

15 March 2023

Taiwan

EQUITIES

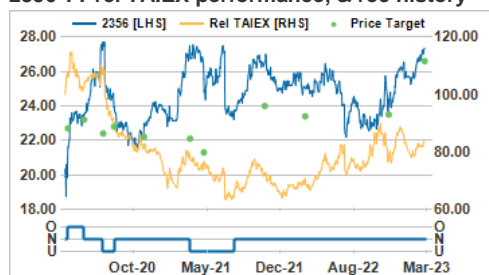
2356 TT Neutral
Price (at 12:19, 14 Mar 2023 GMT) NT\$27.15

Valuation	NT\$	26.60
- PER		
12-month target	NT\$	26.60
Upside/Downside	%	-2.0
12-month TSR	%	+3.1
Volatility Index		Low
GICS sector		
Technology Hardware & Equipment		
Market cap	NT\$m	97,387
Market cap	US\$m	3,202
Free float	%	91
30-day avg turnover	US\$m	5.2
Number shares on issue	m	3,587

Investment fundamentals

Year end 31 Dec		2022A	2023E	2024E	2025E
Revenue	bn	541.8	553.5	590.1	618.2
EBIT	bn	6.7	7.5	8.8	10.2
EBIT growth	%	41.2	12.8	17.3	15.4
Reported profit	bn	6.1	6.0	7.6	8.7
EPS rep	NT\$	1.71	1.67	2.13	2.43
EPS rep growth	%	-6.3	-2.4	27.5	14.2
PER rep	x	15.9	16.3	12.8	11.2
Total DPS	NT\$	1.50	1.38	1.76	2.02
Total div yield	%	5.5	5.1	6.5	7.4
ROA	%	2.6	2.8	3.1	3.5
ROE	%	10.4	9.9	12.2	13.4
EV/EBITDA	x	13.3	11.9	10.5	9.4
Net debt/equity	%	51.6	66.0	55.0	54.1
P/BV	x	1.6	1.6	1.5	1.5

2356 TT rel TAIEX performance, & rec history



Note: Recommendation timeline - if not a continuous line, then there was no Macquarie coverage at the time or there was an embargo period.

Source: FactSet, Macquarie Research, March 2023
(all figures in NT\$ unless noted, TP in TWD)

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Inventec (2356 TT)

Still see '23 growth on servers, smart devices

Key points

- 4Q GM beat, but OPM/EPS missed on higher R&D, production costs for diversification, and interest expense, which should carry on to 2023E.
- We expect 2023 revenue to grow 2% on servers (US hyperscale) and smart devices (low base).
- Maintain Neutral on rich valuation. Raise TP 13% to NT\$26.60 (12.5x 2024PE), from NT\$23.50 (12.5x 2023PE).

4Q GM beat but OPM and EPS missed

- Inventec reported 4Q results and hosted an analyst call today. GM beat on higher sever mix, but OPM missed on higher R&D and costs for production diversification. The company reported higher non-op losses in 4Q due to higher interest expense and FX loss.

2023 outlook intact, but we cut OPM, non-op income post-4Q miss

- What we liked:** Management remained positive on growth for its PC (share gain), server (US hyperscale), and handheld segments in 2023, though we are more convinced for servers and handhelds than PCs given slow PC demand.
- What we didn't like:** We expect opex ratio to remain high in 2023E given continued production diversification and interest expense to still affect pretax profit meaningfully. Enterprise server and China hyperscale demand could decline in 2023, though to be offset by growth in US hyperscale. We think upside could come from Inspur Group (596.HK, Not Rated and 600756.CH, Not Rated), which is [included on the US "entity list" for sanctions](#), but management cannot confirm as of now.
- Outlook:** We expect revenue to grow 2% in 2023E driven by smart devices and servers. In our view, 1Q23E should be the trough for trough PC shipment and server inventory digestion, followed by sequential growth in 2Q-3Q23E.

