Macquarie Commodities Research





The Global Commodities Specialist

GLOBAL

OLODAL							
Shanghai Futures Exchange							
	1	Week on week					
Cash price	RMB/t	% change					
Copper	59,840	8.82					
Aluminium	16,465	-0.33					
Zinc	15,415	6.13					
Lead	15,405	3.77					
Stocks	ton	%change					
Copper	87,726	18.92					
Aluminium	118,036	4.15					
Zinc	381,795	1.73					
Lead	61,197	12.86					
Open interest	Contracts	change					
Copper	18,850	-9876					
Aluminium	31,348	-12490					
Zinc	14,964	-10042					
Lead	658	-752					
Other prices (from SI	MM)						
Cash price	RMB/t	% change					
Nickel	140,750	2.01					
Tin	182,000	0.19					
Steel prices (From My	Steel prices (From Mysteel)						
Cash price	RMB/t	% change					
HR coil (3mm)	4,330	2.24					
CR coil (1mm)	5,250	0.00					
Galvanised (1mm)	5,290	-1.21					
Rebar (20mm)	4,200	0.72					
Iron ore import (from TSI)							

Exchange rate

62%Fe

58%Fe

CFR N. China port

US\$/Rmb 6.36

\$/t

116.9

102.9

% change

-18.0

-20.6

Source:LME, Comex, Nymex, SHFE, Metal Bulletin, Reuters, LBMA, Macquarie Research, TSI, October 2011

Macquarie Capital Securities Limited Graeme Train

+86 21 2412 9035 graeme.train@macquarie.com Angela Bi

+86 21 2412 9086 angela.bi@macquarie.com Macquarie Capital Securities (Singapore) Pte.

Limited Bonnie Liu

+65 6601 0144

bonnie.liu@macquarie.com

31 October 2011

China Commodity Call

Upside in iron ore

- The depth and pace of the recent iron ore price declines have been astonishing even during the dark days of the GFC, iron ore didn't see daily drops of as much as \$10/t. However, we are firmly of the view that the current price levels are not reflective of real demand weakness or substantial oversupply but rather are a symptom of an aggressive destock of iron ore by the Chinese mills.
- The pace of this destocking is unsustainable, and as mills normalise inventory, we believe the first \$20-30/t of a recovery rally should be easy. We therefore expect iron ore to be trading above \$140/t by the end of 2011.

The fall in iron ore prices is reflecting an aggressive destock – not a collapse in real demand



Source: Mysteel, TSI, Macquarie Research

- In the very near term, iron ore can still trade lower, as steel production cuts are just getting started. However, we think production cuts are largely already priced in. Based on the current volume of inventory, the smaller mills would need to cut production by 40% before the current volume of inventory they are holding starts to look high (ie, back up to over 30 days). Cuts of this magnitude are not required.
- China swinging from destocking to just moderate restocking could potentially add 80mtpa to global iron ore demand (before even factoring steel production volumes starting to recover). This will put pricing power back in the hands of the suppliers.

Please refer to the important disclosures and analyst certification on inside back cover of this document, or on our website www.macquarie.com.au/disclosures.

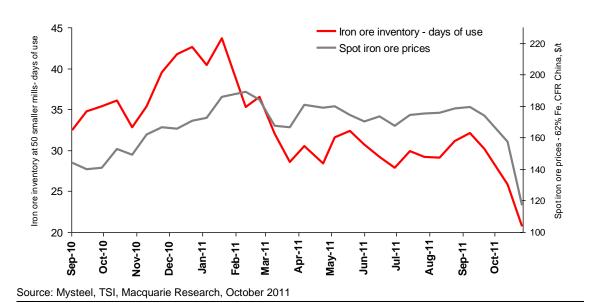
Iron ore is oversold – risks firmly to the upside by year-end

The depth and pace of the recent iron ore price declines have been astonishing – even during the dark days of the GFC, iron ore didn't see daily drops of as much as \$10/t. However, we are firmly of the view that the current price levels are not reflective of real demand weakness or substantial oversupply but rather are a symptom of an aggressive destock of iron ore by the Chinese mills. The pace of this destocking is unsustainable, and as mills normalise inventory, we believe the first \$20–30/t of a recovery rally should be easy. We therefore expect iron ore to be trading above \$140/t by the end of 2011.

Smaller mill inventory has collapsed

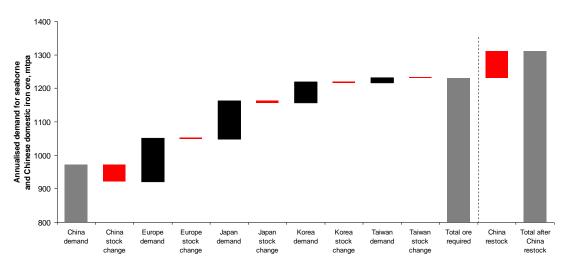
A critical data point we have been watching this year has been the level of iron ore inventory held by 50 smaller mills. In the considerably milder downturns in pricing of January–March and May-July, inventory levels hitting 28 days of use provided some level of support. Since early-September, inventory levels have crashed from 33 days down to 21 days as of Friday 28 October. Note that this inventory includes what mills are holding in their own yards, at port and in transit.

Fig 1 Iron ore inventory at mills has fallen sharply - price declines reflect destocking



- Clearly, with inventory falling so rapidly, iron ore prices are not reflecting a real slowdown in demand – they are reflecting the fact that mills are buying less than they need. But why are mills destocking so aggressively? We think there are two main reasons.
- The first is a bit circular: As prices fall, mills hold out of the market as is it clear that it will be cheaper to start purchasing a bit later on. The waiting causes prices to fall further. Helping this process along is the fact that demand for iron ore from other iron ore importing regions is also easing, meaning there is good availability of material from the majors in the spot market. At the recent rate of purchasing activity, this material has supplied the vast majority of demand traders report that until recently, there were no enquiries from mills for a good ten-day stretch. This has meant there has been no one to offer resistance, as prices have fallen through cost support levels. Once purchasing activity resumes (and given the pace of inventory falls, this should be sooner rather than later) this material will not be enough, and pricing power will return to the higher cost producers. At current prices, we estimate about 150mtpa of iron ore supply is losing money.
- The chart below shows the potential difference in total apparent consumption of seaborne and Chinese domestic iron ore when China is destocking from 30 to 20 days of inventory and when China is restocking from 20 days back up to 30. The potential swing in iron ore demand is around 80mtpa. (We have assumed China and ex-China steel production run rates are also declining – any reversal here adds further potential upside).

