(SVM \$0.40) Speculative Buy - Initiation of Coverage



Analyst	Date	Price Target
Andrew Clayton	30 th September 2020	\$0.60/sh

Kasiya - A globally significant rutile deposit

Key points

- SVM has a 100% interest in the Kasiya project located in Malawi.
- Whilst its original focus was graphite, an opportune discovery (3rd Q CY'18) of high grade, shallow (1-10m) free dig, rutile mineral sands has been a game changer/company maker.
- Wide spaced drilling has identified a mineralised zone of +16m strike, with surface widths of up to 6km.
- Mineralisation is hosted in a soft, free dig, friable saprolite rock from surface. Not traditional sand host of most mineral sands deposits.
- Intercepts of >10m from surface at rutile grades of >1% are common.
- A maiden resource estimate is due in Q4 CY'20. We believe this could be a ~200mt at ~ 1% rutile for 2mt of contained rutile with an in-situ value of A\$3.6bn
- There also appears to potential for a near surface, higher grade zones of >1.5% rutile to be defined as a subset of the overall resource.
- Phase 7 drilling has tripled the mineralised envelope from ~ 22sqkm to 66sqkm.
- Initial metallurgical test work from a 1t bulk sample show excellent recoveries of 98.3% to a 96.3% TiO2 concentrate based on a conventional flowsheet.
- Specifications beyond grade are grain size, U/Th and MgO ratios and all within specification and ahead of global peers.
- Confirms a simple conventional flowsheet is likely with a single heavy mineral product (simplified MSP). High slime content can be overcome with additional cyclones at the front end.
- Infrastructure is good with established rail network directly to Nacala Port, paved roads surrounding project, sufficient water, grid power likely in the medium term.
- We believe Kasiya has all the hallmarks of developing into a significant rutile producer in the medium term. The resource size is likely to support production size of ~ 100-130kt pa based on a 10mtpa plant.
- Our 'back of the envelope' estimates envisage margins of >U\$\$700/t could be achieved, implying EBITDA of >U\$\$110m or >A\$150m pa for 15+ yrs.
- Early years, high grade zones will be targeted at ~ 1.3-1.5% Rutile with potential production of >130kt Rutile in the early years and EBITDA of >\$170m pa.
- A scoping due in 1st H CY'21 will quantify these estimates but Kasiya has the hallmarks of being a globally significant rutile deposit.
- Our heavily risk adjusted valuation is \$0.57/sh based on the above assumptions. Ultimately, we see potential corporate action as long life, natural rutile deposits are highly sought after; from both a feedstock perspective and integrated pigment producers. Short term catalysts include;
 - o Maiden mineral resource due in Q4 CY'20,
 - On going drill results,
 - Scoping Study due in 2nd Q CY'21.

Sovereign Metals Ltd	Year End 3	O June
Share Price Issued Capital	\$0.40	A\$/sh
Fully paid Ord	394	m
Opts @ \$0.10	6	m
Opt @ \$0.14/sh	7.37	m
Opts @ \$0.15/sh	2.15	
Opts @ \$0.18/sh	4.5	
Total Dil FP Ord	411	m
Market Capitalisation	\$165	m
Enterprise Value	\$162	m
Cash	\$3	m
Debt	\$0	m
Year Low - Hi	\$0.08 - \$0.45	5
Avg Daily volume	0.55m per da	ıy

Directors Ian Middlemas Julian Stephens Mark Pearce	NE Chairman MD NED
Shareholders Dir & Mgt	10%

Company Details

Tel: (08) 9322 6322 www.sovereignmetals.com.au Level 9, BGC Centre

28 The Esplanade PERTH WA 6000

Share Price Chart

\$0.00



Euroz Securities Limited

(SVM \$0.40) Speculative Buy - Initation of Coverage



Valuation

Trying to value something pre resource/scoping study is inherently difficult/risky with many unknowns and some broad brush assumptions made.

Nevertheless, we have attempted to do this and built a simple model based on a 15 yrs mine life, 10mtpa producing between 93-130kt of rutile pa with an operating margin of US\$750/t and an initial capital cost of US\$225m.

Based on a rutile price of US\$1,200/t and FX of 0.7 this generates a NPV10 of \$425m. We have then risk adjusted this NPV by 40% to reflect the uncertainties in this type of analysis. We add a nominal \$50m for exploration value and value the graphite project at \$30m to derive our total valuation of \$229m or \$0.57/sh.

