

Equities

14 July 2011 | 26 pages

Metals & Mining

Coal and mineral sands boost, but costs spoil the party

- **Bullish coal outlook** — Rapidly growing emerging market demand, infrastructure constraints and permanent cost increases are likely to support elevated coal prices for the foreseeable future. We recently raised thermal coal price forecasts by 10-50% and hard coking coal price forecasts up to 30% over the next 10 years.
- **And higher mineral sands prices** — Following Iluka's significantly better than expected pricing settlements on 6 June, we hiked rutile prices up to 47% and zircon prices up to 20% over the next five years.
- **...but costs are biting** — Cost inflation will likely erode the benefit of higher commodity prices. In South Africa, coal rail tariffs and electricity costs are rising up to 25% this year, unions are demanding double digit wage increases, and consumables prices have shot up in line with commodity prices. A strong rand is not providing any relief. We bumped up unit cost forecasts for SA miners, offsetting the positive impact of higher commodity prices to some extent.
- **The winners: Anglo American and Exxaro** — Our Exxaro earnings forecasts increase up to 10% as cost increases are outweighed by higher coal and mineral sands prices. Our target price increases 5% to R200, reflecting higher near-term earnings and cash flows. We raise Anglo's earnings by up to 7% to reflect the net benefit of higher coal prices, but our target price remains unchanged at £38 (R460).
- **The losers: ARM and Assore** — ARM's coal exposure is limited to only 8% of NPV and therefore higher coal revenues are more than offset by higher costs across all its divisions. We cut ARM's earnings by up to 10% and reduce our target price from R260 to R240. Assore has no coal or mineral sands exposure. Higher costs lower our earnings estimates by up to 12% and we reduce our target price from R300 to R280.
- **Pecking order** — Anglo American is our pick in the SA general mining sector, with an expected total return of 41%. We also recommend buying ARM, Assore and BHP Billiton, supported by favourable long-term fundamentals, strong volume growth into high-margin industries, comfortable balance sheets, and attractive valuations. We remain cautious on Exxaro (Hold) and Kumba Iron Ore (Sell) due to stretched valuations, unsustainably high near-term margins, cost pressures and infrastructure constraints limiting growth, particularly for coal.

- Industry Overview
- Target Price Change
- Estimate Change

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Ticker	Rating		Target Price		Current Year Earnings Estimates		Next Year Earnings Estimates	
	Old	New	Old	New	Old	New	Old	New
AGLJ.J	1M	1M	R460.00	R460.00	US\$5.36	US\$5.36	US\$6.79	US\$6.79
ARIJ.J	1M	1M	R260.00	R240.00	R17.33	R16.22	R22.54	R20.23
ASRJ.J	1M	1M	R300.00	R280.00	ZA¢2,713	ZA¢2,654	ZA¢3,150	ZA¢2,902
EXXJ.J	2M	2M	R190.00	R200.00	R20.77	R20.04	R22.76	R23.70
KIOJ.J	3M	3M	R430.00	R430.00	R55.72	R55.40	R57.32	R57.69

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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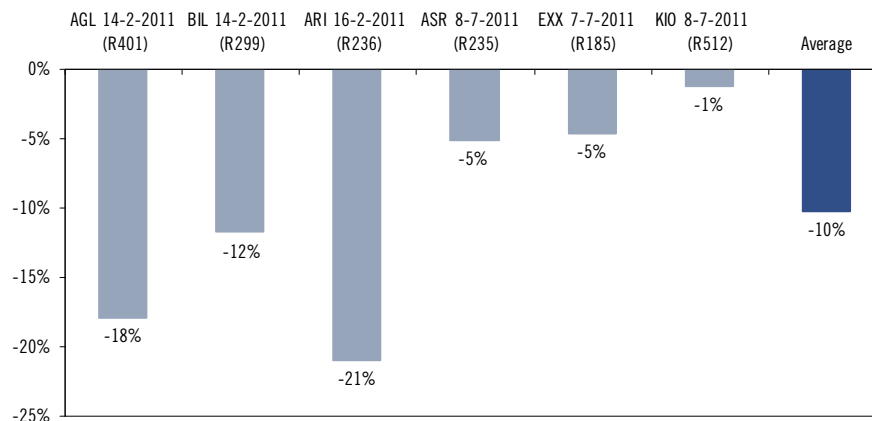
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Ranking the miners

South African listed miners' share prices have been punished due to recent global macro-economic concerns. African Rainbow Minerals has led the miners down, falling 21% since its 14 February high of R236. Kumba, Exxaro and Assore have performed relatively well recently and are not too far off all time highs.

Figure 1. Share price declines since recent peak (date indicated on chart)



Source: I-Net, CIRA

We believe some miners offer value from current share price levels. Anglo American is our pick in the SA general mining sector, with an expected total return of 41%.

Figure 2. Miners ranked by total expected one-year return*

Company	Unit	1-Yr target price	Current price*	1-Yr target capital return	1-Yr fwd dividend yield	Total 1-Yr expected return	12-month forward rolling PE	Rec. & risk
Impala	ZAR	240	171	40.4%	3.2%	43.6%	11.9x	BUY (M)
Northam	ZAR	56	39	42.9%	0.5%	43.4%	17.3x	BUY (M)
Anglo American	ZAR	460	330	39.2%	2.1%	41.4%	7.9x	BUY (M)
Xstrata	GBP	18	14	30.5%	2.2%	32.7%	8.8x	BUY (M)
ARM	ZAR	240	188	27.5%	4.0%	31.5%	9.2x	BUY (M)
Vale	USD	42	33	29.2%	1.6%	30.8%	6.6x	BUY (M)
Assore	ZAR	280	226	24.2%	5.3%	29.5%	7.7x	BUY (M)
BHP Billiton	GBP	30	24	23.0%	2.6%	25.5%	8.7x	BUY (M)
Lonmin	GBP	17	14	23.2%	-0.1%	23.1%	10.5x	HOLD (M)
Rio Tinto	GBP	52	44	17.6%	1.7%	19.4%	7.3x	BUY (M)
AngloGold	ZAR	340	293	15.9%	2.0%	17.9%	16.2x	HOLD (M)
Acquarius	Pence	357	310	15.2%	2.7%	17.8%	14.5x	HOLD (H)
Exxaro	ZAR	200	176	13.6%	4.2%	17.7%	8.0x	HOLD (M)
Anglo Platinum	ZAR	650	603	7.8%	2.5%	10.4%	15.6x	SELL (M)
Gold Fields	ZAR	95	104	-8.4%	2.9%	-5.5%	14.1x	SELL (M)
Kumba Iron Ore	ZAR	430	508	-15.4%	8.7%	-6.7%	9.0x	SELL (M)
Harmony	ZAR	85	93	-8.2%	0.0%	-8.2%	30.3x	SELL (M)
Average				18.7%	2.7%	21.4%	12.0x	

Source: dataCentral (13 July 2011).

dataCentral is CIRA's proprietary database, which includes Citi estimates, data from company reports and feeds from Reuters, Datastream, First Call, IBES and Toyo Keizai

Hiking coal price forecasts

In our recent report “No more tough times for the Coal Miners Daughter” on 4 July we increased coal price forecasts up to 50% over the next 10 years.

- **New pricing paradigm for coal** — The demand for coal from the energy and steel sectors appears to be unrelenting and is likely to keep coal prices elevated for the foreseeable future. With large parts of the industry handicapped by infrastructure constraints, it's being left up to too few producers to meet the strong demand from developing economies. This will leave the coal market exposed to sudden price spikes and a new premium on supply as disruptions become common place.
- **Demand rising from developing economies** — Despite the modest outlook for advanced economies, we think that the strong EM growth should keep global growth buoyant, at 3-4% this year and 2012, and even higher thereafter – well above the long-run norm of just below 3% YoY.
- **Coal still king in energy markets** — We have increased our price forecasts for thermal coal by between 10-50% over our new 10 year forecast. Thermal coal's share of the electricity generating capacity is rising, not only Japan and Germany (after the nuclear crisis in March) but also in developing economies. China and India are becoming significant importers as domestic production in both countries lags behind demand.
- **Metallurgical coal at a premium, but past peak** — As developing economies (outside of China) boost steel consumption over the next decade, demand for premium hard coking coal will remain strong. With new sources of supply scarce, we believe HCC prices have permanently jumped up to a new level. Therefore we have increased our forecasts of prices in 2014-2018 by an average of 15%.
- **Long Term Price Upgraded** — We have raised our LT thermal coal price to \$105/t based on rampant (and permanent) cost inflation. Our new LT HCC price of \$200/t reflects our views that the industry's high margins (~50%) are here to stay as a lack of new supply creates a high barrier to entry.

Figure 1 summarizes changes to coal price forecasts.