Earnings and target price revision

- We cut 2023E EPS by 11% on lower OPM and higher interest expense. Minimal (+0.1%) change for 2024E EPS. However, we lift TP 13% to NT\$26.60, from NT\$23.50, as we roll over the 12.5x target multiple (0.5SD below average of 13.5x to adjust for past earnings misses) from 2023 to 2024.

Price catalyst

- 12-month price target: NT\$26.60 based on a PER methodology.
- Catalyst: PC and server (enterprise/hyperscale) shipments, margin trends

Action and recommendation

- Maintain Neutral.** Company has a more stable PC business (higher exposure to enterprise), server growth and recovery of smart device (off a low base), which we believe are in the price.
- Upside risks: higher PC shipments and revenue, share gain from Inspur. Downside risks: slower US hyperscale growth, slower smart handheld demand.

Analysis

Fig 1 4Q22 earnings summary

NT\$m	4Q22	3Q22	4Q21	QoQ %	YoY %	MACQ	Diff %	BBG	Diff %
Revenue	134,757	142,452	148,001	-5.4%	-8.9%	136,102	-1.0%	135,576	-0.6%
Gross profit	7,009	7,340	6,119	-4.5%	14.5%	6,902	1.5%	6,481	8.2%
GM %	5.2%	5.2%	4.1%			5.1%		4.8%	
Operating profit	1,721	2,240	1,208	-23.2%	42.5%	2,275	-24.3%	1,863	-7.6%
OPM %	1.3%	1.6%	0.8%			1.7%		1.4%	
Pretax income	1,421	2,293	1,552	-38.0%	-8.4%	1,972	-27.9%	1,908	-25.5%
Net income	1,393	1,749	1,460	-20.4%	-4.6%	1,527	-8.8%	1,549	-10.1%
Net margin	1.0%	1.2%	1.0%			1.1%		1.1%	
EPS (NT\$)	0.39	0.49	0.41	-20.8%	-5.3%	0.43	-8.8%	0.43	-10.5%

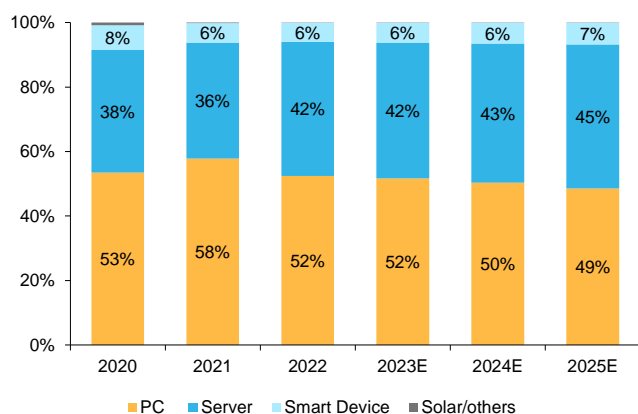
Source: Company data, Bloomberg, Macquarie Research, March 2023

Fig 2 Earnings revisions

NT\$m	2022A			2023E			2024E		
	New	Old	Diff %	New	Old	Diff %	New	Old	Diff %
Revenue	541,751	543,096	-0.2%	553,511	556,128	-0.5%	590,147	583,818	1.1%
Gross profit	26,003	25,896	0.4%	26,834	26,515	1.2%	29,084	28,001	3.9%
GM %	4.8%	4.8%		4.8%	4.8%		4.9%	4.8%	
Operating profit	6,669	7,223	-7.7%	7,524	8,176	-8.0%	8,828	8,881	-0.6%
OPM %	1.2%	1.3%		1.4%	1.5%		1.5%	1.5%	
Pretax income	7,177	7,728	-7.1%	7,374	8,396	-12.2%	9,428	9,481	-0.6%
Net income	6,129	6,263	-2.1%	5,984	6,751	-11.4%	7,626	7,619	0.1%
EPS (NT\$)	1.71	1.75	-2.1%	1.67	1.88	-11.4%	2.13	2.12	0.1%