Valuation	A\$m	A\$/sh.
(+) Kaisya (100%) risk adj 40%	170.1	\$0.43
(-) Corporate	(26.0)	-\$0.07
(+/-) Graphite	30.0	\$0.08
(+) Exploration	50.0	\$0.13
(+) Opts	2.0	\$0.01
(-) Debt	0.0	\$-
(+) Cash	3.0	\$-
Total @ 10%	229.1	\$0.57

In terms of sense checking this valuation its worth looking at in situ values of ore and potential fully developed EV/EBITDA estimates.

If our estimate of 200mt @ 1% rutile is in the ball park this equates to 2mt of rutile which is currently trading at US\$1,250/t giving an in -situ value of US\$2.5bn or A\$3.6bn. Thus, our A\$229m valuation is around 6% of the in-situ value assuming this resource. This is easily justified based on the exceptional quality of the deposits

In addition, on a fully developed basis (ie current mkt cap + capex) SVM has an EV of \$470m and EBITDA in the first year at 150m puts its on a 3x EV/EBITDA which for a long life high quality project appears reasonable. Longer term multiples of >6x EV/EBITDA implies a fully developed EV of \$700-800m.

New discoveries are highly valued by the recent market, often achieving significant capitalisation prior to resource estimates. Recent examples include;

- Chalice Gold Mines with the Julimar discovery has a market capitalisation of \$750m,
- De Grey Mining with the Hemi gold discovery has a market capitalisation of \$1.6bn
- Legend Mining with its Mawson discovery has a market capitalisation of \$388m.

(SVM \$0.40) Speculative Buy - Initation of Coverage



Kasiya (SVM 100%)

Locations and History

SVM has ~ 3,700 sqkm of tenure in Malawi. Kayisa is located ~ 40km to the west of the capital Lilongwe (Figure 1). Site access is via a sealed road ~ 60km from Lilongwe. Infrastructure is good with the rail connecting directly to the Nacala Port passing directly through the project. Grid power is also expected to be available in time and there is abundant water for a potential operation.

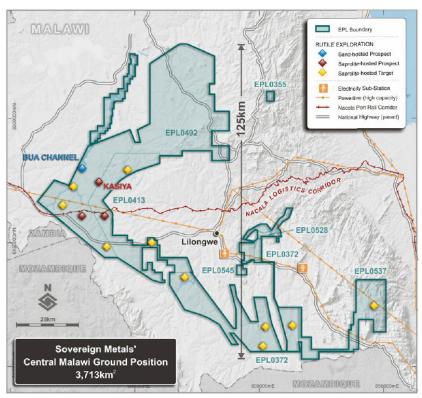


Figure 1: Location Map

The project area is sparsely popluated with local agriculture the main source of income. There are some small villages in the project area but ultimately its likely they would be moved in due course.

SVM has been working in Malawi since mid 2012 when it acquried a coarse flake graphite project. Work focussed on exploring for saprolite-hosted graphite despoits and it completed a PFS in 2018 which outlined a 9.5Mt @ 9.5% TGC and looked at a low capex option to produce ~ 52kt of graphite pa.

As part of the PFS, SVM noticed that rutile was concentrating in the graphite tails during metallurgical testwork and reported as such in Aug'18. It appears the deep weathering profile that attracted SVM to explore for saprolite hosted graphite deposits (plus the high metamorphic grade), provided the necessary ingredients for this rutile enrichment.

Due to the large database already established for the graphite project, it re assayed auger holes to evaluate the prospectivity of its entire land package. Early work centred around Malingunde graphite project but work along the roads and railway led to the discovery of the Railroad deposit and then further work resulted in the game changing discovery at Kasiya.

Euroz Securities Limited

(SVM \$0.40) Speculative Buy - Initation of Coverage



Work completed - Maiden Resource Due in Q4 CY'20.

SVM reported maiden rutile results in Jan '19 from re assaying of historical hand auger holes. A total of 125 holes were selected for reassay to assess the overall rutile potential across its large tenement holding. It reported that 26 holes returned an average grade of 2.34% TiO2 and 96 holes returned an weighted average grade of 1.89% TiO2. Two main areas were indentified: Malingunde and Lifidzi.

