

11 November 2024

### Last Price

\$0.22

### Valuation, 12mths

**\$0.95 (Initiation)**

### Implied return from valuation

|                       |      |
|-----------------------|------|
| Capital growth        | 332% |
| Dividend yield        | 0%   |
| Total expected return | 332% |

### Company data

|                           |              |
|---------------------------|--------------|
| Market capitalisation     | A\$44m       |
| Enterprise value          | A\$39m       |
| Issued capital (shares)   | 238m         |
| Free float                | c.50%        |
| Average daily vol (3mths) | 253k         |
| Price range (12mths)      | A\$0.20-0.33 |
| GICS sector               | Materials    |

### Share price performance

| Period      | 1 mth | 3 mths | 12 mths |
|-------------|-------|--------|---------|
| Price (A\$) | 0.225 | 0.215  | 0.22    |
| Change (%)  | 2.0   | 2.5    | 0.0     |

### One year price chart



### Business description

Maronan Metals Limited (ASX:MMA) is an Australian mineral exploration and development company. Its flagship asset is the 100% owned Maronan Project (Pb-Ag-Cu-Au) near Cloncurry in the Carpentaria region of north-western Queensland..

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# Maronan Metals (ASX:MMA)

## Emerging silver giant

Maronan is developing its namesake project, the polymetallic Maronan Ag-Pb-Cu-Au deposit, near Cloncurry (QLD). Given its large scale, rich silver grades of +100g/t Ag and favourable location, we expect Maronan to deliver positive studies in 2025/26 and reach production in 2030, with an earlier date and initial capex reduction if a trucking option is adopted. It's rare to see an exploration project and think "this looks like a mine": Maronan has been one of those positive occasions. We initiate research coverage with a Valuation of A\$0.95/sh.

### Key points

- Maronan Project:** The company's eponymous flagship asset is the Maronan Project, which hosts silver-lead (Ag-Pb) and copper-gold (Cu-Au) mineralisation. This project is in a region known for its rich mineral deposits and long mining history, including multiple Tier 1 lead-zinc-silver operations such as Mount Isa, Century and Cannington, as well as copper-gold mines like Ernest Henry and Eloise. **Maronan has JORC Resources of 32.1Mt @ 6.1% Pb and 107g/t Ag, as well as 32.5Mt @ 0.84% Cu and 0.61g/t Au, with a gold only 1.8Mt @ 1.24g/t Au.**
- Development strategy:** MMA is yet to release feasibility studies, although these are in progress. After a site visit to the project, our financial model considers **underground polymetallic production for +15yrs**, at an **average silver-equivalent rate of 13.5Moz**, which is about the same as 45ktpa of copper, or hypothetically 160kozpa of gold; **opex would be in the first half of the cost curve**. Based on industry studies of similar projects, we expect capex could be A\$350-450m, with site opex c.A\$100/t – the easy-milling Ag-Pb mineralisation is an advantage.
- Metal hedge:** In our experience, **mines that successfully produce both base and precious metals tend to be economically resilient**. This is due to intrinsically higher ore value (\$/t), but also because a downturn in one group can be partly offset by an upturn in the other, allowing them to profit through most economic cycles.

### Valuation of A\$0.95/sh

We initiate coverage with a Valuation of A\$0.95/sh, compared to the current share price of A\$0.22/sh. We like this company because we see in Maronan the opportunity for a relatively low risk, large and economically compelling mining project in eastern Australia. The company itself has been overlooked by investors, although the surging silver price is changing that. Subject to macroeconomic factors, **MMA's share price could approach our valuation over the next 12 months as the project moves through resource upgrades to economic studies and demonstrates a timeline to production.**

### Production and Financial Forecasts

| YEAR END: 30 June                   | Sep-24a | Dec-24F | FY-23a | FY-24a | FY-25F |
|-------------------------------------|---------|---------|--------|--------|--------|
| Exploration and Evaluation (A\$m)   | 2.18    | 2.98    | 6.7    | 4.6    | 8.0    |
| Staff and Corporate (A\$m)          | 0.153   | 0.16    | 0.4    | 0.7    | 1.0    |
| Exploration/(Expl.+ Corporate) (%)  | 83.9    | 94.9    | 94.3   | 86.4   | 88.9   |
| Shares on issue (pr end) (m shares) | 201     | 201     | 150.0  | 201    | 238    |
| Drilling - AC/RAB (m)               | 0       | 0       | 0      | 0      | 0      |
| Drilling - RC/Diamond (m)           | 3,000   | 4,100   | 15,000 | 17,000 | 15,000 |
| Land holding ('km <sup>2</sup> )*   | 38      | 38      | 38     | 38     | 38     |
| Capital Raisings (A\$m)             | 0.0     | 0.0     | 0.0    | 9.1    | 10.0   |
| Funding from JV partners (A\$m)     | 0       | 0       | 0      | 0      | 0      |
| Cash (A\$m)                         | 7.8     | 5.0     | 5.9    | 10.1   | 6.2    |
| Cash Backing (Ac/share)             | 12.1    | 5.3     | 6.3    | 11.7   | 7.0    |

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# Maronan Metals (ASX:MMA)

## Overview and background

The Maronan Deposit is close to other base metal and gold mines in the Mt Isa district of QLD.

It was discovered by Billiton, in the same exploration period when Cannington was unearthed, but remained largely untested until Red Metal acquired the property.

Maronan Metals Limited (ASX:MMA) is an Australian mineral exploration and development company. Its flagship asset is the 100% owned Maronan Project (Pb-Ag-Cu-Au) near Cloncurry in the Carpentaria region of north-western Queensland.

The project is c.65km south of Cloncurry and 5km from the Landsborough Hwy. Nearby mines include Eloise (15km; Cu-Au; ASX:A1M), and Cannington (90km; Pb-Zn-Ag; ASX:S32), while the region hosts globally and historically significant base-metal deposits and operations like Mt Isa, Ernest Henry, Dugald River and Century.

Maronan was discovered in 1988 by Billiton, which was testing aeromagnetic anomalies while looking for Broken Hill type (BHT) lead-zinc-silver deposits in Proterozoic rocks, buried under cover. During this period BHP discovered the Tier 1 Cannington deposit nearby, however the potential of Maronan remained largely tested and it was relinquished.

ASX-listed exploration company Red Metal (ASX:RDM) acquired the project from copper major Phelps Dodge and, realising its potential for scale, defined an initial JORC resource (2015) before spinning the project out as Maronan Metals (MMA) in 2022. RDM retains a 43.98% shareholding in MMA.

Figure 1: Map of MMA's Maronan Project



The North-West Minerals Province of QLD is an economically vital region that is rich in base, precious and critical metals, particularly lead, zinc, copper, gold, cobalt, vanadium – and silver.

Source: Company report

Figure 2: Key Projects

| Project | Ownership | Metal        | JV Partner | Target Type                      | Area (km <sup>2</sup> ) | Project Status                     | Location        |
|---------|-----------|--------------|------------|----------------------------------|-------------------------|------------------------------------|-----------------|
| Maronan | 100%      | Ag-Pb, Cu-Au | NA         | SEDEX; possibly with IOCG, skarn | 38.35                   | Advanced exploration / feasibility | QLD (Australia) |

## Initial Valuation – A\$0.95/sh

Our valuation is based on a DCF analysis, using parameters from MMA's published studies and some of our own assumptions.