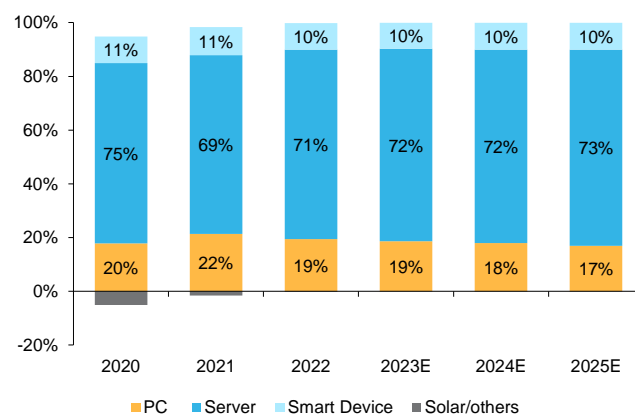
Source: Macquarie Research, March 2023

Fig 3 Inventec sales mix by products



Source: Company, Macquarie Research, March 2023

Fig 4 Inventec gross profit contribution



Source: Company, Macquarie Research, March 2023

Fig 5 Inventec: P&L

NT\$m	1Q22	2Q22	3Q22	4Q22	1Q23E	2Q23E	3Q23E	4Q23EE	2021	2022	2023E	2024E	2025E
Revenue	128,795	135,747	142,452	134,757	116,154	133,826	150,823	152,708	519,732	541,751	553,511	590,147	618,164
Gross Profit	5,731	5,923	7,340	7,009	5,571	6,374	7,405	7,485	22,295	26,003	26,834	29,084	31,099
Operating Profit	1,130	1,578	2,240	1,721	1,215	1,890	2,126	2,293	4,725	6,669	7,524	8,828	10,184
PBT	1,911	1,552	2,293	1,421	965	1,840	2,176	2,393	7,699	7,177	7,374	9,428	10,784
Net profit	1,487	1,500	1,749	1,393	793	1,493	1,762	1,936	6,538	6,129	5,984	7,626	8,712
EPS (NT\$)	0.41	0.42	0.49	0.39	0.22	0.42	0.49	0.54	1.82	1.71	1.67	2.13	2.43

Profitability

Gross Margin	4.4%	4.4%	5.2%	5.2%	4.8%	4.8%	4.9%	4.9%	4.3%	4.8%	4.8%	4.9%	5.0%
Operating Margin	0.9%	1.2%	1.6%	1.3%	1.0%	1.4%	1.4%	1.5%	0.9%	1.2%	1.4%	1.5%	1.6%
PBT Margin	1.5%	1.1%	1.6%	1.1%	0.8%	1.4%	1.4%	1.6%	1.5%	1.3%	1.3%	1.6%	1.7%
Net margin	1.2%	1.1%	1.2%	1.0%	0.7%	1.1%	1.2%	1.3%	1.3%	1.1%	1.1%	1.3%	1.4%

QoQ Growth

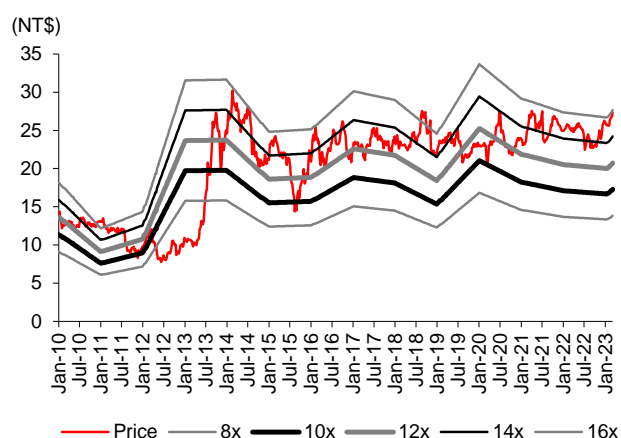
Sales	-13.0%	5.4%	4.9%	-5.4%	-13.8%	15.2%	12.7%	1.2%					
Gross Profit	-6.3%	3.3%	23.9%	-4.5%	-20.5%	14.4%	16.2%	1.1%					
Operating Profit	-6.4%	39.7%	42.0%	-23.2%	-29.4%	55.6%	12.5%	7.9%					
Pretax Profit	23.2%	-18.8%	47.8%	-38.0%	-32.1%	90.7%	18.2%	10.0%					
Net Profit	1.8%	0.9%	16.6%	-20.4%	-43.1%	88.3%	18.0%	9.9%					
EPS	1.8%	0.9%	16.6%	-20.4%	-43.1%	88.3%	18.0%	9.9%					