Fig 2 China moving from destocking to restocking could add 80mtpa to global iron ore demand



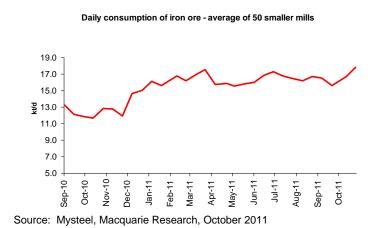
Source: Customs data, Macquarie Research, October 2011

The second reason mills are destocking so aggressively is because they are planning to cut production. Inventory has been rising at mills, and traders and prices have pulled back to a point where margins are under pressure. We have highlighted this as a hurdle that needs to be overcome before iron ore can perform, and from our conversations with mills and reports in the media it does seem that production cuts are happening. The data, however, is mixed. On the one hand, CISA data on production for the middle ten days of October indicated that production had been cut back to 657mtpa, down from 706mtpa over the first ten days (the pace of this decline feels improbable to us). Meanwhile, back-calculating the rate of ore consumption at the 50 smaller mills (we get data in both volume terms and on a days in use basis) suggests that production cuts are yet to come through.

Fig 3 High frequency CISA data says production is being cut

750 730 ¹⁴712₇₀₆709711 steel production (mtpa) 690 670 650 630 Crude 8 610 590 11-20 11-20 11-20 11-20 1-10 11-20 1-10 21-31 11-20 21-30 21-31 21-31 Feb-11 | Mar-11 | Apr-11 | May-11 | Jun-11 Jul-11 Source: CISA, Macquarie Research, October 2011

Fig 4 ...but the smaller mills don't seem to be cutting yet



- Until production cuts have been fully implemented, there is still near-term downside risk to the iron ore price, as mills will not buy aggressively until they know how much ore they should be holding. Even so, given the sharp decline in inventory, we think production cuts are largely already priced in. Based on the current volume of inventory, the smaller mills would need to cut production by 40% before the current volume of inventory they are holding starts to look high (ie, back up to over 30 days). Cuts of this magnitude are not required.
- So while there is likely to still be further weakness in the price near term, on balance iron ore looks undervalued. As the steel market comes back to equilibrium and China moves from destocking to restocking, we see the price easily trading above \$140/t by the end of 2011 and higher into 2012.

Fig 5 Production trade and apparent demand for China's main mining, metal and steel products ('000t unless otherwise specified)

	2010	2010	2010	2010	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2010	% chnge
Production	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	YTD	YTD	YoY
Aluminium	1310	1291	1197	1246	1315	1315	1445	1289	1787	1560	1585	1599	1581	13476	12441	8.3
Copper	388	372	405	430	382	392	443	431	440	459	452	499	458	3955	3411	15.9
Nickel	28.7	25.9	28.6	33.7	35.5	28.6	29.5	27.8	37.0	36.5	37.3	38.9	44.7	316	242	30.4
Zinc	456	463	460	470	387	413	446	427	418	447	423	410	453	3824	3781	1.1
Lead	404	397	424	418	351	382	378	389	332	403	347	385	407	3374	2958	14.1
Alumina	2384	2255	2304	2460	2725	2587	2960	2985	3009		2959	2959	2959	26243	21894	19.9
Copper concentrate	98	103	117	111	77	87	102	106	104	115	108	109	111	919	821	12.0
	315	285	352	385	214	207	302	323	360	395	353	373	389	2916	2622	11.2
Zinc concentrate								323 169			195					
Lead Concentrate	169	168	186	195	110	109	171	169	209	226	195	199	223	1611	1337	20.5
Aluminium semis	1748	1658	1939	1983	1672	1672	1767	2608	1530	2319	2133	2071	2092	17864	13836	29.1
Copper semis	842	848	952	986	596	596	1134	1077	1081	1107	979	1112	1080	8761	7315	19.8
	2010	2010	2010	2010	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2010	% chnge
Net imports base m€	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	YTD	YTD	Y-o-Y
Aluminium (refined &	-37	-44	-46	-49	-16	-9	-33	-40	-45	-44	-65	-40	-35	-328	-253	29.4
Aluminium (semis)	-122	-137	-153	-141	-169	-113	-202	-201	-287	-251	-252	-225	-186	-1887	-1156	63.2
Total above (Al conter	-158	-180	-199	-189	-185	-122	-235	-241	-333	-296	-317	-266	-221	-2214	-1409	57.1
																-
Copper (refined)	240	169	230	219	223	139	155	116	129	161	191	235	273	1622	2270	-28.5
Copper (semis)	37	32	34	30	26	23	27	25	19	21	18	29	29	217	308	-29.6
Nickel (finished, ni cor	17	20	15	20	22	16	22	20	19	16	26	22	0	188	155	21.5
Zinc (refined)	28	21	20	32	30	16	32	11	22	20	14	23	0	198	207	-4.5
Lead (refined)	1	-2	0	-2	-2	-1	0	1	0	0	0	0	217	0	2	-115.7
Alumina	310	450	273	409	343	225	133	131	113	72	59	35	80	1192	3180	-62.5
Bauxite	3143	1782	2617	3127	2971	2169	3577	4138	4502		3743	3852	4478	32920	22688	45.1
Aluminium scrap	169	182	202	193	221	150	256	257	337	301	305	274	232	2100	1432	46.7
Copper concentrate	684	472	553	485	571	398	451	466	466	595	453	453	672	4524	4966	-8.9
Copper scrap	409	315	399	435	365	246	387	378	399	422	432	382	418	3011	2808	7.3
Zinc concentrate	415	286	282	256	296	208	225	225	236	184	245	338	346	2304	2417	-4.7
Lead concentrate	219	184	171	130	163	90	101	135	84	89	90	141	160	1053	1122	-6.1
Nickel Concentrate	25	15	10	19	21	16	26	30	20	19	35	13	27	207	155	33.8
	0040	0040	0046	0046	0044	0044	0044	0044	0044	0044	0044	0011	0044	2011	0046	0/ -1
	2010	2010	2010	2010	2011	2011	2011	2011	2011	-	2011	2011	2011	2011	2010	% chnge
Apparent demand	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	YTD	YTD	Y-o-Y
Aluminium	1404	1331	1214	1314	1330	1105	1447	1375	1871	1666	1607	1551	1604	13555	12095	12.1
Copper (after stock ch	701	523	598	620	507	402	644	711	685	771	726	699	885	6031	5604	7.6
Nickel	45	46	43	54	58	44	51	48	56	53	63	61	70	504	397	26.9
Zinc	461	449	473	488	402	420	450	412	430	466	438	416	497	3931	3905	0.7
Lead	405	395	425	416	349	381	378	390	332	403	347	385	407	3374	2960	14.0
Aluminium semis	1626	1521	1786	1843	1503	1558	1565	2407	1243	2068	1882	1846	1906	15977	12680	26.0
Copper semis	880	880	986	1016	622	619	1161		1100		998	1140	1108	8978	7623	17.8