Given the advanced state of exploration, we think this is a more useful method than generalised EV/resource comparisons.

We've risked our NPV down by 50%.

Our valuation of MMA is a Sum of the Parts (SOTP) including a Net Present Value (NPV) based on Discounted Cash Flow analysis (DCF) for the Maronan Project itself.

MMA's initial economic studies of the project are yet to be released, so key parameters in the DCF are based on available information about Maronan (resources, grade, recoveries) and our own industry-based assumptions about production rates and costs.

We did consider trying to value MMA using **EV/resource multiples**, by converting all the in-ground A\$ value of metals to one commodity and dividing into Enterprise Value (EV), to allow some comparison with ASX averages. This is a well-worn method used to value advanced explorers that are focused on a single commodity and have abundant peers (e.g. gold) – but it becomes **problematic when looking at polymetallic resources**, which are geologically and metallurgically distinct. The DCF method using reasonable assumptions seems more useful in this case. **For completeness, we show a chart of EV/resource comps in Appendix 2 – MMA trades on A\$13/oz AgEq (silver) vs comps on an average A\$95/oz.**

**The outcome of our DCF analysis is an NPV of A\$497m (post-tax, discount rate 10% real), with an IRR of 34%.** Considering many of the assumptions, particularly around mining rates and costs, are GBA's and not MMA's, we have subtracted 50% to account for risk; we then adjust for cash and corporate costs in the usual way.

**On this basis, our 12-month Valuation of MMA is A\$227m or A\$0.95/sh.** Figure 3 shows how **NPV might increase through time**, as the project goes through funding and construction in FY25-29 (A\$1.29/sh), then Ag-Pb ramp-up, production and project finance payback in FY30-34 (A\$4.16/sh), then true polymetallic (Ag-Pb-Cu-Au) production and strong free cash flow in FY36-44 (A\$5.50/sh).

Figure 3: Valuation of Maronan Metals (ASX:MMA)

| NPV                                   |               | FY25e       | Av FY25-29  | Av FY30-34  | Av FY36-44  | IRR |
|---------------------------------------|---------------|-------------|-------------|-------------|-------------|-----|
| Base case: NPV10, post-tax, spot -10% | \$m           | 497         | 646         | 1,161       | 556         | 34% |
| Case 2: Spot prices                   | \$m           | 684         | 875         | 1,453       | 700         | 40% |
| Case 3: Spot prices +10%              | \$m           | 871         | 1,103       | 1,745       | 845         | 46% |
| Case 4: NPV discount rate 8%          | \$m           | 646         | 797         | 1,279       | 590         | 32% |
| Case 4: NPV discount rate 12%         | \$m           | 382         | 526         | 1,061       | 525         | 32% |
| Less: corporate: NPV 5%, 10yrs        | \$m           | 28          | 34          | 40          | 21          |     |
| Plus: net cash (debt)                 | \$m           | 6           | -108        | 8           | 959         |     |
| Total                                 | \$m           | 227         | 340         | 1,130       | 1,493       |     |
| Risk weighting at Base case           | %             | 50          | 28          | -           | -           |     |
| Shares                                | m             | 238         | 262         | 272         | 272         |     |
| <b>Valuation</b>                      | <b>A\$/sh</b> | <b>0.95</b> | <b>1.29</b> | <b>4.16</b> | <b>5.50</b> |     |

Source: Company reports, GBA Capital. Note: spot prices modelled Ag US\$33.70/oz, Pb \$0.91/lb, Cu \$4.24/lb, Au \$2750/oz; FX assumption AUD/USD 0.67

## Potential share-price catalysts

We expect MMA to approach this initial Valuation, by ongoing **resource upgrade and expansion drilling**, focusing on the **Ag-Pb Starter Zone**, ahead of conversion to Reserves as part of **ongoing project studies**. These studies will likely include advanced metallurgy, project permitting, and an assessment of processing options, i.e. stand-alone or regional toll treat – we think a **Scoping or Pre-Feasibility Study is possible in 1H25**. There is potential **for brownfields exploration, to yield new discoveries**. Of course, the main top-down driver for mineral developers is **metal prices** - in this case, **silver prices will be key**.

MMA's share price could approach and the exceed our initial valuation as Maronan advances.

## Asset Summary

### Maronan Ag-Pb-Cu-Au Project (MMA 100%)

#### Mineralisation and resource status

##### Overview

To help investors grasp the vast scale of Maronan, MMA compares it in plan to the CBD of Sydney and in long section to the Eiffel Tower (Figures 4 and 5); note that the latter only shows the upper Starter Zone, to 600m below surface, which is less than half the known depth of the deposit.

There is potential to grow the extent and grade of Maronan through brownfields exploration.

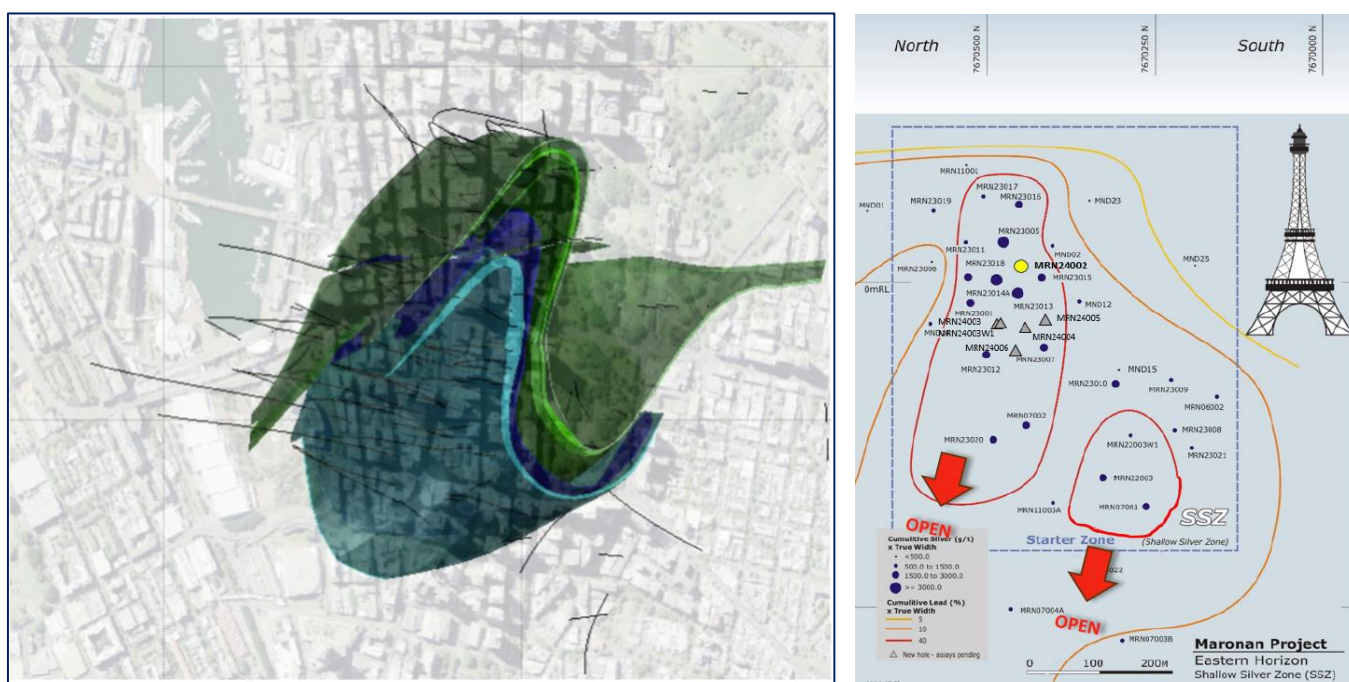
Maronan is a large-scale deposit comprised of multiple folded and possibly overprinted zones of silver-lead-copper-gold mineralisation. Overall, there are **four such zones, of three main types: silver-lead (two zones), copper-gold; and a smaller gold-only zone.** These areas are better visualised than described: refer to Figures 4-7.