YoY Growth

Sales	15.2%	18.2%	-1.8%	-8.9%	-9.8%	-1.4%	5.9%	13.3%	2.3%	4.2%	2.2%	6.6%	4.7%
Gross Profit	11.9%	15.0%	24.3%	14.5%	-2.8%	7.6%	0.9%	6.8%	5.6%	16.6%	3.2%	8.4%	6.9%
Operating Profit	15.1%	53.2%	48.8%	42.5%	7.5%	19.8%	-5.1%	33.2%	6.4%	41.2%	12.8%	17.3%	15.4%
Pretax Profit	36.0%	28.0%	-35.0%	-8.4%	-49.5%	18.6%	-5.1%	68.4%	-25.6%	-6.8%	2.7%	27.8%	14.4%
Net Profit	29.9%	32.5%	-37.5%	-4.6%	-46.7%	-0.5%	0.7%	38.9%	-13.4%	-6.3%	-2.4%	27.5%	14.2%
EPS	29.9%	32.5%	-37.5%	-4.6%	-46.7%	-0.5%	0.7%	38.9%	-13.4%	-6.3%	-2.4%	27.5%	14.2%

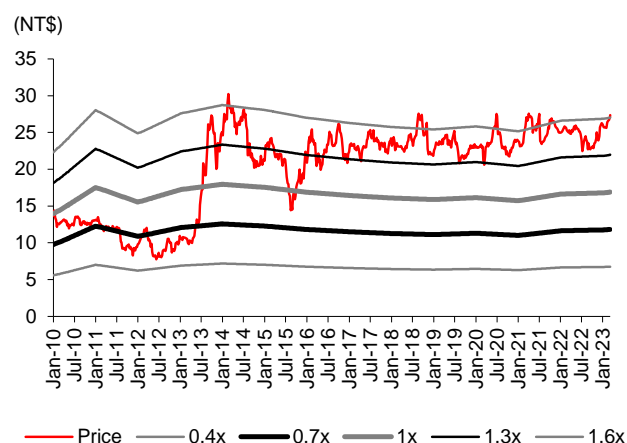
Source: Company, Macquarie Research, March 2023

Fig 6 12-month forward P/E band chart



Source: TEJ, Macquarie Research, March 2023

Fig 7 12-month forward P/BV band chart



Source: TEJ, Macquarie Research, March 2023

Macquarie Quant Alpha Model Views

The quant model currently holds a strong positive view on Inventec. The strongest style exposure is Valuations, indicating this stock is under-priced in the market relative to its peers. The weakest style exposure is Growth, indicating this stock has weak historic and/or forecast growth. Growth metrics focus on both top and bottom line items.

38/1131

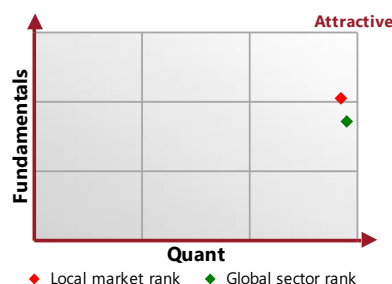
Global rank in

Technology Hardware & Equipment

% of BUY recommendations 29% (2/7)