Note: Apparent demand = production plus net imports adjusted for reported (and SRB) stock changes. Annual data is for the most part the sum-of monthly data o may not incorporate revisions to annual data.

Source: CISA, CNI-A, China Metals, NBS, Ecowin, Macquarie Research, October 2011

Fig 6 Key macroeconomic and sector indicators for China's steel, coal and metals industries (YoY% change)

	.,															
Growth % change year-on-year	Year 2010	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	YTD 2011
Macro-economic indicators	2010	Aug-10	ocp-10	001-10	1404-10	DC0-10	oun-11	105-11	mui-11	Apr-11	may-11	ouii-11	oui-11	Aug	ОСР	2011
GDP (Gross domestic product)	10.3%		9.6%			9.8%			9.7%			9.5%			9.1%	9.7%
Industrial production	14.4%	13.9%	13.3%	13.1%	13.3%	13.5%	_	14.9%	14.8%	13.4%	13.3%	15.1%	14.0%	13.5%	13.8%	14.1%
OECD lead indicator	16.3	12.6	12.3	12.3	12.4	12.5	12.6	12.7	12.7	12.7	12.8	12.9	12.9	12.5	13.076	12.7
PMI	53.8	51.7	53.8	54.7	55.2	53.9	52.9	52.2	53.4	52.9	52.0	50.9	50.7	50.9	51.2	51.9
Money supply growth (M2)	20.6%	19.2%	19.0%	19.3%	19.5%	19.7%	17.2%	15.7%	16.6%	15.3%	15.1%	15.9%	14.7%	13.5%	13.0%	15.2%
Consumer price index (inflation)	3.3%	3.5%	3.6%	4.4%	5.1%	4.6%	4.9%	4.9%	5.5%	5.3%	5.5%	6.4%	6.5%	6.2%	6.1%	5.7%
Ex-factory price index (PPI)	5.5%	4.3%	4.3%	5.0%	6.1%	5.9%	6.6%	7.2%	7.3%	6.8%	6.8%	7.1%	7.5%	7.3%	6.5%	7.0%
Fixed asset investment - total urban	26.2%	34.5%	23.2%	23.7%	29.1%	20.4%	24.9%	24.9%	25.1%	26.1%	26.7%	25.1%	24.5%	22.9%	24.5%	25.3%
Retail sales	23.4%	24.3%	24.0%	21.9%	22.7%	21.6%	19.9%	11.6%	17.4%	17.1%	16.9%	17.7%	17.2%	17.0%	17.7%	16.9%
Exports	31.6%	36.4%	25.1%	22.8%	34.9%	17.9%	37.7%	1.3%	35.8%	29.8%	19.3%	17.7%	20.3%	24.4%	20.4%	27.4%
Imports	38.8%	35.3%	24.4%	25.4%	37.9%	25.6%	51.4%	19.8%	27.4%	22.0%	28.4%	19.0%	23.0%	30.4%	20.9%	23.4%
Importo	30.070	00.070	24.470	20.470	07.070	20.070	31.470	13.070	27.470	22.070	20.470	13.070	20.070	30.470	20.570	20.470
Sector indicators																
Fixed asset investment in:																
Coal mining/processing	28.8%	45.1%	6.5%	46.9%	31.5%	38.3%	13.2%	13.2%	6.1%	13.1%	19.2%	33.2%	31.1%	25.5%	49.4%	26.6%
Iron ore mining	25.1%	51.8%	10.7%	32.4%	43.4%	58.2%	37.9%	37.9%	6.4%	69.0%	14.9%	20.4%	14.2%	34.5%	35.6%	25.9%
Non-ferrous mining	27.0%	15.7%	23.0%	20.6%	27.8%	23.0%	14.8%	14.8%	20.8%	33.8%	-8.9%	31.6%	23.4%	21.9%	36.1%	21.4%
Steel	9.2%	-21.1%	13.6%	13.1%	39.8%	32.8%	4.8%	4.8%	5.2%	10.3%	15.4%	5.2%	67.7%	47.8%	22.4%	18.4%
Non-ferrous melting/rolling	33.2%	34.6%	46.9%	38.9%	9.9%	25.2%	24.2%	24.2%	27.2%	14.6%	57.2%	22.4%	43.0%	47.8%	25.8%	31.8%
Metal product manufacturing	28.0%	32.2%	27.0%	14.4%	25.6%	42.9%	52.6%	52.6%	34.2%	56.4%	60.4%	18.3%	23.5%	38.8%	25.6%	37.1%
Power and thermal supply	7.1%	14.1%	-2.7%	7.4%	20.9%	2.6%	0.2%	0.2%	5.1%	2.7%	7.3%	-17.0%	-0.7%	5.0%	8.3%	0.2%
Real estate	33.3%	32.3%	34.8%	33.4%	52.1%	15.7%	37.2%	37.2%	33.1%	38.3%	39.8%	24.7%	43.1%	37.6%	30.3%	34.9%
Floor space of buildings under construction (3MMA)	20.9%	22.1%	24.3%	21.4%	25.2%	18.7%	29.5%	32.9%	32.3%	24.7%	14.1%	18.2%	20.2%	20.3%	17.2%	25.7%
