

# Goodman Gold Challenge

University of Kentucky



GOODMAN GOLD CHALLENGE

DÉFI D'OR GOODMAN



# Challenge Objective

Acting as a finance firm, students determined which of the three mining companies presented would provide capital appreciation as a long-term investment.



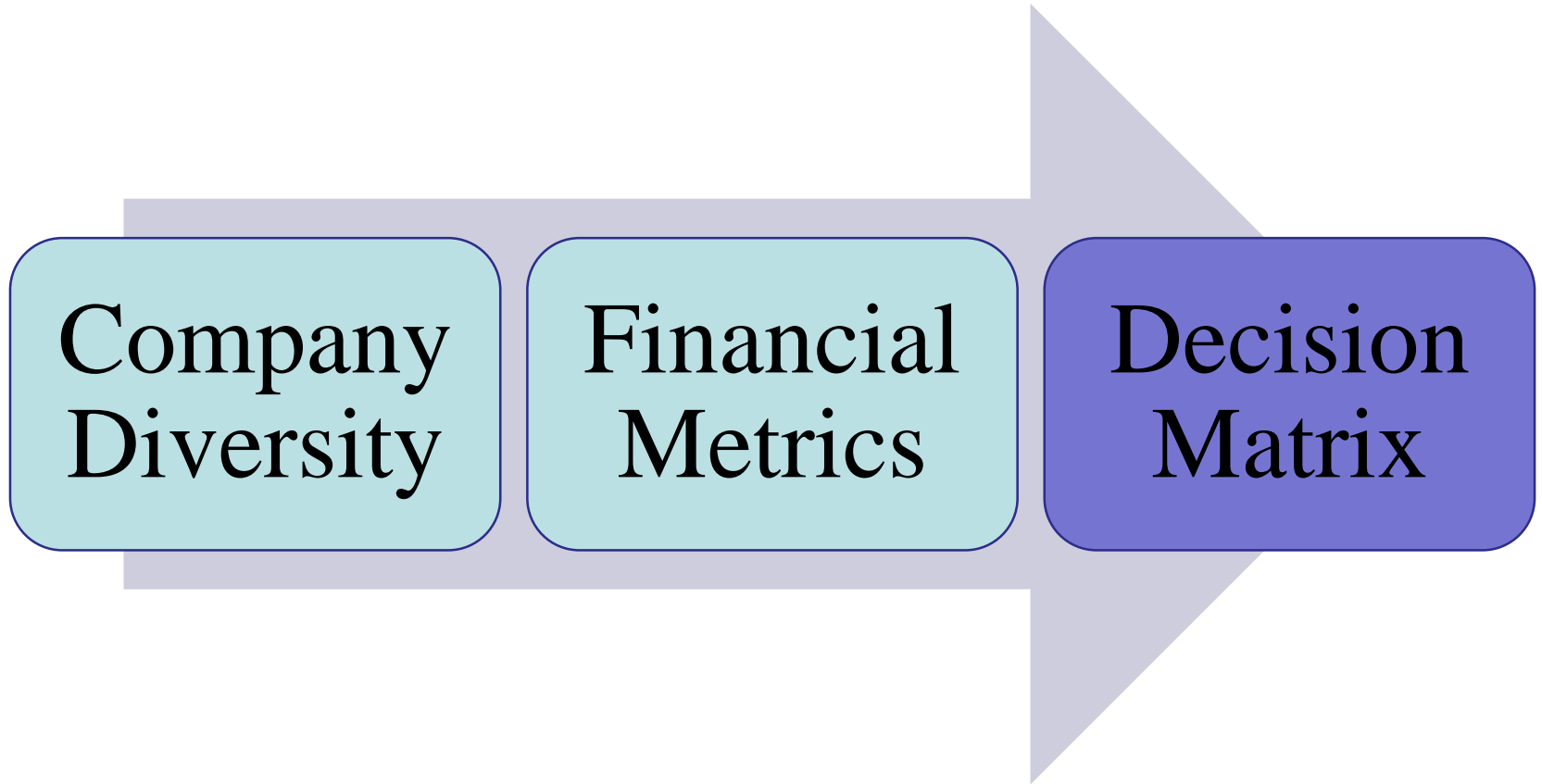
**DETOUR GOLD**



# Company Selection



# Method of Selection



# Method Selection

Ranking system: if three in category rank 3 (Best), 2(Mid), 1(Least). If two in category rank 2(Best), 1 (Least). If one in category rank 1

