

## TAIWAN

# AUO

22 October 2008

**2409 TT** **Outperform**

Stock price as of 21 Oct 08	NT\$	27.50
12-month target	NT\$	40.00
Upside/downside	%	+45.5
Valuation	NT\$	40.00
- Price To Book		

GICS sector	technology hardware & equipment	
Market cap	NT\$m	233,907
30-day avg turnover	NT\$m	1,985.4
Market cap	US\$m	7,172
Foreign ownership	%	40.5
Number shares on issue	m	8,506

### Investment fundamentals

Year end 31 Dec		2007A	2008E	2009E	2010E
Total revenue	bn	480.2	470.1	546.6	553.0
Reported profit	bn	56.4	31.6	26.8	31.7
Profit bonus exp	bn	41.4	31.6	26.8	31.7
Bon exp/rep prof	%	26.6	0.0	0.0	0.0
EPS rep	NT\$	6.93	3.82	3.14	3.70
EPS rep growth	%	432.9	-45.0	-17.7	18.0
EPS bonus exp	NT\$	5.09	3.82	3.14	3.70
EPS bonus growth %		458.5	-25.0	-17.7	18.0
PE rep	x	4.0	7.2	8.8	7.4
PE bonus exp	x	5.4	7.2	8.8	7.4
Total DPS	NT\$	2.38	0.60	0.60	0.80
Total div yield	%	8.7	2.2	2.2	2.9
ROA	%	10.6	6.7	6.4	6.5
ROE	%	21.2	10.7	9.0	10.0
EV/EBITDA	x	2.0	2.4	2.2	2.1
Net debt/equity	%	29.2	49.5	43.3	36.8
Price/book	x	0.8	0.8	0.8	0.7

### 2409 TT rel Taix performance, & rec history



Source: Datastream, Macquarie Research, October 2008 (all figures in NT\$ unless noted)

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## 3Q08 results preview

### Event

- We preview 3Q08 results and provide an outlook for 4Q08.

### Impact

- We believe AUO will post an operating loss for 3Q08. We estimate that the 3Q08 operating margin dropped to -4.0%, down from 19.5% in 2Q08 due to sharp falls in panel prices. We estimate a 3Q08 loss per share (LPS) of NT\$0.64 (net loss of NT\$5.5bn) vs EPS of NT\$2.44 in the previous quarter. Sales were NT\$104bn (-16% QoQ, -24% YoY). We estimate that the large panel blended ASP was US\$138 (-19% QoQ, -20% YoY), lower than company guidance of a 7–13% QoQ decline. Large panel shipments totalled 20.7m units (-5% QoQ, -7% YoY), below company guidance of 5% growth QoQ.
- For 4Q08, AUO will likely guide for its large panel blended ASP to be down by 5–10% QoQ in US\$, similar to that by LGD (034220 KS, Won24,100, Neutral, TP: Won25,000). We expect large panel shipments to rise by 0–5% QoQ. This is a slower rate than LGD because AUO is maintaining lower utilisation rates. We estimate a LPS of NT\$1.17 and an operating margin drop to -8.2%.
- Regarding capex, we expect AUO to reduce spending in 2009. We are unsure of the exact amount, but it could be down YoY. For the moment, we are modelling a fall of 25% from NT\$130–140bn to NT\$100bn for 2009. Similarly, other panel makers globally are also reducing their capex for 2009. This should lead to tighter supply conditions and pave the way for a cyclical upswing in 2H09.

### Earnings revision

- We are lowering our 2008–10E EPS by 40%, 66% and 54%, respectively, to reflect lower ASP assumptions. We expect AUO to turn profitable at the operating level in 2Q09.

### Price catalyst

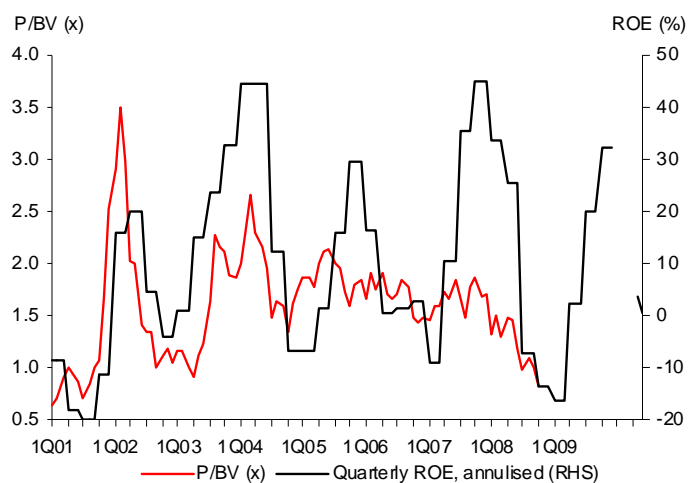
- 12-month price target: NT\$40.00 based on a Price to Book methodology.
- Catalyst: The demand response to lower LCD TV Street prices will be a key factor for panel price stability and the direction of the TFT-LCD cycle.