Overall, the Maronan system has a **total strike length and width of c.1100m** (or Darling Harbour to the Sydney Domain, as shown in Figure 4); mineralisation commences at 90m below surface, under shallow cover, and continues for at least 1300m vertical. The silver-lead mineralised zones have an average true thickness of between 4m to 20m and the copper-gold zones average 10m to 30m true thickness but up to 50m.

Geologically, Maronan is hosted by the Mt Norna Quartzite of the Soldiers Cap Group. The current theory is that **silver-lead mineralisation formed as iron-rich, flat-lying layers** at about 1650-1670Ma (1.65-1.67Bn years ago), which were **subsequently folded and deformed into the steeply west-dipping geometry seen today** (deformations D1-5, or so). **The copper-gold, which is less folded, may have formed as an overprint** at this later time – see Figures 6 and 7. Metamorphic grades are amphibolite facies.

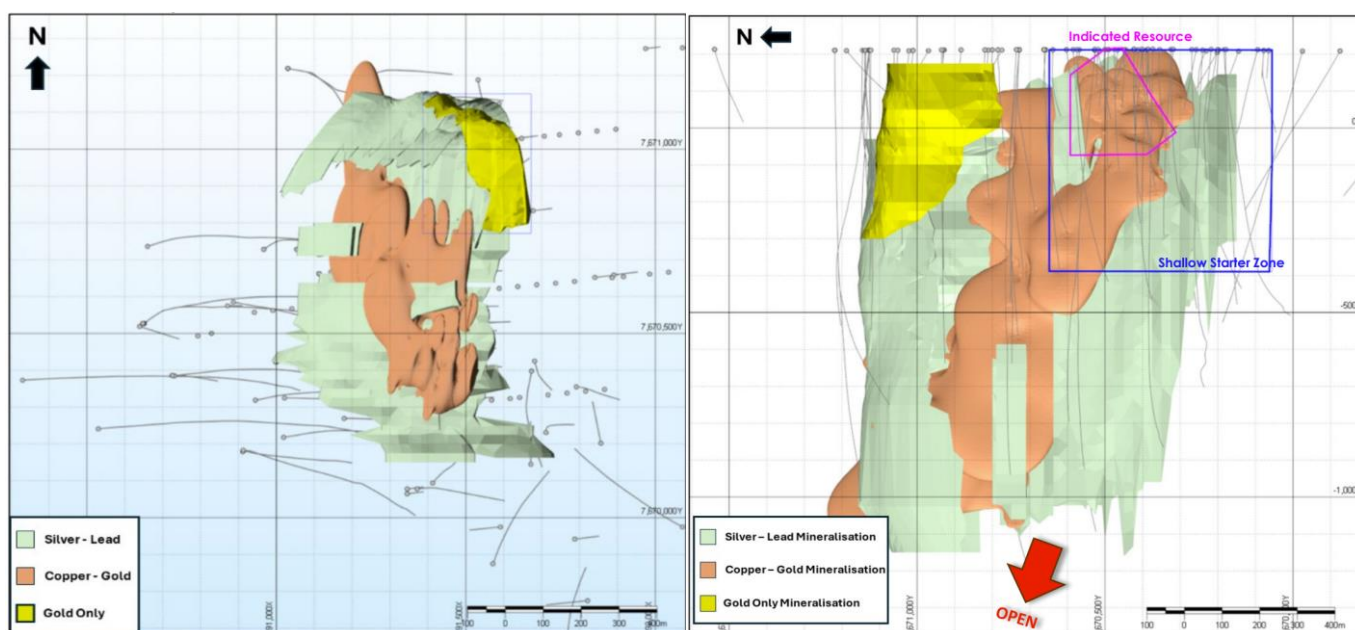
The area of the Maronan EPM (Exploration Permit Mineral), EPM13368, is quite compact, at c.38km<sup>2</sup>, but it contains the full (known) mineral system and leaves plenty of room for brownfields exploration for high-grade tonnes, both down plunge and in structural positions within the current orebody.

Figures 4, 5: Plan section of Maronan on Sydney's CBD, left; and a Starter Zone section with grades and landmark, right



Source: Company report

Figure 6, 7: Maronan, plan view, left, and long section, right, showing mineralised domains



Source: Company report

**The Maronan deposit is open at depth, so there is potential to upgrade and grow the current resource.**

## Resources

**The total JORC-qualifying Resource at Maronan is 66.4Mt across four zones of Silver-Lead (East and West Horizons), Copper-Gold and Gold-Only.**

At the time of the spin-off from RDM and IPO as MMA, the resource stood at 42Mt, based on 42,895m of drilling by various owners.

Subsequently, MMA drilled 16,784m for 33 holes in 2022/23 and expects to drill another 7-10,000m in 2024, focused on infilling and extending resources, and creating a well-constrained 3D geological and structural model.

One outcome of the recent drilling has been the **11Mt Starter Zone, a 500m x 600m block at the south end of the deposit**. This area has higher-grade lead-silver mineralisation (e.g. 23.3m @ 5% Pb and 175g/t Ag with 0.7m @ 22% Pb and 1520g/t Ag) and comes to within 90m of surface. This is likely to be the source of initial ore tonnes if Maronan becomes a mining operation.

**Mineral Reserves, defined using a mine plan and assuming economic parameters, usually accompany a Pre-Feasibility Study, which we expect in FY25/6.**

Figure 8: Maronan Project resources

| Zone                                     | Category  | Tonnes (Mt) | Pb (%) | Ag (g/t) | Cu (%) | Au (g/t) | Cutoff  |
|------------------------------------------|-----------|-------------|--------|----------|--------|----------|---------|
| <b>Silver-Lead (East, West Horizons)</b> | Total     | 32.1        | 6.1    | 107      |        |          | 3% Pb   |
| Starter Zone                             | Indicated | 2           | 5.3    | 155      |        |          |         |
| Starter Zone                             | Inferred  | 9           | 5.3    | 101      |        |          |         |
| Outside Starter Zone                     | Inferred  | 20.1        | 6.5    | 105      |        |          |         |
| <b>Copper-Gold</b>                       | Inferred  | 32.5        |        | 7        | 0.84   | 0.61     | 0.4% Cu |
| <b>Gold-only</b>                         | Inferred  | 1.8         |        |          |        | 1.24     | 1g/t Au |

## Silver-lead mineralisation and the Starter Zone

There are two clear zones of this type, the **Western and Eastern Horizons**. The lead-silver mineralisation is broadly interpreted as a Broken Hill-type (BHT) deposit and bears

**In the first few years of production, the main ore type would be silver-lead mineralisation.**

similarities to nearby Cannington (ASX:S32), although it appears to be less structurally complex than either of these and is mostly hosted in carbonate facies rocks (marbles). Furthermore, rock types can be divided into **carbonate- or pyroxene-rich; the latter are more prevalent closer to surface**. The main sulphide minerals are **galena (lead) and pyrrhotite (iron) with minor sphalerite (zinc); silver is strongly associated and recovered with lead**.