Weighted Factor	Economic Considerations				Ranking				Weighted Individual Rank			Cumulative Scores		
	Dundee	Detour	Osisko		Dundee	Detour	Osisko	Comments	Dundee	Detour	Osisko	Dundee	Detour	Osisko
3	Cash	\$ 11,757,000.00	\$ 115,576,000.00	\$ 81,206,205.00	1	3	2	More Cash Considered Better Investment	3	9	6	232	207	97
3	Total Assets	\$ 733,952,000.00	\$ 231,800,000.00	\$ 274,296,982.00	3	1	2	More Assets Considered Better Investment	9	3	6			
3	Total Liability	\$ 181,925,000.00	\$ 512,095,000.00	\$ 10,854,081.00	2	1	3	Least Amount of Liability Considered Better Investment	6	3	9			
10	P/NAV	1.1	0.88	0.9	3	2	1	Higher P/NAV Ratio Considered Better Investment	30	20	10			
10	EV/EBITDA	13.6	3.8	0	2	1	0	Higher EV/EBITDA Considered Better Investment	20	10	0			
10	Operating Cash Flow/Market Cap (%)	18.00%	11.00%	0	2	1	0	Higher Op Cash Flow/Market Cap Considered Better Investment	20	10	0			
5	Liabilities to Assets	0.2648	0.2145	0.0396	1	2	3	Lower Ratio Correlates With A Less Risky Investment	5	10	15			
5	Liabilities to Equity	0.3602	0.2730	0.0396	1	2	3	Lower Ratio Correlates With A Less Risky Investment	5	10	15			
5	NPV of Producing Operations (USD)	\$ 534,000,000.00	\$ 2,964,000,000.00	\$ -	1	2	0	Larger Net Present Value Considered Better Investment	5	10	0			
	<b>Mining Considerations</b>													
5	LOM Operations (yr)	10	23	0	1	2	0	Longer Mine Life Considered Better Investment	5	10	0			
5	LOM (Pre-Production)	8	0	0	1	0	0	Longer Mine Life Considered Better Investment	5	0	0			
5	Reserves (Millions of Tonnes)	27.72	514.3	0	2	3	1	More Reserves Considered Better Investment	10	15	5			
5	Reserves (Millions of Au Oz)	2.993	16.395	0	2	3	1	More Reserves Considered Better Investment	10	15	5			
5	M&I Resources (Millions of Tonnes)	81.62	120.5	70	2	3	1	More Resources Considered Better Investment	10	15	5			
5	M&I Resources (Millions of Au Oz)	4.013	3.886	3.43	3	2	1	More Resources Considered Better Investment	15	10	5			
5	Inferred Resources (Millions of Tonnes)	554	42.3	14.98	3	2	1	More Resources Considered Better Investment	15	10	5			
5	Inferred Resources (Millions of Au Oz)	4.833	1.121	1.8	3	2	1	More Resources Considered Better Investment	15	10	5			
7	Average Gold Assay of Producing Operations (g/t)	3.43	0.91	0	2	1	0	Better Assay Considered Better Investment	14	7	0			
7	Average Gold Recovery (%)	70%	89%	0	1	2	0	Better Recovery Considered Better Investment	7	14	0			
10	AISC Projected (USD)	\$ 616.00	\$ 1,124.00	-	2	1	0	Cheaper Production Considered Better Investment	20	10	0			
	<b>Geopolitical standing</b>													
3	Country Risk Premiums (%)	3.10%	0.00%	0.00%	1	2	2	Lower Country Premium Considered Better Investment	3	6	6			

# Decision Matrix

- Includes both financial and mining factors
- Factors weighted based on importance
- Relative ranking between three companies

# Decision Matrix

	Financial/Mining Parameter			Ranking					Weighted Individual Rank			Cumulative Scores		
Weight	Dundee	Detour	Osisko	Dundee	Detour	Osisko	Comments	Dundee	Detour	Osisko	Dundee	Detour	Osisko	
1-10	Parameter listed for each company			Relative Ranking (1-3)					Weight x Relative Ranking			Summation of Weighted Rankings		

# Decision Matrix Factors

A total of 21 categories considered in decision matrix.