Work continued with new targets identified but it wasn't until Mar'20 that Kasiya was discovered with maiden drill results of;

- 7m @ 1.27 % rutile inc 3m @ 1.8% rutile from surface
- 9m @ 1.17% rutile inc 5m @ 1.3% rutile from surface
- 13m @ 1,09% rutile inc 3m @ 1.27% rutile.
- 14 of the initial 19 holes intersected high grade rutile zones with 11 of these >1% rutile from surface

Drilling is all done by hand auger and terminates at the water table and SVM intend to twin some auger holes with core holes in the next round of drilling.

Results have been spectacular with high grade mineralisation from surface. As opposed to most heavy mineral deposits, where the highest grades are often at the base of the deposit, the unique host material type has resulted in significant rutile enrichment right from surface.

Mineralisation has now been intersected over a 16km strike and up to 6km width for total footprint of 66 sqkm.

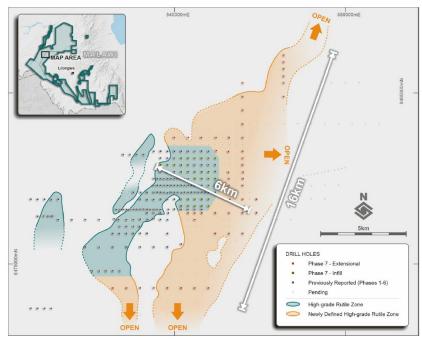


Figure 2: Kasiya footprint

(SVM \$0.40) Speculative Buy - Initation of Coverage



A selection of the better results are outlined below

- 10m @ 1.53% rutile inc. 3m @ 2.31% rutile from surface
- 14m @ 1.24% rutile inc. 4m @ 1.95% rutile from surface
- 7m @ 1.27% rutile inc. 3m @ 1.80% rutile from surface
- 5m @ 1.43% rutile inc. 2m @ 2.04% rutile from surface
- 11m @ 1.52% rutile inc. 7m @ 1.99% rutile from surface
- 9m @ 1.19% rutile inc. 3m @ 1.86% rutile from surface
- 11m @ 1.37% rutile inc 5m @ 1.82% rutile from surface
- 11m @ 1.33% rutile inc. 5m @ 1.79% rutile from surface
- 13m @ 1.13% rutile inc. 4m @ 1.86% rutile from surface

The high grade mineralisation is interpreted to extend to the base of the soft saprolite at around 25m, however the near -surface enrichment, with grades of >1.3% rutile makes this a high priority. In most cases, drill depth was restricted by the hand-auger drilling equipment capacity and SVM assume that free-dig rutile mineralisation should continue vertically to the base of the saprolite, estimated at 25m below surface.

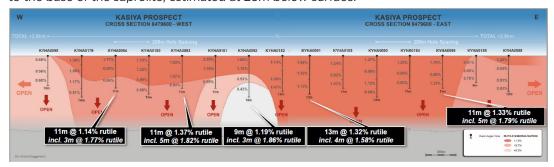


Figure 3: Kasiya cross section

The central zone of ~30sqkm where the nominal drill spacing is 400m x 400m or closer will be under consideration for the maiden resource estimate. The objective is to define a large rutile resource that is capable of supporting a long life, large scale rutile operation.

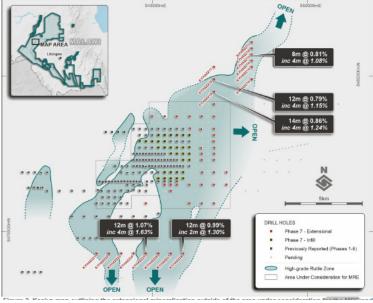


Figure 4: Kasiya drilling. Note - central area for resource consideration

Euroz Securities Limited

(SVM \$0.40) Speculative Buy - Initation of Coverage



We expect that SVM's maiden resource will be essentially in the inferred category with potential for some in the indicated, depending on the independent assessment of grade continuity. The results thus far suggest there is very good grade continuity with mineralisation identified on section to section. Within the overall resource we expect there will be a high grade core reflecting the higher grade near surface mineralisation – this is really the key to overall economics and the early capital payback etc.

Metallurgical testwork

Initial metallurgical testwork from a 1 tonne bulk sample has returned outstanding results showing a 98.3% recovery to a 96.3% TiO2 concentrate based on a conventional flowsheet. The material was processed through a traditional mineral sands flowsheet, consisting of:

- Screening and sizing;
- Desliming;
- Up current classifier and wet concentration via gravity spirals;
- Attritioning; and
- Mineral separation including electrostatic and magnetic methods.

