21 January 2025

Master Drilling Group

RB fleet and earnings growth

- **H1:24:** Basic earnings of USD2c/s were affected by a $12m impairment of the MTB1 and other equipment. Using the less sensitive and representative HEPS metrics, MDI achieved **USD9c/s** or ZAR169c/s. We expect MDI to record basic earnings of **USD9.7c/s** in the 2024FY and HEPS of **USD16.7c/s** and ZAR318c/s.
- **RB fleet build:** By the end of 2024FY, MDI's large diameter fleet should increase from **89** to **98** rigs including a Herrenknecht RBR900. More machines are under construction that will increase the fleet size to around **105** machines by the end of 2025FY. Several more blind drilling high-efficiency rigs are also being built. This is the fastest expansion of the fleet on record and follows a strong increase in underground mining capex spend in several regions.
- **RB feet build benefits:** The increase in the RB fleet and the fact that most machines are being built to meet contractual requirements provides some certainty that MDI will be able to generate solid earnings increases over the next two years. The larger machines are used in longer contracts and generate higher ARPOR.
- **Mogalakwena setback**: The Hall Core JV (HCJV) surface and underground contracts at Mogalakwena were sharply reduced at short notice and the JV may now be unprofitable. HCJV's surface contract has expired and may be replaced by short-term extensions. This may trigger rig impairments as well as fair value losses for the JV.
- **Kolomela setback:** MDI had hoped to use both MDX's and HCJV's surplus rigs for a contract at Kolomela. This has not been successful and may require both MDX and HCJV to look for slim rig contracts overseas. MDX is expected to generate a modest GP for the medium term.
- **Re-impairments:** There is now optimism that both the MTB1 as well as RC shaft drilling rigs will be able to find contracts in 2025Q2. If this does happen, re-impairments would be required. The reactivation of the MTB1 would be very positive for MDI and its future earnings.
- **Growth investments:** We expect MDI to continue investing its c. $15m/a surplus cash in growth. The focus in 2025FY will probably remain on the fleet build as well as the acquisition of another 24% of A&R, which may create a fair value gain. In 2026FY, a $10m investment in the MTB2 through the Besalco JV looks likely.
- **Future earnings and valuations:** We forecast MDI's basic earnings and HEPS to increase to **USD19.4c/s** and **USD20.7c/s** respectively, in 2026FY. We don't forecast possible impairments, re-impairments or changes in fair values. Our base case valuation has increased to **R14.28/s** and our speculative value to **R15.44/s.** The increase in valuations reflects our increased confidence in the benefits of the RB fleet build.

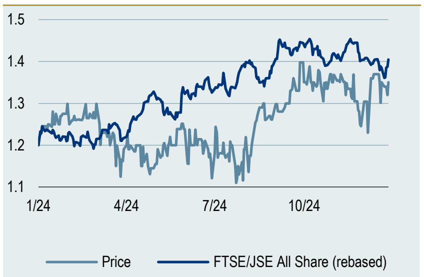
Key forecasts	Dec 21A	Dec 22A	Dec 23A	Dec 24E	Dec 25E	Dec 26E
Net sales (US$ m)	172	226	243	259	276	295
EBITDA (US$ m)	39	50	50	51	67	72
EBITDA margin (%)	23	22	21	20	24	25
Net Income (US$ m)	20	22	22	16	28	31
Basic (EPS) (US¢)	13	14	14	10	18	19
Underlying (EPS) (US¢)	13	14	15	17	19	21
DPS - ordinary (US¢)	2	3	3	3	3	3
P/E (x)	4.7	5.5	5.0	4.3	3.8	3.5
EV/EBITDA (x)	2.9	3.1	3.0	2.9	2.2	1.9
Dividend yield (%)	3.6	3.5	3.9	4.0	4.4	4.7

Source: Company financials, SBG Securities estimates

Share data

RIC	MDIJ.J
Sub industry	General Mining
Price (17 Jan 2025)	R 13.50
Market cap. (R m)	2,043
Enterprise value (R m)	2,622
Market cap. (USD m)	109
Enterprise value (USD m)	140
Avg. daily trade value (USD m)	0.03
Free float (%)	46

Price relative to FTSE/JSE All Share



Historical performance relative to FTSE/JSE All Share

Performance over	1M	3M	12M
Absolute (%)	5.2	1.5	7.3
Relative (%)	6.4	3.7	-10.8

Source: FTSE/JSE All Share, SBG Securities Research

The price relative chart measures performance against the South Africa FTSE/JSE All Share which closed at 84700 on 17 Jan 2025

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www.standardbank.com/research

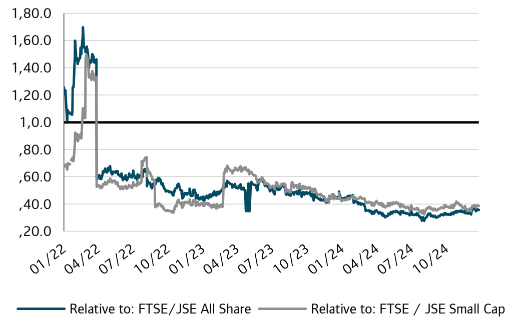
Corporate Commissioned Equity Research | Metals and Mining

Valuation metrics	Dec 21A	Dec 22A	Dec 23A	Dec 24E	Dec 25E	Dec 26E
P/E (x)	4.7	5.5	5.0	4.3	3.8	3.5
EV/EBITDA (x)	2.9	3.1	3.0	2.9	2.2	1.9
FCF yield (%)	15.8	4.6	3.8	11.2	5.9	7.8
Dividend yield (%)	3.6	3.5	3.9	4.0	4.4	4.7