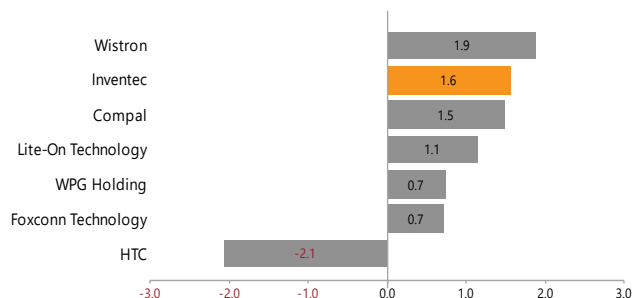
Number of Price Target downgrades 0

Number of Price Target upgrades 1



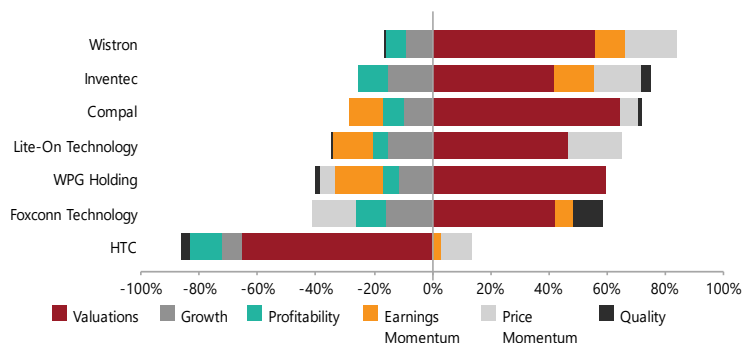
Macquarie Alpha Model ranking

A list of comparable companies and their Macquarie Alpha model score (higher is better).



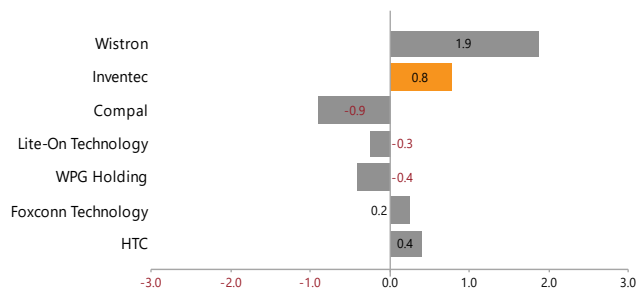
Factors driving the Alpha Model

For the comparable firms this chart shows the key underlying styles and their contribution to the current overall Alpha score.



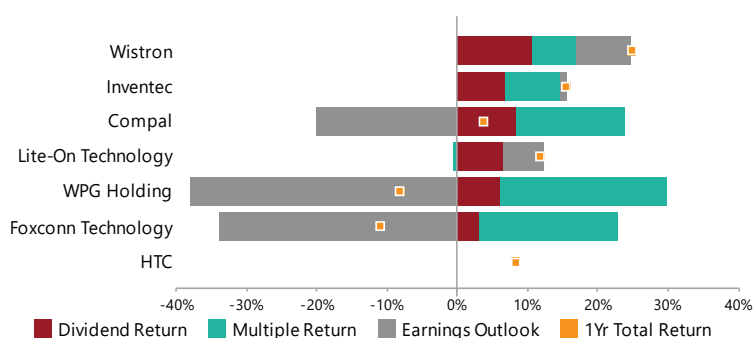
Macquarie Earnings Sentiment Indicator

The Macquarie Sentiment Indicator is an enhanced earnings revisions signal that favours analysts who have more timely and higher conviction revisions. Current score shown below.



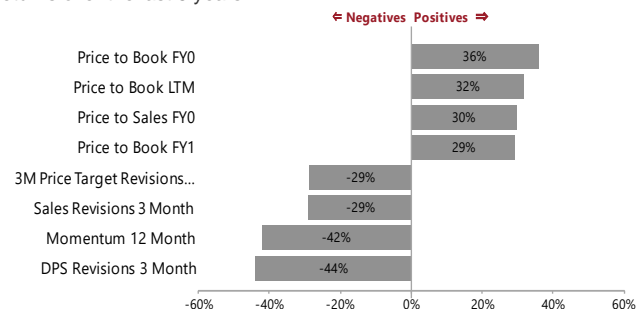
Drivers of Stock Return

Breakdown of 1 year total return (local currency) into returns from dividends, changes in forward earnings estimates and the resulting change in earnings multiple.