## Financial

- P/NAV
- EV/EBITDA
- Operating Cash Flow/ Market Cap

## Mining

- AISC
- LOM
- Reserves/Resources
- Grade
- Recovery



# Decision Matrix Factors

	Dundee	Detour	Osisko
P/NAV	1.1	0.88	0.9
EV/EBITDA	13.6	3.8	0
Operating Cash Flow/Market Cap	18.00%	11.00%	0
Average Recovery	70	90.5	0
AISC Projected	\$616.00	\$1,124.00	-
LOM Operations (yr)	10	23	0
AISC Projected	\$616.00	\$1,124.00	-

# Cumulative Scores

Dundee	Detour	Osisko
232	207	97

# Detour Gold

## Positives

- Low-risk operation
- Long mine life
- Very large gold production rates
- Current mill capacity can handle potential expansion
- Potential buyout candidate
- Strong history of public relations
- Debt reduction
- Lower power cost

# Detour Gold

## Concerns

- Consistently have not met
  - Production rates
  - Recovery percentages
  - Expected grades
- West Detour Permit Delay
- High cost of production, smaller margins
  - High stripping ratio
  - Low grade deposit
- Pit Constraints
- History of higher than expected capital requirements

# Osisko Mining

## Positives

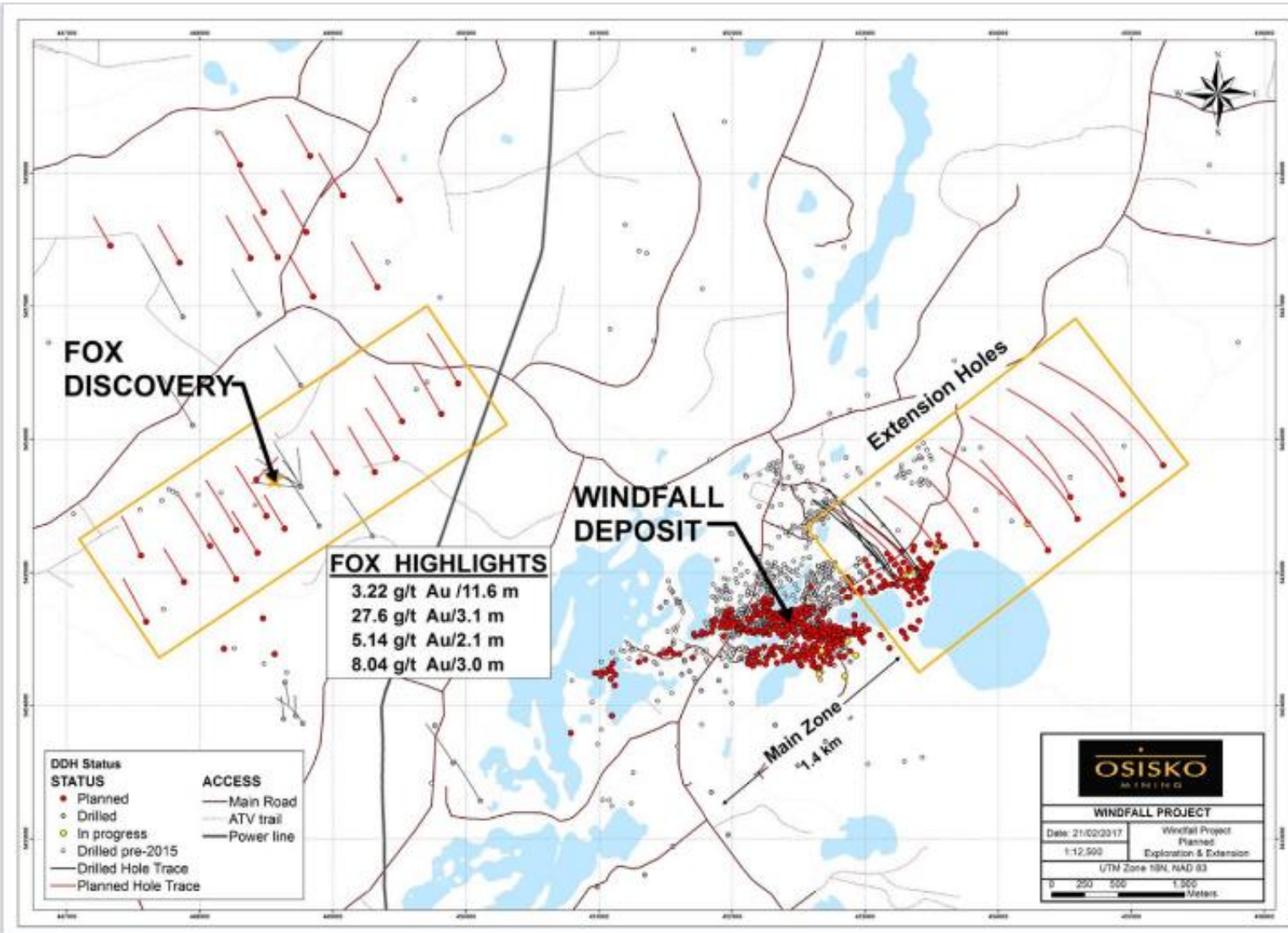
- Significant upside
- High grade deposit/assumed low cost of production
- Sufficient fully diluted cash to fund Windfall Lake Operation
- Officers have significant stake in company
- Management has historical success with similar projects