### Action and recommendation

- We maintain an Outperform but lower our target price from NT\$61 to NT\$40 based on a 2009E P/BV of 1.1x. We believe the stock should trade above its book value on a 12-month view before a return to profitability in 2Q09 and 2H09. Our previous target price of NT\$61 (ex-dividend) was based on 1.6x our preceding 2008E BV/sh estimate. Historically, the stock has traded at an average P/BV of 1.6x with a high of 3.5x and low of 0.6x.
- We believe the losses and TFT-LCD downcycle in 2H08 should be mostly discounted. Since 1 August, when it became apparent that panel pricing would fall sharply to cash COGS, AUO has outperformed the TWSE index by 11%.

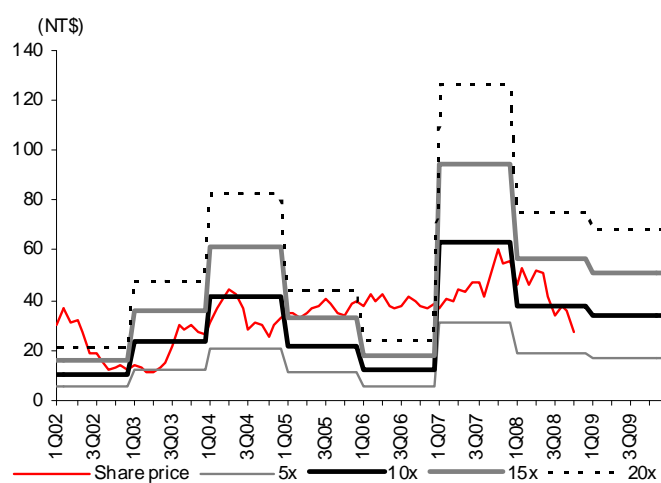
Please refer to the important disclosures and analyst certification on inside back cover of this document, or on our website [www.macquarie.com.au/research/disclosures](http://www.macquarie.com.au/research/disclosures).

Fig 1 AUO – P/BV vs ROE, reported



Source: Company data, Macquarie Research, October 2008

Fig 2 AUO – PER band, reported



Source: Company data, Macquarie Research, October 2008

Fig 3 Income statement, reported

Year end 31 Dec (NT\$m)	2003A	2004A	2005A	2006A	2007A	2008E	2009E	2010E
Large panel shipments (units, 000)		18,700	30,600	48,700	80,900	86,300	103,400	116,000
% ch YoY/QuoQ		0	64	59	66	7	20	12
Large panel blended ASP (US\$)		238	194	165	166	154	135	125
% ch YoY/QuoQ		0	-19	-15	0	-7	-12	-7
Net sales	104,861	168,112	217,388	293,107	480,184	470,092	546,570	553,014
Gross profit	23,462	39,643	29,848	29,850	86,178	71,741	74,557	81,496
Operating expenses	7,217	11,036	12,859	15,634	22,903	30,141	34,276	38,794
Operating income	16,245	28,607	16,989	14,216	63,275	41,600	40,281	42,703
Net non-operating income	-672	-583	-894	-4,016	-4,711	-4,700	-6,600	-5,600
Pretax income	15,573	28,024	16,095	10,200	58,564	36,900	33,681	37,103
Income tax (credit)	-87	61	473	1,068	2,088	5,095	6,650	5,071
Extraordinary items	0	0	0	-39	0	0	0	0
Minority interest	0	0	-6	-10	58	195	270	320
Net income	15,660	27,963	15,627	9,103	56,418	31,610	26,761	31,711
Shares, wgt avg, adj (m)	5,413	5,773	6,397	6,997	8,136	8,383	8,526	8,565
EPS, adj (NT\$)	2.89	4.84	2.44	1.30	6.93	3.77	3.14	3.70
% ch YoY								
Sales	39	60	29	35	64	-2	16	1
Gross profit	94	69	-25	0	189	-17	4	9
Operating income	111	76	-41	-16	345	-34	-3	6
Net income	160	79	-44	-42	520	-44	-15	18
EBITDA	57	66	-5	30	116	-14	7	8
EPS	132	67	-50	-47	433	-46	-17	18
Margins (%)								
Gross	22.4	23.6	13.7	10.2	17.9	15.3	13.6	14.7
Operating	15.5	17.0	7.8	4.9	13.2	8.8	7.4	7.7
Net	14.9	16.6	7.2	3.1	11.7	6.7	4.9	5.7
EBITDA	31.0	32.1	23.7	22.9	30.2	26.5	24.4	26.0

As per ROC GAAP reporting, financials from and including 2008 include bonus expenses, while financials before 2008 exclude bonus expenses.