Carbonate-bearing silver-lead material comprises a majority of the near-surface Starter Zone – see Figures 7/8.

The Starter Zone exhibits high silver values – the resource grade is 155g/t Au.

Figure 9: Core with marked grades from soft carbonate lead-silver ore type



Source: Company report

### Copper-gold mineralisation

Between the main lead-zinc horizons is a steep plunging, roughly pipe shaped, silica rich body, which hosts the copper-gold. This style of mineralisation has **affinities to nearby Eloise and Jericho**, which are interpreted as being Iron-Sulphide Copper Gold (ISCG) deposits. Drilling has intersected this style of mineralisation **to 1,250m below surface**.

The main sulphide minerals are **chalcopyrite (copper) and again pyrrhotite (iron)**. Most of the known Resource is fresh rock (75%) but some is transitional (20%) or leached (5%), possibly due to weathering or hydrothermal alteration along a deep structure.

### Gold-only mineralisation

This is a near-surface zone, found in the north-eastern area of the deposit while drilling out the Starter Zone – see Figures 6/7. It displays higher gold grades of 1.24g/t and lower base metal values than the rest of the Maronan system – it could be a very late-stage or retrograde zone of mineralisation.

Copper-gold mineralisation is likely to be mined after year 5, in our view. The grade of this material is relatively modest at 0.84% Cu and 0.61g/t Au

... but there are one or more higher-grade gold zones that could blend in to lift the average.

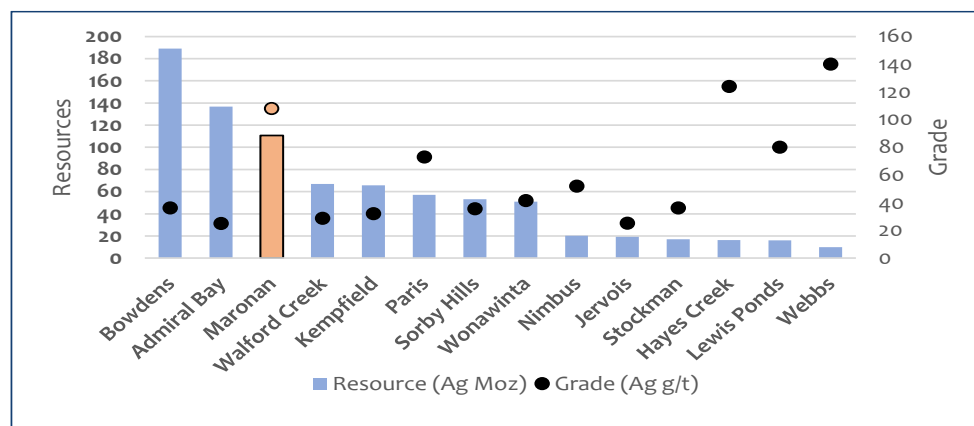
Figure 10: Copper gold mineralisation from Maronan



Metallurgically this copper-gold material seems to be metallurgically unproblematic and should be economic to mine, assuming simultaneous production of higher-grade silver-lead and after initial capex has been recovered.

Source: GBA Capital

Figure 11: Australian silver, exploration and development projects



By our estimation, Maronan has the third largest resource of contained silver among development projects in Australia, and the highest silver grade

Sources: Company reports, MakCorp, GBA Capital

Figure 12: Australian silver, exploration and development projects

| Project (ticker)     | Resource (AgMoz) | Grade (Ag g/t) | Moz Ag x g/t | Metals                | State      |
|----------------------|------------------|----------------|--------------|-----------------------|------------|
| Bowdens (SVL)        | 189              | 36             | 6835         | Ag, Au                | NSW        |
| Admiral Bay (ARI)    | 137              | 25             | 3416         | Zn, Pb, Ag            | WA         |
| <b>Maronan (MMA)</b> | <b>111</b>       | <b>108</b>     | <b>11927</b> | <b>Ag, Pb, Cu, Au</b> | <b>QLD</b> |
| Walford Creek (AML)  | 67               | 29             | 1923         | Cu, Pb, Zn, Ag, Co    | QLD        |
| Kempfield (ARD)      | 66               | 32             | 2115         | Ag, Au, Pb, Zn        | NSW        |
| Paris (IVR)          | 57               | 73             | 4161         | Ag, Pb                | SA         |
| Sorby Hills (BML)    | 53               | 36             | 1891         | Pb, Ag, Zn            | WA         |
| Wonawinta (MKR)      | 51               | 42             | 2121         | Ag, Pb, Zn            | NSW        |
| Nimbus (HRZ)         | 20               | 52             | 1050         | Ag, Zn, Pb, Au        | WA         |
| Jervois (KGL)        | 19               | 25             | 488          | Cu, Au, Ag            | NT         |
| Stockman (AIS)       | 17               | 36             | 620          | Cu, Zn, Au, Ag        | VIC        |
| Hayes Creek (PNX)    | 16               | 124            | 2027         | Zn, Ag, Au            | NT         |
| Lewis Ponds (GRL)    | 16               | 80             | 1276         | Au, Ag, Zn, Pb, Cu    | NSW        |

## Development studies and mining

Previous owner RDM conducted some initial technical and mining studies, resulting in a limited Scoping Study in 2015. It was soon realised that, not only were **high metallurgical recoveries** possible, but that the **soft- to medium hardness** of the ore and steep geometry of the deposit with its discrete mineralised zones could lend themselves to **cost-effective underground mining**.