Floor space of buildings sold (3MMA)	10.1%	-9.1%	-1.9%	8.1%	15.7%	13.2%	12.6%	12.1%	14.9%	5.0%	7.6%	11.6%	21.1%	19.6%	12.9%	17.7%
Power/coal indicators																
	12.2%	11.7%	8.1%	5.9%	6.8%	2.1%	8.8%	15.4%	15.1%	10.6%	11.1%	15.7%	12.1%	10.0%	10.7%	12.1%
Electric power production of which thermal	12.2%	12.9%	2.0%	-0.6%	1.1%	-1.3%	5.5%	13.7%	12.1%	9.0%	10.6%	18.8%	17.5%	14.1%	21.0%	13.4%
	8.6%															
Production of power generating equipment Cement production	11.6%	-5.1% 9.7%	-2.0% 10.3%	6.2% 10.5%	9.7% 17.0%	8.9% 14.1%	47.6% 6.7%	84.9% 12.4%	16.9% 30.7%	8.0% 23.3%	-7.7% 17.6%	17.8% 20.4%	5.5% 16.6%	36.0% 11.8%	26.1% 11.6%	21.6% 17.0%
Fertilizer production	-8.1%	-27.1%	4.4%	7.1%	3.1%	6.8%	3.1%	8.9%	17.8%	6.8%	19.4%	17.7%	29.0%	24.2%	11.076	0.1%
Pig iron production	6.4%	-27.1%	-6.0%	-7.0%	4.7%	3.3%	7.9%	10.0%	1.4%	6.9%	6.1%	13.6%	18.0%	12.6%	14.0%	9.8%
rig iron production	0.476	-2.0%	-0.0%	-7.0%	4.770	3.3%	7.9%	10.0%	1.476	0.9%	0.176	13.0%	10.0%	12.0%	14.0%	9.0%
Production of metal-containing products																
Copper semis	-0.2%	-5.5%	0.0%	7.6%	12.5%	-7.9%	12.0%	19.2%	18.3%	8.7%	20.1%	30.5%	17.3%	26.2%	15.8%	18.7%
Aluminium semis	23.1%	26.6%	23.1%	24.4%	24.3%	36.3%	37.3%	53.4%	46.6%	41.5%	33.0%	34.5%	28.2%	22.8%	22.7%	34.4%
Air conditioners	30.3%	27.2%	42.0%	42.2%	27.4%	-16.1%	57.9%	51.1%	40.0%	32.5%	29.5%	53.3%	42.6%	43.4%	7.2%	38.6%
Washing machines/refrigerators/freezers	21.6%	19.5%	21.4%	21.0%	23.1%	-3.2%	16.1%	9.7%	18.3%	15.9%	19.4%	25.0%	17.7%	11.2%	10.7%	16.1%
Power cables	26.7%	26.8%	25.0%	29.6%	32.0%	26.3%	7.1%	1.0%	23.1%	14.9%	28.9%	36.7%	15.3%	18.6%	10.1%	17.7%
Electric motors	27.8%	28.7%	20.6%	24.3%	30.0%	20.3%	26.2%	20.5%	7.5%	8.9%	0.3%	15.3%	8.3%	1.5%		10.0%
Electric driven tools	-6.4%	-13.6%	-12.6%	-9.3%	-14.8%	-4.6%	27.6%	9.2%	19.7%	1.7%	2.8%	15.7%	11.4%	14.6%		12.1%
Electrical instruments	17.2%	3.8%	3.5%	10.8%	43.8%	85.3%	35.1%	34.0%	27.1%	34.3%	2.3%	21.8%	6.5%	29.9%		21.8%
Computers	25.7%	6.7%	15.5%	12.0%	13.1%	22.1%	16.0%	1.6%	31.2%	38.9%	25.8%	34.4%	52.0%	61.8%		33.7%
Colour TVs	7.6%	-4.8%	-2.6%	-4.4%	8.9%	91.8%	-13.6%	-8.5%	2.9%	5.2%	4.9%	8.7%	20.7%	13.9%	7.4%	4.7%
Transport production																
Cars (sedans, MPVs, SUVs)	26.8%	6.7%	13.1%	17.9%	24.9%	18.3%	17.3%	7.2%	10.6%	3.4%	5.6%	17.6%	14.8%	17.4%	10.2%	11.6%
Trucks	25.0%	9.5%	6.8%	19.3%	15.2%	25.2%	6.0%	-1.7%	2.3%	-15.6%	-21.5%	-20.7%	-30.3%	-17.8%	-9.0%	-11.3%
Buses	18.9%	14.9%	22.0%	13.0%	17.7%	20.5%	9.2%	4.0%	21.2%	5.6%	-2.6%	-11.9%	-27.6%	2.1%	-12.5%	-1.1%
Motor cycles	1.5%	-8.3%	-25.0%	-24.4%	-20.9%	-6.2%	-14.0%	-2.3%	-8.5%	-13.5%	-8.8%	-14.2%	10.0%	23.1%	15.0%	-2.8%
Large and Medium Tractors	7.9%	-7.9%	8.6%	27.1%	-13.8%	91.1%	5.0%	5.8%	27.8%	45.0%	36.5%	27.3%	13.0%	18.5%	-0.4%	36.1%
Railway engines	32.7%	31.0%	35.8%	55.0%	50.2%	-7.3%	75.3%	34.0%	29.9%	-18.8%	10.8%	45.8%	77.7%	6.3%		47.6%
Civil Steel Boats and ships	59.9%	31.4%	47.6%	51.9%	38.6%	63.7%	37.2%	-23.1%	19.1%	36.6%	16.2%	-3.2%	64.1%	19.9%	57.6%	34.1%
:																