Ratio analysis	Dec 21A	Dec 22A	Dec 23A	Dec 24E	Dec 25E	Dec 26E
ROE (headline basis) (%)	11	12	12	13	13	13
EBITDA margin (%)	23	22	21	20	24	25
EBITDA interest cover (x)	0.0	(0.1)	(0.1)	(0.1)	(0.1)	(0.2)
Net profit margin (%)	12	10	9	6	10	10
Net debt/equity (%)	5.3	8.9	8.8	7.8	5.1	0.9

Profit and loss	Dec 21A	Dec 22A	Dec 23A	Dec 24E	Dec 25E	Dec 26E
Revenue (US$ m)	172	226	243	259	276	295
% growth	39.5	31.7	7.2	6.6	6.9	6.8
Gross profit (US$ m)	49	65	71	79	84	90
EBITDA (US$ m)	39	50	50	51	67	72
% growth	90.0	28.8	0.31	1.1	30.6	8.6
EBIT (US$ m)	28	35	34	32	46	49
% growth	149.8	25.3	-2.8	-5.3	42.8	8.0
Exceptional items (incl. non continuing) (US$	1.9	(0.2)	0.0	0.0	0.0	0.0
Net interest (US$ m)	(2)	(4)	(4)	(5)	(5)	(5)
Tax (US$ m)	(8)	(10)	(8)	(11)	(12)	(13)
Tax rate (%)	29.2	31.9	26.1	40.3	30.2	30.2
Net profit (US$ m)	20	22	22	16	28	31
Headline earnings (continuing business) (US$	20	21	22	25	29	31
% growth	398.8	9.7	2.6	15.1	13.6	8.9
Weighted diluted number of shares (m)	151	151	152	151	151	151
Basic (EPS) (US¢)	13	14	14	10	18	19
Basic earnings per share (EPS) growth	498	7	(4)	(29)	83	10
Adjusted diluted HEPS (cont. business) (US¢)	13	14	15	17	19	21
% growth	397.2	9.7	2.5	15.2	13.6	8.9
Ordinary dividend per share (DPS) (US¢)	2	3	3	3	3	3
Ordinary dividend pay-out ratio (%)	25.2	33.6	36.2	33.0	31.6	31.4

Relative to JSE All Share



Source: Refinitiv

Cash flow	Dec 22A	Dec 23A	Dec 24E	Dec 25E
Normalised EBITDA (US$ m)	37	35	43	45
Change in working capital (US$ m)	(17)	0.1	(7)	(13)
Cash generated by operations (US$ m)	18	51	48	40
Net finance income (charge) (US$ m)	(3)	(4)	(6)	(8)
Taxes paid (US$ m)	(8)	(12)	(7)	(8)
Dividends paid (US$ m)	(4)	(4)	(5)	4
Total cash flow from operations (US$ m)	25	35	42	36
Total capex (US$ m)	(20)	(31)	(30)	(30)
Net cash flow from investing activities (US$	(25)	(31)	(30)	(31)
Share issuance (repurchases) (US$ m)	0	0	0	0
Net increase (decrease) in cash (US$ m)	11	(2)	3	5

Balance sheet	Dec 22A	Dec 23A	Dec 24E	Dec 25E
Intangible fixed assets (US$ m)	23	21	21	21
Property, plant equipment (US$ m)	152	165	173	177
Remaining total fixed assets (US$ m)	15	18	20	20
Current assets (less cash) (US$ m)	162	158	164	178
Cash (US$ m)	31	28	30	34
Total assets (US$ m)	352	362	378	395
Total equity (US$ m)	196	209	229	253
Total liabilities (US$ m)	156	153	157	159
Total equity and liability (US$ m)	352	362	386	411
Net cash (debt) (US$ m)	(15)	(16)	(16)	(12)

Sources: Company financials, SBG Securities estimates

Master Drilling

RB fleet and earnings growth

Overview

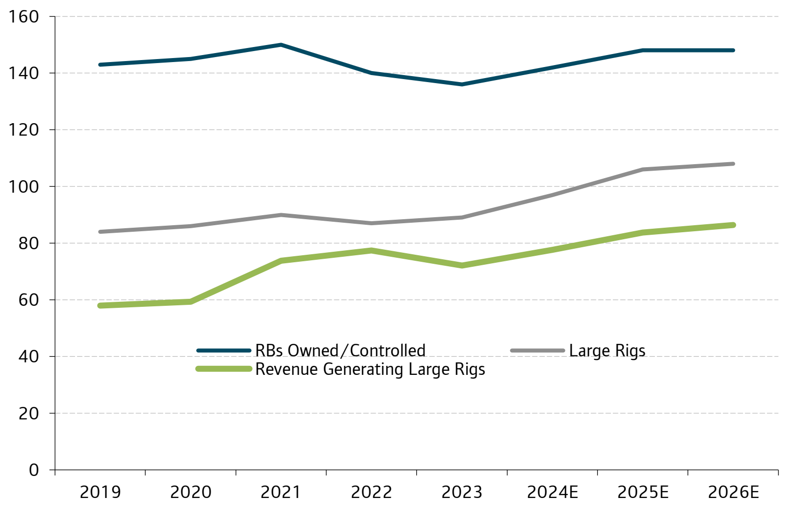
After two years of static underlying earnings caused by poor commodity markets, MDI looks set for basic USD earnings growth over the next two years to **USD17.7c/s** and **USD19.4c/s** in 2025FY and 2026FY. This forecast excludes the rising possibility of both further impairments as well as re-impairments.

The more stable HEPS metric should increase from **USD16.7c/s** in 2024FY to **USD20.7c/s** in 2026FY.