# Osisko Mining

## Concerns

- All Windfall resources indicated or inferred
- No feasibility report
- Unrealistic timeline
  - Permitting
  - 43.101 Completion
  - Construction
- Low drill hole density, grade dilution between cross-sections
- Share price is unrepresentative of risk

# Osisko Mining



# Dundee Precious Metals

## Concerns

- Smelter accounts for high percentage of revenue (Costly downtimes)
- Low revenue growth
- High arsenic concentrate
- Lower chance of buyout because of complex assets

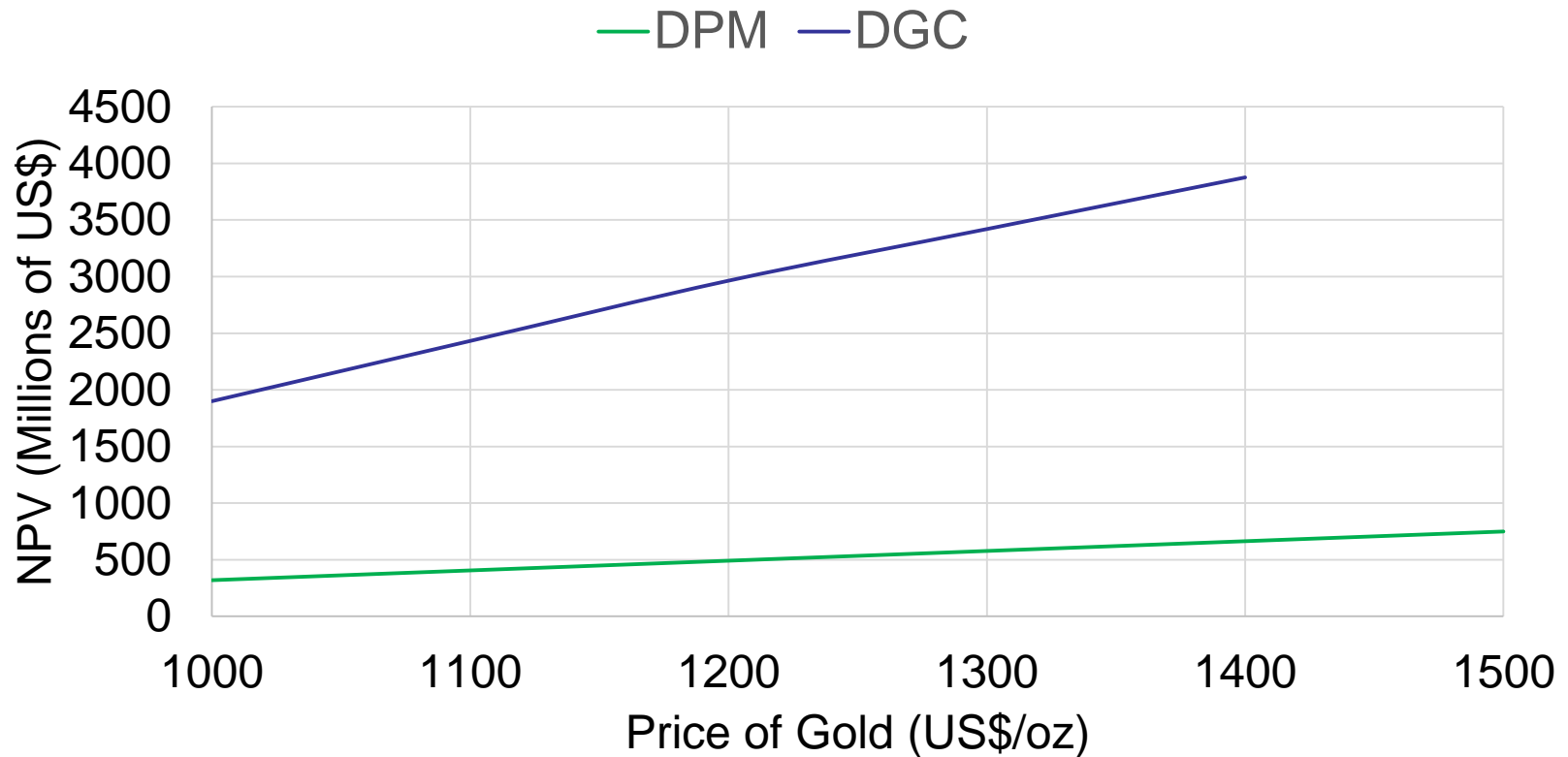


# Dundee Precious Metals

## Positives

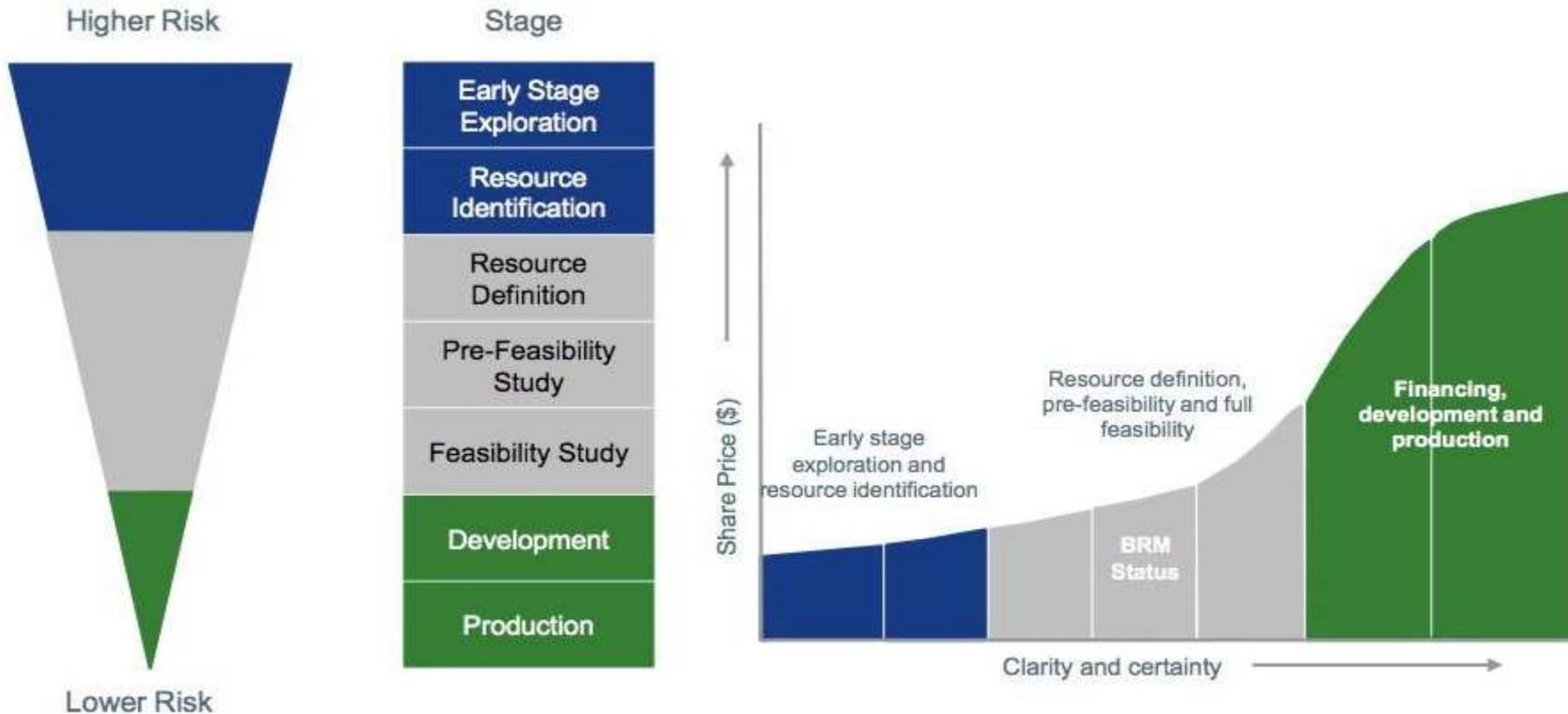
- Lower production cost, larger margins
- High grade deposits
- Excellent management team
- Impressive innovation and technology
- High efficiently mine
- Krumovgrad mine coming online
- Skilled and experienced workforce
- Consistently meeting production goals
- Trading at a discount

