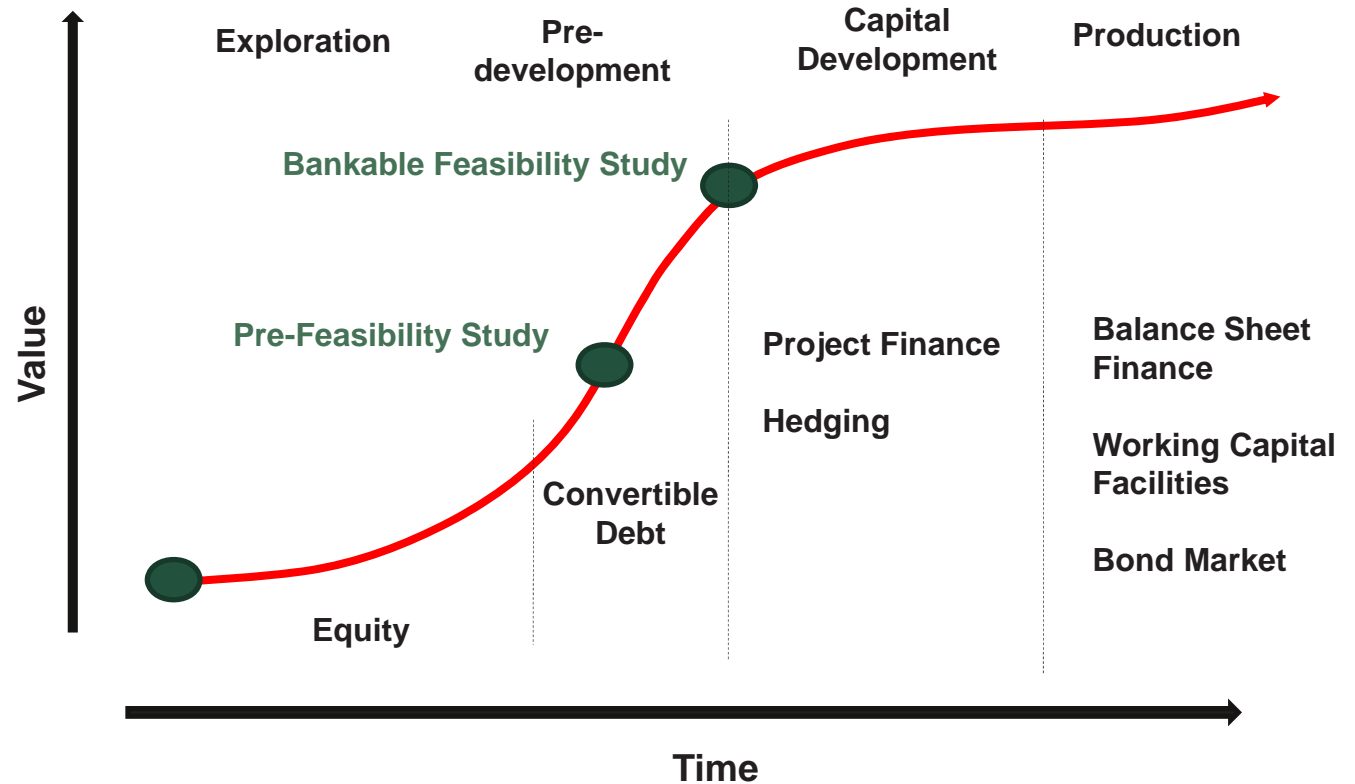
Conducted pre-feasibility studies;

Raised further equity / capital in order to conduct BFS.

Rolled pre-feasibility study results into a full BFS;

Raising of Project Debt finance from banks;

Raising of additional debt/equity through stock exchange, banking institutions and/or capital markets