The earnings growth is supported by an improved global underground mining capex cycle, which has created a strong demand for low-profile **large diameter raise bore equipment as well as high-efficiency blind hole drill rigs**. The demand has been strengthened by a shift away from narrow diameter shafts in many applications. MDI responded to the demand in 2023FY by building more RB rigs despite weak markets in regions like South America and Central and North America and continued to invest in new machines into 2024FY to match market needs.

There are now 10 machines being built, which promises to increase the large rig fleet from **89** in 2023FY to **105** in 2025FY. With these additional machines, MDI will increase its dominance of the global large diameter RB market and advance its blind hole drill rig technology.

Figure 1: Large raise bore machine fleet



MDI presentations, SBG Securities estimates

We also expect large rig **ARPOR**[1] to rise. This critical metric will benefit from the increased number of larger machines in the fleet as well as allowable cost adjustments on new and existing contracts. However, MDI is also planning to improve rig operating performances which will generate both better GPs and ARPOR.

[1] Average monthly revenue per operating rig, only rigs receiving revenue for an entire month qualify

Assuming the usual delays in the deployment of new and existing machines and their ability to earn revenue, this promises underlying revenue and GP growth from this important segment of c. **9%** in 2025FY and another **8%** in 2026FY.

Africa returned to being the region with the highest GP margins after a poor H2:23. Figure 2 below shows the assets in Africa and other regions. This indicates that Africa generates the highest GP/asset ratio in MDI's portfolio.

Figure 2: Estimated RB assets by region ($m)

Total RB Assets ($m)	2018	2019	2020	2021	2022	2023
Africa	53	48	55	58	46	49
Central+NA	44	49	46	43	48	51
South America	93	95	67	66	80	82
Other	51	49	63	77	74	84
Total	241	240	231	244	248	265
RB's GP ($m)	40	42	26	49	62	51
GP/Assets (%)	17%	17%	11%	20%	25%	19%

MDI Reports, SBG Securities estimates

MDI expects to finalise the acquisition of another **24%** of the **A&R Group** during 2025FY. This acquisition could add $2m/a to profits at a cost of $11m to be paid over five years although we expect MDI to on-sell 9% to A&R Group managers. The A&R Group has no immediate overlap with MDI's existing businesses but offers an extended range of high-tech products with promising growth potential, or at the very least, the ability to generate steady earnings.

Working against these improvements in earnings are recent setbacks in MDI's **Slim Rigs** businesses both of which are indirectly related to the unbundling of Anglo American. The first is the **MDX** subsidiary, which has a low fleet utilisation of 25%, and the second is the **Hall Core JV (HCJV),** which has had its surface and underground drilling contracts at Mogalakwena sharply reduced at short notice. The HCJV is now at the end of its five-year contract with Mogalakwena and will be given short-term contract extensions.

MDI had hoped to win a joint bid to provide surface rigs for **Kolomela** using surplus rig capacity at both MDX and the HCJV. This has not happened, and MDI is looking for alternative contracts. One solution is to bid for large offshore contracts separately as MDX or HCJV or jointly. However, offshore surface rig contracts are competitive and often rely on local service providers.

If the HCJV is unable to support its overheads or generate a profit, then a fair value loss may have to be booked to the detriment of basic earnings as well as HEPs and the R50m debt owed to MDI would also be affected. Another possible outcome of the difficult slim rigs market is that MDX and the HCJV may have to impair and retire some of their fleet, including the new technology variants.

Fortunately, there are indications that the **MTB1** may return to commercial use. The MTB1's exit from the Mogalakwena Decline Project was a disappointment and cut the superb earnings and cash flows it generated as well as undermined confidence in MDI's technical solutions. The lack of contractual work led to an $8m impairment of its $12m book value in H1:24.

The refurbished and redesigned MTB1 is still parked in MDI's yard, but there is now third-party interest in using the machine for work that is not on a critical development path in Q2:25. If this does happen, and the MTB1 performs well it will be a welcome boost to the future of the machine and MDI. It would also allow some re-impairments.

In a similar way, the RC shaft sinking rigs that were also impaired, have found a promising opportunity that may lead to a contract in 2025FY. If successful, this could also lead to a re-impairment, incremental profits as well as help re-establish the credentials of the technology.

The most interesting technology under development is the **blind shaft boring (SBS) system** that promises to be a game changer for the mining industry and generate significant profits for MDI and its co-shareholder, the IDC. The 4.3m diameter prototype is being trialled at Fochville, which even when the test is over in Q2:24, will require significant capital and several years to develop to the point where it can be regarded as 'proven'.

The preferred interim solution is to find a sponsor to provide an RB contract at a fixed price with limited risk but allows MDI to construct the shaft with the SBS at MDI's own risk in the event of underperformance. If solutions like this are not available, then MDI and the IDC may have to assume more development and funding risk.

MDI can invest about $30m/a in capex or acquisitions. About $15m/a is required for maintenance leaving $15m/a for growth opportunities. The funds for growth must be shared among a range of possible investments including the SBS, new RB machines and further investments in the A&R Group. At present, there is no capital allocation framework that encompasses all investment possibilities.

The rapidly evolving contract market and the unpredictable availability of possible acquisitions or investments to grow MDI can result in considerable short-term variations of its growth tactics and its budgets. So, the large machine build could fall away when and if the current mining investment boom ends.

MDI recently secured an additional $30m debt facility from Absa. This will probably be used to refinance the $35m of existing facilities due to Absa in September 2025 and may provide MDI more working capital flexibility.