Note: Some monthly numbers (especially for December) often include revisions to prior numbers and may not make sense Source: NBS, OECD, Ecowin, Dragonomics, Macquarie Research, October 2011

Important disclosures:

Recommendation definitions

Macquarie - Australia/New Zealand

Outperform – return >3% in excess of benchmark return Neutral – return within 3% of benchmark return Underperform – return >3% below benchmark return

Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield

Macquarie - Asia/Europe

Outperform - expected return >+10% Neutral - expected return from -10% to +10% Underperform - expected return <-10%

Macquarie First South - South Africa

Outperform – expected return >+10% Neutral - expected return from -10% to +10% Underperform – expected return <-10%

Macquarie - Canada

Outperform - return >5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return

Macquarie - USA

Outperform (Buy) - return >5% in excess of Russell 3000 index return

Neutral (Hold) - return within 5% of Russell 3000 index

Underperform (Sell)- return >5% below Russell 3000 index return

Volatility index definition*

This is calculated from the volatility of historical price movements.

Very high-highest risk - Stock should be expected to move up or down 60-100% in a year - investors should be aware this stock is highly

High – stock should be expected to move up or down at least 40-60% in a year - investors should be aware this stock could be speculative.

Medium - stock should be expected to move up or down at least 30-40% in a year.

Low-medium – stock should be expected to move up or down at least 25-30% in a year.

Low – stock should be expected to move up or down at least 15-25% in a year.

* Applicable to Australian/NZ/Canada stocks only Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Financial definitions

All "Adjusted" data items have had the following adjustments made:

Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / efpowa* ROA = adjusted ebit / average total assets ROA Banks/Insurance = adjusted net profit /average total assets

ROE = adjusted net profit / average shareholders funds Gross cashflow = adjusted net profit + depreciation *equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Recommendation proportions - For quarter ending 30 September 2011

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	57.35%	65.88%	56.94%	46.54%	74.68%	47.85% (for US coverage by MCUSA, 11.63% of stocks covered are investment banking clients	nts)
Neutral	31.99%	20.68%	31.94%	50.00%	23.42%	34.66% (for US coverage by MCUSA, 9.30% of stocks covered are investment banking clients)	s)
Underperform	10.66%	13.45%	11.11%	3.46%	1.90%	17.49% (for US coverage by MCUSA, 0.47% of stocks covered are investment banking clients)	s)

Company Specific Disclosures:

Important disclosure information regarding the subject companies covered in this report is available at www.macquarie.com/disclosures.

Analyst Certification:

The views expressed in this research accurately reflect the personal views of the analyst(s) about the subject securities or issuers and no part of the compensation of the analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations or views in this research. The analyst principally responsible for the preparation of this research receives compensation based on overall revenues of Macquarie Group Ltd ABN 94 122 169 279 (AFSL No. 318062) (MGL) and its related entities (the Macquarie Group) and has taken reasonable care to achieve and maintain independence and objectivity in making any recommendations.

General Disclaimers:

Macquarie Securities (Australia) Ltd; Macquarie Capital (Europe) Ltd; Macquarie Capital Markets Canada Ltd; Macquarie Capital Markets North America Ltd; Macquarie Capital (USA) Inc; Macquarie Capital Securities Ltd and its Taiwan branch; Macquarie Capital Securities (Singapore) Pte Ltd; Macquarie Securities (NZ) Ltd; Macquarie First South Securities (Pty) Limited; Macquarie Capital Securities (India) Pvt Ltd; Macquarie Capital Securities (Malaysia) Sdn Bhd; Macquarie Securities Korea Limited and Macquarie Securities (Thailand) Ltd are not authorized deposit-taking institutions for the purposes of the Banking Act 1959 (Commonwealth of Australia), and their obligations do not represent deposits or other liabilities of Macquarie Bank Limited ABN 46 008 583 542 (MBL) or MGL. MBL does not guarantee or otherwise provide assurance in respect of the obligations of any of the above mentioned entities. MGL provides a guarantee to the Monetary Authority of Singapore in respect of the obligations and liabilities of Macquarie Capital Securities (Singapore) Pte Ltd for up to SGD 35 million. This research has been prepared for the general use of the wholesale clients of the Macquarie Group and must not be copied, either in whole or in part, or distributed to any other person. If you are not the intended recipient you must not use or disclose the information in this research in any way. If you received it in error, please tell us immediately by return e-mail and delete the document. We do not guarantee the integrity of any e-mails or attached files and are not responsible for any changes made to them by any other person. MGL has established and implemented a conflicts policy at group level (which may be revised and updated from time to time) (the "Conflicts Policy") pursuant to regulatory requirements (including the FSA Rules) which sets out how we must seek to identify and manage all material conflicts of interest. Nothing in this research shall be construed as a solicitation to buy or sell any security or product, or to engage in or refrain from engaging in any transaction. In preparing this research, we did not take into account your investment objectives, financial situation or particular needs. Before making an investment decision on the basis of this research, you need to consider, with or without the assistance of an adviser, whether the advice is appropriate in light of your particular investment needs, objectives and financial circumstances. There are risks involved in securities trading. The price of securities can and does fluctuate, and an individual security may even become valueless. International investors are reminded of the additional risks inherent in international investments, such as currency fluctuations and international stock market or economic conditions, which may adversely affect the value of the investment. This research is based on information obtained from sources believed to be reliable but we do not make any representation or warranty that it is accurate, complete or up to date. We accept no obligation to correct or update the information or opinions in it. Opinions expressed are subject to change without notice. No member of the Macquarie Group accepts any liability whatsoever for any direct, indirect, consequential or other loss arising from any use of this research and/or further communication in relation to this research. Clients should contact analysts at, and execute transactions through, a Macquarie Group entity in their home jurisdiction unless governing law permits otherwise.