Figure 3. Changes to Citi's coal price forecasts

Average per calendar year	2011F	2012F	2013F	2014F	2015F	LT (Real)
Richard's Bay thermal coal (US\$/tonne)						
CIRA New	128	136	144	158	146	109
CIRA Old	134	123	109	105	105	94
% Change in forecast	-5	+10	+32	+50	+39	+16
Hard coking coal (US\$/tonne)						
CIRA New	294	275	248	240	230	200
CIRA Old	294	270	190	220	220	170
% Change in forecast	-0	+2	+30	+9	+5	+18
Semi soft benchmark (US\$/tonne)						
CIRA New	221	195	165	160	148	130
CIRA Old	219	179	128	120	120	110
% Change in forecast	+1	+9	+29	+33	+24	+18

Source: Citi Investment Research and Analysis

Significant upgrade to mineral sands prices

2H11 feedstock and 3Q11 zircon price increases achieved by Iluka have significantly exceeded our forecasts and we have made material upgrades to prices as a result.

Zircon Prices up 35-40% — 3Q11 zircon prices should rise by 35-40% to US\$2,160-2,240/t, significantly above our previous US\$1,800/t forecast. We have increased prices for 2012/13 to US\$2,400/t, previously US\$2,000 and US\$2,200/t respectively, as we expect the markets to remain very tight due to strong demand growth and limited supply increases.

Rutile prices up 70-75% — Our 2H11 rutile price increase is 70-75% to US\$1,310-1,350/t, up from US\$770/t in 1H11 and well above our previous US\$890/t forecast. With tight markets we expect further increases in 2012 and 2013 and have upgraded prices accordingly.

Figure 2 summarises changes to Citi's rutile and zircon price forecasts.

Figure 4. Changes to Citi's mineral sands price forecasts

Average per calendar year	2011F	2012F	2013F	2014F	2015F	LT (Real)
Rutile (US\$/tonne)						
CIRA New	989	1,400	1,400	1,400	1,400	550
CIRA Old	820	950	1,000	1,050	1,050	550
% Change in forecast	+21	+47	+40	+33	+33	+0
Zircon (US\$/tonne)						
CIRA New	1,789	2,400	2,400	2,400	2,400	850
CIRA Old	1,545	2,000	2,200	2,400	2,400	850
% Change in forecast	+16	+20	+9	+0	+0	+0

Source: Citi Investment Research and Analysis

Impact on earnings and valuations

Higher coal prices benefitted our estimates for Anglo American (24% of NPV), African Rainbow Minerals (8% of NPV) and Exxaro (33% of NPV).

Exxaro was the only beneficiary of higher mineral sands prices. Its mineral sands division accounts for 15% of its NPV.

Cost inflation will likely erode the benefit of higher commodity prices. In South Africa, coal rail tariffs and electricity costs are rising up to 25% this year, unions are demanding double digit wage increases and consumables prices have shot up in line with commodity prices. Shortages ranging from skilled labour to available rail infrastructure (necessitating expensive road transport) put further pressure on costs. Falling grades and increasing mining complexity are amplifying final product inflation. A strong rand is not providing any relief. We bumped up unit cost forecasts for SA miners, offsetting the positive impact of higher commodity prices to some extent.

Our Exxaro earnings forecasts increase by up to 10% over the next five years as cost increases are outweighed by higher coal and mineral sands prices. Our target price also benefits from higher near-term earnings and cash flows and increases 5% to R200.

We raise Anglo's earnings by up to 7% to reflect the net benefit of higher coal prices, but its target price remains unchanged at £38 (R460). Figure 5 summarizes earnings revisions for companies with a December year-end.

We made only minor revisions to Kumba's mining royalty and mining cost forecasts, which had a minimal impact on earnings.

Figure 5. Earnings forecast revisions for miners with December year-ends

FYE December	2011F	2012F	2013F	2014F	2015F
Anglo American diluted EPS (USD)					
CIRA New	5.36	6.79	6.55	6.11	5.57
CIRA Previous	5.42	6.65	6.11	5.77	5.55
% change	-1	+2	+7	+6	+0
Bloomberg consensus - 13 July 2011	5.96	6.86			
Exxaro diluted HEPS (ZAR)					
CIRA New	20.04	23.70	25.58	26.89	28.24
CIRA Previous	20.82	22.76	23.64	24.40	25.73
% change	-3	+4	+8	+10	+10
I-Net consensus - 13 July 2011	22.21	26.18	25.39		
Kumba Iron Ore diluted HEPS (ZAR)					
CIRA New	55.40	57.69	52.49	45.05	43.63
CIRA Previous	55.72	57.32	52.27	44.89	43.71
% change	-1	+1	+0	+0	-0
I-Net consensus - 13 July 2011	57.57	62.35	57.02		
Source: I-Net, Bloomberg, CIRA					

ARM's coal exposure is limited to only 8% of NPV and therefore higher coal revenues are more than offset by higher costs across all its divisions. We cut our ARM earnings by up to 4% and reduce our target price 8% to R240. Assore has no coal or mineral sands exposure. Higher costs impacts earnings up to 12% and we reduce its target price 7% to R280.

Figure 6. Earnings forecast revisions for miners with June year-ends

FYE June	2011F	2012F	2013F	2014F	2015F
ARM diluted HEPS (ZAR)					
CIRA New	16.22	20.23	25.94	24.61	27.61
CIRA Previous	17.33	22.54	28.07	25.55	28.02
% change	-6	-10	-8	-4	-1
I-Net consensus - 13 July 2011	18.00	25.73	31.31		
Assore diluted HEPS (ZAR)					
CIRA New	26.54	29.02	33.87	28.62	36.46
CIRA Previous	27.13	31.50	38.30	29.98	38.50
% change	-2	-8	-12	-5	-5
I-Net consensus - 13 July 2011	27.49	33.22	39.85		
Source: I-Net, CIRA					

Financial snapshot per calendar year

Figure 7. Earnings and dividend snapshot per calendar year* for South African-listed miners

Calendar year	2008	2009	2010	2011F	2012F	2013F	2014F	2015F
Anglo American								
EBITDA margin	36%	28%	36%	41%	43%	43%	41%	40%
EBIT margin	31%	20%	30%	34%	38%	36%	33%	30%
ROCE	31%	13%	21%	26%	29%	25%	21%	18%
Earnings per share (ZAR)	34.66	16.99	28.28	37.00	50.00	54.00	55.00	53.00
Earnings growth	13%	-51%	66%	31%	35%	8%	2%	-4%
PE multiple at R331	9.56	19.51	11.72	8.96	6.63	6.14	6.03	6.25
Dividend per share (ZAR)	3.36	0.00	4.72	6.60	8.60	10.60	12.60	14.70
Dividend yield at R331	1.0%	0.0%	1.4%	2.0%	2.6%	3.2%	3.8%	4.4%
BHP Billiton								
EBITDA margin	45%	44%	49%	51%	50%	51%	51%	53%
EBIT margin	37%	36%	41%	44%	43%	43%	42%	42%
ROCE	61%	32%	49%	67%	64%	55%	46%	36%
Earnings per share (ZAR)	19.26	17.48	23.12	30.15	34.14	35.20	33.83	34.12
Earnings growth	5%	-9%	32%	30%	13%	3%	-4%	1%
PE multiple at R267	13.84	15.25	11.53	8.84	7.81	7.57	7.88	7.81
Dividend per share (ZAR)	6.27	7.10	6.69	7.11	8.64	13.45	16.92	17.06
Dividend yield at R267	2.4%	2.7%	2.5%	2.7%	3.2%	5.0%	6.3%	6.4%
African Rainbow Minerals								
EBITDA margin	59%	25%	41%	44%	46%	45%	44%	41%
EBIT margin	54%	12%	32%	35%	38%	36%	35%	32%
ROCE	73%	7%	26%	32%	35%	35%	35%	32%
Earnings per share (ZAR)	25.57	2.52	13.13	18.78	23.37	25.13	26.61	25.53
Earnings growth	290%	-90%	422%	43%	24%	8%	6%	-4%
PE multiple at R189	7.38	74.96	14.37	10.05	8.08	7.51	7.09	7.39
Dividend per share (ZAR)	4.00	1.75	2.00	5.40	7.40	21.60	21.60	20.70
Dividend yield at R189	2.1%	0.9%	1.1%	2.9%	3.9%	11.4%	11.4%	11.0%
Assore								
EBITDA margin	69%	30%	48%	52%	51%	47%	45%	45%
EBIT margin	66%	20%	42%	47%	45%	40%	39%	40%
ROCE	141%	14%	41%	46%	45%	39%	39%	43%
Earnings per share (ZAR)	42.83	5.28	21.30	29.58	32.30	30.13	31.90	37.16
Earnings growth	431%	-88%	304%	39%	9%	-7%	6%	16%
PE multiple at R189	4.41	35.77	8.86	6.38	5.84	6.26	5.92	5.08
Dividend per share (ZAR)	2.50	4.00	3.40	9.00	12.00	15.00	18.00	20.00
Dividend yield at R189	1.3%	2.1%	1.8%	4.8%	6.4%	7.9%	9.5%	10.6%
Exxaro								
EBITDA margin	35%	30%	37%	41%	43%	43%	41%	39%
EBIT margin	29%	23%	31%	36%	37%	36%	34%	32%
ROCE	40%	27%	40%	43%	40%	38%	38%	37%
Earnings per share (ZAR)	10.06	7.02	14.37	20.04	23.70	25.58	26.89	28.24
Earnings growth	147%	-30%	105%	39%	18%	8%	5%	5%
PE multiple at R177	17.54	25.14	12.28	8.81	7.45	6.90	6.56	6.25
Dividend per share (ZAR)	3.75	2.00	5.00	7.30	9.90	10.60	14.00	14.60
Dividend yield at R177	2.1%	1.1%	2.8%	4.1%	5.6%	6.0%	7.9%	8.3%
Kumba Iron Ore								
EBITDA margin	65%	57%	67%	71%	68%	64%	61%	58%
EBIT margin	64%	55%	65%	69%	65%	61%	56%	53%
ROCE	146%	102%	152%	152%	126%	99%	78%	63%
Earnings per share (ZAR)	22.75	21.76	44.54	55.40	57.69	52.49	45.05	43.63
Earnings growth	131%	-4%	105%	24%	4%	-9%	-14%	-3%
PE multiple at R504	22.17	23.18	11.32	9.10	8.74	9.61	11.20	11.56
Dividend per share (ZAR)	21.00	14.60	34.50	45.00	47.00	46.00	39.00	40.00
Dividend yield at R504	4.2%	2.9%	6.8%	8.9%	9.3%	9.1%	7.7%	7.9%
Average earnings growth	117%	-37%	146%	34%	19%	4%	-1%	-1%
Average PE multiple	14.1	31.6	12.2	9.2	7.7	7.5	7.8	7.9
Average dividend yield	2.4%	1.5%	2.9%	4.1%	4.9%	7.0%	7.5%	7.6%

