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Taiwan Discovery

CPT (2475.TW) – 3Q08 Analyst Meeting Takeaways

Conclusion: CPT reduced fab utilization by 10% to ~85% in 3Q (Gen 6 fab cut was deeper than Gen 4.5 fab); it plans for another 10%+ cut in 4Q. Gen 6 fab (L2) expansion (from 90 to 120K substrate/mth) will be delayed until 2H09 (to 100K)/1H10 (to 120K), although some equipment has been moved in, according to channel checks. 2008 capex will be ~NT$6 bn for Color Filter fab (Y2) expansion, down from original NT$15.9 bn target. 2009/10 combined capex will be NT$9-10 bn for Gen 6 expansion. CPT sees rising pipeline inventory level - monitor inventory 4-7 weeks higher than normal, NB/TV inventories 2-3 weeks higher than normal.

What's New? CPT reported LPS NT$0.64 vs. EPS of NT$0.11 in 2Q08. TFT OM/EBITDA margin was (23%)/5% on 18% Q/Q shipments decline to 5.6 mn units and 29% Q/Q ASP decline to $US93. Inventory increased by 10 days Q/Q to 55 days. **Value Added Data:** 1. Large size product mix - monitors 66%, notebooks 26%, 8% LCD TV. 2. For shipments, monitors, down 1% Q/Q; NBs, up 1% Q/Q; TVs flat Q/Q. 3. S/M size shipments growth of 81% Q/Q to 17.3 mn units (small size shipments grew 103% Q/Q; medium size shipments grew 34% Q/Q). 4. Hanset 80% of small/medium size shipments – 55% for 2.4"-2.6", 21% 1.5"-2.2", 24% for 2.8"-3.2". **4Q08 Guidance:** 1. Large size shipments decline 16% Q/Q (notebook down 20% Q/Q, monitors down 14% Q/Q, TV down 17% Q/Q). 2. Small size shipments decline 17% Q/Q, medium size shipments decline 19% Q/Q. 2.8"-3.2" mix will increase to 29%. 3. CPT revised down 2008 large size shipment target again by 11% to 24 mn units and increased small/medium size shipment target by 14% to 55mn units (stronger China-related demand in 3Q08).

Implications: CPT has US$400 mn (NT$ 13.5 bn) ECB put in 1H09. 3Q08 cash on hand is NT$26 bn with undrawn credit line of NT$4 bn. It plans for NT$6 bn syndication loan for Gen 6 expansion project ahead. Quarterly loan payback is ~NT$5 bn vs. ~NT$6 bn depreciation cash flow.

Stock Data

Rating	NOT RATED
Ticker (Reuters)	2475.TW
Price (October 28, 2008)	NT$3.23
Market Cap (NT$ mn)	30,623
Foreign Ownership (%)	12.19%
Outstanding Shares (mn)	9,480
3M/6M/12M Rel. Perf. (%)	-14 / -14 / -17
6M Avg. Daily Turnover (NT$ mn)	321

Company Description
Chunghwa Picture Tubes Ltd. (CPT) established in 1971, is the third-largest TFT-LCD manufacturer in Taiwan. CPT currently operates five TFT fabs in Taiwan.

3Q08 Panel Market Trends – 1. 3Q pricing trend - Monitor panel price declined 20-27% Q/Q; notebook price declined 14-20% Q/Q; 40"+ LCD TV ASP declined 8-9% Q/Q; 32"/37" and below LCD TV price declined 12-16% Q/Q. 2. 3Q shipments trend - Monitor shipments declined by 11% Q/Q; Notebook shipments declined by 3% Q/Q; LCD TV shipments increased by 13% Q/Q on price cut; 40"+ LCD TV increased by 32-38% Q/Q, 32"/37" increased 11% Q/Q, 19"W/22"W increased by 162% Q/Q.

Exhibit 1

CPT: Shipment Targets in 2008 and 1Q09 – 11% downward revision for 2008

mn units	1Q08	2Q08	3Q08	4Q08	1Q09	2008 New	2008 Old	Revision
TV	0.7	0.7	0.6	0.5	0.5	2.5	2.9	-14%
NB	1.4	1.5	1.5	1.2	1.0	5.6	6.1	-8%
Monitor	4.8	4.6	3.5	3.0	2.7	15.9	17.9	-11%
Total	6.9	6.8	5.6	4.7	4.2	24.0	26.9	-11%

Source: Company data.