We forecast **basic earnings** to grow from **USD9.7c/s** in 2024FY to **USD19.4c/s** in 2026FY. The 2024FY estimate is impacted by the large impairment of USD7c/s and our 2025FY and 2026FY forecasts assume no re-impairments, further asset impairments, investment losses as well as fair value uplifts, all of which are now possible. **Headline earnings** are forecast to grow from USD16.7c/s in 2024FY to USD20.7c/s in 2026FY. In ZAR terms, we forecast HEPS of ZAR3.20/s in 2024FY increasing to ZAR3.93/s in 2026FY.

Our valuation of MDI must choose a most likely future and a more speculative future among the several options known to be available to the company and make some allowance for possible deals in the future. Our base case forecast valuation of **R14.28/s** assumes the acquisition of 15% of A&R Group without organic growth, four new machines and the continuation of the SBS trial into 2025FY. In 2026FY, we forecast another four machines to be built, the return of the MTB1 to contractual work and investment in the MTB2.

Our speculative case, which values MDI at **R15.44/s,** assumes a new large drilling contract for MDX and the HCJV in 2026FY and assumes the underground mining capital cycle continues to grow, which will encourage another three machines to be built in 2025FY. We also assume that A&R Group can grow organically in USD terms.

APPENDIX 1

H1:24 in the rear view mirror

Master Drilling increased its revenue by 17% and achieved headline earnings of USD9c/s or ZAR168c/s in 2024h1, both of which were slightly down from the H1:23 period. The basic earnings of USD2c/s were materially affected by a $12m impairment of the MTB and other specialised rigs.

The consolidation of the A&R Group was finalised in August 2022, which means that comparisons can now be made between H1:23 and H1:24 as well as between H2:23 and H1:24. Beyond the acquisition and consolidation of the A&R Group comparisons between H1 and H2 results for the past two years have been made more difficult by large and unanticipated one-off adjustment to 'other costs' as well as exchange rate adjustments in the audited accounts.

Segment reporting shows the continuous revenue improvement of the Raise Boring (RB) business over the past three six month periods. Revenues increased by 20% from $84m in H1:23 to $101m in H1:24. RB's GP performance fell back in 2023h2 but increased to $29m in H1:24 and is the key driver of MDI's organic growth in H1:24.

The **geographical segment reporting** along with the interim presentation provides some additional colour around the group's RB businesses outside of Africa in H1:24. The weakest region remains **Central and North America** which despite generating $18m of revenue, only received $0.4m of GP. This region has been under intensive management care and restructuring to improve performance and reduce overheads.

The gross trade receivable for the region amounted to $8m, due mostly to weak payment terms.

The second weakest region in the period was **South America** where $32m of revenue converted into a respectable $5m of GP but only $1.6m of operating profit. Together these two regions generated $50m of revenue but only $2m of operating profit.

The gross trade receivables of South America amounted to $22m which provides a picture of payment terms that range between 120 to 180 days for some key contracts in Chile and Peru. The Brazilian debtor's book of $5m may reflect the fact that most contracts in the country stalled in H2:23.

The **Rest of the World** segment did remarkably well. On revenues of $23m the segment generated $9m of GP and an operating profit of $6m. These results reflect good performance in India as well as rapid expansion of the RB business into civil engineering and other contracts in Europe. These results were achieved despite the continued poor performance of the Australian business. The Indian contract receivables amounted to $5m of the region's $6m, suggesting that payment terms in these jurisdictions are also very stretched.

Africa is usually the bedrock of the RB business, except for a very poor 2023h2. The revenue and GP trends of this region must be estimated by extricating the other businesses. We estimate that the Africa business generated $31m in revenues for a GP of c. $16m. If our estimates are correct, they appear to confirm that MDI generates as much GP from Africa as it does from all the other regions combined thanks partly to excellent GP margins as well as good operating performance. The better GP margins also reflect the need to adjust for the (rising) risk of operating in sub-Saharan Africa as well as its competitiveness.

Figure 3: Estimated regional RB revenues and GPs (H1:24)

H1:24	Rev	GP%	GP
S America	29	16%	5
NA+Central	18	2%	0
Africa	31	49%	16
Oz+EU+India	23	38%	9
	101	**29%**	**29,3**

MDI presentations, SBG Securities Est.

The **A&R Group** strongly supported MDI's GP growth by increasing 46% in H1:24 when compared to the prior comparable period (pcp). Its performance in 2024h1 appears to have lost momentum with both revenue and GPs falling from H2:23.

The **Rock Boring Technology** segment reported weaker yoy revenue and GP. The Rock Boring Technology segment is now restricted to the revenue and profit generated by the Reef Extraction System currently being developed for and paid for by ARM.

The revenue and GP contributions of the **Support Services** segment in H1:24 fell both from the pcp as well as from H2:23.

MDI's **Slim Rigs** segment reported a large surge in revenue and GP in 2023h2 but both metrics have fallen back in H1:24. The segment results are based on **MDX,** which owns and manages 48 rigs.

MDX's large increase in GP in H2:23 was supported largely by a rental agreement with the **Hall Core JV (HCJV)** which ceased by the beginning of H2:24 because of cutbacks at Mogalakwena. The business has pivoted away from small exploration contracts in the search for larger contracts offering critical mass. The difficulty of finding these sorts of contracts meant that the fleet only achieved utilisation of 25%. Fortunately, MDX was able to provide services to owners of third-party machines which contributed to the H1:24 GP of $1m.

MDI also invests in another slim rigs business through a 50% non-controlling stake in the HCJV held through MDX. The HCJV, which owns and manages 33 rigs, reports its profit through the 'profit from associates' line in the group income statement. These rigs include an assortment of diamond drilling as well as resource and grade control rigs including percussion and RC.

The HCJV has also faced difficulties due to the unexpected downscaling of the surface drilling contract at Mogalakwena from 23 to 15 rigs. We estimate that the JV was loss making in the H1:24 period.