Source: Company reports, dataCentral, CIRA, Bloomberg *Note: ARM, Assore and BHP Billiton's numbers have been restated to reflect calendar years rather than June YE

Peer comparison

Figure 8. Mining company peer comparison

	Rating & risk	Price (US\$)	Historic P/E		Forward P/E		EV/ EBITDA		FCF yield		Div Yld		P/B		ROE		Perf % (USD)	
			2009	2010	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	Weekly	YTD
FTSE ALL SHARE (GBP)			18	27	12.1	10.9	7.4	6.8	6%	7%	3%	4%	2.7	2.4	25%	24%	-3%	2%
FTSE/JSE ALL SHARE (ZAR)			21	16	12.4	10.8	7.2	6.2	6%	7%	3%	3%	3.0	2.5	29%	27%	-3%	-4%
Major diversified miners																		
BHP Billiton	1M	38.6	19	12	9.0	8.8	5.7	5.2	9%	8%	3%	3%	3.5	2.6	42%	34%	-3%	-4%
Rio Tinto	1M	70.3	20	10	7.1	7.5	3.3	3.1	11%	9%	2%	2%	1.8	1.4	28%	21%	-3%	0%
Anglo American	1M	47.8	23	12	8.9	7.0	4.9	3.9	8%	11%	2%	2%	1.4	1.2	19%	20%	-5%	-8%
Xstrata	1M	21.7	21	12	9.7	8.0	5.7	4.8	3%	7%	2%	3%	1.4	1.2	15%	16%	-3%	-9%
Comp Vale Do Rio	1M	32.5	32	10	6.2	6.9	4.4	4.3	7%	6%	3%	3%	1.7	1.4	32%	23%	-2%	-6%
Average			23	11	8.2	7.7	4.8	4.3	7%	8%	2%	3%	2.0	1.6	28%	23%	-3%	-5%
South African mid-cap miners																		
Kumba - Attributable (74%)	3M	73.4	23	11	9.1	8.7	6.6	6.3	8%	9%	9%	9%	8.8	7.2	109%	91%	2%	15%
Exxaro - proportionately consolida	2M	25.7	25	12	8.8	7.4	5.2	4.3	0%	4%	4%	6%	2.7	2.2	37%	34%	-3%	25%
ARM	1M	27.5	20	15	10.3	8.2	4.7	3.7	4%	9%	3%	5%	1.8	1.5	19%	20%	-3%	-14%
Assore	1M	32.7	11	11	8.1	7.2	5.5	4.8	7%	12%	5%	6%	2.3	1.9	32%	30%	-3%	14%
Average			20	12	9.1	7.9	5.5	4.8	5%	8%	5%	7%	3.9	3.2	49%	44%	-2%	10%
Copper																		
Freeport Mcmoran	2H	54.1	18	12	9.2	10.3	4.3	4.4	12%	11%	3%	2%	3.0	2.4	38%	26%	1%	-10%
Equinox Mnrls	2H	8.3	119	20	16.0	12.4	9.0	6.3	3%	12%	0%	0%	2.7	2.1	20%	19%	0%	38%
Southern Copper Corp	2H	34.2	31	19	10.4	10.6	6.4	6.3	6%	4%	6%	5%	5.6	4.5	62%	47%	4%	-30%
Antofagasta	2H	22.7	33	23	10.7	9.6	4.5	4.1	12%	17%	5%	4%	3.2	2.7	32%	31%	-3%	-11%
Kazakhmys	1H	21.4	19	8	6.5	6.6	5.6	5.9	0%	0%	5%	5%	1.2	1.1	20%	17%	-6%	-17%
KGHM	3H	65.5	15	8	5.8	7.1	3.3	3.6	12%	11%	5%	4%	2.0	1.6	39%	25%	-11%	10%
Jiangxi Copper	1M	3.4	30	14	10.7	10.3	7.5	6.7	7%	11%	2%	2%	1.9	1.6	19%	17%	-5%	-1%
FST Quantum Minerals	1M	138.5	18	13	15.3	10.9	5.8	4.2	3%	4%	1%	1%	3.4	2.6	27%	30%	-8%	26%
Grupo Mexico	2H	3.5	30	17	9.0	9.0	4.4	4.3	10%	9%	6%	6%	3.6	2.7	44%	34%	3%	-16%
Average			35	15	10.4	9.7	5.7	5.1	7%	9%	4%	3%	2.9	2.4	33%	27%	-3%	-3%
Ferrous																		
Siderurgica Naci	1H	11.3	10	11	7.4	8.6	4.7	4.5	3%	3%	3%	4%	3.1	2.4	44%	31%	-8%	-29%
Mt Gibson Iron	2H	2.0	25	12	6.3	4.3	3.2	1.7	17%	24%	0%	0%	1.5	1.2	27%	31%	-2%	-9%
Atlas Iron	1H	4.2	-	-	16.3	9.7	11.0	5.3	6%	9%	0%	0%	4.3	3.0	30%	36%	-2%	32%
ENRC	1H	12.4	15	7	6.8	6.4	3.9	3.7	1%	-2%	3%	3%	1.4	1.3	22%	21%	-7%	-25%
Fortescue Metals	1H	6.8	45	15	9.1	7.9	5.6	4.8	1%	-6%	1%	1%	5.2	3.3	67%	52%	-4%	0%
Cliffs Natural	1H	94.8	-	14	6.4	7.0	4.4	4.7	10%	12%	1%	1%	2.0	1.6	40%	25%	0%	21%
Average			24	12	8.7	7.3	5.4	4.1	6%	7%	1%	1%	2.9	2.1	38%	33%	-4%	-2%
Coal																		
Macarthur	3M	16.1	24	26	20.2	19.1	11.6	10.0	5%	6%	3%	2%	2.5	2.1	16%	12%	35%	23%
Coal Allied Inds	1M	109.0	15	24	14.6	12.1	8.8	7.4	4%	0%	3%	2%	4.1	3.2	33%	30%	-3%	-11%
New Hope	1M	5.6	19	26	21.3	12.7	19.6	10.0	2%	-2%	3%	3%	2.1	1.8	18%	15%	2%	12%
Whitehaven Coal	1M	6.7	42	43	23.3	14.9	12.7	8.5	0%	8%	2%	3%	2.6	2.3	9%	17%	5%	-3%
Adaro Energy	1M	0.3	22	36	14.9	9.3	7.1	5.6	5%	10%	1%	2%	3.6	2.8	27%	34%	-1%	2%
China Coal	2M	1.3	15	15	14.0	11.5	7.3	6.6	-7%	2%	2%	2%	1.4	1.3	10%	12%	-5%	-17%
China Shenhua	1L	4.8	20	16	14.7	12.8	8.2	7.0	4%	6%	2%	3%	2.7	2.4	20%	20%	-6%	12%
Arch Coal Inc	2H	25.4	68	26	9.8	7.6	6.9	5.6	7%	14%	2%	2%	1.6	1.4	17%	19%	-4%	-28%
Peabody Energy	1H	57.9	30	19	12.3	10.4	7.0	5.9	5%	9%	1%	1%	2.7	2.1	24%	23%	-5%	-9%
Average			28	26	16.1	12.3	9.9	7.4	3%	6%	2%	2%	2.6	2.1	19%	20%	1%	-5%
Nickel & Zinc																		
Sterlite Industries	1M	3.7	14	12	8.0	6.9	3.7	3.2	-3%	4%	1%	1%	1.2	1.0	16%	16%	-7%	-13%
Norilsk	1H	261.8	19	10	7.0	6.7	4.4	3.9	10%	11%	4%	4%	1.9	1.6	32%	26%	0%	12%
Average			16	11	8.3	7.5	4.4	3.6	5%	8%	2%	2%	1.7	1.4	24%	21%	-4%	-2%
Average excl. precious			24	15	10.1	8.7	5.9	4.9	6%	8%	3%	3%	2.7	2.1	32%	28%	-3%	-1%
PGM																		
Aquarius Platinum	2H	4.9	237	28	17.5	12.6	8.6	6.9	8%	8%	2%	2%	2.2	1.9	18%	16%	-4%	-13%
Anglo American Platinum	3M	86.8	200	31	19.7	13.0	9.6	7.1	2%	4%	3%	4%	3.1	2.7	15%	22%	-5%	-16%
Impala Platinum	1M	25.0	19	18	13.4	10.8	7.0	5.8	4%	5%	3%	4%	2.1	1.9	16%	18%	-8%	-30%
Northam Platinum	1M	5.7	23	27	23.1	12.0	14.4	7.4	-4%	-2%	1%	2%	1.1	0.9	5%	8%	-6%	-17%
Lonmin	2M	21.7	-85	27	14.5	9.0	5.8	3.7	6%	14%	2%	3%	1.4	1.3	10%	15%	-7%	-30%
Average			79	26	17.6	11.5	9.1	6.2	3%	6%	2%	3%	2.0	1.7	13%	16%	-6%	-21%
Gold/Precious																		
AngloGold Ashanti	2M	43.3	-306	-9	17.1	16.0	7.5	7.0	6%	8%	1%	1%	3.2	2.8	22%	19%	2%	-14%
Gold fields	3M	15.3	32	20	13.1	15.6	5.2	6.2	7%	6%	3%	3%	1.7	1.6	12%	10%	4%	-18%
Harmony Gold Mng	3M	13.7	64	79	34.8	32.4	12.0	9.5	1%	4%	0%	0%	1.2	1.1	3%	4%	3%	5%
Barrick Gold	1M	47.0	26	14	10.6	10.9	6.7	6.6	4%	8%	1%	1%	2.0	1.7	21%	17%	2%	-12%
Newmont Mining	2M	55.3	21	14	11.5	13.8	5.5	6.2	9%	7%	1%	1%	2.2	2.1	19%	15%	2%	-10%
Newcrest Mining	1M	41.3	26	25	25.4	21.3	13.2	10.7	2%	5%	1%	1%	2.1	2.1	9%	10%	2%	-1%
Average			-23	24	18.7	18.3	8.4	7.7	5%	6%	1%	1%	2.0	1.9	15%	13%	3%	-8%
Average - all miners			27	21	15.5	12.8	7.8	6.2	4%	7%	2%	2%	2.2	1.9	20%	19%	-2%	-10%