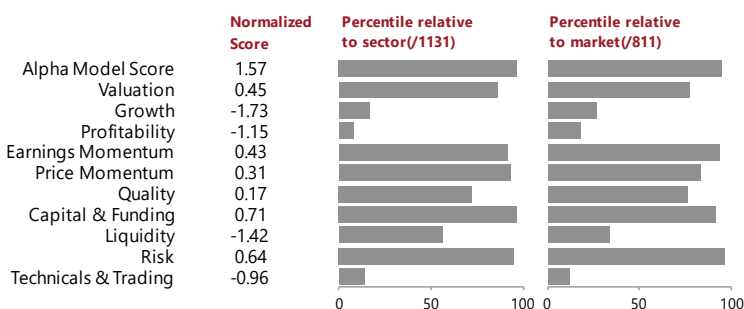
What drove this Company in the last 5 years

Which factor score has had the greatest correlation with the company's returns over the last 5 years.



How it looks on the Alpha model

A more granular view of the underlying style scores that drive the alpha (higher is better) and the percentile rank relative to the sector and market.



Source (all charts): FactSet, Thomson Reuters, and Macquarie Quant. For more details on the Macquarie Alpha model or for more customised analysis and screens, please contact the Macquarie Global Quantitative/Custom Products Group (cpq@macquarie.com)

Inventec (2356 TT, Neutral, Target Price: NT\$26.60)