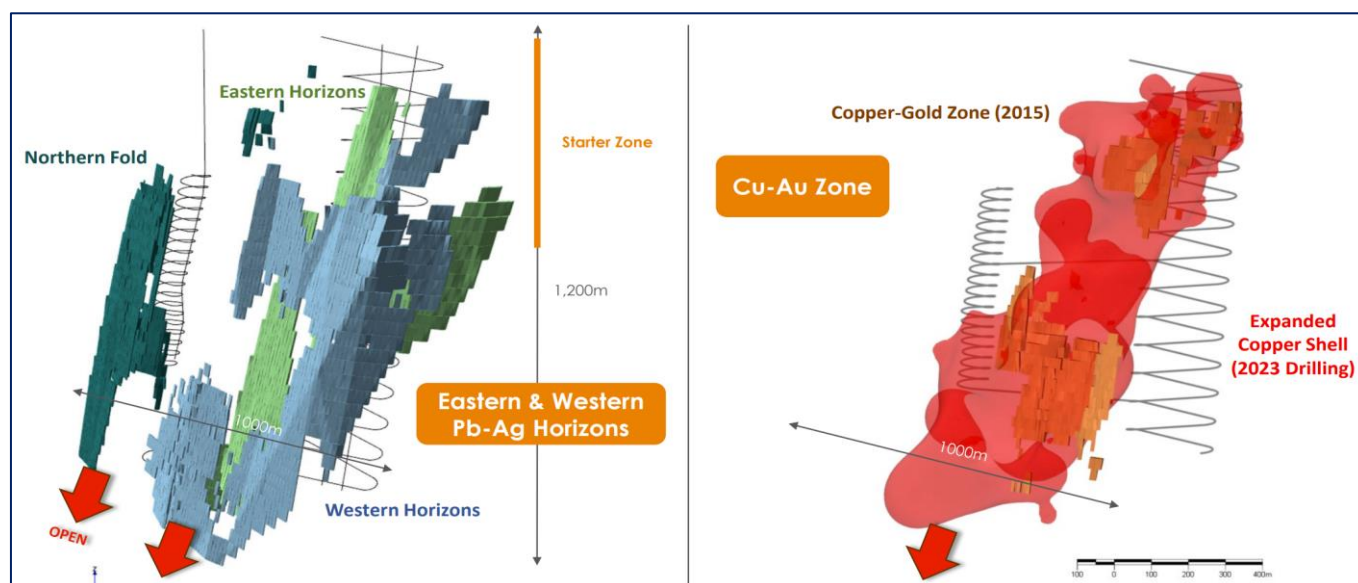
### Metallurgy

Figure 14 shows typical metallurgical recoveries for the different material types. Testing by MMA and predecessor RDM show that Ag-Pb material is of soft-to-medium hardness (BMI 8.4-12.4) and offers **+90% Ag-Pb recoveries to concentrate at +72 micron grinding** (and as coarse as 212 micron), with obvious consequences for reductions in mining and milling costs – earlier mining studies by RDM proposed a cut-off of only 3.1% Pb for this reason. Silver reports to a lead sulphide (galena) concentrate at grades as high as 1,485g/t Ag.

Cu-Au mineralisation also allows **+90% recoveries of Cu and +75% of gold**; some of this fresh material is harder than the Ag-Pb but still only considered of medium hardness. Copper concentrate grades are 25-27% Cu.

**Maronan has the advantage of mineralisation that is relatively soft and easy to mine and process, shows high metallurgical recoveries**

Figure 13: Maronan 3D mining blocks



Source: Company report

### Mining model

**Our model of Maronan assumes underground mining, and on-site conventional crush-grind-flotation to recover sulphides to concentrate**

Given the advanced state of Maronan, which is on the cusp of releasing updated scoping and feasibility studies in 2025, GBA has made a first-pass production and financial model, including an NPV on which we base our valuation of the company. Where possible we used MMA data – sources are shown in Figure 14.

The basic model is for an **underground operation** – the base case is always long-hole open stoping (LHOS); bulk mining could be possible in some wider areas. Processing, **if on site**, will likely use **conventional crush-grind-flotation to produce separate Ag-Pb and Cu-Au concentrates**; the discrete ore types could be managed by batch processing, although

simultaneous double and triple flotation of polymetallic ores is commonplace in industry.

**Trucking and treating at a nearby plant such as Cannington or Eloise could also be possible in appropriate circumstances, which would save on capex but increase opex.**

**Maronan's scale and proximity to mining could allow for a mining rate of +2Mtpa**

The broad assumptions used in model are GBA's own, based on some industry comparables and our understanding of underground base metal mining.

**These assumptions, with a comment on each, are shown in Figure 14 along with some conceptual economic outcomes.**

**Average annual polymetallic output is 13.5Moz, silver-equivalent, which is about the same in A\$ terms as 45ktpa of copper or 160kozpa of gold**

The only controversial choice here might be the **run-rate of 2.25Mtpa**. The rule of thumb for underground production from a single "5x5m" decline is 1.2Mtpa, we've almost doubled that due to the near-surface nature of Maronan and its long strike, which should facilitate **multiple points of ingress and development**.

The on-site treatment option includes **pre-production capex of \$400m or A\$180/t**.

By the end of its life this will be a relatively deep mine, by Australian standards, reaching +1300m below surface, so in the longer term a shaft for ore haulage might be considered (as is the case at Cannington).

**Figure 14: Key assumptions for Maronan operational model including source**

| Assumptions               |                | Years 1-5<br>FY30-34 | Years 6-15<br>FY36-44 | Comment                                                       | Source |
|---------------------------|----------------|----------------------|-----------------------|---------------------------------------------------------------|--------|
| Mined and Milled          | Mtpa           | 2.25                 |                       | Full underground rate - one busy or two quiet declines        | GBA    |
| Ore types                 |                |                      |                       |                                                               |        |
| Silver-lead ore           | Mtpa           | 2.25                 | 1.125                 | Initial Ag-Pb only ...                                        | GBA    |
| Silver grade              | g/t            | 116                  | 91                    | MMA Resource grades - more Ag early in Starter Zone           | MMA    |
| Lead grade                | %              | 5.2                  | 5.0                   |                                                               | MMA    |
| Gold grade                | g/t            | 0.2                  | 0.2                   |                                                               | MMA    |
| Copper-gold ore           | Mtpa           |                      | 1.125                 | Additional Cu-Au from year 6 (FY36)                           | MMA    |
| Silver grade              | g/t            |                      | 9                     | Less silver in Cu -Au zone                                    | MMA    |
| Copper grade              | %              |                      | 1.1                   |                                                               | MMA    |
| Gold grade                | g/t            |                      | 1                     |                                                               | MMA    |
| Metal recoveries          |                |                      |                       |                                                               |        |
| Silver (in Ag-Pb)         | %              | 90                   |                       | +90% Ag-Pb recs in +75 micron grind, +212 micron in carbonate | MMA    |
| Lead                      | %              | 90                   |                       | Ag-Pb ore has soft-medium hardness (BWI 8.4-12.4)             | MMA    |
| Copper                    | %              |                      | 90                    | Cu-Au is medium to medium hard (BWI 14)                       | MMA    |
| Gold                      | %              |                      | 75                    |                                                               | MMA    |
| Silver (in Cu-Au)         | %              |                      | 40                    |                                                               | MMA    |
| Production in concentrate |                |                      |                       |                                                               |        |
| Concentrate               | kt             | 130                  |                       |                                                               | GBA    |
| Silver                    | koz            | 6,520                | 3,400                 | Tests show up to 1485g/t Ag in Pb con                         | GBA    |
| Lead                      | kt             | 92                   | 56                    | Up to 65% Pb in con                                           | GBA    |
| Copper                    | kt             | 5                    | 11                    | Grades 25-27% in con                                          | GBA    |
| Gold                      | koz            | 10                   | 41                    | Grades 11-14g/t in con                                        | GBA    |
| Payabilities (all)        | %              | 95                   |                       |                                                               | GBA    |
| Costs                     |                |                      |                       |                                                               |        |
| Mine                      | A\$/t mined    | 75                   |                       | Assume stoping, starts with near-surface, soft-medium ore     | GBA    |
| Mill                      | A\$/t milled   | 30                   |                       | Grid power, low BWI ore                                       | GBA    |
| G&A                       | A\$/t milled   | 7                    |                       |                                                               | GBA    |
| Total ex-capex            | \$m            | 300                  |                       | Includes TC ; RC; royalty                                     | GBA    |
| Sustaining capex          | \$m/yr         | 16                   |                       |                                                               | GBA    |
| Project capex             | \$m            | 400                  |                       | Range \$350-450m (real) for 2.25Mtpa flotation                | GBA    |
| Metal equivalents         |                |                      |                       |                                                               |        |
| Ag-Eq production          | kozpa          | 13500                |                       | All metal value is in revenue/production ...                  | GBA    |
| AgEq opex                 | US\$/oz (AISC) | 15.68                |                       | ... so no cost credits                                        | GBA    |
| Cu-Eq production          | ktpa           | 45                   |                       | For purposes of comparison with other projects                | GBA    |
| CuEq opex                 | US\$/lb (AISC) | 2.13                 |                       | ... Maronan would be a first or second quartile operation     | GBA    |
| Au-Eq production          | kozpa          | 160                  |                       |                                                               | GBA    |
| AuEq opex                 | US\$/oz (AISC) | 1323                 |                       |                                                               | GBA    |