Source: Macquarie Research, TEJ, Company data, October 2008

**Fig 4 Income statement, reported quarterly**

Year end 31 Dec (NT\$m)	1Q08A	2Q08A	3Q08E	4Q08E	1Q09E	2Q09E	3Q09E	4Q09E
Large panel shipments (units, 000)	22,000	21,800	20,700	21,800	22,000	25,400	28,000	28,000
% ch YoY/QoQ	-5	-1	-5	5	1	15	10	0
Large panel blended ASP (US\$)	181	170	138	126	124	128	138	146
% ch YoY/QoQ	-4	-6	-19	-9	-2	3	8	6
Net sales	136,630	123,476	104,294	105,692	106,842	126,453	150,892	162,384
Gross profit	37,084	30,815	3,969	-128	-158	8,792	26,368	39,555
Operating expenses	6,774	6,754	8,104	8,510	7,659	8,042	8,846	9,730
Operating income	30,310	24,062	-4,135	-8,637	-7,816	750	17,522	29,825
Net non-operating income	-1,456	-444	-1,400	-1,400	-2,400	-1,400	-1,400	-1,400
Pretax income	28,855	23,617	-5,535	-10,037	-10,216	-650	16,122	28,425
Income tax (credit)	1,869	3,226	0	0	1,226	78	1,935	3,411
Extraordinary items	0	0	0	0	0	0	0	0
Minority interest	124	226	-55	-100	-114	-7	142	250
Net income	26,861	20,165	-5,479	-9,937	-11,328	-720	14,046	24,764
Shares, wgt avg, adj (m)	8,258	8,262	8,505	8,506	8,506	8,506	8,546	8,546
EPS, adj (NT\$)	3.25	2.44	-0.64	-1.17	-1.33	-0.08	1.64	2.90
% ch QoQ								
Sales	-53	-10	-16	1	1	18	19	8
Gross profit	-50	-17	-87	nmf	nmf	nmf	200	50
Operating income	-50	-21	nmf	nmf	nmf	nmf	2,235	70
Net income	-52	-25	nmf	nmf	nmf	nmf	nmf	76
EBITDA	-51	-12	-62	-21	10	62	73	31
EPS	-52	-25	nmf	nmf	nmf	nmf	nmf	76
Margins (%)								
Gross	27.1	25.0	3.8	-0.1	-0.1	7.0	17.5	24.4
Operating	22.2	19.5	-4.0	-8.2	-7.3	0.6	11.6	18.4
Net	19.7	16.3	-5.3	-9.4	-10.6	-0.6	9.3	15.3
EBITDA	36.7	35.7	16.2	12.6	13.7	18.8	27.2	33.1

As per ROC GAAP reporting, financials from and including 2008 include bonus expenses.