Quarterly Results		4Q/22A	1Q/23E	2Q/23E	3Q/23E	Profit & Loss		2022A	2023E	2024E	2025E
Revenue	m	134,757	116,154	133,826	150,823	Revenue	m	541,751	553,511	590,147	618,164
Gross Profit	m	7,009	5,571	6,374	7,405	Gross Profit	m	26,003	26,834	29,084	31,099
Operating Expenses	m	-5,288	-4,356	-4,483	-5,279	Operating Expenses	m	-19,334	-19,310	-20,256	-20,915
Operating Income	m	1,721	1,215	1,890	2,126	Operating Income	m	6,669	7,524	8,828	10,184
Net Non-operating income	m	-300	-250	-50	50	Net Non-operating income	m	508	-150	600	600
Pre-Tax Income	m	1,421	965	1,840	2,176	Pre-Tax Income	m	7,177	7,374	9,428	10,784
Tax Expense	m	-49	-193	-368	-435	Tax Expense	m	-1,115	-1,475	-1,886	-2,157
Exceptionals	m	0	0	0	0	Exceptionals	m	0	0	0	0
Minority Interests	m	21	21	21	21	Minority Interests	m	67	84	84	84
Reported Earnings	m	1,393	793	1,493	1,762	Reported Earnings	m	6,129	5,984	7,626	8,712
Reported Earnings (bonus exp)	m	1,393	793	1,493	1,762	Reported Earnings (bonus exp)	m	6,129	5,984	7,626	8,712
Bonus exp / Reported Earnings	%					Bonus exp / Reported Earnings	%				
Adjusted Earnings	m	1,393	793	1,493	1,762	Adjusted Earnings	m	6,129	5,984	7,626	8,712
EBITDA	m	2,563	2,013	2,676	2,919	EBITDA	m	9,637	10,783	12,202	13,675
EPS (rep)	NT\$	0.39	0.22	0.42	0.49	EPS (rep)	NT\$	1.71	1.67	2.13	2.43
EPS pcg growth (rep)	%	-4.6	-46.7	-0.5	0.7	EPS growth (rep)	%	-6.3	-2.4	27.5	14.2
EPS (rep bonus exp)	NT\$	0.39	0.22	0.42	0.49	EPS (rep bonus exp)	NT\$	1.71	1.67	2.13	2.43
EPS pcg growth (rep bonus exp)	%	-4.6	-46.7	-0.5	0.7	EPS growth (rep bonus exp)	%	-6.3	-2.4	27.5	14.2
EPS (adj)	NT\$	0.39	0.22	0.42	0.49	EPS (adj)	NT\$	1.71	1.67	2.13	2.43
EPS pcg growth (adj)	%	-4.6	-46.7	-0.5	0.7	EPS growth (adj)	%	-6.3	-2.4	27.5	14.2
Revenue pcg growth	%	-8.9	-9.8	-1.4	5.9	PE (rep)	x	15.9	16.3	12.8	11.2
Operating Income pcg growth	%	42.5	7.5	19.8	-5.1	PE (rep bonus adj)	x	15.9	16.3	12.8	11.2
Reported Earnings pcg growth	%	-4.6	-46.7	-0.5	0.7	PE (adj)	x	15.9	16.3	12.8	11.2
Gross Profit Margin	%	5.2	4.8	4.8	4.9	Total DPS	NT\$	1.50	1.38	1.76	2.02
Operating Income Margin	%	1.3	1.0	1.4	1.4	Total Div Yield	%	5.5	5.1	6.5	7.4
Reported Earnings Margin	%	1.0	0.7	1.1	1.2	Basic Shares Outstanding	m	3,587	3,587	3,587	3,587
EBITDA Margin	%	1.9	1.7	2.0	1.9	Diluted Shares Outstanding	m	3,587	3,587	3,587	3,587
Profit and Loss Ratios		2022A	2023E	2024E	2025E	Cashflow Analysis		2022A	2023E	2024E	2025E
Revenue Growth	%	4.2	2.2	6.6	4.7	Reported Earnings	m	6,129	5,984	7,626	8,712
Gross Profit Growth	%	16.6	3.2	8.4	6.9	Depreciation & Amortisation	m	2,968	3,258	3,375	3,491
Operating Income Growth	%	41.2	12.8	17.3	15.4	Chgs in Working Cap	m	-2,438	-11,254	745	-5,018
Reported Earnings Growth	%	-6.3	-2.4	27.5	14.2	Other	m	8,800	-0	-0	-0
EBITDA Growth	%	20.6	11.9	13.2	12.1	Operating Cashflow	m	15,459	-2,013	11,746	7,184
Gross Profit Margin	%	4.8	4.8	4.9	5.0	Acquisitions	m	479	0	0	0
Operating Income Margin	%	1.2	1.4	1.5	1.6	Capex	m	-6,239	-3,200	-3,200	-3,200
Reported Earnings Margin	%	1.1	1.1	1.3	1.4	Asset Sales	m	0	0	0	0
EBITDA Margin	%	1.8	1.9	2.1	2.2	Other	m	-1,850	0	0	0
Payout Ratio	%	87.8	83.0	83.0	83.0	Investing Cashflow	m	-7,609	-3,200	-3,200	-3,200
EV/EBITDA	x	13.3	11.9	10.5	9.4	Dividend (Ordinary)	m	-5,022	-5,394	-4,966	-6,330
EV/EBIT	x	19.1	17.0	14.5	12.6	Equity Raised	m	0	0	0	0
Balance Sheet Ratios						Debt Movements	m	5,199	0	0	0
ROE	%	10.4	9.9	12.2	13.4	Other	m	-3,568	1,600	1,600	1,600
ROA	%	2.6	2.8	3.1	3.5	Financing Cashflow	m	-3,391	-3,794	-3,366	-4,730
ROIC	%	7.0	6.7	7.1	8.4	Net Chg in Cash/Debt	m	6,205	-9,006	5,180	-745
Net Debt/Equity	%	51.6	66.0	55.0	54.1	Free Cashflow	m	9,220	-5,213	8,546	3,984
Interest Cover	x	5.2	10.0	nmf	nmf	FCF per Share	NT\$	2.57	-1.45	2.38	1.11
Price/Book	x	1.6	1.6	1.5	1.5	P/FCF	x	10.6	-18.7	11.4	24.4
Book Value per Share	NT\$	16.8	17.0	17.7	18.4						
						Balance Sheet		2022A	2023E	2024E	2025E
						Cash	m	40,994	31,988	37,167	36,422
						Receivables	m	100,839	114,271	113,371	119,311
						Inventories	m	71,118	80,846	80,155	84,271
						Investments	m	518	518	518	518
						Fixed Assets	m	32,665	33,372	33,963	34,437
						Intangibles	m	0	0	0	0
						Other Assets	m	19,527	18,762	17,997	17,231
						Total Assets	m	265,661	279,757	283,171	292,191
						Payables	m	87,042	98,948	98,102	103,140
						Short Term Debt	m	58,742	58,742	58,742	58,742
						Long Term Debt	m	13,017	13,017	13,017	13,017
						Provisions	m	0	0	0	0
						Other Liabilities	m	47,209	48,809	50,409	52,009
						Total Liabilities	m	206,010	219,516	220,270	226,908
						Total S/H Equity	m	59,651	60,241	62,901	65,282
						Total Liab & S/H Funds	m	265,661	279,757	283,171	292,191