## Infrastructure, access and permitting

The Maronan exploration tenement, EPM13368, overlaps areas of Crown and private land, including a homestead, as well as part of a Native Title area. MMA has good relations with the private owner and Native Title group (Mitakoodi and Mayi People); these parties provide all required access to the Tenement, where MMA operates under a **conduct and compensation agreement**. It's reasonable to expect that development of a mine at Maronan will require simultaneous refinement of this agreement.

The climate of Cloncurry is hot and semi-arid, with a distinct wet season from December to March. **The primary land use at Maronan**, aside from mineral exploration, is cattle grazing. MMA has commenced the requisite **surveys of flora, fauna and water** (surface and ground) that will be required for **future environmental permits** of mining.

Numerous gold and base-metal mines operate successfully in the Mt Isa – Cloncurry region of QLD, aka the North West Minerals Province (NWP), so there's **a clear and well-regulated permitting pathway by which Maronan can reach production**.

Maronan is located adjacent to the Landsborough Highway, with **local access to road and rail transport**. Mt Isa and Cloncurry are connected to a local gas-powered electricity grid but the more distant mines, such as Cannington and Eloise, **generate their own electricity on site** via diesel, gas and or solar (PV). Moving to grid power would be of obvious benefit.

The QLD Government, as part of its Critical Minerals Strategy is making a \$5bn investment in the **CopperString 2032 project**, which will build **a high kV power connection between the North West Minerals Province and the east coast grid at Townsville**; this could supply renewable energy from the planned NQ Superhub at Hughenden. A 2032 delivery of the project could be timely for Maronan. QLD is also providing assistance to develop its critical minerals industry via its **\$170m Critical Minerals and Battery Technology Fund**. The QLD critical minerals list includes copper (and should include silver), so MMA could benefit.

Figure 15: Wide open spaces – MMA has access to drill at Maronan



Source: GBA Capital

MMA has access to drill and conduct technical studies at Maronan.

The Carpentaria region is well serviced by the infrastructure required to successfully operate a mine.

The regional power grid will be greatly upgraded via the CopperString project.

MMA is drilling on Maronan cattle station, after which the company and project are named.

## Corporate

Maronan Metals only has three Board members: **Simon Bird (Non-Exec Chair)**, **Richard Carlton (MD)** and **Rob Rutherford (NED)**.

Major shareholder is ASX-listed parent RDM, with 44%. RDM has a major rare earth project in QLD and might be expected to sell down some MMA over time to help fund it.

Exploration spend in FY24 was A\$4.52m but this should increase in FY25 as MMA drills out an expands the Maronan resource, and invests in feasibility studies of future production.

## Directors and Management

Overseeing the Board since the April 2022 ASX listing has been **Non-Exec Chairman, Simon Bird**. Mr Bird has more than 30 years of international corporate experience, having held senior and C-level roles at Stockland, GrainCorp, Wizard Mortgage Corp, CPA Australia and King Island Scheelite, as well as directorships of Sovereign Gold, Rawson Resources Limited and Pacific American Holdings. He is currently the Lead Independent Non-Executive Director of Mount Gibson Iron Limited (ASX:MGX).

**Richard Carlton** has been the **Managing Director (MD)** since listing. Mr Carlton, a mining engineer, has more than 30 years of operations management experience in Australia and internationally, with numerous positions including General Manager at gold mines Edna May (WA), Stawell (VIC), Waihi (NZ), Westonia (WA) and Golden Crown (WA). His base-metals management experience includes Rosebery (TAS, underground Zn-Cu-Pb), Elura (NSW, Zn-Pb-Ag) and Girilambone (NSW, Cu).

The only **Non-Exec Director** (Technical NED) is geologist **Robert Rutherford**: he is also MD of MMA's parent company and major shareholder Red Metal (ASX:RDM), which he founded in 2003. Mr Rutherford is an explorationist, with expertise in IOCG and Sediment-Hosted base metal systems, and more recently in granitic REE systems.

The company's **Exploration Manager** is **Andrew Barker**. Mr Barker's 15 years of experience includes being in the teams that discovered the GRE46 underground gold deposit at Cowal (NSW, Evolution Mining), and the Pegasus, Millennium, Paradigm North and Velvet gold deposits in the Kalgoorlie district (WA, Northern Star).

## Shareholders

The top 20 holds 70.86%, with founding corporate Red Metal (ASX:RDM) still at 43.98% since receiving 50% in its 2022 spin-off of MMA, and Denver-based asset manager Crescat Capital at 6.22%. RDM's two-year escrow ended in April 2024.

## Capital structure and financials

Shares on Issue are 201,250,617; there are also various Options totalling 17,988,319, exercisable over the next 3 years at prices \$0.25-0.60/sh.

**Cash at 31-Sep-24 (end SepQ) was A\$7.757m, with no debt.** The most recent capital raise was **A\$9.02m @ A\$0.24/sh** in JunQ24, comprised of a \$5.65m placement and \$3.37m SPP.

**Exploration spend in the financial year to 30-Jun was A\$4.52m, while corporate was only \$850k** – this was followed **by \$2.183m/\$153k in SepQ**. Low corporate costs are an advantage of having a single project, in the same country in which the company is domiciled, close to infrastructure and transport and, as in this case, experienced and prudent management.

Development is ramping up so costs should lift in FY25. Our rule of thumb is that a focused exploration program including diamond drilling with 1-2 rigs costs a conservative A\$2-2.5m/qtr including corporate, so **MMA might have c.\$7.5m cash at 30-Sep-24**. Our estimates on Page 1 are based on this conceptual SepQ24 expenditure.

**It's likely that MMA will need to raise equity capital in FY25.** Down the road, future funding for development is likely to be a **blend of equity and bank debt**; the polymetallic nature of Maronan could also allow for pre-payment financing, such as metal streaming or royalties, attached to certain metals.

Figure 16: Financial estimates for MMA based on production model

Our base case metal price assumptions are spot prices (at the time of modelling in Nov'24), less 10%.

We've divided the estimates into three periods of averages: FY25-29, which covers feasibility studies, funding and construction; FY30-34, (years 1-5) which is silver-lead production including ramp-up; and FY35-44 (years 6-15), which is combined silver-lead and copper-gold production out to year 15.