Source: dataCentral (13th July). dataCentral is CIRA's proprietary database, which includes Citi estimates, data from company reports and feeds from Reuters, Datastream, First Call, IBES and Toyo Keizai

Commodity price and exchange rate forecasts

The commodity price and exchange rate forecasts below are Citi's house forecasts.

Figure 9. Commodity price and exchange rate forecasts (average per calendar year)

Average per calendar year	2007	2008	2009	2010	2011F	2012F	2013F	2014F	2015F	LT (Real)
Precious commodities										
Gold (US\$/oz)	697	872	973	1,225	1,449	1,325	1,225	1,125	950	950
Silver (US\$/oz)	13.59	15.06	14.80	20.72	34.22	26.00	22.38	19.13	16.00	12.00
Platinum (US\$/oz)	1,302	1,572	1,203	1,612	1,819	1,900	1,775	1,632	1,500	1,500
Palladium (US\$/oz)	355	352	263	526	799	950	850	700	550	550
Rhodium (US\$/oz)	6,198	6,551	1,594	2,455	2,401	3,000	3,000	3,500	3,000	3,000
3PGM basket (US\$/oz) (63%Pt,30%Pd,7%Rh)	1,360	1,555	948	1,345	1,554	1,692	1,583	1,483	1,320	1,320
Base metals										
Aluminium (US\$/tonne)	2,639	2,573	1,664	2,173	2,657	2,687	2,597	2,556	2,518	2,205
Aluminium (US cents/lb)	120	117	75	99	121	122	118	116	114	100
Copper (US\$/tonne)	7,121	6,961	5,148	7,536	9,546	9,412	8,646	8,051	7,077	4,850
Copper (US cents/lb)	323	316	234	342	433	427	392	365	321	220
Nickel (US\$/tonne)	37,229	21,115	14,653	21,833	26,656	27,156	25,122	21,367	17,932	14,330
Nickel (US cents/lb)	1,689	958	665	990	1,209	1,232	1,140	969	813	650
Zinc (US\$/tonne)	3,243	1,876	1,654	2,160	2,273	2,500	2,469	2,400	2,400	1,764
Zinc (US cents/lb)	147	85	75	98	103	113	112	109	109	80
Lead (US\$/tonne)	2,581	2,093	1,720	2,148	2,601	2,490	2,302	2,129	1,942	1,653
Lead (US cents/lb)	117	95	78	97	118	113	104	97	88	75
Uranium (US\$/lb)	98	64	47	46	55	50	50	50	50	50
Steelmaking materials										
Iron ore spot (CIF China) (US\$/t)	122	152	85	152	175	153	130	115	110	81
Iron ore fines (FOB) (US\$/dmu)	79	129	109	177	261	236	192	165	153	111
Iron ore fines (FOB) (USD/tonne)	50	82	69	112	166	150	122	105	97	71
Iron ore lump (FOB) (US\$/dmu)	100	177	134	196	287	259	212	182	168	120
Iron ore lump (FOB) (USD/tonne)	64	112	85	124	182	165	134	116	107	76
Hard coking coal (US\$/tonne)	103	253	172	191	294	275	248	240	230	200
April coking coal settlement	-16%	211%	-58%							
Semi soft benchmark (US\$/tonne)	63	196	116	139	221	195	165	160	148	130
April coking coal settlement	12%	271%	-69%							
Manganese ore - CIF (US\$/mtu)	3.53	14.09	5.43	7.71	7.12	8.50	6.00	6.00	6.00	5.20
Ferro manganese - CIF (US\$/tonne)	1,235	2,646	1,267	1,449	1,568	1,785	1,300	1,300	1,300	1,300
Ferrochrome (US\$/lb)	0.92	1.81	0.93	1.24	1.25	1.20	0.90	0.90	0.90	1.00
Energy										
Brent crude oil (US\$/bbl)	73	98	62	80	107	100	90	87	89	80
Richard's Bay thermal coal (US\$/tonne)	63	120	65	92	128	136	144	158	146	109
Heavy minerals										
Rutile (US\$/tonne)	476	509	535	538	989	1,400	1,400	1,400	1,400	550
Zircon (US\$/tonne)	797	804	947	942	1,789	2,400	2,400	2,400	2,400	850
Ilmenite (US\$/tonne)	80	103	87	75	116	150	160	170	170	120
Currency exchange rates										
US\$/ZAR	7.04	8.25	8.40	7.30	6.92	7.48	8.34	8.98	9.56	10.00
US\$/AUD	0.84	0.85	0.79	0.92	1.04	1.00	0.86	0.85	0.84	0.80
US\$/EUR	1.37	1.47	1.39	1.33	1.44	1.46	1.38	1.37	1.36	1.10