Country-Specific Disclaimers:

Australia: In Australia, research is issued and distributed by Macquarie Securities (Australia) Ltd (AFSL No. 238947), a participating organisation of the Australian Securities Exchange. New Zealand: In New Zealand, research is issued and distributed by Macquarie Securities (NZ) Ltd, a NZX Firm. Canada: In Canada, research is prepared, approved and distributed by Macquarie Capital Markets Canada Ltd, a participating organisation of the Toronto Stock Exchange, TSX Venture Exchange & Montréal Exchange. Macquarie Capital Markets North America Ltd., which is a registered brokerdealer and member of FINRA, accepts responsibility for the contents of reports issued by Macquarie Capital Markets Canada Ltd in the United States and sent to US persons. Any person wishing to effect transactions in the securities described in the reports issued by Macquarie Capital Markets Canada Ltd should do so with Macquarie Capital Markets North America Ltd. The Research Distribution Policy of Macquarie Capital Markets Canada Ltd is to allow all clients that are entitled to have equal access to our research. United Kingdom: In the United Kingdom, research is issued and distributed by Macquarie Capital (Europe) Ltd, which is authorised and regulated by the Financial Services Authority (No. 193905). Germany: In Germany, research is issued and distributed by Macquarie Capital (Europe) Ltd, Niederlassung Deutschland, which is authorised and regulated in the United Kingdom by the Financial Services Authority (No. 193905). France: In France, research is issued and distributed by Macquarie Capital (Europe) Ltd, which is authorised and regulated in the United Kingdom by the Financial Services Authority (No. 193905). Hong Kong & Mainland China: In Hong Kong, research is issued and distributed by Macquarie Capital Securities Ltd, which is licensed and regulated by the Securities and Futures

31 October 2011 6

Commission. In Mainland China, Macquarie Securities (Australia) Limited Shanghai Representative Office only engages in non-business operational activities excluding issuing and distributing research. Only non-A share research is distributed into Mainland China by Macquarie Capital Securities Ltd. Japan: In Japan, research is issued and distributed by Macquarie Capital Securities (Japan) Limited, a member of the Tokyo Stock Exchange, Inc. and Osaka Securities Exchange Co. Ltd (Financial Instruments Firm, Kanto Financial Bureau (kin-sho) No. 231, a member of Japan Securities Dealers Association and Financial Futures Association of Japan and Japan Securities Investment Advisers Association). India: In India, research is issued and distributed by Macquarie Capital Securities (India) Pvt Ltd., 92, Level 9, 2 North Avenue, Maker Maxity, Bandra Kurla Complex, Bandra (East), Mumbai 400 051, India, which is a SEBI registered Stock Broker having membership with National Stock Exchange of India Limited (INB231246738) and Bombay Stock Exchange Limited (INB011246734). Malaysia: In Malaysia, research is issued and distributed by Macquarie Capital Securities (Malaysia) Sdn. Bhd. (Company registration number: 463469-W) which is a Participating Organisation of Bursa Malaysia Berhad and a holder of Capital Markets Services License issued by the Securities Commission. Taiwan: Information on securities/instruments that are traded in Taiwan is distributed by Macquarie Capital Securities Ltd, Taiwan Branch, which is licensed and regulated by the Financial Supervisory Commission. No portion of the report may be reproduced or quoted by the press or any other person without authorisation from Macquarie. Nothing in this research shall be construed as a solicitation to buy or sell any security or product. Thailand: In Thailand, research is issued and distributed by Macquarie Securities (Thailand) Ltd, a licensed securities company that is authorized by the Ministry of Finance, regulated by the Securities and Exchange Commission of Thailand and is an exchange member no. 28 of the Stock Exchange of Thailand. The Thai Institute of Directors Association has disclosed the Corporate Governance Report of Thai Listed Companies made pursuant to the policy of the Securities and Exchange Commission of Thailand. Macquarie Securities (Thailand) Ltd does not endorse the result of the Corporate Governance Report of Thai Listed Companies but this Report can be accessed at: http://www.thaiiod.com/en/publications.asp?type=4. South Korea: In South Korea, unless otherwise stated, research is prepared, issued and distributed by Macquarie Securities Korea Limited, which is regulated by the Financial Supervisory Services. Information on analysts in MSKL is disclosed at http://dis.kofia.or.kr/fs/dis2/fundMgr/DISFundMgrAnalystPop.jsp?companyCd2=A03053&pageDiv=02. South Africa: In South Africa, research is issued and distributed by Macquarie First South Securities (Pty) Limited, a member of the JSE Limited. Singapore: In Singapore, research is issued and distributed by Macquarie Capital Securities (Singapore) Pte Ltd (Company Registration Number: 198702912C), a Capital Markets Services license holder under the Securities and Futures Act to deal in securities and provide custodial services in Singapore. Pursuant to the Financial Advisers (Amendment) Regulations 2005, Macquarie Capital Securities (Singapore) Pte Ltd is exempt from complying with sections 25, 27 and 36 of the Financial Advisers Act. All Singapore-based recipients of research produced by Macquarie Capital (Europe) Limited, Macquarie Capital Markets Canada Ltd, Macquarie First South Securities (Pty) Limited and Macquarie Capital (USA) Inc. represent and warrant that they are institutional investors as defined in the Securities and Futures Act. United States: In the United States, research is issued and distributed by Macquarie Capital (USA) Inc., which is a registered broker-dealer and member of FINRA. Macquarie Capital (USA) Inc, accepts responsibility for the content of each research report prepared by one of its non-US affiliates when the research report is distributed in the United States by Macquarie Capital (USA) Inc. Macquarie Capital (USA) Inc.'s affiliate's analysts are not registered as research analysts with FINRA, may not be associated persons of Macquarie Capital (USA) Inc., and therefore may not be subject to FINRA rule restrictions on communications with a subject company, public appearances, and trading securities held by a research analyst account. Any persons receiving this report directly from Macquarie Capital (USA) Inc. and wishing to effect a transaction in any security described herein should do so with Macquarie Capital (USA) Inc. Important disclosure information regarding the subject companies covered in this report is available at www.macquarie.com/research/disclosures, or contact your registered representative at 1-888-MAC-STOCK, or write to the Supervisory Analysts, Research Department, Macquarie Securities, 125 W.55th Street, New York, NY 10019. © Macquarie Group