Source: Macquarie Research, TEJ, Company data, October 2008

Fig 5 Income statement, bonus adjusted

Year end 31 Dec (NT\$m)	2003A	2004A	2005A	2006A	2007A	2008E	2009E	2010E
Net sales	104,861	168,112	217,388	293,107	480,184	470,092	546,570	553,014
Gross profit	23,462	39,643	29,848	29,850	86,178	71,741	74,557	81,496
Operating expenses	10,996	15,549	17,242	18,362	37,916	30,141	34,276	38,794
Non-bonus expenses	7,217	11,036	12,859	15,634	22,903	23,936	29,553	33,197
Bonus at market value	3,779	4,513	4,382	2,728	15,013	6,205	4,723	5,596
Operating income	12,466	24,094	12,606	11,488	48,262	41,600	40,281	42,703
Net non-operating income	-672	-583	-894	-4,016	-4,711	-4,700	-6,600	-5,600
Pretax income	11,794	23,511	11,712	7,472	43,551	36,900	33,681	37,103
Income tax (credit)	-87	61	473	1,068	2,088	5,095	6,650	5,071
Extraordinary items	0	0	0	-39	0	0	0	0
Minority interest	0	0	-6	-10	58	195	270	320
Net income	11,881	23,449	11,245	6,375	41,405	31,610	26,761	31,711
Shares, wgt avg, adj (m)	5,413	5,773	6,397	6,997	8,136	8,383	8,526	8,565
EPS (NT\$)	2.19	4.06	1.76	0.91	5.09	3.77	3.14	3.70
Net income before bonus	15,660	27,963	15,627	9,103	56,418	37,815	31,483	37,307
Bonus at market value as % of								
Net income before bonus	24	16	28	30	27	16	15	15
Net income	32	19	39	43	36	20	18	18
Pretax income before bonus	24	16	27	27	26	14	12	13
Pretax income	32	19	37	37	34	17	14	15
Operating income before bonus	23	16	26	19	24	13	10	12
Operating income	30	19	35	24	31	15	12	13
Gross profit	16	11	15	9	17	9	6	7
Sales	4	3	2	1	3	1	1	1
% ch YoY								
Sales	39	60	29	35	64	-2	16	1
Gross profit	94	69	-25	0	189	-17	4	9
Operating expenses	108	41	11	7	106	-21	14	13
Operating income	84	93	-48	-9	320	-14	-3	6
Net income	133	97	-52	-43	549	-24	-15	18
EBITDA	45	72	-5	36	102	-4	7	8
EPS	108	85	-57	-48	458	-26	-17	18
Margins (%)								
Gross	22.4	23.6	13.7	10.2	17.9	15.3	13.6	14.7
Operating	11.9	14.3	5.8	3.9	10.1	8.8	7.4	7.7
Net	11.3	13.9	5.2	2.2	8.6	6.7	4.9	5.7
EBITDA	27.4	29.4	21.7	21.9	27.1	26.5	24.4	26.0
Returns (%)								
ROE	14.4	22.4	8.5	3.6	17.1	12.0	10.1	11.1
ROIC	13.4	18.3	6.7	3.2	12.6	9.7	8.0	9.1
ROCE	11.1	16.5	6.4	3.4	11.7	10.2	9.7	10.3
ROA	9.0	13.0	4.8	2.5	8.7	7.2	6.5	6.9

For income statement data, financials from and including 2008 are reported, while financials before 2008 are pro forma. For return ratios, all data are pro forma.