We expect the mine to generate strong CF and FCF after ramp-up, with EBITDA margins of almost 50%.

| Year                            | Units      | FY23a       | FY24a       | FY25-29<br>average | FY30-34<br>average | FY36-44<br>average | FY25-44<br>total |
|---------------------------------|------------|-------------|-------------|--------------------|--------------------|--------------------|------------------|
| <b>Macro assumptions</b>        |            |             |             |                    |                    |                    |                  |
| Silver                          | US\$/oz    |             |             | 30                 | 30                 | 30                 |                  |
| Lead                            | US\$/lb    |             |             | 0.82               | 0.82               | 0.82               |                  |
| Copper                          | US\$/lb    |             |             | 3.82               | 3.82               | 3.82               |                  |
| Gold                            | US\$/oz    |             |             | 2475               | 2475               | 2475               |                  |
| FX                              | AUDUSD     |             |             | 0.67               | 0.67               | 0.67               |                  |
| <b>Company Financials</b>       |            |             |             |                    |                    |                    |                  |
| <b>P&amp;L</b>                  |            |             |             |                    |                    |                    |                  |
| Revenue                         | \$m        | 0.0         | 0.0         | 0                  | 563                | 555                | 7,808            |
| <b>EBITDA</b>                   | <b>\$m</b> | <b>-7.9</b> | <b>-4.5</b> | <b>-6</b>          | <b>266</b>         | <b>270</b>         | <b>3,729</b>     |
| EBIT                            | \$m        | -7.9        | -4.5        | -8                 | 250                | 253                | 3,495            |
| PBT                             | \$m        | -7.9        | -4.5        | -9                 | 241                | 253                | 3,439            |
| NPAT                            | \$m        | -9.2        | -4.5        | -9                 | 168                | 177                | 2,394            |
| <b>Cash flow</b>                |            |             |             |                    |                    |                    |                  |
| <u>Operating surplus (loss)</u> | \$m        | 0.0         | 0.0         | 0                  | 271                | 241                | 3,523            |
| Corporate (S&E)                 | \$m        | 0.4         | 0.7         | 2                  | 5                  | 5                  | 82               |
| Exploration                     | \$m        | 6.7         | 4.6         | 6                  | 5                  | 5                  | 98               |
| Net interest                    | \$m        | 0.1         | 0.0         | -1                 | -6                 | 38                 | 301              |
| Tax                             | \$m        | 0.0         | 0.0         | 0                  | 72                 | 76                 | 1,045            |
| Other                           | \$m        | 0.0         | 0.8         | 0                  | 0                  | 0                  | -                |
| <u>CF Operating</u>             | \$m        | -7.0        | -4.5        | -9                 | 183                | 192                | 2,598            |
| Capex                           | \$m        | 0.1         | 0.0         | 78                 | 22                 | 15                 | 635              |
| Other                           | \$m        | 0.0         | 0.0         | 0                  | 0                  | 0                  | -                |
| <u>CF Investing</u>             | \$m        | -0.1        | 0.0         | -78                | -22                | -15                | - 635            |
| Capital raisings                | \$m        | 0.0         | 9.1         | 6                  | 0                  | 0                  | 30               |
| Dividends                       | \$m        | 0.0         | 0.0         | 0                  | 13                 | 53                 | 544              |
| Loan drawdowns                  | \$m        | 0.0         | 0.0         | 81                 | 0                  | 0                  | 404              |
| Loan repayments                 | \$m        | 0.0         | 0.0         | 0                  | 81                 | 0                  | 404              |
| Issue costs                     | \$m        | 0.0         | 0.3         | 0.24               | 0                  | 0                  | 1                |
| <u>CF Financing</u>             | \$m        | 0.0         | 8.7         | 87                 | -94                | -53                | - 516            |
| <u>Net change in cash</u>       | \$m        | -7.1        | 4.2         | -1                 | 67                 | 124                | 1,447            |
| <b>Balance sheet</b>            |            |             |             |                    |                    |                    |                  |
| Cash                            | \$m        | 5.9         | 10.1        | 5                  | 145                | 959                |                  |
| Other                           | \$m        | 0.0         | 0.2         | 0                  | 0                  | 0                  |                  |
| <b>Non-current assets</b>       |            | 0.0         |             |                    |                    |                    |                  |
| PP&E                            | \$m        | 0.1         | 0.1         | 115                | 404                | 406                |                  |
| Exploration and evaluati        | \$m        | 5.7         | 5.7         | 11                 | 19                 | 29                 |                  |
| Other                           | \$m        | 0.3         | 0.1         | 0                  | 0                  | 0                  |                  |
| <b>Total assets</b>             | \$m        | 12.1        | 16.2        | 131                | 568                | 1394               |                  |
| Debt                            | \$m        | 0.1         | 0.1         | 113                | 137                | 0                  |                  |
| Other                           | \$m        | 1.1         | 0.9         | 1                  | 1                  | 1                  |                  |
| <b>Total liabilities</b>        | \$m        | 1.2         | 1.0         | 114                | 138                | 1                  |                  |
| <b>Net assets</b>               | \$m        | 10.9        | 15.2        | 17                 | 430                | 1393               |                  |
| <b>Equity</b>                   | \$m        | 10.9        | 15.2        | 17                 | 430                | 1393               |                  |
| <b>EBITDA margin</b>            | %          |             |             | -                  | 47                 | 49                 |                  |
| <b>Free cash flow (FCF)</b>     | \$m        | -7          | -5          | -87                | 161                | 177                | 1,963            |
| <b>Net debt (equity)</b>        | \$m        | -6          | -10         | 108                | -8                 | -959               |                  |
| <b>Capital structure</b>        |            |             |             |                    |                    |                    |                  |
| Fully Diluted Shares            | :m         | 150.0       | 201.2       | 262                | 272                | 272                |                  |
| EPS (undiluted)                 | :A\$/sh    | -0.1        | 0.0         | -0.03              | 0.62               | 0.65               |                  |
| DPS                             | :A\$/sh    | 0.0         | 0.0         | 0.00               | 0.05               | 0.20               |                  |
| FCFPS                           | :A\$/sh    | 0.0         | 0.0         | -0.32              | 0.59               | 0.65               |                  |

Source: Company reports, Company Reports, GBA Capital

## Risks of investment

MMA aims to develop an underground metalliferous mine in Queensland, Australia (QLD). It is currently in the middle of a resource drill-out and is undertaking feasibility studies of mining, so there are risks associated with **resource and reserve definition** and the potential findings of ongoing **technical and economic studies**.

Speaking generally, MMA's activities are subject to the usual **operational, financing and permitting risks** of mineral exploration and development in Australia. On the downside, these may or may not include – and are not limited to – difficult or remote terrain, inconvenient weather, problems with land access, local anti-mining sentiment, short-term problems in sourcing staff and equipment, slow assay turnaround, funding challenges, political and legal changes affecting the resources sector, and the possibilities that future permits may not be granted.

All mineral projects are exposed to **commodity price and exchange rate variations and the state of the global financial markets**, which can affect project valuations, liquidity and the ability **fund** development and working capital.

Figure 17: Central (?) Bearded Dragon at Maronan



Exploration and mining can have their share of surprises, both positive and negative.

Source: GBA Capital

## Appendix 1 – Silver outlook

Maronan is a polymetallic deposit – but of its suite of commodities the most influential, in terms of the share price of MMA, is silver. Silver is of approximately equal value to Pb in terms of revenue in the first 5 years of production, and its price is far more volatile. **Recently, silver prices have gained as the metal becomes recognised as being critical for its use as a conductor and in photovoltaics.**

The current price of silver is c.US\$33/oz, an increase of c.60% over the past 12mths, and just below the recent record high of US\$34.82/oz.