Source: I-Net, Bloomberg, DataCentral, CIRA

Financial Summaries

Anglo American PLC

Fiscal year end 31-Dec	2009	2010	2011E	2012E	2013E
Valuation Ratios					
P/E adjusted (x)	22.8	12.1	8.9	7.0	7.3
EV/EBITDA adjusted (x)	11.6	6.6	4.9	3.9	3.8
P/BV (x)	2.2	1.7	1.4	1.2	1.1
Dividend yield (%)	0.0	1.4	2.0	2.4	2.7
Per Share Data (US\$)					
EPS adjusted	2.10	3.96	5.36	6.79	6.55
EPS reported	1.99	5.18	5.66	6.79	6.55
BVPS	21.70	28.37	33.46	39.55	45.23
DPS	0.00	0.65	0.95	1.15	1.27
Profit & Loss (US\$M)					
Net sales	20,858	27,960	32,542	36,555	36,374
Operating expenses	-16,476	-19,452	-20,956	-22,217	-22,755
EBIT	4,382	8,508	11,586	14,338	13,620
Net interest expense	-407	-139	8	57	249
Non-operating/exceptionals	59	2,559	1,355	1,060	852
Pre-tax profit	4,034	10,928	12,949	15,455	14,721
Tax	-1,117	-2,809	-3,710	-4,606	-4,438
Extraord./Min.Int./Pref.div.	-487	-1,575	-2,070	-2,229	-1,964
Reported net income	2,430	6,544	7,169	8,620	8,319
Adjusted earnings	2,569	4,976	6,779	8,620	8,319
Adjusted EBITDA	6,102	10,427	13,642	16,519	16,234
Growth Rates (%)					
Sales	-20.7	34.0	16.4	12.3	-0.5
EBIT adjusted	-45.1	94.2	36.2	23.8	-5.0
EBITDA adjusted	-35.7	70.9	30.8	21.1	-1.7
EPS adjusted	-51.3	88.7	35.4	26.6	-3.5
Cash Flow (US\$M)					
Operating cash flow	4,764	10,390	10,769	13,319	13,630
Depreciation/amortization	1,720	1,919	2,056	2,181	2,614
Net working capital	-1,375	-98	-1,354	-263	101
Investing cash flow	-5,084	-5,279	-5,859	-6,493	-7,670
Capital expenditure	-4,839	-5,086	-6,253	-6,887	-8,103
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	818	-1,979	-7,235	-3,701	-8,469
Borrowings	320	-876	-4,175	-91	-4,951
Dividends paid	0	-302	-1,026	-1,267	-1,460
Change in cash	498	3,132	-2,325	3,125	-2,509
Balance Sheet (US\$M)					
Total assets	56,308	66,656	68,439	75,588	78,316
Cash & cash equivalent	3,634	6,778	4,076	7,201	4,692
Accounts receivable	3,554	4,052	5,833	6,067	5,996
Net fixed assets	35,198	39,810	43,724	47,846	52,847
Total liabilities	28,239	28,685	24,258	24,133	20,053
Accounts payable	4,395	4,950	5,546	4,929	4,996
Total Debt	14,315	13,439	9,264	9,173	4,222
Shareholders' funds	28,069	37,971	44,180	51,455	58,263
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	29.3	37.3	41.9	45.2	44.6
ROE adjusted	11.1	16.5	18.2	19.6	16.3
ROIC adjusted	8.8	13.2	16.6	18.8	16.2
Net debt to equity	38.1	17.5	11.7	3.8	-0.8
Total debt to capital	33.8	26.1	17.3	15.1	6.8

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African Rainbow Minerals

Fiscal year end 30-Jun	2009	2010	2011E	2012E	2013E
Valuation Ratios					
P/E adjusted (x)	17.5	23.6	11.6	9.3	7.3
EV/EBITDA adjusted (x)	7.8	8.8	5.2	4.3	3.3
P/BV (x)	2.5	2.3	1.9	1.7	1.4
Dividend yield (%)	0.9	1.1	2.9	3.9	6.3
Per Share Data (R)					
EPS adjusted	10.79	7.98	16.22	20.23	25.94
EPS reported	13.02	8.69	16.20	20.23	25.94
BVPS	76.15	83.69	98.31	113.39	132.26
DPS	1.75	2.00	5.40	7.40	11.80
Profit & Loss (RM)					
Net sales	10,094	11,028	14,850	17,087	20,295
Operating expenses	-6,387	-8,054	-9,265	-10,439	-12,071
EBIT	3,707	2,974	5,585	6,648	8,223
Net interest expense	29	17	-50	-2	160
Non-operating/exceptionals	589	46	-137	74	217
Pre-tax profit	4,325	3,037	5,398	6,720	8,600
Tax	-1,727	-1,009	-1,749	-2,109	-2,672
Extraord./Min.Int./Pref.div.	198	-162	-164	-252	-339
Reported net income	2,796	1,866	3,485	4,359	5,588
Adjusted earnings	2,317	1,714	3,489	4,359	5,588
Adjusted EBITDA	4,502	3,978	6,788	7,967	9,767
Growth Rates (%)					
Sales	-19.8	9.3	34.7	15.1	18.8
EBIT adjusted	-44.5	-19.8	87.8	19.0	23.7
EBITDA adjusted	-37.7	-11.6	70.6	17.4	22.6
EPS adjusted	-42.4	-26.0	103.2	24.8	28.2
Cash Flow (RM)					
Operating cash flow	5,075	3,079	3,863	6,875	7,420
Depreciation/amortization	795	1,004	1,203	1,318	1,544
Net working capital	1,959	-659	-1,532	225	-549
Investing cash flow	-3,272	-2,828	-3,395	-3,699	-2,721
Capital expenditure	-3,622	-2,958	-3,518	-3,857	-2,893
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	-1,059	-784	970	-3,863	-4,134
Borrowings	-356	-458	1,582	-2,461	-2,219
Dividends paid	-847	-371	-425	-1,150	-1,576
Change in cash	731	-534	1,437	-688	566
Balance Sheet (RM)					
Total assets	25,499	28,233	32,992	34,419	36,921
Cash & cash equivalent	3,513	3,039	4,228	3,540	4,106
Accounts receivable	1,699	3,077	3,787	4,051	4,748
Net fixed assets	11,500	13,256	15,175	17,318	18,247
Total liabilities	8,748	9,704	11,226	9,440	7,926
Accounts payable	1,637	2,315	2,199	2,297	2,652
Total Debt	3,744	3,346	4,680	2,219	0
Shareholders' funds	16,751	18,529	21,767	24,979	28,995
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	44.6	36.1	45.7	46.6	48.1
ROE adjusted	14.9	10.1	18.0	19.3	21.4
ROIC adjusted	15.7	13.6	22.0	22.5	25.5
Net debt to equity	1.4	1.7	2.1	-5.3	-14.2
Total debt to capital	18.3	15.3	17.7	8.2	0.0

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Assore Limited

Fiscal year end 30-Jun	2009	2010	2011E	2012E	2013E
Valuation Ratios					
P/E adjusted (x)	8.2	18.0	8.5	7.8	6.6
EV/EBITDA adjusted (x)	5.5	10.8	5.8	5.3	4.3
P/BV (x)	4.0	3.4	2.6	2.1	1.8
Dividend yield (%)	1.8	1.5	4.0	5.3	6.7
Per Share Data (¢)					
EPS adjusted	2,754	1,249	2,654	2,902	3,387
EPS reported	2,734	1,236	2,654	2,902	3,387
BVPS	5,569	6,574	8,718	10,520	12,556
DPS	400	340	900	1,200	1,500
Profit & Loss (RM)					
Net sales	8,819	7,086	10,182	11,007	12,763
Operating expenses	-3,638	-4,818	-5,475	-5,995	-7,104
EBIT	5,180	2,267	4,707	5,012	5,660
Net interest expense	-298	-124	-70	-8	0
Non-operating/exceptionals	367	191	118	127	255
Pre-tax profit	5,249	2,334	4,754	5,132	5,915
Tax	-1,981	-823	-1,548	-1,621	-1,818
Extraord./Min.Int./Pref.div.	-26	-32	-31	-38	-44
Reported net income	3,241	1,480	3,176	3,472	4,053
Adjusted earnings	3,266	1,494	3,176	3,472	4,053
Adjusted EBITDA	5,595	2,768	5,249	5,599	6,441
Growth Rates (%)					
Sales	-3.7	-19.7	43.7	8.1	16.0
EBIT adjusted	11.2	-56.2	107.6	6.5	12.9
EBITDA adjusted	13.0	-50.5	89.6	6.7	15.0
EPS adjusted	21.2	-54.7	112.5	9.3	16.7
Cash Flow (RM)					
Operating cash flow	3,903	1,557	3,211	4,623	4,794
Depreciation/amortization	415	501	542	587	781
Net working capital	494	-498	-652	352	-22
Investing cash flow	-1,020	-1,850	-2,165	-1,785	-912
Capital expenditure	-1,269	-2,039	-2,250	-1,873	-1,092
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	-1,834	-858	-1,246	-1,779	-1,651
Borrowings	-1,019	-641	-603	-432	0
Dividends paid	-508	-357	-766	-1,316	-1,616
Change in cash	1,049	-1,151	-200	1,059	2,231
Balance Sheet (RM)					
Total assets	11,161	12,350	14,782	16,779	19,567
Cash & cash equivalent	3,049	1,908	1,708	2,771	5,005
Accounts receivable	593	1,481	1,850	1,798	2,047
Net fixed assets	5,181	6,345	8,699	9,978	10,280
Total liabilities	4,486	4,381	4,249	4,083	4,424
Accounts payable	648	1,006	1,349	1,350	1,570
Total Debt	1,675	1,034	432	0	0
Shareholders' funds	6,675	7,969	10,533	12,697	15,143
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	63.4	39.1	51.6	50.9	50.5
ROE adjusted	61.0	20.7	34.7	30.2	29.4
ROIC adjusted	53.7	19.5	32.4	29.1	31.3
Net debt to equity	-20.6	-11.0	-12.1	-21.8	-33.1
Total debt to capital	20.1	11.5	3.9	0.0	0.0