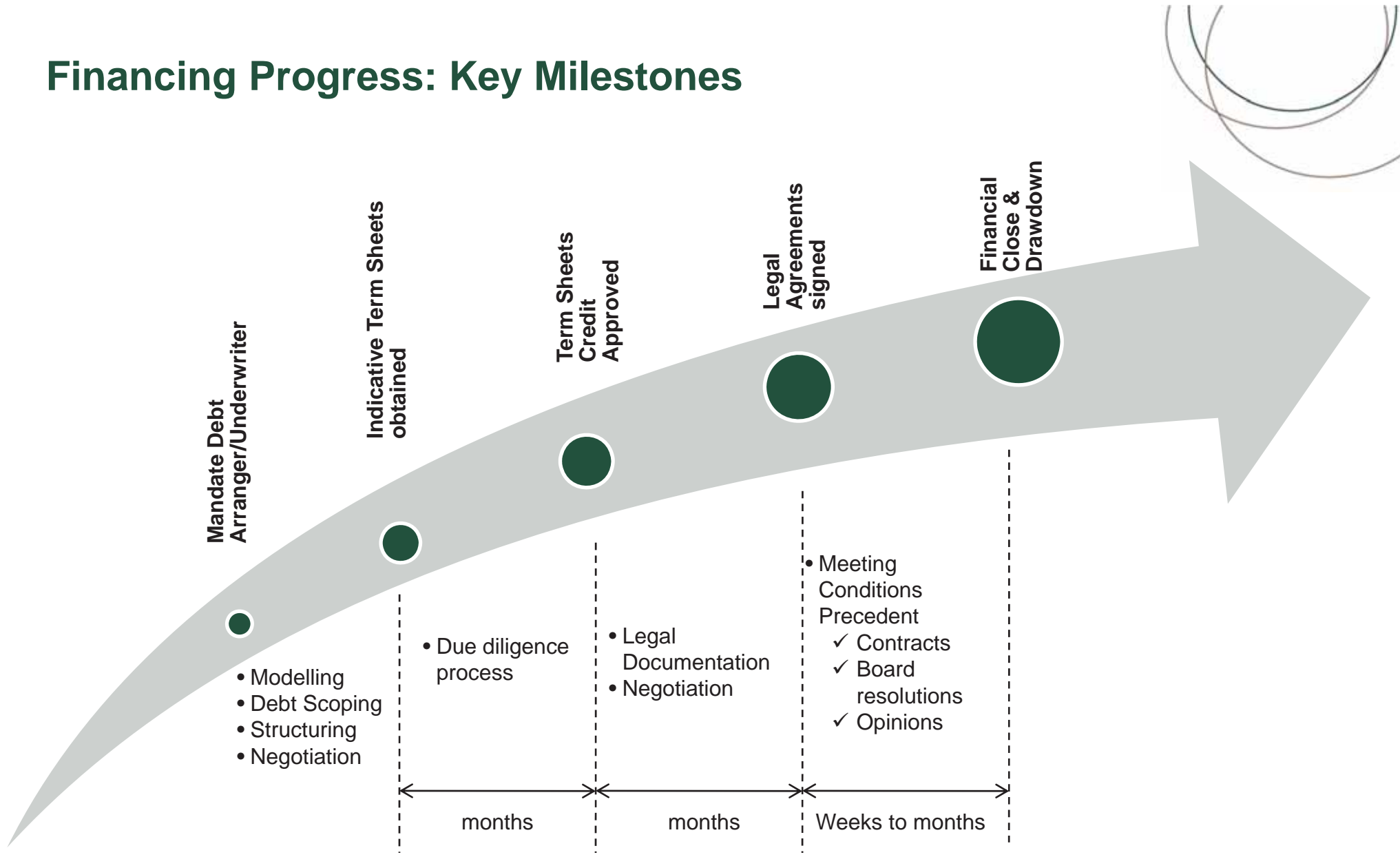




The haloed Bankable Feasibility Study

- Also termed the Definitive Feasibility Study “DFS”
- A comprehensive forward analysis of a project’s economics (+/-15% precision) to be used by financial institutions to assess the economics for financing (debt and equity)
- Undertaken by a technical consultant appointed by project sponsor
- Contains a comprehensive engineering study, cost estimate and mining development plan covering:
 - Geology and Resource Calculations
 - Mining Analysis
 - Metallurgy and process plant
 - Environmental Aspects
 - Management
- Guided by a set of assumptions, a strategy, development conditions and a planned outcome.

Financing Progress: Key Milestones





Example Press Releases

- ***NORD RESOURCES: April 16, 2007-***

... A \$25 million secured term loan credit facility that would be used by Nord for the reactivation of Nord's Johnson Camp Mine project in Arizona.

...The credit facility will be subject to the entering into of a **definitive loan agreement** between Nord and Nedbank. Draw down under the facility will be **subject to certain conditions**, including the completion by Nord of a \$20 million equity financing within the next three months, pay-out of Nord's existing \$5 million bridge loan facility with Nedbank and customary conditions to closing.

- ***Harmony: R2 billion debt facility secured 4 October 2007***

Harmony Gold Mining Company Limited (Harmony) is pleased to announce that it has **secured** a R2 billion debt facility with Nedbank Limited.



Example Press Releases

- ***Tiger Resources: Financing Arrangements***

Nedbank Limited (“Nedbank”) is acting as **exclusive arranger** of an Export Credit Insurance Corporation of South Africa Limited (“ECIC”) supported US\$16 million debt facility.