Table 1. Comparison of SVM's rutile specification to leading global producers.

The concentrate grade is above other global peers with other important metrics also above peers. This includes grain size of d50 of 145um which is recognised as world class and suggests product should be suitable for all major end uses. U + Th of 39ppm, MgO 0.02%, Fe2O3 0.59% for a high Fe:Mg ratio.

Table 1: Comparison of Sovereign's rutile specifications to leading global producers								
Constitue	nt	Malawi Rutile (Sovereign)	Sierra Rutile (Iluka)	RBM (Rio Tinto)	Kwale (Base Resources)	Namakwa Sands (Tronox)		
TiO ₂	%	96.27	96.29	93.30	96.18	94.50		
ZrO2+HfO2	96	0.52	0.78	1.30	0.72	1.10		
SiO ₂	96	1.18	0.62	2.00	0.94	2.00		
Fe ₂ O ₃	96	0.59	0.38	0.70	1.25	0.8		
Al ₂ O ₃	96	0.41	0.31	0.90	0.23	0.6		
Cr ₂ O ₃	96	0.12	0.19	0.11	0.17	0.14		
V ₂ O ₅	96	0.66	0.58	0.40	0.52	0.33		
Nb ₂ O ₅	96	0.39	0.15	0.30	-	0.04		
P ₂ O ₅	96	0.01	0.01	0.03	0	0.02		
MnO	96	0.01	0.01	-	0.03	0.4		
MgO	96	0.02	0.01	-	0.1	0.01		
CaO		0.01	0.01	-	0.04	0.04		
s	96	0.01	<0.01	<0.05	-	0.01		
U+Th	ppm	39	26	100	-	-		
d ₅₀ sizing	μm	145	-	124	-	124		
fluka" is liuka Resources Limited, "Plo Tinto" is Rio Tinto pic, "Base Resources" is Base Resources Limited, "Tronox" is Tronox Holdings pic. <- is not disclosed. Sources. RBM data from World Thanlum Resources List TZM Conference Presentation November 2011 (Updated January 2012), Sierra Ruffle, Kwale and Jamaikus Bands data from BGR Assessment Manual titled "Heavy Miterais of Economic Importance" 2010.								

Table 1: Metallurgical testwork

(SVM \$0.40) Speculative Buy - Initation of Coverage



Whilst +75um is typically preferred by pigment producers, products incorporating the -75um fraction would target other end use markets or be used for blending into TiO2 pigment feed stock.

We believe these initial results are excellent – confirming that Kasiya can produce a commercially acceptable rutile concentrate with industry leading metrics that could lead to premiums for its product. Importantly the U+Th level of 39ppm is well below the 500ppm limit for shipping into the US and the high Fe: MgO ratio limits the deleterious Mg elements for the pigment producers.

The premium specification of the product allowd SVM the flexibility to work with major customers and adapt to their different needs and requirements. SVM has despatched samples for initial assessment by market participants.

One issue that was potentially a concern was the high slimes content of the ore at ~ 45%. This is due to mineralisation being in the saprolite. However, whilst the slimes content is high, the percentage of clay within the slimes is modest at 15-20%. In terms of processing this means in the initial processing further work consisting of additional cyclones/trommel capacity maybe required to clean up the ore before it's introduced into the gravity spirals etc.

Scoping Study - 1st HCY'21

SVM aim to complete a scoping study in the 1st H CY'21. This will include mining and tailings studies along with further metallurgical testwork and feedback from industry end users on the product to be incorporated into a marketing studies etc.

Core drilling will be undertaken to twin some of the hand auger drilling and the further infill drilling on the maiden resource will be targeted to upgrade the predominantly inferred resource to indicated category. A clear focus will be on identifying the higher grade areas to form the basis of the scoping study.

In addition, step out and regional drilling at Kasiya and the broader surrounding area to identify extensions and satellite mineralised zones.

We believe the potential global resource could well be in excess of 500mt (based on our 'back of the envelope' estimates) but the key will be the sub set of higher grade mineralisation.

Mining is likely to be either dozer trap or hydraulic mining – both methods are used at Kwale by Base Resources Ltd in Kenya. Dozer trap involves a bulldozer moving ore into a sump where water is added to produce a slurry which is then pumped to a processing facility. The capex is higher than dry mining due to the pumps and pipes but opex is typically <50% of dry mining at US\$1-1.5/t. Hydraulic mining works where the slimes are >10%. The advantage is very low opex at under US\$1/t and lower capex than dozer trap. Typically the working face needs to be >4m.