From a **group income statement** perspective, a total GP of $37m was achieved in H1:24, which was strongly up from H1:23 but flatlined from H2:23. The group's operating profit fell sharply to $8m due to the $13m impairment of equipment caused by the lack of visible success with contracting out the MTB1 and the RC shaft sinking rigs. Without the impairment the operating profit would have been $21m, which is not easily comparable to either H1:23 or H2:23 due to exceptional adjustments and unequal provisions.

MDI's profit before tax fell to $6m and thanks to a remarkably low tax expense of $2m, after tax profit fell to $3.6m of which 80% was attributable to the company.

Cash from operating activities increased significantly from the $20m achieved in 2023h1 to $33m in H1:24 but only marginally from $32m in H2:23. Net cash from operating activities improved from $22m in H2:23 to $28m in H1:24. The sharp improvement reflected lower finance costs and tax paid, neither of which are expected to reflect an alignment with the full-year's likely expenses.

The net **cash from investing activities** of $20m was materially higher than the comparable period's spending of $11m. The PPE spend of $20m in H1:24 was comparable to the

$22m spent in H2:24. The split between maintenance of 55% and expansion was kept intact. Of the $20m spent on capex in H1:24, $17m was spent on plant and machinery and assets under construction.

Most maintenance capex is directed to the existing machinery of the Raise Bore business. Expansion capex was allocated to new RB machines and to new machinery like the SBS prototype. We estimate that about $10m was spent on RB maintenance and $12m on RB expansion projects.

An ongoing feature of the balance sheet is the reduction in book values of the assets due to the weakness in the rand, which in H1:24 rand reduced MDI's USD-based PPE balance by $5m. The reduction of dollar values of the PPE because of weaker rand trends has been a long-standing feature of the accounts.

MDI has continued to pay an annual dividend which increased from $3m to $4m in H1:24. The impact of these payments and the $2m repayment of debt was offset by debt drawdowns of $3m in H2:23 and $4m in H1:24. As a result, **total cash less forex adjustments** increased from $28m in H2:23 to $32m at the end of H2:24.

The debt drawdowns appear to indicate that MDI is running a fine line between spending on capital and the need to ensure liquidity at the centre to 'afford' its dividend payouts. As a result**, total interest-bearing borrowings** increased from $44m to $46m. These liabilities are a loan from Absa that is partly rand- and partly USD-denominated and which is secured by $96m of moveable equipment as well as the SA debtor's book.

The debt is held at the Master Drilling Group level in South Africa but the cash on the balance sheet is dispersed through the subsidiaries to provide them with liquidity. Possibly only $12m is easily accessible to the centre in a two-month period. The same dispersion applies to the cash generated from operations which is not always available to service debt, invest in capex or dividends which are usually paid from the centre, so the usual liquidity metrics are not applicable.

MDI's **working capital** is also dispersed through its organisation. Its **inventories** have increased in value from $48m at the end of 2023FY to $52m reflecting both increased costs and RB fleet activity. Consumables and cutters are the largest part of the inventory.

Trade and other receivables decreased from $76m to $72m. However, normal trade receivables prior to adjustments fell from $64m to $58m despite the extended credit terms being experienced in some regions, which provided a boost to cash flow from operating activities in H1:24. MDI's contracting business also relies on prepayments for expenses that are incurred typically during relocations amounting to $6m at the end of H1:24.

The company has increased its **trade and other payables** from $64m at the end of 2023FY to $69m at the end of H1:24. The largest part of this was the normal trade payables which increased from $39m to $45m. This is an aggressive increase and results from MDI passing on the extended payment terms it must accept to its own suppliers.

The improved trade payables and fall in trade receivables created a material and one-off $6m benefit to the cash generated from operational activities.

In summary, MDI's H1:24 results were a strong improvement on the 2023h1 period but remained in line with the H2:23 period. The Raise Bore business returned to growth despite the issues facing some of its regions in H2:23. The A&R Group contributed strongly to GP growth over the period although its growth seems to have flattened out from H2:23. Slim Rigs' contribution has also fallen back in H1:24 after an excellent H2:23.

APPENDIX 2

2024FY and beyond

Despite the recent addition of A&R Group and the continued focus on the rock cutting projects and equipment, MDI's earnings growth as well as cash flows will remain dominated by the Raise Bore business for the foreseeable future. Some of MDI's other businesses are once again promising to generate additional layers of growth as management works to restore the credibility of the MTB1 and looks to acquiring a larger stake in the A&R Group. These layers as well as continued strong contributions from the A&R Group should offset the weaker performance of the Slim Rigs business and the Hall Core JV.

Figure 4 below summarises our revenue and GP expectations for the various segments of the business.

Figure 4: Segmental revenue and GP forecasts

Revenue	2023A	2024F	2025F	2026F
Industrial Products	33 958 450	37 894 485	37 894 485	37 894 485
Raise Boring	177 134 224	205 238 400	224 982 000	243 648 000
Support Services	18 009 488	6 000 000	6 000 000	6 000 000
Slim Drilling	10 599 275	8 000 000	6 000 000	6 000 000
New Tech (MTB)	3 096 104	1 600 000	1 600 000	1 600 000
Total Revenue	**242 797 541**	**258 732 885**	**276 476 485**	**295 142 485**
Industrial Products	11 584 344	11 368 346	11 368 346	11 368 346
Raise Boring	48 958 912	63 371 520	69 294 600	74 894 400
Support Services	2 472 104	1 380 000	1 380 000	1 380 000
Slim Drilling	4 148 896	2 000 000	1 500 000	1 500 000
New Tech (MTB)	1 267 575	608 000	608 000	608 000
Total GP	**68 431 831**	**78 727 866**	**84 150 946**	**89 750 746**

MDI Reports, SBG Securities estimates

The Raise Bore segment – following the underground mining capital cycle

We estimate that the RB business generated $13m of operating profit in H1:24 out of what would have been $20m if there had been no impairments. However, the segment's percentage contribution to MDI's share of profit after tax is probably higher. In the past two years, management has recommitted to organic growth in the larger segment of the RB business. As a result, MDI has increased its larger rig fleet with diameters >4.5m from **87** in 2022FY to **95** in 2024h2. These include RD7s and RD8s and MDI now owns three of the five largest machines in the world. It is also developing three RD6 DC Low Profile rigs for delivery in 2025.