- ***Keaton Energy: 6 December 2010***

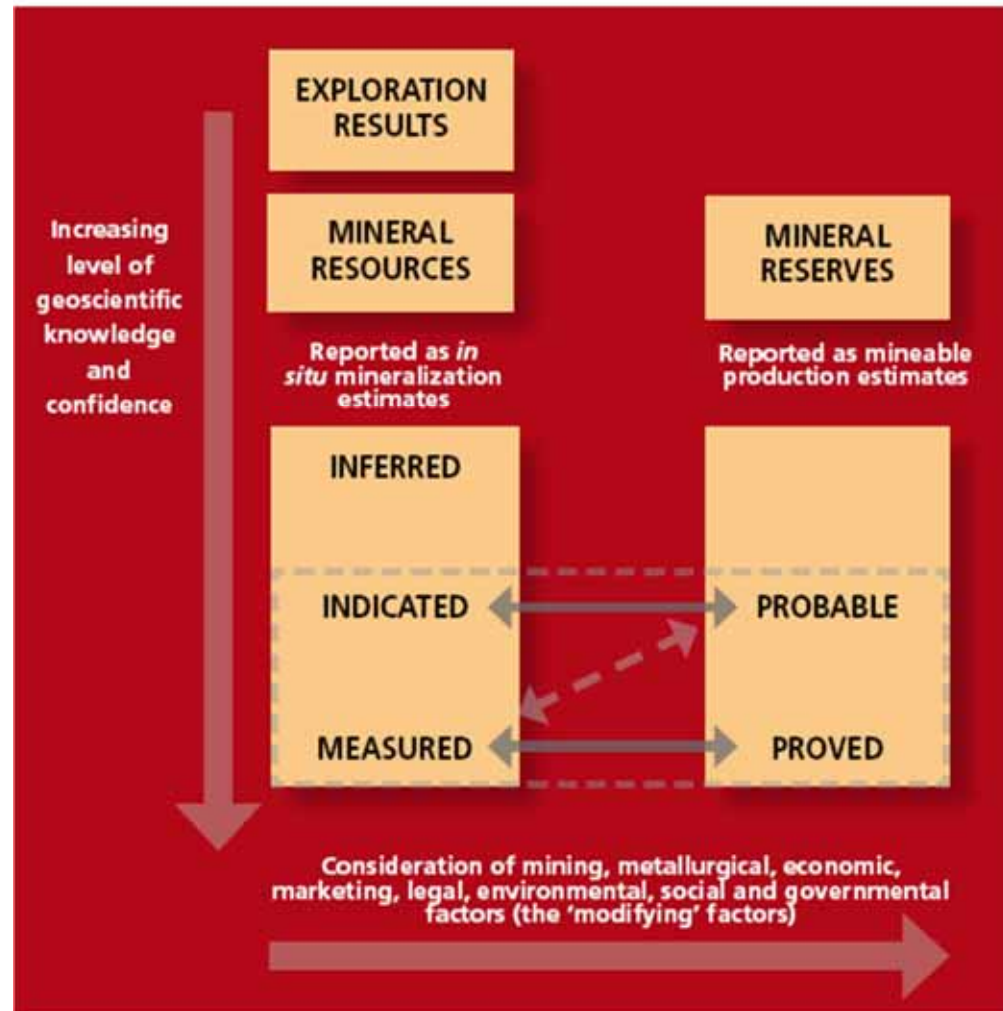
The project financing debt facility, earmarked for the completion of Vanggatfontein Phase 2, is in the form of a **credit approved offer** from Nedbank Capital following a due diligence process by the institution and approval by its credit committee.

- ***Keaton Energy: 7 April 2011***

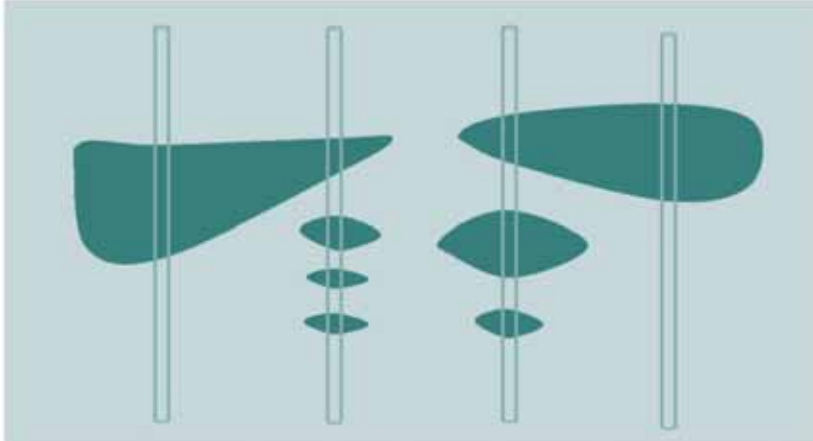
The offer of the R255 million project financing from Nedbank Capital announced on 6 December 2010 has reached **financial close** in record time following an intensive due diligence of the Project and completion of the legal documentation. The **first draw-down** of R138.5 million took place on 01 April 2011.