Exhibit 2

CPT: 2008 Small/Medium Size Shipment Targets – 14% upward revision

mn units	1Q08	2Q08	3Q08	4Q08	2008 New	2008 Old	Revision
Small	9.3	6.5	13.1	10.9	39.8	32.0	24%
Medium	4.1	3.1	4.2	3.4	14.8	16.0	-7%
Total	13.4	9.6	17.3	14.3	54.6	48.0	14%

Source: Company data.

Exhibit 3

CPT's View on 3Q08 Inventory Level

Unit: Weeks	Monitor	NB	TV
Panel	3-4	3	2-3
Brand	4-6	4-6	5
Channel	5-7	2	6-8
Total	12-17	9-10	13-16
Historical Level	8-10	6-8	10-12

Source: Company data.

Exhibit 4

CPT Medium Size Shipment Mix

	3Q08	4Q08
P-DVD	41%	21%
Digital Photo Frame	23%	27%
Low Cost PC	31%	44%
Car Use	2%	3%
Others	3%	5%
Total	100%	100%

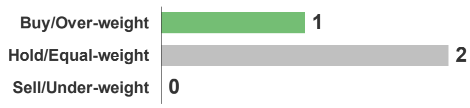
Source: Company data.

Exhibit 5
Summary of Consensus View: CPT

Chunghwa Picture Tubes Ltd.

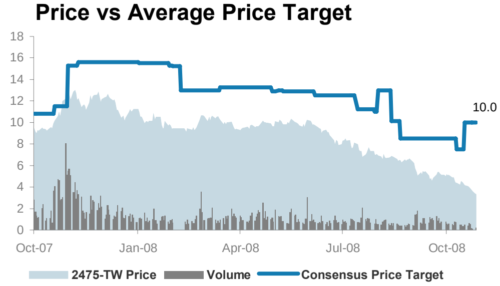
2475-TW

Consensus recommendations



Current Price		Avg Price Target
3.3	200%	10.0

Price vs Average Price Target



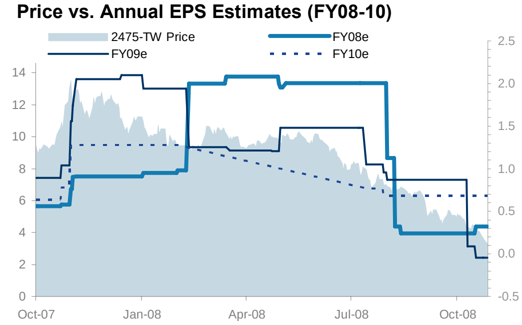
Sector Yardstick

Chunghwa Picture Tubes

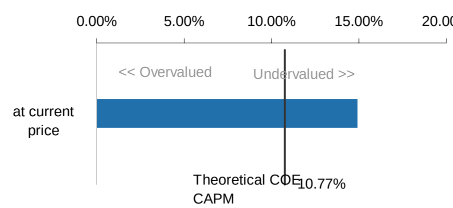
key metrics ranked relative to Information Technology sector

	Chunghwa Picture Tubes Ltd. percentile range (vs. peers)	Peer Median
Price / Volatility		
12m price perf	-72.9%	-37.9%
3m price perf	-55.8%	-46.5%
1m price perf	-36.5%	-63.1%
12m hist vol	50.4%	49.1%
Growth		
Sales 1yr hist	25.9%	30.5%
EBIT 1yr hist	-264.7%	0.9%
EPS (1 yr fwd)	-21.7%	-27.5%
EPS (2 yrs fwd)		-22.3%
Valuation		
P/E (1 yr fwd)	4.2x	5.9x
P/E (2 yrs fwd)	-72.0x	10.0x
P/Book	1.0x	1.5x
EV/Ebitda	1.9x	2.1x
Profitability		
ROE	9.6%	18.3%
EBITDA margin	26.2%	27.5%
EBIT margin	8.4%	11.8%
Net inc. margin	5.5%	9.8%
Cash Flow		
FCF/Market Cap	111.1%	72.3%
FCF/Sales	22.0%	24.3%
Liquidity		
Cash ratio	39.8%	39.7%
Quick ratio	86.0%	114.3%
Current ratio	101.4%	132.7%
Financial Leverage		
Debt/Assets	32.3%	23.9%
Debt/Equity	74.8%	49.1%
Net Debt/Equity	37.6%	19.5%