Source: Macquarie Research, TEJ, Company data, October 2008

**AU Optronics (2409 TT, Outperform, Target price: NT\$40.00)**

Quarterly Results					Profit & Loss						
		1Q/08A	2Q/08A	3Q/08E	4Q/08E		2007A	2008E	2009E	2010E	
<b>Revenue</b>	m	136,630	123,476	104,294	105,692	<b>Revenue</b>	m	480,184	470,092	546,570	553,014
<b>Gross Profit</b>	m	37,084	30,815	3,969	-128	<b>Gross Profit</b>	m	86,178	71,741	74,557	81,496
Operating Expenses	m	-6,774	-6,754	-8,104	-8,510	Operating Expenses	m	-22,903	-30,141	-34,276	-38,794
<b>Operating Income</b>	m	30,310	24,062	-4,135	-8,637	<b>Operating Income</b>	m	63,275	41,600	40,281	42,703
Net Non-operating income	m	-1,456	-444	-1,400	-1,400	Net Non-operating income	m	-4,711	-4,700	-6,600	-5,600
<b>Pre-Tax Income</b>	m	28,855	23,617	-5,535	-10,037	<b>Pre-Tax Income</b>	m	58,564	36,900	33,681	37,103
Tax Expense	m	-1,869	-3,226	0	0	Tax Expense	m	-2,088	-5,095	-6,650	-5,071
Exceptionals	m	0	0	0	0	Exceptionals	m	0	0	0	0
Minority Interests	m	-124	-226	55	100	Minority Interests	m	-58	-195	-270	-320
<b>Reported Earnings</b>	m	26,861	20,165	-5,479	-9,937	<b>Reported Earnings</b>	m	56,418	31,610	26,761	31,711
Reported Earnings (bonus exp)	m	26,861	20,165	-5,479	-9,937	Reported Earnings (bonus exp)	m	41,405	31,610	26,761	31,711
Bonus exp / Reported Earnings	%	0.0	0.0	0.0	0.0	Bonus exp / Reported Earnings	%	26.6	0.0	0.0	0.0
<b>Adjusted Earnings</b>	m	26,861	20,165	-5,479	-9,937	<b>Adjusted Earnings</b>	m	56,418	31,610	26,761	31,711
<b>EBITDA</b>	m	50,114	44,044	16,865	13,363	<b>EBITDA</b>	m	144,980	124,386	133,281	143,703
EPS (rep)	NT\$	3.25	2.56	-0.64	-1.17	EPS (rep)	NT\$	6.93	3.82	3.14	3.70
EPS pcp growth (rep)	%	5,886.2	4,616.8	nmf	nmf	EPS growth (rep)	%	432.9	-45.0	-17.7	18.0
EPS (rep bonus exp)	NT\$	3.25	2.56	-0.64	-1.17	EPS (rep bonus exp)	NT\$	5.09	3.82	3.14	3.70
EPS pcp growth (rep bonus exp)	%	8,056.8	6,327.1	nmf	nmf	EPS growth (rep bonus exp)	%	458.5	-25.0	-17.7	18.0
Revenue pcp growth	%	46.3	32.3	-28.9	-28.0	PE (rep)	x	4.0	7.2	8.8	7.4
Operating Income pcp growth	%	2,159	1,693	nmf	nmf	PE (rep bonus adj)	x	5.4	7.2	8.8	7.4
Reported Earnings pcp growth	%	5,994	4,475	nmf	nmf	PE (adj)	x	4.0	6.9	8.8	7.4
Gross Profit Margin	%	27.1	25.0	3.8	-0.1	Total DPS	NT\$	2.38	0.60	0.60	0.80
Operating Income Margin	%	22.2	19.5	-4.0	-8.2	Total Div Yield	%	8.7	2.2	2.2	2.9
Reported Earnings Margin	%	19.7	16.3	-5.3	-9.4	Weighted Average Shares	m	8,136	8,284	8,526	8,565
EBITDA Margin	%	36.7	35.7	16.2	12.6	Period End Shares	m	8,209	8,506	8,546	8,584
<b>Profit and Loss Ratios</b>		2007A	2008E	2009E	2010E	<b>Cashflow Analysis</b>		2007A	2008E	2009E	2010E
Revenue Growth	%	63.8	-2.1	16.3	1.2	<b>Reported Earnings</b>	m	56,418	31,610	26,761	31,711
Gross Profit Growth	%	188.7	-16.8	3.9	9.3	Depreciation & Amortisation	m	81,706	82,786	93,000	101,000
Operating Income Growth	%	345.1	-34.3	-3.2	6.0	Chgs in Working Cap	m	10,654	-15,735	336	-13,291
Reported Earnings Growth	%	519.7	-44.0	-15.3	18.5	Other	m	8,149	4,953	-0	-0
EBITDA Growth	%	116.5	-14.2	7.2	7.8	<b>Operating Cashflow</b>	m	156,927	103,614	120,097	119,420
Gross Profit Margin	%	17.9	15.3	13.6	14.7	Acquisitions	m	0	0	0	0
Operating Income Margin	%	13.2	8.8	7.4	7.7	Capex	m	-65,137	-133,379	-100,000	-100,000
Reported Earnings Margin	%	11.7	6.7	4.9	5.7	Asset Sales	m	-789	-1,737	0	0
EBITDA Margin	%	30.2	26.5	24.4	26.0	Other	m	-1,801	-857	0	0
Payout Ratio	%	34.4	15.0	19.2	21.6	<b>Investing Cashflow</b>	m	-67,727	-135,973	-100,000	-100,000
EV/EBITDA	x	2.0	2.4	2.2	2.1	Dividend (Ordinary)	m	-1,515	-21,263	-5,127	-5,150
EV/EBIT	x	4.6	7.2	7.4	7.0	Equity Raised	m	0	0	0	0
<b>Balance Sheet Ratios</b>						Debt Movements	m	-36,581	-16,148	0	-20,000
ROE	%	21.2	10.7	9.0	10.0	Other	m	-6,721	-3,539	-4,525	-3,127
ROA	%	10.6	6.7	6.4	6.5	<b>Financing Cashflow</b>	m	-44,817	-40,951	-9,652	-28,277
ROIC	%	14.8	9.2	7.5	8.4	<b>Net Chg in Cash/Debt</b>	m	45,964	-73,655	10,444	-8,857
Net Debt/Equity	%	29.2	49.5	43.3	36.8	Free Cashflow	m	91,790	-29,765	20,097	19,420
Interest Cover	x	14.2	13.5	11.2	11.9	FCF per Share	NT\$	11.28	-3.59	2.36	2.27
Price/Book	x	0.8	0.8	0.8	0.7	P/FCF	x	2.4	-7.7	11.7	12.1
Book Value per Share	NT\$	36.6	33.8	35.7	38.3	<b>Balance Sheet</b>		2007A	2008E	2009E	2010E
						Cash	m	89,890	16,235	26,679	17,823
						Receivables	m	75,911	58,718	90,213	92,913
						Inventories	m	35,431	70,547	54,591	72,734
						Investments	m	1,516	1,139	1,139	1,139
						Fixed Assets	m	363,835	420,810	427,810	426,810
						Intangibles	m	14,021	11,619	11,619	11,619
						Other Assets	m	36,856	37,359	37,359	37,359
						<b>Total Assets</b>	m	617,459	616,427	649,410	660,397
						Payables	m	138,342	169,477	185,352	192,904
						Short Term Debt	m	35,722	41,694	41,694	41,694
						Long Term Debt	m	142,016	116,990	116,990	96,990
						Provisions	m	0	0	0	0
						Other Liabilities	m	560	371	371	371
						<b>Total Liabilities</b>	m	316,639	328,533	344,408	331,960
						<b>Total S/H Equity</b>	m	300,820	287,894	305,002	328,436
						<b>Total Liab &amp; S/H Funds</b>	m	617,459	616,427	649,410	660,397