Resource Classification: The basis of lending

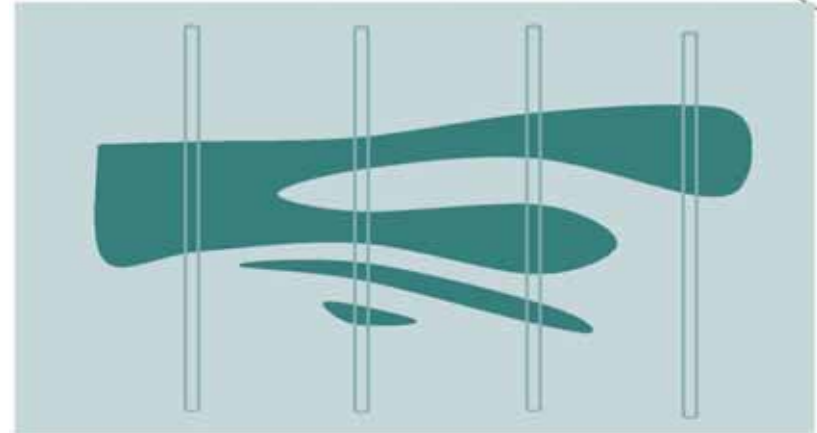
- The South African Code for Reporting of Mineral resources and Mineral Reserves (the 'SAMREC Code' or 'the Code') sets a required minimum standard for Public Reporting on exploration results mineral resources or mineral reserves in South Africa
- Banks lend primarily against **RESERVES**



Geological interpretation



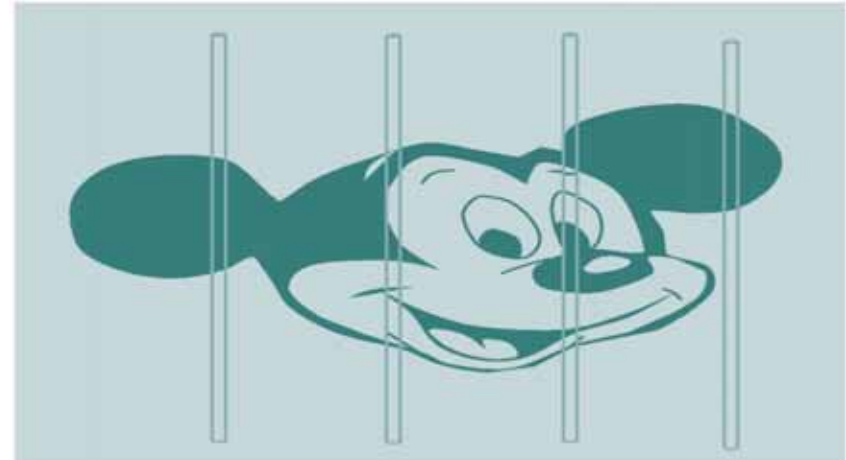
A conservative geologist's interpretation



An optimistic geologist's interpretation



A very optimistic geologist's interpretation



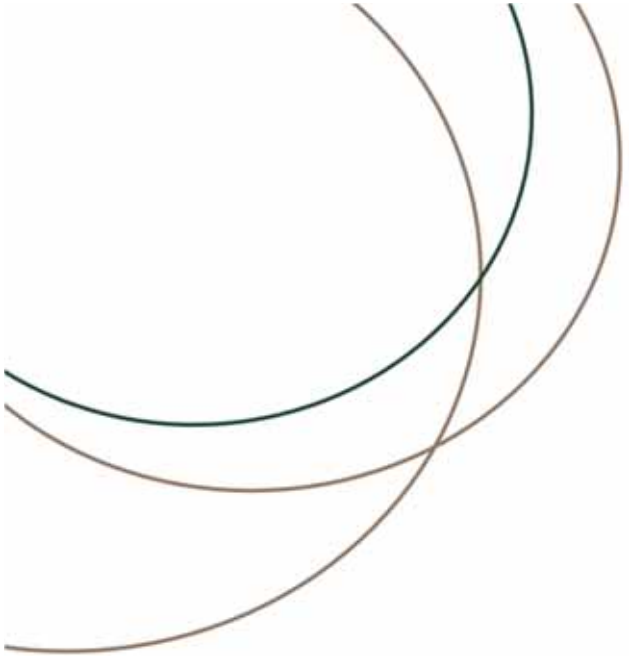
A mining engineer's interpretation





Commodity Hedging:

- Invaluable tool for mitigating price risk and protecting cash flow
- Simplest: Forward Sale of commodity
 - Contango if future price is higher
 - Backwardation if future price is lower
- Buy Put (asset) – right to sell at future price
- Sell Call (liability) – obligation to sell at future price
- Sell Call to pay for purchase of Put– Zero cost collar
- Value of hedge reported on balance sheet (asset if in-the-money, liability if out-the money)
- Well structured hedges effective, poorly structured hedges dangerous
- Production risk– shortage of commodity to deliver into hedge



Thank You