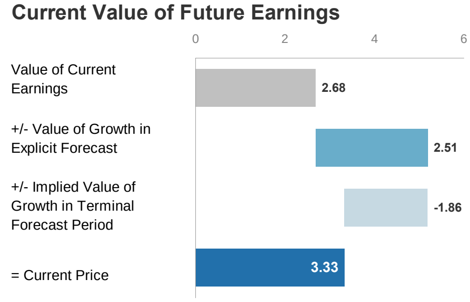
Price vs. Annual EPS Estimates (FY08-10)



Implied cost of equity



Current Value of Future Earnings



Source: Company Data, Factset

Exhibit 6

CPT Financial Summary

All values in millions except per share data - (Taiwan Dollar)

Income Statement

	12/2004	12/2005	12/2006	12/2007
Net Sales	117,102	103,329	126,605	159,397
COGS	87,202	85,073	104,067	108,443
Gross Profit	29,900	18,255	22,539	50,953
SG&A	5,729	5,961	8,543	9,435
EBIT	12,441	(5,074)	(8,107)	13,352
Net NO Income	0	(0)	0	0
PBT	11,326	(7,046)	(13,068)	8,823
Taxes	548	201	51	196
Net Profit	10,322	(7,352)	(13,160)	8,703
EPS	1.29	-0.94	-1.60	0.92
DPS	0.54	0.00	0.00	0.40

Balance Sheet

	12/2004	12/2005	12/2006	12/2007
Cash & Equivalents	27,073	15,756	12,841	15,635
Marketable Securities	17,092	18,645	23,546	14,514
Acct Receivable	20,345	23,100	21,185	29,893
Inventories	10,903	14,369	18,604	11,650
Total Current Assets	75,413	71,871	76,175	71,691
PP&E	117,390	162,498	154,771	135,094
Goodwill	0	0	0	0
Amortizable Intangibles	740	1,013	1,341	2,367
Other Assets	11,303	11,381	15,097	22,251
Total Fixed Asset	129,434	174,892	171,209	159,712
Total Assets	204,847	246,763	247,384	231,403
Accounts Payable	27,154	33,557	37,856	35,093
Other Accrued Expenses	2,990	3,579	5,127	10,304
Income Taxes Payable	65	76	12	89
Deferred Revenue	0	0	0	0
Deferred Taxes	572	800	1,295	1,694
Total Current Liabilities	30,781	38,013	44,290	47,180
L/T Debt	63,479	100,177	109,323	74,837
Minority Interest	1,438	1,460	1,330	1,405
Other Liabilities	14,372	13,188	10,301	7,902
Total L/T Liabilities	79,290	114,825	120,954	84,144
Total Liabilities	110,071	152,837	165,243	131,324
Preferred Equity	0	0	0	0
Shareholders' Equity	94,776	93,926	82,140	100,078
Liabs+Shr'hlders Eq	204,847	246,763	247,384	231,403

Source: Company data & Factset

Cash Flow Statement

	12/2004	12/2005	12/2006	12/2007
Cash Flow From Operating				
Net Income	10,322	(7,352)	(13,160)	8,703
Dep & Amort.	12,634	17,847	23,851	28,342
Chg in WC	(19,237)	1,011	3,958	1,137
Chg in Other Liabs	29,508	(3,057)	(4,415)	(11,410)
CF from Operations	33,226	8,448	10,234	26,772
Cash Flow from Investing				
Capital Expenditures	(56,411)	(60,571)	(14,678)	(6,198)
Change in ST Investments	8,480	1,553	4,900	(9,032)
Other Investing Cash Flow	(11,578)	(1,617)	(7,514)	2,940
CF from Investing	(59,508)	(60,635)	(17,291)	(12,291)
Cash Flow from Financing				
Dividends	0	0	0	0
Change in Debt	21,812	36,697	9,146	(34,486)
Change in Equity	7,397	(1,283)	(2,648)	(9,618)
Change in Preferred Stock	0	0	0	0
Other Financing Cash Flow	14,262	5,192	2,574	21,853
CF from Financing	43,471	40,606	9,073	(22,251)
Other Cash Flow - Including FX	(9,894)	263	(4,931)	10,563
Change in Cash	7,295	(11,317)	(2,915)	2,794