Auckland	Bangkok	Calgary	Denver	Frankfurt	Geneva	Hong Kong
Tel: (649) 377 6433	Tel: (662) 694 7999	Tel: (1 403) 218 6650	Tel: (303) 952 2800	Tel: (069) 509 578 000	Tel: (41) 22 818 7777	Tel: (852) 2823 3588
Jakarta	Johannesburg	Kuala Lumpur	London	Manila	Melbourne	Montreal
Tel: (62 21) 515 1818	Tel: (2711) 583 2000	Tel: (60 3) 2059 8833	Tel: (44 20) 3037 2000	Tel: (63 2) 857 0888	Tel: (613) 9635 8139	Tel: (1 514) 925 2850
Mumbai Tel: (91 22) 6653 3000	Munich Tel: (089) 2444 31800	New York Tel: (1 212) 231 2500	Paris Tel: (33 1) 7842 3823	Perth Tel: (618) 9224 0888	Seoul Tel: (82 2) 3705 8500	Shanghai Tel: (86 21) 6841 3355
Singapore Tel: (65) 6601 1111	Sydney Tel: (612) 8232 9555	Taipei Tel: (886 2) 2734 7500	Tokyo Tel: (81 3) 3512 7900	Toronto Tel: (1 416) 848 3500		

Available to clients on the world wide web at www.macquarieresearch.com and through Thomson Financial, FactSet, Reuters, Bloomberg, CapitallQ and TheMarkets.com.

Macquarie Commodities Research





Heads of Equity Research	
John O'Connell (Global Co – Head) David Rickards (Global Co – Head) Julian Wentzel (Europe/South Africa) George Brits (South Africa)	(612) 8232 7544 (612) 8237 1159 (44 20) 3037 4274 (2711) 583 2223
Consumer Staples	
Food & Beverages Julian Wentzel (Johannesburg) Sreedhar Mahamkali (London) Vincent Hamel (Paris)	(2711) 583 2202 (44 20) 3037 4016 (33 1) 5652 5491
Consumer Discretionary	
Retailing Julian Wentzel (Johannesburg) Stephen Carrott (Johannesburg) Sreedhar Mahamkali (London) Rebecca Lay (London) Robert Joyce (London) Vincent Hamel (Paris)	(2711) 583 2202 (2711) 583 2211 (44 20) 3037 4016 (44 20) 3037 4468 (44 20) 3037 4355 (33 1) 5652 5491
Energy	
Jason Gammel (Global) David Farrell (London) Mark Wilson (London) Marc Kofler (London)	(44 20) 3037 4085 (44 20) 3037 4465 (44 20) 3037 4466 (44 20) 3037 1909
Alternative Energy	
Shai Hill (Europe) Robert Schramm (Europe)	(44 20) 3037 4232 (44 20) 3037 4559
Financials	
Diversified Financials Neil Welch (London) William Howlett (London)	(44 20) 3037 4272 (44 20) 3037 4196
Banks Edward Firth (Europe) Alessandro Roccati (London) Dave Johnston (London) Benjie Creelan-Sandford (London) Thomas Stoegner (London) Piers Brown (London) Jeff Harris (London)	(44 20) 3037 4077 (44 20) 3037 4254 (44 20) 3037 4525 (44 20) 3037 4081 (44 20) 3037 4081 (44 20) 3037 4044 (44 20) 3037 5065
Insurance Hadley Cohen (London)	(44 20) 3037 4078

Industrials - cont

Autos					
Christian Breitsprecher (Frankfurt)	(49 69) 50957 8014				
Jens Schattner (Frankfurt)	(49 69) 50957 8026				
Transportation – Infrastructure					
Robert Joynson (London)	(44 20) 3037 4240				
Peter Steyn (Johannesburg)	(2711) 583 2337				
Markus Hesse (Frankfurt)	(49 69) 50957 8019				

Materials

Chemicals/Containers, Packaging/Paper & Forest Products, Construction Materials

Global Metals & Mining	
Jürgen Reck (Frankfurt)	(49 69) 50957 8024
Christian Faitz (Frankfurt)	(49 69) 50957 8017
Peter Steyn (Johannesburg)	(2711) 583 2337
David Smith (Johannesburg)	(2111) 303 2240

•	
Jeff Largey (London)	(44 20) 3037 4359
Alon Olsha (London)	(44 20) 3037 2637
Michael Bogusz (Perth)	(618) 9224 0607
Avishkar Nagaser (Johannesburg)	(2711) 583 2280
Gareth Neilson (Johannesburg)	(2711) 583 2318
Kieran Daly (Johannesburg)	(2711) 583 2208
Lee Bowers (Sydney)	(612) 8232 9834

Pharmaceuticals

Peter Düllman (Frankfurt)	(49 69) 50957 8016
Claudia Lakatos (Frankfurt)	(49 69) 50957 8022
Aadil Omar (Johannesburg)	(2711) 583 2305
Christian Peter (Zurich)	(41 44) 564 0226

Real Estate

Property Trusts & Developers	3
Leon Allison (Johannesburg)	(2711) 583 2209
Alex Moss (London)	(44 20) 3 037 4086