All figures in NT\$ unless noted.

Source: Company data, Macquarie Research, February 2023

Important disclosures:

Recommendation definitions

Macquarie – Asia and USA

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

Macquarie – Australia/New Zealand

Outperform – expected return >10%
 Neutral – expected return from 0% to 10%
 Underperform – expected return <0%

Note: expected return is reflective of a Medium Volatility stock and should be assumed to adjust proportionately with volatility risk

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 speculative.

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 select stocks in Asia/Australia/NZ

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 31 Dec 2022

	AU/NZ	Asia	USA	
Outperform	55.17%	62.10%	68.04%	(for global coverage by Macquarie, 2.41% of stocks followed are investment banking clients)
Neutral	37.59%	25.07%	28.87%	(for global coverage by Macquarie, 2.52% of stocks followed are investment banking clients)
Underperform	7.24%	12.82%	3.09%	(for global coverage by Macquarie, 0.00% of stocks followed are investment banking clients)

2356 TT vs TAIEX, & rec history



(all figures in TWD currency unless noted)

000977 CH vs CSI 300, & rec history



(all figures in CNY currency unless noted)

Note: Recommendation timeline – if not a continuous line, then there was no Macquarie coverage at the time or there was an embargo period.
 Source: FactSet, Macquarie Research, March 2023

12-month target price methodology

2356 TT: NT\$26.60 based on a PER methodology

000977 CH: Rmb16.70 based on a PER methodology

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Date	Stock Code (BBG code)	Recommendation	Target Price
25-Nov-2022	2356 TT	Neutral	NT\$23.50
16-Mar-2022	2356 TT	Neutral	NT\$23.40
13-Nov-2021	2356 TT	Neutral	NT\$24.00
11-Aug-2021	2356 TT	Neutral	NT\$21.30
12-May-2021	2356 TT	Underperform	NT\$21.30
31-Mar-2021	2356 TT	Underperform	NT\$22.10
11-Nov-2020	2356 TT	Neutral	NT\$22.20
12-Aug-2020	2356 TT	Neutral	NT\$22.80
10-Jul-2020	2356 TT	Underperform	NT\$22.40
13-May-2020	2356 TT	Neutral	NT\$23.20
25-Mar-2020	2356 TT	Outperform	NT\$22.70

Target price risk disclosures:

2356 TT: Any inability to compete successfully in their markets may harm the business. This could be a result of many factors which may include geographic mix and introduction of improved products or service offerings by competitors. The results of operations may be materially affected by global economic conditions generally, including conditions in financial markets. The company is exposed to market risks, such as changes in interest rates, foreign exchange rates and input prices. From time to time, the company will enter into transactions, including transactions in derivative instruments, to manage certain of these exposures.

000977 CH: Any inability to compete successfully in their markets may harm the business. This could be a result of many factors which may include geographic mix and introduction of improved products or service offerings by competitors. The results of operations may be materially affected by global economic conditions generally, including conditions in financial markets. The company is exposed to market risks, such as changes in interest rates, foreign exchange rates and input prices. From time to time, the company will enter into transactions, including transactions in derivative instruments, to manage certain of these exposures.

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