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Exxaro Resources Limited

Fiscal year end 31-Dec	2009	2010	2011E	2012E	2013E
Valuation Ratios					
P/E adjusted (x)	25.1	12.3	8.8	7.4	6.9
EV/EBITDA adjusted (x)	42.5	16.0	10.8	8.1	6.4
P/BV (x)	4.7	3.5	2.7	2.2	1.8
Dividend yield (%)	1.1	2.8	4.1	5.6	6.0
Per Share Data (R)					
EPS adjusted	7.03	14.37	20.04	23.70	25.58
EPS reported	7.20	14.54	20.24	23.90	25.79
BVPS	37.31	50.25	64.65	80.16	95.76
DPS	2.00	5.00	7.30	9.90	10.60
Profit & Loss (RM)					
Net sales	15,009	17,155	21,212	24,800	28,733
Operating expenses	-13,121	-14,476	-16,832	-18,527	-20,849
EBIT	1,888	2,679	4,380	6,273	7,884
Net interest expense	-415	-455	-428	-714	-718
Non-operating/exceptionals	377	3,741	4,642	4,897	4,483
Pre-tax profit	1,850	5,965	8,594	10,456	11,649
Tax	-766	-665	-1,309	-1,851	-2,364
Extraord./Min.Int./Pref.div.	1,493	-49	0	0	0
Reported net income	2,577	5,251	7,285	8,605	9,285
Adjusted earnings	2,516	5,186	7,216	8,532	9,208
Adjusted EBITDA	1,528	3,995	5,875	8,083	9,926
Growth Rates (%)					
Sales	8.4	14.3	23.6	16.9	15.9
EBIT adjusted	-87.7	767.1	63.6	43.8	25.9
EBITDA adjusted	-55.3	161.5	47.1	37.6	22.8
EPS adjusted	-30.1	104.4	39.5	18.2	7.9
Cash Flow (RM)					
Operating cash flow	3,091	7,369	9,746	11,646	11,513
Depreciation/amortization	1,224	1,359	1,564	1,882	2,119
Net working capital	-705	-71	-1,434	-377	-549
Investing cash flow	-3,466	-4,829	-9,606	-9,198	-4,089
Capital expenditure	-2,888	-3,714	-9,606	-9,198	-4,089
Acquisitions/disposals	-1,082	0	0	0	0
Financing cash flow	-316	-1,456	-1,743	-94	-3,300
Borrowings	604	-394	545	3,129	572
Dividends paid	-1,056	-712	-2,220	-3,150	-3,795
Change in cash	-691	1,084	-1,603	2,354	4,124
Balance Sheet (RM)					
Total assets	22,419	27,726	35,372	45,443	52,165
Cash & cash equivalent	1,023	2,140	537	2,890	7,014
Accounts receivable	3,121	3,752	4,391	4,921	5,646
Net fixed assets	11,910	13,351	20,521	26,810	27,771
Total liabilities	9,510	10,312	12,961	17,650	18,960
Accounts payable	2,510	3,057	3,005	3,290	3,700
Total Debt	4,754	4,360	4,905	8,034	8,607
Shareholders' funds	12,909	17,414	22,410	27,792	33,205
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	10.2	23.3	27.7	32.6	34.5
ROE adjusted	19.4	34.2	36.2	34.0	30.2
ROIC adjusted	-3.1	11.9	13.9	14.9	16.3
Net debt to equity	28.9	12.7	19.5	18.5	4.8
Total debt to capital	26.9	20.0	18.0	22.4	20.6

For further data queries on Citi's full coverage universe please contact CIRA Data Services Europe at CIRADataServicesEMEA@citi.com or +44-207-986-4050

Kumba Iron Ore Ltd

Fiscal year end 31-Dec	2009	2010	2011E	2012E	2013E
Valuation Ratios					
P/E adjusted (x)	23.2	11.3	9.1	8.7	9.6
EV/EBITDA adjusted (x)	12.4	6.4	4.9	4.6	5.0
P/BV (x)	22.1	11.3	8.8	7.2	6.9
Dividend yield (%)	2.9	6.8	8.9	9.3	9.1
Per Share Data (R)					
EPS adjusted	21.76	44.54	55.40	57.69	52.49
EPS reported	21.76	44.54	55.40	57.69	52.49
BVPS	22.80	44.54	57.05	69.87	73.46
DPS	14.60	34.50	45.00	47.00	46.00
Profit & Loss (RM)					
Net sales	23,408	38,704	47,855	53,111	52,957
Operating expenses	-10,528	-13,573	-14,900	-18,345	-20,685
EBIT	12,880	25,131	32,955	34,766	32,272
Net interest expense	-127	-29	44	29	34
Non-operating/exceptionals	-20	5	0	0	0
Pre-tax profit	12,733	25,107	32,999	34,795	32,306
Tax	-3,949	-6,813	-9,790	-10,308	-9,885
Extraord./Min.Int./Pref.div.	-1,812	-3,966	-5,338	-5,877	-5,489
Reported net income	6,972	14,328	17,871	18,610	16,932
Adjusted earnings	6,972	14,328	17,871	18,610	16,932
Adjusted EBITDA	13,375	25,903	33,830	36,071	33,921
Growth Rates (%)					
Sales	9.6	65.3	23.6	11.0	-0.3
EBIT adjusted	-5.5	95.7	31.1	5.5	-7.2
EBITDA adjusted	-4.3	93.7	30.6	6.6	-6.0
EPS adjusted	-4.4	104.7	24.4	4.1	-9.0
Cash Flow (RM)					
Operating cash flow	9,379	18,652	22,481	25,663	24,864
Depreciation/amortization	530	765	876	1,305	1,649
Net working capital	-107	-331	-1,962	-749	359
Investing cash flow	-4,000	-5,090	-4,438	-6,394	-5,966
Capital expenditure	-3,996	-4,723	-4,600	-6,600	-6,250
Acquisitions/disposals	-204	-348	0	0	0
Financing cash flow	-8,298	-9,598	-17,369	-18,263	-19,446
Borrowings	56	-729	743	924	993
Dividends paid	-6,453	-6,699	-13,842	-14,486	-15,774
Change in cash	-2,919	3,964	674	1,006	-548
Balance Sheet (RM)					
Total assets	17,656	27,379	33,231	40,974	44,869
Cash & cash equivalent	891	4,855	5,529	6,535	5,987
Accounts receivable	2,195	3,096	4,688	5,388	5,014
Net fixed assets	11,575	15,872	19,593	24,884	29,480
Total liabilities	8,700	9,003	9,758	12,202	14,116
Accounts payable	2,161	3,274	2,765	3,459	3,660
Total Debt	3,914	3,185	3,928	4,852	5,846
Shareholders' funds	8,956	18,376	23,472	28,771	30,753
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	57.1	66.9	70.7	67.9	64.1
ROE adjusted	98.4	132.4	109.3	91.1	73.4
ROIC adjusted	70.5	110.8	107.1	88.9	68.6
Net debt to equity	33.8	-9.1	-6.8	-5.8	-0.5
Total debt to capital	30.4	14.8	14.3	14.4	16.0

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Valuation & Risks

Anglo American PLC

(AAL.L; £30.03; 1M)

Valuation

We calculate Anglo American's discounted cash flow target price of ZAR460/£38 based on: 1) a weighted average cost of capital (WACC) of 9.52%; 2) long-term (2013E-23E) nominal revenue growth of 5% per annum; 3) long-term EBITDA margins of 38%; 4) long-term capex/EBITDA ratio of 41%; 5) long-term ROE of 12%; and 6) a terminal growth rate (after 2023E) of 3.5% (implying an exit P/E multiple of 10x).

Risks

We rate Anglo American as Medium Risk. Its risk rating is derived after considering several factors, including an assessment of the macroeconomic environment, industry-specific risks, company-specific operational risks as well as financial risk.

The biggest risks to our earnings forecasts and valuation relate to commodity prices and currency forecasts.

Industry-specific risks include government actions, such as controls on imports, exports and prices, new forms or rates of taxation and royalties, and increased government regulation. South African miners started paying mining royalties in March 2010, in line with global best practice and market expectations. We do not believe there is a material risk that SA mining assets will be nationalised, despite pressure from various groups.

Higher-than-forecast inflation in the mining sector could lead to near-term margin compression, but should support higher commodity prices in the long term.

Skills, electricity and water shortages in South Africa may affect production and mining inflation more than we anticipate. As around 40% of Anglo's assets are in South Africa, it could erode Anglo's global competitiveness.

Over-estimation of mineral reserves could weaken our investment case. We assume long-term reserve replacement at a fixed capital cost to EBITDA. Failure to discover new reserves or expand existing reserves could therefore impact on Anglo's valuation.

Conversely, if any of these factors proves to have less of an effect than we anticipate, the stock could materially outperform our target.

African Rainbow Minerals

(ARIJ.J; R188.70; 1M)

Valuation

We use a discounted cash flow approach to derive our one-year target price of R240, based on:

WACC of 13.34%; long-term (2015-2028) nominal revenue growth of 5% per annum; long-term EBITDA margins of 38%; long-term capex/EBITDA ratio of 33%; long-term ROE (excluding Harmony) of 20%; and nominal terminal growth rate

(after 2028) of 6.5%, implying an exit PE multiple of 12x.

We include ARM's investment in Harmony Gold in our valuation at listed market value.