Kayisa could be a combination of both methods - dozer trap/hydraulic mining as Kwale was. We note that since Kwale changed to hydraulic mining it has reduced its mining cost by 40%.

(SVM \$0.40) Speculative Buy - Initation of Coverage



What could Kasiya produce

WE believe that Kayisa could support a \sim 10mt pa operation producing \sim 100-130kt of rutile per annum for >15yrs. We estimate intial capex of US\$225m and assume operating costs of US\$450/t of product or around A\$64/t.

This is based on BSE Kwale operation which in FY'19 had t'put of 17.5mt and produces four different products: rutile, ilmenite, zircon and zircon con with operating costs of US\$64m which equates to US\$365/t. Kwale has relatively high slimes content at ~ 30% but similar to Kayisa, ore outcrops at surface.

We assume the higher grades are mined in the early years with an average grade of 1.3% rutile for the first six years, before falling to 1.1% for the next 4 yrs and 1% thereafter.

These are obviously very rough estimates that need to be quantified but its useful to show the potential cashflow Kasiya could generate.

At a US\$1,200/t rutile price and A\$:USD at 0.7, average EBITDA is \sim \$140m pa for the first six yrs before falling to \sim \$103m and then \$87m thereafter with an average of \$105m.

Depending on the level of debt, we believe an NPAT can avg \sim \$63m pa for the 15yrs. Like the cashflow this is higher in the initial years due to the higher grades mined at >\$100m in the early years.

FY	Units	Total	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Inputs																				
AUDUSD	×		0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Rutile	US\$/t		1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
Ore Treated	Mt		0.0	0.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Grade	%			0.00	1.40	1.30	1.30	1.30	1.30	1.20	1.10	1.10	1.10	1.10	1.00	1.00	1.00	1.00	1.00	1.00
recovery	%			93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%	93%
Rutile Produced	kt	1,227.6	0.0	0.0	130.2	120.9	120.9	120.9	120.9	111.6	102.3	102.3	102.3	102.3	93.0	93.0	93.0	93.0	93.0	93.0
Capex	A\$m	426.7	250.0	70.0	26.7	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
AISC	A\$/t		0.0	0.0	698.6	597.9	597.9	597.9	597.9	647.7	706.6	706.6	706.6	706.6	777.3	777.3	777.3	777.3	777.3	777.3
Total Operating costs	US\$/t		0.0	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450
Group P&L																				
(+) Rutile Revenue	A\$m	2,104.5	0.0	0.0	223.2	207.3	207.3	207.3	207.3	191.3	175.4	175.4	175.4	175.4	159.4	159.4	159.4	159.4	159.4	159.4
(-) Operating Costs	A\$m	(707.1)	0.0	(0.0)	(64.3)	(64.3)	(64.3)	(64.3)	(64.3)	(64.3)	(64.3)	(64.3)	(64.3)	(64.3)	(64.3)	(64.3)	(64.3)	(64.3)	(64.3)	(64.3)
(-) Corp O/H	A\$m	(104.0)	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0	-8.0
EBITDA	A\$m	1,293.3	(8.0)	(8.0)	150.9	135.0	135.0	135.0	135.0	119.0	103.1	103.1	103.1	103.1	87.1	87.1	87.1	87.1	87.1	87.1
(-) Dep/Amort	A\$m	(275.0)	0.0	0.0	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0	-25.0
(-) Interest Expense	A\$m	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(-) Tax	A\$m	(245.5)	0.0	0.0	0.0	(6.0)	(33.0)	(33.0)	(33.0)	(28.2)	(23.4)	(23.4)	(23.4)	(23.4)	(18.6)	(18.6)	(18.6)	(18.6)	(18.6)	(18.6)
NPAT	A\$m	772.8	(8.0)	(8.0)	125.9	104.0	77.0	77.0	77.0	65.8	54.7	54.7	54.7	54.7	43.5	43.5	43.5	43.5	43.5	43.5
Tax Rate	%		30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
FCF																				
(+) Kayisa (100%)		725.2	(250.0)	(70.0)	132.2	129.0	102.0	102.0	102.0	90.8	79.7	79.7	79.7	79.7	68.5	68.5	68.5	68.5	68.5	68.5
(+/-) FX Hedging		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(-) Corporate		(104.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)	(8.0)
Total		621.2	(258.0)	(78.0)	124.2	121.0	94.0	94.0	94.0	82.8	71.7	71.7	71.7	71.7	60.5	60.5	60.5	60.5	60.5	60.5