All figures in NT\$ unless noted.

Source: Macquarie Research, Company data, TEJ, October 2008

## Important disclosures:

Recommendation definitions	Volatility index definition*	Financial definitions
<p><b>Macquarie - Australia/New Zealand</b> Outperform – return &gt;5% in excess of benchmark return (&gt;2.5% in excess for listed property trusts) Neutral – return within 5% of benchmark return (within 2.5% for listed property trusts) Underperform – return &gt;5% below benchmark return (&gt;2.5% below for listed property trusts)</p> <p><b>Macquarie – Asia/Europe</b> Outperform – expected return &gt;+10% Neutral – expected return from -10% to +10% Underperform – expected return &lt;-10%</p> <p><b>Macquarie First South - South Africa</b> Outperform – expected return &gt;+10% Neutral – expected return from -10% to +10% Underperform – expected return &lt;-10%</p> <p><b>Macquarie – Canada</b> Outperform – return &gt;5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return &gt;5% below benchmark return</p> <p><b>Macquarie – USA</b> Outperform (Buy) – return &gt;5% in excess of benchmark return Neutral (Hold) – return within 5% of benchmark return Underperform (Sell) – return &gt;5% below benchmark return</p> <p><b>Recommendations</b> – 12 months</p> <p><b>Note:</b> Quant recommendations may differ from Fundamental Analyst recommendations</p>	<p>This is calculated from the volatility of historic price movements.</p> <p><b>Very high–highest risk</b> – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.</p> <p><b>High</b> – 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.</p> <p><b>Medium</b> – stock should be expected to move up or down at least 30–40% in a year.</p> <p><b>Low–medium</b> – stock should be expected to move up or down at least 25–30% in a year.</p> <p><b>Low</b> – stock should be expected to move up or down at least 15–25% in a year.</p> <p>* Applicable to Australian/NZ stocks only</p>	<p>All "Adjusted" data items have had the following adjustments made: Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives &amp; hedging, IFRS impairments &amp; IFRS interest expense Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends &amp; minority interests</p> <p><b>EPS</b> = adjusted net profit / epowa* <b>ROA</b> = adjusted ebit / average total assets <b>ROA Banks/Insurance</b> = adjusted net profit / average total assets <b>ROE</b> = adjusted net profit / average shareholders funds <b>Gross cashflow</b> = adjusted net profit + depreciation *equivalent fully paid ordinary weighted average number of shares</p> <p>All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).</p>

## Recommendation proportions – For quarter ending 30 September 2008

	AU/NZ	Asia	RSA	USA	CA	EUR
Outperform	43.17%	61.57%	63.08%	53.60%	71.54%	43.00%
Neutral	41.37%	16.43%	30.77%	37.60%	24.61%	48.00%
Underperform	15.47%	22.00%	6.15%	8.80%	3.85%	9.00%

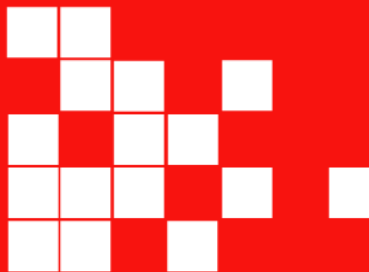
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