TMET

(44 20) 3037 4450

(2711) 583 2337 (44 20) 3037 1901

(1 212) 231 2555 (1 212) 231 2555

Telecommunications	
Guy Peddy (London)	(44 20) 3037 4509
Martin Dullaart (Johannesburg)	(2711) 583 2322
Media	
Martin Dullaart (Johannesburg)	(2711) 583 2322

Martin Dullaart (Johannesburg) (2711) 583 2322 **Technology/IT/Internet**Marcus Sander (Frankfurt) (49 69) 50957 8025

Utilities

Shai Hill (London)	(44 20) 3037 4232
Atallah Estephan (London)	(44 20) 3037 4356
Matthias Heck (Frankfurt)	(49 69) 50957 8018

Commodities & Precious Metals

Jim Lennon (London) Colin Hamilton (London) Duncan Hobbs (London) Hayden Atkins (London) Kona Haque (London) Chris Gadd (London) Bonnie Liu (Singapore) Graeme Train (Shanghai)	(44 20) 3037 4271 (44 20) 3037 4061 (44 20) 3037 4497 (44 20) 3037 4476 (44 20) 3037 4334 (44 20) 3037 1957 (65) 6601 0144 (86 21) 2412 9035
Graeme Train (Shanghai) Angela Bi (Shanghai)	(86 21) 2412 9035 (86 21) 2412 9086

European Macro Group

Daniel McCormack (Europe)	(852) 3922 4073
Strategy Matthias Jörss (Frankfurt) George Brits (South Africa)	(49 69) 50957 8021 (2711) 583 2223
Quantitative Gurvinder Brar (Global) Christian Davies (London) James Murray (London) Inez Khoo (London)	(44 20) 3037 4036 (44 20) 3037 4037 (44 20) 3037 1976 (44 20) 3037 2640
George Ssali (Johannesburg)	(2711) 583 2364

C: ~ ~				-4
Fina	OUL	resear	cn	at

Fina our r	esearch at
Macquarie:	www.macquarie.com.au/research
Thomson:	www.thomson.com/financial
Reuters:	www.knowledge.reuters.com
Bloomberg:	MAC GO

Factset: http://www.factset.com/home.aspx CapitallQ www.capitaliq.com TheMarkets.com www.themarkets.com

Contact Gareth Warfield for access (612) 8232 3207

Email addresses

FirstName.Surname@macquarie.com eg. David.Rickards@macquarie.com

Equities

Industrials

Capital Goods
Paul Butler (London)

Peter Steyn (Johannesburg)

Sam Dobson (London)

US Sales Trading

Chris Reale (New York) Guy Devereux (New York)

Stevan Vrcelj (Global Head) Duarte Da Silva (Johannesburg) UK Trading	(612) 8232 5999 (2711) 583 2000
Richard Bateson (London) Julian Parmenter (London) Thorsten Ackermann (London) Colin Reed (London) Robert Tappin (London) Wayne Drayton (London) Marc Crome (London) UK Sales Trading	(44 20) 3037 4821 (44 20) 3037 4826 (44 20) 3037 4908 (44 20) 3037 4982 (44 20) 3037 4827 (44 20) 3037 4980 (44 20) 3037 4778
Daryl Bowden (London) Greg Hill (London) Drew Hendrickson (London) Joanne Mowatt-Morris (London) Leon Cutler (London) James Buckley (London) Jim Dixon (London) Simona Casella (London) KC O'Rourke (London)	(44 20) 3037 4973 (44 20) 3037 4757 (44 20) 3037 4784 (44 20) 3037 4970 (44 20) 3037 4750 (44 20) 3037 4750 (44 20) 3037 1721 (44 20) 3037 4949 (44 20) 3037 4910

Germany Trading

Elvis Javor (Frankfurt)	(49 69) 50957 8654
Germany Sales Trading	
Ralf Loke (Frankfurt)	(49 69) 50957 8833
Marcus Dunne (Frankfurt)	(49 69) 50957 8831
EU Cash Sales	
Charles Nelson (London)	(44 20) 3037 4832
Richard Alderman (London)	(44 20) 3037 4875
Sam Bygott-Webb (London)	(44 20) 3037 4767
Luke Ahern (London)	(44 20) 3037 4960
Trevor Griffiths (London)	(44 20) 3037 4964
Robin Wrench (London)	(44 20) 3037 4978
Matthew Camacho (London)	(44 20) 3037 4972
Ed Reekie (London)	(44 20) 3037 4957
Jacob Potts (London)	(44 20) 3037 4929
Charles Lesser (London)	(44 20) 3037 4771
Paul De Thierry (London)	(44 20) 3037 4809
James Lumby (London)	(44 20) 3037 4846
Leon Caine (London)	(44 20) 3037 4954
Karl Filbert (Frankfurt)	(49 69) 50957 8651
Thomas Auschill (Frankfurt)	(49 69) 50957 8168
Markus Geisbuesch (Frankfurt)	(49 69) 50957 8709
Holger Hoepfner (Zurich)	(41 44) 564 0220

EU Cash Sales – cont Martin Pommier (New York)

Jan Halaska (Boston)	(1 617) 598 2503	
Chris Carr (New York)	(1 212) 231-6398	
Doug Stone (New York)	(1 212) 231 2606	
South Africa Sales		
Franco Lorenzani (Johannesburg)	(2711) 583 2014	
William Ridge (Johannesburg)	(2711) 583 2060	
Liam Graham (London)	(44 20) 3037 4836	
Nazmeera Moola (Cape Town)	(2721) 813 2725	
Russell Fryer (New York)	(1 212) 231 2504	
South Africa Sales Trading		

(1 212) 231 8054

Harry Ioannou (Johannesburg)	(2711) 583 2015
Jesse Ushewokunze (Johannesburg)	(2711) 583 2017
Keith Thompson (Johannesburg)	(2711) 583 2058
Martin Hughes (Johannesburg)	(2711) 583 2019
Marcello Damilano (Johannesburg)	(2711) 583 2018
Roland Wood (Cape Town)	(2721) 813 2611