The RB business is seeing strong global demand for the large machines, which appears to be following a capital investment cycle in many underground mining regions. MDI's success in generating orders for its large machine fleet has underlined its competitive advantages, which include cheaper machines, shorter lead times and competitive rates.

As a result, another **9** machines are being built and booked for contracts in Africa, Canada, the US and South America. Of these, **7** are very large machines. This build should see the large machine fleet to grow to **97** by 2024FY-end, **101** by the end of H1:25 and **105** by 2025FY-end.

The capital cycle and MDI's rig build promise to make the large fleet the driver of MDI's real earnings growth over the next 24 months. The larger machines generate better utilisations even with the difficulty of moving them to new locations. They also offer longer contracts. As importantly, ARPOR growth from the **$184,000/month** achieved in H1:24 can be expected to increase to **$210,000/month** as more of the ultra-large machines get deployed from the end of 2024FY into 2025FY and 2026FY.

From a regional perspective, Canada has recently generated considerable RFQs for large machines in the 'battery metal' mines and MDI is expected to benefit from a proportion of the order flow. This should ensure that its current rigs on standby in the country return to work and that further large rigs enter the country. This may allow the region to reach critical mass and become a meaningful profit centre from H2:25 after a period of suffering losses related to the difficult operating conditions and competitive markets.

Similar demand for large rigs has appeared in Australia where MDI will either invest in more rigs or acquire a company to facilitate the order book and to acquire additional machines.

Large rigs also play an important role in Africa. This is a region where MDI's competitiveness is strong, based on its ability to provide large rigs quickly and use its South African cost base and personnel as well as take on the higher risks associated with the region.

By comparison, the **smaller rig fleet** has fallen from **60** in 2021FY to **45** in H1:24 and is likely to fall further in the years ahead. Rising governance standards no longer allow smaller rig contracts to be rolled over and their utility in generating larger contracts has been diluted. The small rig fleet generates 17% of the RB segment's revenue but very little profit and we expect that only **40** machines will be in the fleet by 2027FY, with impairments of c $1m-$2m/a.

Part of the reason for the expected decline in numbers is MDX's decision to winnow out unprofitable contracts and lose market share if necessary. This should improve the ARPOR of the remaining small rigs.

The smaller rigs are still useful in certain regions for narrow vein deposits. The improvement of small rig utilisation to 69% recorded in H1:24 is partly due to the lower number of rigs in the fleet but also to strong performance at the Peruvian lead zinc mines. Nevertheless, these small rig contracts are affected by competition and are marginally profitable.

Considerable effort has been made to improve the **Mexican** business and MDI has reduced the numbers of rigs in the country and simplified management structures throughout the Central and North America region. There are a considerable number of requests from gold miners in the region, which indicates that a regional rebuild is possible within 12 months.

South America is also showing signs of improvement. Utilisation and efficiencies are improving in Chile and the slew of one-offs that affected the region appear to have diminished. Two gold contracts in Brazil that were suspended due to geo-mechanical and slimes dam safety issues, are now being reactivated along with the potential for using the larger machines that have been deployed 'on spec' to the region. This promises high upfront costs in the short term but better revenues, longer contract periods, higher GP margins and operating profit contributions from 2024h2 into 2027FY.

MDI's **European** business has seen a remarkable 2024FY, with large engineering contracts performing well. In 2025FY, the business could weaken slightly due to the timing of replacement contracts. In the medium term, Boliden, a major client, has made acquisitions in both Sweden and Portugal that promise to expand MDI's footprint and its contributions to the Rest of the World business from 2026FY.

We not only expect the number of larger rigs to increase over the next two years, but all operating and financial metrics should also improve in most of the regions over the next two to three years. **Fleet utilisation rates** may be an exception. Utilisation is defined as the number of rigs that have been employed for a full month, but it also provides insight into what percentage of the fleet is being maintained, in transit or delayed by mining clients.

Utilisation rates also reflect fleet management decisions. For example, if small rig fleet utilisation rates fall below 50%, rigs may be retired and impaired, which will then increase utilisation rates. For larger rigs in the current strong market, an increase in utilisation above 80% may catalyse the construction of more rigs, which could suppress utilisation metrics in the following year.

MDI aims to keep the average fleet utilisation at 75% and the large machine utilisation at 80%. These metrics are defined by experience as ideal levels reflecting two-year maintenance cycles, keeping the flexibility to rotate machines from region to region and, if necessary, put machines on speculative standby to create contracting opportunities.

ARPOR is another key revenue metric that has several explanations. For example, it reflects the sizes of rigs in service, with the larger, more expensive rigs creating higher monthly revenues. ARPOR can also mirror cost increases for new contracts. However, there is a third explanation which is equipment efficiency. This means that a rig that drills for eight hours a day will generate more metres, higher ARPOR and more GP than a rig that operates three hours a day. This rig utilisation metric can be as low as 25%.

Improving rig utilisation rates can be an important way of improving ARPOR, GPs, operating profits as well as reducing lazy capital and is currently the focus of MDI's efforts to improve performance.