Risks

We rate ARM as Medium Risk. Our risk rating is derived after considering several factors, including an assessment of the macro economic environment, industry-specific risks, company-specific operational risks as well as financial risk.

Downside risks include: potential execution risk, given significant new projects; South African infrastructure constraints; skills, electricity and water shortages and onerous regulation in South Africa; higher-than-forecast mining inflation; over-estimation of mineral reserves and government actions.

Assore Limited

(ASRJ.J; R225.00; 1M)

Valuation

Our R280 target price is based on a DCF calculation. Our main assumptions are WACC of 13.34%, long-term (2016-2030) nominal revenue growth of 5% per annum, long-term EBITDA margins of 42%, long-term capex/EBITDA ratio of 29%, long-term ROE of 17% and nominal terminal growth rate (after 2030) of 6% (SA inflation of 5% + 1% volume growth), implying an exit PE multiple of 8.2x.

Risks

We rate ASR as Medium Risk. Our risk rating is derived after considering several factors, including an assessment of the macro economic environment, industry specific

risks, company-specific operational risks as well as financial risk.

Downside risks include: A significant global economic slowdown (China in particular), which could lead to lower than forecast commodity prices; potential execution risk given significant new projects; South African infrastructure constraints limiting volume growth; skills, electricity and water shortages; onerous regulation in South Africa; higher-than-forecast mining inflation; overestimation of mineral reserves and government actions.

Exxaro Resources Limited

(EXXJ.J; R176.50; 2M)

Valuation

We calculate Exxaro's discounted cash flow (DCF) target price at R200 based on: 1) a WACC of 13.2%; 2) long-term (2013E-23E) nominal revenue growth of 5% per annum; 3) long-term EBITDA margins of 36%; 4) long-term capex/EBITDA ratio of 37%, long-term ROE of 18%; and 5) terminal growth rate (after 2023) of 6.9% in rand terms (implying an exit P/E multiple of 11x).

Risks

We rate Exxaro as Medium Risk. The risk rating is derived after considering a number of factors, including an assessment of the macroeconomic environment, industry-specific risks, company-specific operational risks as well as financial risk.

The biggest risk for miners in general is that economic growth in highly-populated emerging market countries slows materially and developed market economies take longer to recover than we anticipate. This would imply downside risk to our commodity price and sales volume forecasts. Near-term margin forecasts are still only slightly below mid-cycle levels for most commodities and in the case of iron ore margins are still at highly-elevated levels. A stronger-than-forecast rand or Australian dollar would negatively affect Exxaro's earnings and valuation.

Industry-specific risks include government actions, such as controls on imports, exports and prices, new forms or rates of taxation and royalties, and increased government regulation. South African miners will start paying mining royalties in 2010, in line with market expectations. We do not believe there is a material risk that SA mining assets will be nationalised, despite pressure from some groups.

Higher-than-forecast inflation in the mining sector could lead to near-term margin compression, but should support higher commodity prices in the long term.

Skills, electricity and water shortages in South Africa may impact production and mining inflation more than we anticipate and could erode Exxaro's global competitiveness.

Over-estimation of mineral reserves, particularly in the Waterberg area could weaken our investment case. Failure to discover new reserves or expand existing reserves could also impact on Exxaro's valuation.

If the impact on the company from any of these factors proves to be more negative than we anticipate, the stock will likely have difficulty achieving our financial and price targets. Likewise, if any of these factors proves to have less of an effect than we anticipate, the stock could materially outperform our target.

Kumba Iron Ore Ltd

(KIOJ.J; R504.40; 3M)

Valuation

Our Kumba target price of R430 is calculated using a discounted cash flow valuation, which takes into account optimistic long-term export EBITDA margins of 52%, as well as Kumba's considerable volume growth. Our DCF assumes a 13.1% nominal weighted average cost of capital; long-term (2013-23) nominal revenue growth of 5% per annum; long-term capex/EBITDA ratio of 30%; long-term ROE of 29%; and a terminal growth rate (after 2024) of 7.6% in rand terms.

Risks

We rate Kumba Medium Risk based on our assessment of industry and company-specific risk factors. Key risks to projected earnings, cash flows and valuation relate to weaker-than-expected commodity prices/economic growth and US\$. Country risk is a consideration with all producing assets in South Africa. Operating risk in Kumba is principally from higher inflation concerns in South Africa. Kumba is also involved in a legal dispute with ArcelorMittal SA and ICT, which may negatively impact our earnings forecasts and valuation.

Four major upside risks to our target price are: 1) China's demand for iron ore outpaces new low cost supply and long-term margins stay at elevated levels; 2) A collapse in the rand, which would boost Kumba's earnings forecasts and valuation; 3) Corporate action - Anglo American already holds around 65% of Kumba and we believe it will have to offer a premium to market prices if it wants to buy out minorities; and 4) Kumba's attractive dividend yield.

Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

IMPORTANT DISCLOSURES

Anglo American (AGLJ.J)

Ratings and Target Price History Fundamental Research

Analyst: Johann Pretorius
Covered since February 4 2010

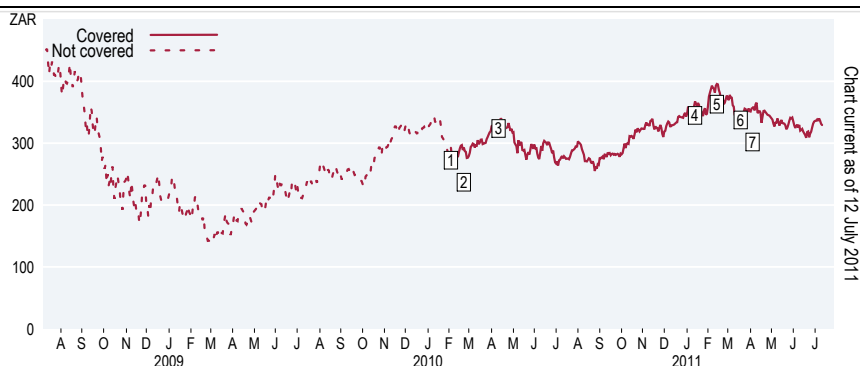


Chart current as of 12 July 2011

	Date	Rating	Target Price	Closing Price
1	3-Feb-10	*1M	*340.00	292.50
2	22-Feb-10	1M	*360.00	293.00
3	12-Apr-10	1M	*420.00	328.50

* Indicates change

	Date	Rating	Target Price	Closing Price
4	13-Jan-11	1M	*430.00	367.50
5	14-Feb-11	*2M	*450.00	395.70
6	18-Mar-11	*1M	450.00	344.42

	Date	Rating	Target Price	Closing Price
7	5-Apr-11	1M	*460.00	357.10

Rating/target price changes above reflect Eastern Standard Time

Anglo American (AGLJ.J)

Ratings and Target Price History Best Ideas Research Relative Call (3 Month)

Analyst: Johann Pretorius
Covered since February 4 2010

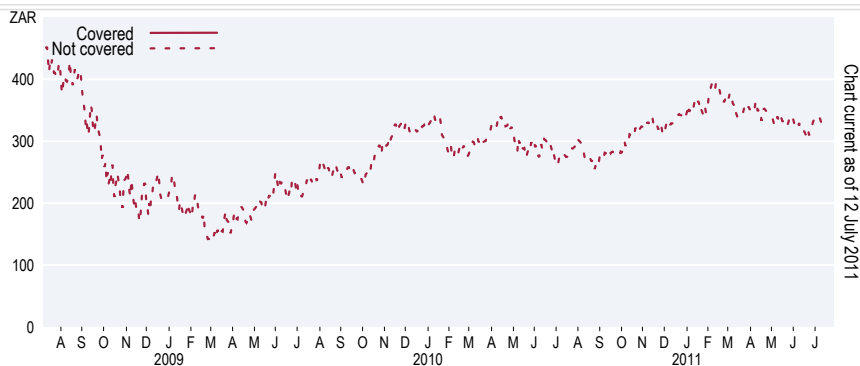


Chart current as of 12 July 2011

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

African Rainbow Minerals (ARIJ.J)

Ratings and Target Price History Fundamental Research

Analyst: Johann Pretorius
Covered since May 14 2010

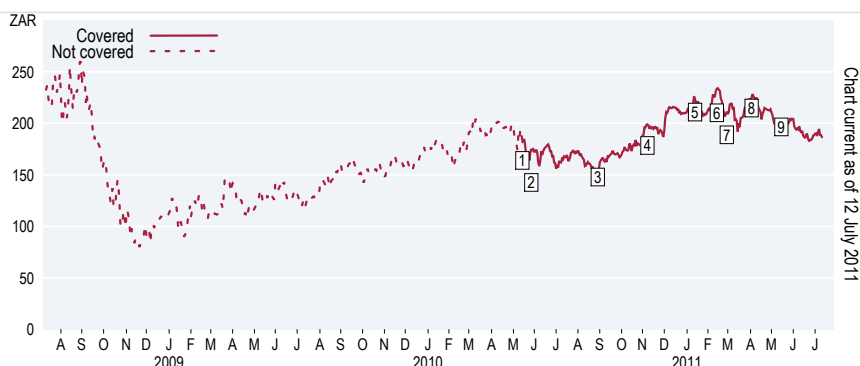


Chart current as of 12 July 2011

	Date	Rating	Target Price	Closing Price
1	14-May-10	*3M	*200.00	181.69
2	27-May-10	*1M	200.00	175.00
3	30-Aug-10	1M	*205.00	151.14