### Market drivers

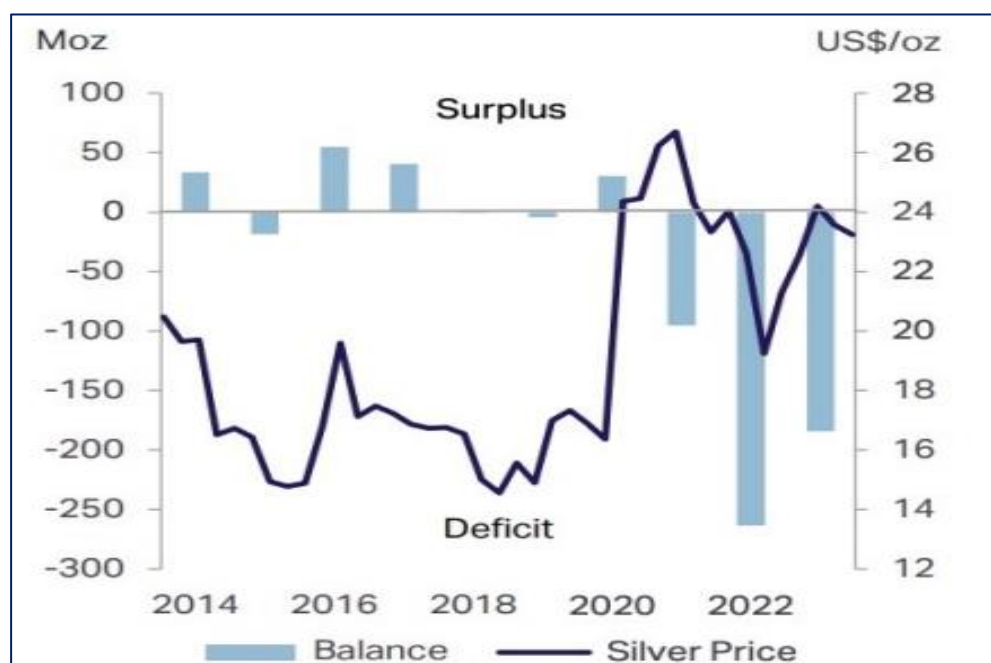
Silver prices have surged in 2024, partly due to the same geopolitical and economic factors that have favoured gold ...

- **Industrial demand:** The demand for silver is driven by industrial applications such as photovoltaics (solar panels), 5G technology, and automotive electronics. The shift to higher-efficiency solar cells, which use more silver, is a significant driver.
- **Supply deficit:** Silver has been in a supply deficit since 2021, and this trend is expected to continue into 2025. Limited mining output is a key contributor.
- **Economic factors:** Silver is a precious metal and is still used as a store of wealth, so prices react in a similar positive way to gold, to falling interest rates and (to a lesser extent) geopolitical risk and high inflation.

### Prices in 2025

Consensus prices, if “consensus” is the right word in this case, are **bullish**, with some commentators expecting US\$40/oz in 2025 and a few bulls discussing US\$100/oz in the medium term (+3yrs). The base-case silver price used in our NPV model for Maronan is US\$30/oz, which is 4% below spot at the time of publication.

Figure 18: Key drivers of demand for copper wire and cable



... but also because it's industrially useful and in undersupply.

Source: Company report, World Silver Institute, GBA Capital

## Appendix 2 – Comparable companies

Figure 19 shows a chart of EV/resource (company enterprise value, over the value of silver-equivalent resources, i.e. A\$/oz AgEq) ratios for some ASX-listed silver companies. Criteria for selection: companies are that they have >50Moz AgEq in JORC-qualifying Resource (all categories) but are pre-production or recently in production; the resources are from global projects and we don't claim that our list is exhaustive.

Note that the AgEq calculations are GBA's and based on converting 100% of all in-ground metal value to silver. Yes, we have omitted specific metallurgical recoveries: in our view, the variability of geological and metallurgical characteristics between polymetallic deposits, which many of these are, and the varied stages of feasibility studies on projects, is the reason why **grade-equivalent EV/resource comparisons aren't all that useful for equity valuations. They can't hurt for a broad and subjective comparison, though.**

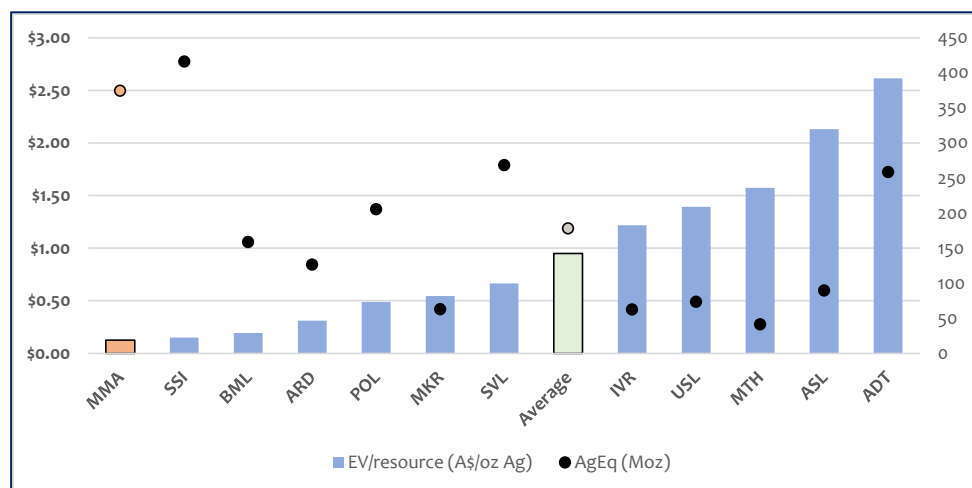
On an EV/resource basis, MMA is the cheapest silver company on the ASX, which is hard to understand given its grade and scale.

- The average EV/resource multiple of A\$95/oz is shown as a **green bar**.
- MMA with its current multiple of A\$13/oz, based on the Maronan resource of 375Moz AuEq, is as an **orange bar**.
- Silver-equivalent (AgEq) grades are shown as points (right axis scale).

On this basis, it's reasonable to say that **MMA is trading at a very deep discount to its peers**, which is surprising when you consider it has a very high comparative (conceptual) silver-equivalent resource. A comparison of silver resources for Australian projects is shown in Figure 12 in the main section of the report.

We think the company has simply been overlooked or misunderstood by investors

Figure 19: EV/resource values for ASX silver companies



Source: Industry and media reports, GBA Capital

## Recommendation structure

**Buy:** Expected to outperform the overall market on a 12 month view.

**Hold:** Expected to perform in line with the overall market on a 12 month view.

**Sell:** Expected to underperform the market on a 12 month view.

**Not Rated:** GBA has a factual view of the company with no recommendation.

**High Risk:** A qualitative rating, based on our assessment of significantly higher-than market risk of share price volatility.

**Medium Risk:** A qualitative rating, based on our assessment of market-average risk of share price volatility.

**Low Risk:** A qualitative rating, based on our assessment of lower-than-market risk of share price volatility.

**If no Recommendation is stated, including 'Not Rated', then the note has been commissioned for publication by the subject company. A Valuation may be provided, but not a Price Target.**

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