There is also a possibility that some of the $4m impairment of RC shaft rigs that took place in H1:24 may be reversed in 2025. The search for new contracts for the specialised machines appears to have created new opportunities in the Far East. A re-impairment would be validation of MDI's drive to create machines with new technology options across its RB portfolio.

Slim Rigs future – difficult times

The Slim Rigs future is more austere. The loss made by the HCJV in H1:24 will probably deteriorate in H2:24 after the surface rig contract reduction from 24 to 15 rigs was recently followed by an underground rig reduction from 5 to 3 rigs.

The contract at Mogalakwena ended at the end of December 2024. The JV expects to be awarded rolling short-term contracts to keep the existing rigs on site. However, the motivation to continue investing in safer, but expensive new technology rigs has dimmed. Instead, we expect a focus on cheaper, older machines to maintain the contract.

MDX may also be affected by the Mogalakwena cutback as it has several rigs doing work on the mine independently from the HCJV.

MDI has been through various iterations around its investments in the Slim Rigs business. An early proposal was to buy control of the JV by merging it with its MDX subsidiary but as the contract expiry date approached, the commercial logic and the price asked by the HCJV minorities put a brake on the idea. It was then superseded by a proposal to make a joint MDX/HCJV bid to win the resource definition and grade control drilling contract at Kolomela.

This was unsuccessful. As is happening at Mogalakwena the commitment to safety by employing newer machines and new technology may no longer be top of mind for Anglo American Group companies and the cheaper bid won.

The Kolomela bid was hoped to absorb MDX's as well as the HCJV's excess rigs. Now, both parties will have to look for similar contracts independently, which may require them to bid against each other or enter into joint bidding arrangements. Both parties may also find themselves bidding against its JV partner, Hall Core. MDX's future contracts will probably be outside South Africa where competition from local companies is expected to be strong with less emphasis on safety.

The loss of the Kolomela bid may require an accelerated impairment of the ordinary and the recently developed specialised rigs in both businesses but it does release capital from the 2025 schedules.

The HCJV has only generated $2m of profit for MDI, well short of the $5m invested by MDI and the JV looks unlikely to improve its profitability in the foreseeable future. In the event that the JV fails, it will put at risk some R50m ($3m) of loans made to HCJV as well as reduce the valuation of the business, which could create fair value losses to the detriment of both basic earnings and HEPS metrics.

A&R Group future –unsaturated markets and regulatory support

A&R Group performed well at the GP level for MDI in H1:24. However, in the past two periods the revenue and GP metrics have grown. The group's performance at the PAT level is not disclosed in the interim results but can be estimated via the put option agreement discussed below as c. $5m.

MDI expects rand revenues to increase by 20% p.a. in the near term. This should improve USD GPs although margins may shrink. The reason for these bullish expectations is the DMRE's mandatory requirement that Level 9 anti-collision devices must be fitted on all vehicles and workers in South Africa. At present, A&R Group companies have installed their systems on 27,000 personnel and 1,200 underground Trackless Mobile Machines (TMMs).

The TMMs fitted with the group's detectors represent only 24% of the underground fleet. Although there are competitors such as Epiroc and Sandvik, their detectors are limited to operations that use their equipment. This means that the South African market for underground anti-collision systems is still three years from being saturated.

Another promising A&R Group technology is the missing persons locator (MPL) that relies on a network of underground RF transmitters to record the passage of people and machines past recording centres. This technology has been fitted to 28% of South Africa's 277,000 underground workers.

The MPL does have competitors with different technologies, but the group has a proven and growing foothold in the market even without the benefit of the additional coercive legislation that the DMRE is considering. Legislation could significantly accelerate the group's revenue and profits.

Longer term, the group may offer scraper winch detection systems and connectivity into the working stopes, which will bring the future world of high data transmissions underground closer and allow remote operation of mining equipment.

MDI has a put option exercisable against it for 24% of A&R Group. When exercised, MDI will own 75% of the A&R Group. The exercise price is based on a historical three-year average of a 5x to 6.5x multiple of earnings plus royalties. The liability of $11m would be paid over five years at $2m/a. This is considerably lower than the $19m previously estimated based on the put option of 49%, which would have been a major and potentially unaffordable transaction.

The minority owners of A&R Group were originally expected to exercise their put option at the end of the 2024FY. However, they are delaying the finalisation of the transaction to improve the value of the put option, which relies on historical performance. The inference is that they are expecting A&R Group to be a more profitable company in the year ahead. This also implies that the rand value of the put option will also rise, offset, perhaps, by the stronger R/USD exchange rate.

MDI remains keen to acquire more of A&R Group even though it is buying a company at a significant premium to its own rating. This is because it expects A&R Group to be considerably more profitable in the years ahead. However, it may reduce its 24% acquisition to 16% by on-selling part of the stake to A&R Group managers.

We forecast the option agreement will be exercised within the next six months, requiring $2m/a in payments. However, based on the put transaction multiples, we expect MDI will generate an increased PAT of approximately $2m in the 2025FY. We expect the acquisition will trigger a fair value uplift.

New technology future – re-impairments and new possibilities?

MDI's new technology revenue is now derived from its work on the **reef extraction system**. The system will be fully tested at its workshops in H1:25 and is expected to be deployed to ARM's Bokoni Mine or undergo on-site tests. Research and development is funded by ARM, which essentially owns the technology, and it creates a small GP for MDI.

The **MTB1,** which was refitted and upgraded after being withdrawn from the Mogalakwena contract in April 2022, was unable to secure a new contract by H1:24-end and had to be impaired by $8m, leaving approximately $4m of value in the machine and its spares and inventory.