Euroz Securities Limited

(SVM \$0.40) Speculative Buy - Initation of Coverage



Infrastructure

Whilst Malawi is not close to the coast where most mineral sand deposits lie, the infrastructure is good. Importantly, the Nacala Logisitics Corridor has a newly built railway line and is controlled by Vale and Mitusi with annual capacity of 25mt of which 20mt is reserves for Vale/Mitsui coal from the Tete mine and 5mt reserved for Malawi. We understand only circa 15% of the 5mt capacity is currently being used. The rail connects directly to the deep sea container port at Nacala.

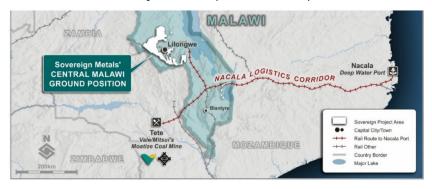


Figure 6: Logistics corridor

Forward Plan

The ongoing work programs for Kasiya include;

- Reporting assays from final batch of mainly infill drill holes over the coming weeks ahead of the maiden resources estimate due in Q4 CY'20;
- Step out and extensional drilling at Kasiya and the broader surrounding area to identify extensions and discover new regional mineralised zones;
- Push tube drilling at Kasiya to twin hand -auger holes and to obtain core samples for specific gravity determinations and initial geotechnical and mining studies.
- Mining and tailings to continue and will feed into a future Scoping Study targeted for 1st H CY'21
- Customer feedback from rutile product sample assessment to be incorporate into marketing studies.
- Investigate the potential for a coarse-flake graphite by product from Kasiya.

A positive scoping study should roll straight into a PFS study which could be completed in a year. This may include a pilot plant to prove the flowsheet and get a better understanding of the front end of the plant requirements for the slimes etc. This is likely to cost ~ \$10-15m (depending if a pilot plant is done).

Exploration Upside

The Bua Channel deposit is a traditional placer sand style with good grades dominated by rutile but also has zircon and ilmenite. Better results from drilling returned 8m @ 0.9% rutile, 1.5% ilmenite and 0.1% zircon and 7m @ 0.9% rutile, 1.4% ilmenite and 0.1% zircon from surface.

SVM has only drilled a small portion of the potentially 50km long river channel as the Kasiya discovery saw its focus switch to this higher grade project.

Euroz Securities Limited

(SVM \$0.40) Speculative Buy - Initation of Coverage



Rutile Market

Rutile is the highest grade, naturally occurring TiO2 mineral and as such highly sought after. Its contains double the Ti content of most Ilmenite deposits and hence has a significantly lower environmental footprint per than ilmenite and other low grade feedstocks. It has produced 6x less waste for pigments producers than ilmenite and 7x less chlorine. See image below.

The ever increasing importance on ESG for miners to address these issues, bodes well for Kasiya to potentially solve some these issues, with potential premiums and like the high grade iron ore market where a premium for high grade has opened up, the same could occur in the rutile.

Whilst the rutile market is relatively modest at ~ 600kt pa, the high grade titanium feedstock market (ie >80% TiO2 which includes rutile, synthetic rutile, chloride slag and upgraded slag) is close to ~ 3mt TiO2 pa and hence substitution into these markets should be no issue. 75% of the high grade market is controlled by three companies; RIO, Iluka and Tronox.

TZMI forecast a structural deficit in rutile caused by a combination of mature mines with declining grades and a lack of new rutile rich deposits to fill the gap.

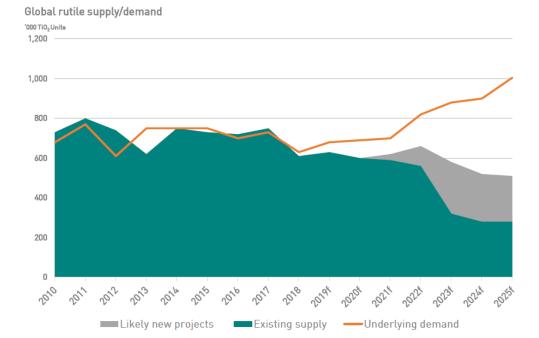


Figure 7: Rutile supply/demand forecast (TZMI)

(SVM \$0.40) Speculative Buy - Initation of Coverage



Malawi

Malawi has had a limited mining experience with Kayalekera uranium mine, previously owned by Paladin Resource operating from 2009 to 2014 ad producing ~ 11mlbs of uranium. The government had a 15% free carried interest in the project. The project is currently on care and maintainence.