# Net Present Value Sensitivity to Varying Gold Prices



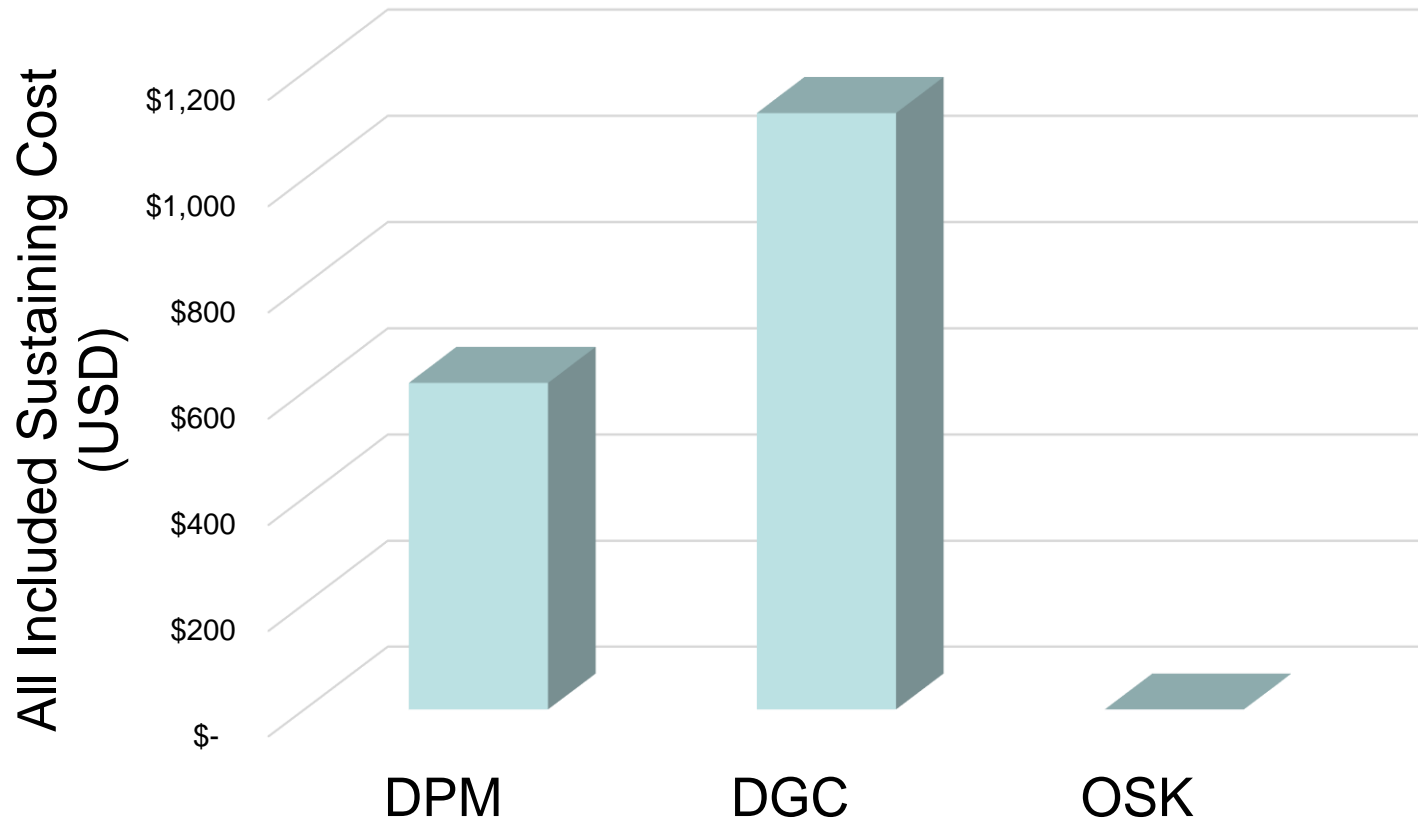
# Risk Characterizations

Shares of mining development projects have typically followed a similar trading pattern



Source: US Global Research

# Projected AISC



# Why Invest in Dundee Precious Metals

- Low P/NAV
- Lowest AISC of considered companies
- Resolved smelter issues
- High grade deposits
- Increase production with introduction of Krumovgrad



# Questions?