MDI management has been looking for new contracts and it now appears that some interest has emerged for a Q2:25 contract. If confirmed, it may allow for a partial reversal of the impairment based on DCFs of the contract. However, it represents an exciting rejuvenation of a technology that we had expected to remain dormant for several years although we had included its possible profits in our optimistic valuations.

Another surprise has been the interest in the **MTB2.** This is designed to be a large diameter machine more suited to large-scale mechanised underground mining than the MTB1 and built by CCHRI, a Chinese manufacturer. Codelco initiated contact with Master Drilling and others for tunnel boring solutions but its fall from being a Tier 1 to Tier 3 miner as well as its extended payment terms of 120 days was negatively viewed by management.

More recently, MDI reached an agreement with its partners in the Besalco JV to use the JV to fund its share of the c. $20m investment required to build the MTB2. This appears to have swung the needle back to enthusiasm for the new project. At present, Codelco has yet to issue RFQs and it appears as it is using the process to learn its way into the MTB market, which may delay awarding of the contract to 2026.

If the contract is won by MDI, the MTB2 may only be ready for contractual work in 2027 when it could generate an appreciable benefit to the GP. MDI is also exploring other funding options for both the MTB1 and MTB2 that could include machine sale and buy-back arrangements.

The most important technology for MDI remains the **SBS**. The original IC was bought by MDI in patent form and by 2019 a proof-of-concept trial of how to extract the chips generated by the technology was successfully conducted and patented. MDI has since sold 50% of the technology company to the IDC, which led to the building of a 4.3m diameter prototype that commenced a 50m trial sink in July 2024.

Progress has been slower than expected and the current expectation is that the trial sink will only be completed by May 2025. The current designed advance rate of the system is 3m/d and bringing the prototype to the point where this metric is achieved over a sustained period is likely to prove to be expensive and time consuming.

At present, the SBS trial is costing R2m/m, which is being funded equally by MDI and the IDC in the form of loan funding. The loan funding is due to be repaid in 2027, and if not possible the funds can be converted to equity.

MDI hopes to be able to find a sponsor that is prepared to support and use the prototype after the trials. The experience would help bring the technology closer to the ‘proven’ category.

One option is to use the prototype to build a shaft currently planned to be done by Raise Boring. The shaft would not be on a critical development path and would allow MDI the option to generate revenue equivalent to what an RB rig would have generated without the risk of penalties. MDI would still be required to go on-risk for delays and potential losses.

Another innovative and attractive idea is to use the 4.3m SBS to create a blind shaft which is then used to open a void at the bottom to allow a conventional large diameter RB to be used with minimal risk. This could allow MDI to avoid having to construct another larger diameter SBS prototype at considerable capital cost.

MDI’s capital allocation maze

MDI’s choices of how to spend its capital are affected by the evolution of swiftly changing mining and commodity cycles. This has resulted in equally swift changes to its strategic/tactical objectives. For example, after several years of attempting to grow the RB business by acquisition, it reverted to constructing new RB machines, both for contracts and on ‘spec’. The rapid change in market conditions can result in budget-by-budget or ad hoc changes in capital allocation.

The amount of capex or acquisitions that MDI can fund from current cash flows is probably around $30m, assuming repayment of debt at $3m a year. About $15m of this must be spent on maintenance of equipment and cannot easily be reduced and will rise as the number of machines in the fleet increases. The remainder must be shared by competing growth priorities such as the ongoing SBS trial, the construction of new RB machines as well as corporate acquisitions.

These competing growth priorities cannot be easily placed in a capital allocation framework. They range from undefined business outcomes in the case of the SBS to historical PE multiples of between 5x and 6x in the case of some corporate acquisitions. Regardless of how and why it makes its investments, MDI looks at its earnings as a key measure of growth.

Although MDI wants to grow earnings, its ability to invest in growth is limited by the cash it can extract from its dispersed organisation and bring to the centre. For example, $20m of the $32m of cash on its balance sheet is needed to maintain liquidity in the subsidiaries. Even earnings-rich acquisitions like the A&R Group may have limited cash available to the centre, if they are growing and have minority shareholders.

The corporate acquisition most likely to occur in 2025FY is the purchase another 24% of the A&R Group, which will nominally absorb $2m/a of investments for five years and generate $2m/a of additional profits. The transaction will probably evolve so that MDI ends up with 66% of the group and the remaining 8% on-sold to current and future managers of A&R Group. However, there is no certainty when the minority shareholders of A&R Group will exercise their put option against MDI, which creates uncertainty around its budgets.

Another variable is the possible investment in the MTB2, which depends on the finalisation of the contract adjudication process under way at Codelco. This could be finalised in 2025FY and require up to $10m capex if the contract is awarded to the Besalco JV. The unpredictable timing and outcome of this contract also creates budget uncertainty.

Debt can provide the short-term solvency needed to make transactions at the centre and issue dividends. Absa has lent MDI $47m with recourse to $90m of moveable assets as well as its South African debtor’s book at rates of SOFR/JIBAR+c.3%. A further $30m facility has recently been made available to MDI, which may be used to retire some $35m of the existing Absa debt in September 2025.

In summary, MDI should be able to grow core earnings through the Raise Bore business for several more years while the mining capital cycle remains supportive. It has a range of other growth opportunities, but uncertainty exists around which of them will be successful and desirable as well as their timing. The basic earnings may also be impacted by unforecastable re-impairments as well as further impairments over the next two years.

Companies Mentioned (Price as of 20 Jan 2025)
Master Drilling Group (MDIJ.J, R13.50, FVVR: R14.28/s – R15.44/s)

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2024-10-18	**13.98**	**15.2**	**Current Analyst**

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