Since 1994, Malawi has been a democratic, multi party government. It's economy is heavily reliant on agriculture and the govt is keen to attract foreign interest and supportive of responsible mining to help the economy .

The Mines and Mineral Act was updated in 2019 with changes designed to promote mining investment as it currently only accounts for ~ 1%. Corporate tax is at 30%, royalties at 5% and the govt is entitled 'up to' 10% minority interest on a free carried basis.

The permitting process is relatively straightforward. Once a PFS has been completed SVM can take this study to commence permitting and adding environmental and social impact studies.

Malingunde Graphite Project (SVM 100%)

SVM completed a PFS on Malingunde in 2018 and defined a 9.5Mt @ 9.5% TGC reserve. The study envisaged a low capex (US\$49m), long life (16yrs) development to produce ~ 52kt of coarse flake graphite pa. Estimated opex was US\$323/t and based on a graphite basket price of US\$1,216/t SVM estimated a NPV10 after tax of US\$141m.

We value this project at a nominal \$30m.

Peer Comparisons

Two projects that are most similar to Kasiya are ILU's Sierra Rutile and BSE's Kwale project.

Sierra Rutile, located in Sierra Leone, has been operating for more than 30yrs and in 2017 ILU acquired Sierra Rutile for total consideration of \$455m (incl \$80m in debt).

Sierra rutile has a current resource of 739mt @ 1.1% rutile and a reserve of 272mt @ 1.3% rutile. In CY'19 the a total 8.28mt was mined to produce 137kt of rutile which accounts for 20% of worlds production.

In FY'20 Kwale produced 78.9kt of rutile from the treating 18mt of ore. Its current resource is 246mt @ 0.26% rutile with a reserve of 40m @ 0.44% rutile. It also produces ~ 355kt of ilmenite and 31.6kt of zircon.

(SVM \$0.40) Speculative Buy - Initation of Coverage



Directors

Ian Middlemas- Non -Executive Chairman

Ian was a Senior Group Executive for Normandy Mining for more than ten years which was Australia's largest gold miner before merging with Newmont Mining. He is currently Chairman of Salt Lake Potash, Berkley Energia, Prairie Mining and a number of other listed resource companies.

Ian was also previously Chairman of Papillon Resources Ltd and Mantra Resources Ltd.

Julian Stephens - Managing Director

Julian is a geologist with over 20yrs experience in mineral exploration across many commodity types and spend 14yrs working on minerals project in Malawi. Julian identified, secured and led the team the discovered graphite and rutile mineralisation across SVM's large ground position in Malawi

Mark Pearce- Non Executive Director

Mark Is a Chartered Accountant and is currently a director of several listed companies that operate in the resources sectors. He has considerable experience in the formation and development of listed resource companies.

Directors Shareholdings

	Shares	Incentive Options
I. Middlemas NE Charm	16,100,000	
J. Stephens - Mgr Director	11,317,518	4,000,000
M. Pearce- NE Dir	4,070,842	

Top 20 Shareholders

	Name	Shares (m)	% Held
1	Ian Middlemas	16.10	4.08
2	Mark Savage	13.95	3.54
3	Julian Stephens	11.32	2.87
4	Grant Paterson	10.57	2.68
5	Pennee Osmond	7.50	1.90
6	Terry Coffey	7.21	1.83
7	FM - Sociedade de Controlo, SGPS, S.A.	6.00	1.52
8	JackHamish Pty Ltd	6.00	1.52
9	Creagh O'Connor	5.73	1.45
10	Calama Holdings Pty. Ltd.	4.69	1.19
11	Mikado Corporation Pty Ltd	4.50	1.14
12	Michael Bowen	3.86	0.98
13	Susetta Holdings Pty Ltd	3.63	0.92
14	Collin Davy	3.48	0.88
15	Patrick Elliott	3.06	0.78
16	Mark Pearce	2.16	0.55
17	Apollo Group Pty Ltd	1.91	0.48
18	Angus Johnson	1.73	0.44
19	Lindy Johnson	1.73	0.44
20	Sam Cordin	1.02	0.26
	Total	116.15	29.46