* Indicates change

	Date	Rating	Target Price	Closing Price
4	7-Nov-10	*2M	205.00	198.50
5	13-Jan-11	*3M	*215.00	223.50
6	14-Feb-11	3M	*230.00	233.71

	Date	Rating	Target Price	Closing Price
7	28-Feb-11	*2M	230.00	211.20
8	4-Apr-11	2M	*250.00	224.89
9	15-May-11	*1M	*260.00	200.00

Rating/target price changes above reflect Eastern Standard Time

African Rainbow Minerals (ARIJ.J)

Ratings and Target Price History Best Ideas Research Relative Call (3 Month)

Analyst: Johann Pretorius
Covered since May 14 2010



Chart current as of 12 July 2011

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Assore Limited (ASRJ.J)

Ratings and Target Price History Fundamental Research

Analyst: Johann Pretorius
Covered since June 3 2011

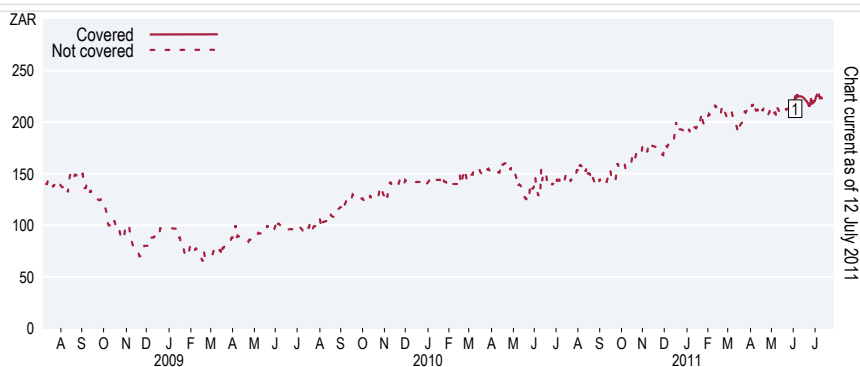


Chart current as of 12 July 2011

	Date	Rating	Target Price	Closing Price
1	3-Jun-11	*1M	*300.00	225.01

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Assore Limited (ASRJ.J)

Ratings and Target Price History

Best Ideas Research

Relative Call (3 Month)

Analyst: Johann Pretorius
Covered since June 3 2011

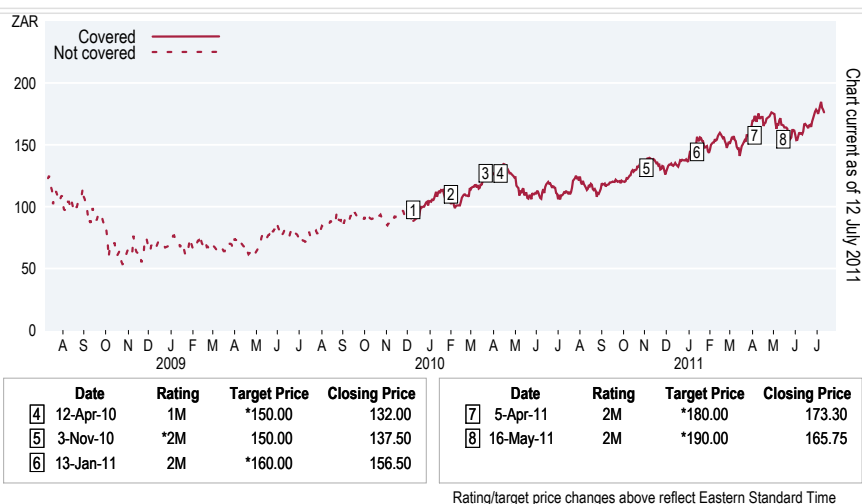


Exxaro Resources Limited (EXXJ.J)

Ratings and Target Price History

Fundamental Research

Analyst: Johann Pretorius
Covered since December 9 2009



	Date	Rating	Target Price	Closing Price
1	9-Dec-09	*1M	*120.00	88.50
2	1-Feb-10	1M	*130.00	102.00
3	21-Mar-10	1M	*140.00	126.51

	Date	Rating	Target Price	Closing Price
4	12-Apr-10	1M	*150.00	132.00
5	3-Nov-10	*2M	150.00	137.50
6	13-Jan-11	2M	*160.00	156.50

	Date	Rating	Target Price	Closing Price
7	5-Apr-11	2M	*180.00	173.30
8	16-May-11	2M	*190.00	165.75

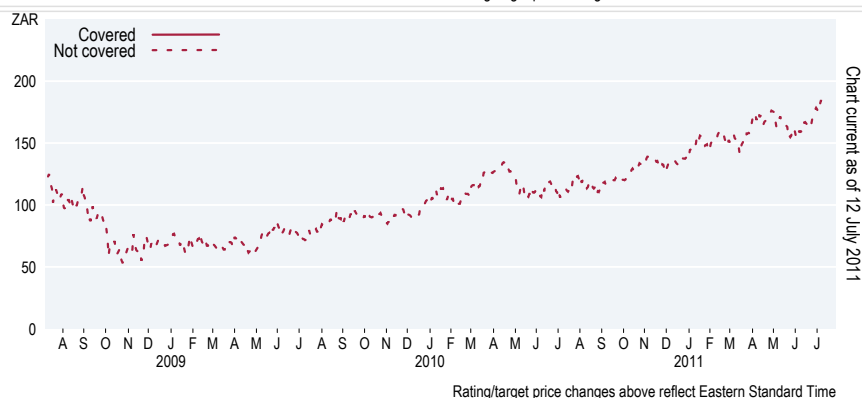
Exxaro Resources Limited (EXXJ.J)

Ratings and Target Price History

Best Ideas Research

Relative Call (3 Month)

Analyst: Johann Pretorius
Covered since December 9 2009



Kumba Iron Ore Ltd (KIOJ.J)

Ratings and Target Price History Fundamental Research

Analyst: Johann Pretorius
Covered since December 9 2009



Chart current as of 13 July 2011

	Date	Rating	Target Price	Closing Price
1	29-Sep-08	1M	*386.00	182.00
2	27-Oct-08	1M	*254.00	104.00
3	25-Jan-09	1M	*218.00	135.00
4	7-Jul-09	*2M	*190.00	172.00
5	9-Dec-09	*3M	*250.00	264.00
6	1-Feb-10	3M	*300.00	319.00

* Indicates change

	Date	Rating	Target Price	Closing Price
7	19-Mar-10	3M	*330.00	344.50
8	12-Apr-10	3M	*360.00	366.50
9	4-Jul-10	*2M	*340.00	317.60
10	22-Jul-10	*3M	*360.00	375.00
11	26-Aug-10	*1M	360.00	320.50
12	31-Aug-10	1M	*370.00	335.27

	Date	Rating	Target Price	Closing Price
13	14-Oct-10	*3M	370.00	394.87
14	3-Feb-11	3M	*380.00	466.10
15	5-Apr-11	3M	*420.00	484.00
16	16-May-11	3M	*430.00	440.75

Rating/target price changes above reflect Eastern Standard Time

Kumba Iron Ore Ltd (KIOJ.J)

Ratings and Target Price History Best Ideas Research Relative Call (3 Month)

Analyst: Johann Pretorius
Covered since December 9 2009

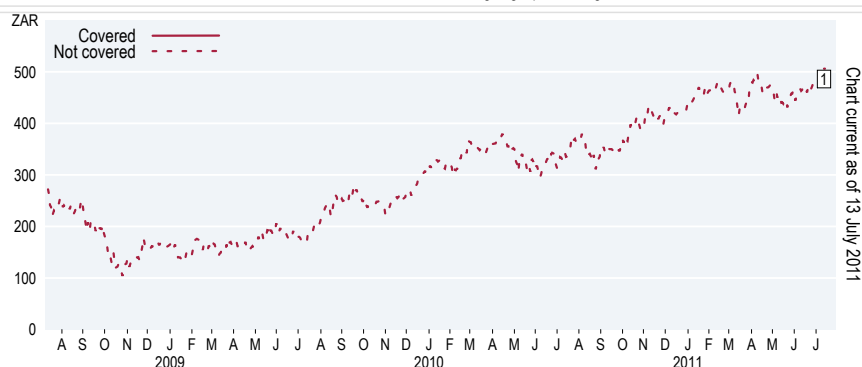


Chart current as of 13 July 2011

	Date	Rating	Target Price	Closing Price
1	13-Jul-11	*ADD LP	-	506.10

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

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Johann Steyn, Analyst, holds a long position in the securities of Anglo American PLC.

Pradeep Mahtani, Analyst, holds a long position in the securities of Sterlite Industries (India).

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