Euroz Securities Limited



Disclaimer

Copyright & Distribution

The material contained in this communication (and all attachments) is prepared for the exclusive use of clients of Euroz Securities Ltd (ACN 089 314 983) ("Euroz") only. Euroz is the holder of an Australian Financial Services Licence (AFSL 243302) issued by the Australian Securities and Investments Commission ("ASIC") and is a participant of the Australian Securities Exchange Group

The information contained herein is confidential and may be legally privileged. If you are not the intended recipient no confidentiality is lost nor privilege waived by your receipt of it. Please delete and destroy all copies, and contact Euroz on (+618) 9488 1400. You should not use, copy, disclose or distribute this information without the express written authority of Euroz.

Disclaimer & Disclosure

This report was prepared solely by Euroz Securities Limited. ASX Limited ABN 98 009 642 691 and its related bodies corporate ("ASX") did not prepare any part of the report and has not contributed in any way to its content. The role of ASX in relation to the preparation of the research reports is limited to funding their preparation, by Euroz Securities Limited in accordance with the ASX Equity Research Scheme.

ASX does not provide financial product advice. The views expressed in this research report may not necessarily reflect the views of ASX. To the maximum extent permitted by law, no representation, warranty or undertaking, express or implied, is made and no responsibility or liability is accepted by ASX as to the adequacy, accuracy, completeness or reasonableness of the research reports.

Euroz and its associates declare that they deal in securities as part of their securities business and consequently may have a relevant interest in the securities recommended herein (if any). This may include providing equity capital market services to their issuing company, hold a position in the securities, acting as principal or agent, or make a market therein and as such may effect transactions not consistent with the recommendation (if any) in this report.

Euroz declares that it may have acted as an underwriter, arranger, co-arranger or advisor in equity capital raisings, and will have received a fee for its services, for any company mentioned within this report during the last 12 months.

You should not act on any recommendation issued by Euroz without first consulting your investment advisor in order to ascertain whether the recommendation (if any) is appropriate, having regard to your investment objectives, financial situation and particular needs. Nothing in this report shall be construed as a solicitation to buy or sell a security, or to engage in or refrain from engaging in any transaction.

Euroz believes that the information and advice contained herein is correct at the time of compilation, however we make no representation or warranty that it is accurate, complete, reliable or up to date, nor do we accept any obligation to correct or update the opinions in it. The opinions expressed are subject to change without notice. No member of Euroz accepts any liability whatsoever for any direct, indirect, consequential or other loss arising from any use of this material.

We cannot guarantee that the integrity of this communication has been maintained, is free from errors, virus interception or interference.

Analyst Certification

We hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities.

No part of our compensation was, is or will be directly or indirectly, related to the specific recommendations or views expressed by the authoring analyst in this research.

Contact Details

Euroz Securities Limited

+61 8 9488 1400

Research Analysts

Jon Bishop - Head of Research Andrew Clayton - Resources Analyst Steven Clark - Resources Analyst Gavin Allen - Industrials Analyst Harry Stevenson - Industrials Analyst Seth Lizee - Associate Research Analyst

+61 8 9488 1481 +61 8 9488 1427 +61 8 9488 1430 +61 8 9488 1413 +61 8 9488 1429 +61 8 9488 1414

Institutional Sales

Andrew McKenzie - Executive Chairman +61 8 9488 1407 Rob Black - Managing Director Jay Hughes - Executive Director Russell Kane - Executive Director Simon Yeo - Executive Director Timothy Bunney - Executive Director Peter Schwarzbach - Executive Director Stacy Kitsantas - Institutional Advise Jayme Walsh - Institutional Adviser

Private Client Advisers

Chris Webster - Head of Private Clients Ben Statham - Executive Director Brian Bates - Executive Director Cameron Murray - Executive Director James Mackie - Executive Director Ryan Stewart - Executive Director Tim Lyons - Executive Director Brett Stapleton - Associate Director Giles McCaw - Associate Director Michael Bowden - Associate Director Richard Gardner - Associate Director Paul Berson - Associate Director Paul Cooper - Associate Director Ian Harrison - Investment Adviser Lauren Walker - Investment Adviser Michael Bartley - Investment Adviser Tom Kenny - Investment Adviser Zac Vinten - Associate Adviser Laurence Grescos - Associate Adviser Katrina Ryan - Associate Adviser Brandon Oosthuizen - Associate Adviser

Euroz Securities Limited