Ratio Analysis

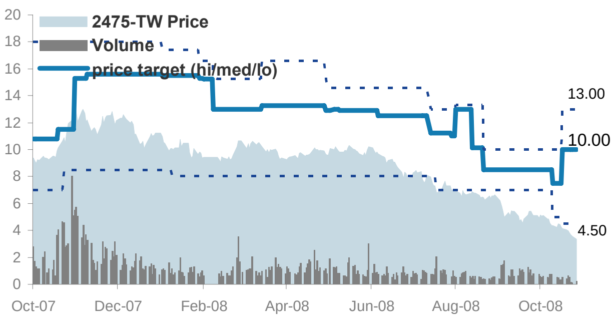
	12/2004	**12/2005**	12/2006	12/2007
Growth				
Sales	31.6%	-11.8%	22.5%	25.9%
EBITDA	72.4%	-49.1%	23.3%	167.9%
Operating Profit	343.0%	-140.8%	59.8%	(264.7%)
Net Income	988.7%	-171.2%	79.0%	(166.1%)
EPS	783.6%	-173.1%	70.5%	(157.4%)
Margins				
EBITDA	21.4%	12.4%	12.4%	26.5%
Gross Margin	25.5%	17.7%	17.8%	32.0%
EBIT	10.6%	-4.9%	(6.4%)	8.4%
Net Income	8.8%	-7.1%	(10.4%)	5.5%
Returns				
ROE	15.5%	-7.8%	(14.0%)	10.6%
ROA	8.8%	(2.5%)	(3.3%)	5.4%
RNOA	14.6%	-4.4%	(5.0%)	8.3%
Leverage				
Net Debt/Equity	38.4%	89.9%	117.5%	59.2%
Gross Debt/Equity	67.0%	106.7%	133.1%	74.8%

Source: Company Data, Factset

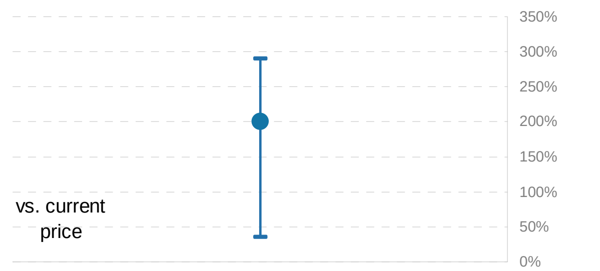
Exhibit 7

CPT: Consensus Price Target and EPS Estimates

Changes to Price Targets (hi/median/low)

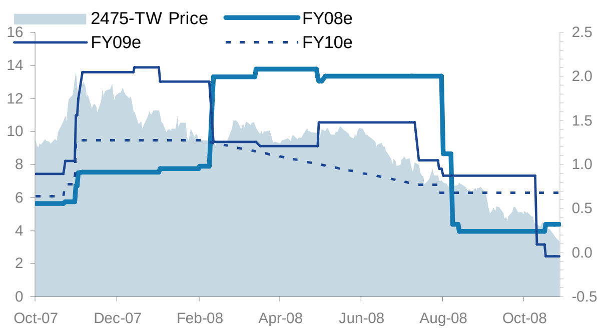


Current Upside to Price Targets

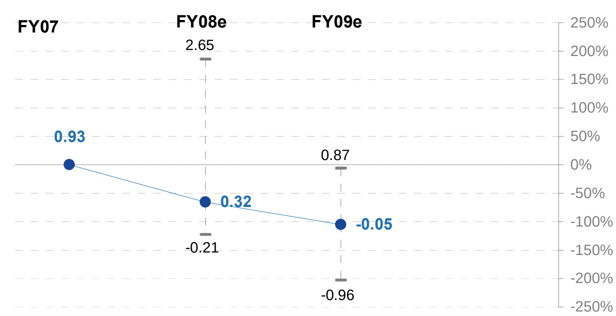


3.33 **based on 3 price targets in FactSet consensus**

Price vs. Annual EPS Estimates (FY08-10)



Current Ranges for EPS Estimates



	Current Price	Median Price Target	% Upside to Median Price Target	Current Distribution of Ratings: Sell	Hold	Buy
Chunghwa Picture Tubes Ltd.	3.33	10.00	200%	0	2	1
HannStar Display Corp.	5.05	13.30	163%	0	2	1
LG Display Co. Ltd.	17,000	34,000	100%	0	13	7
Innolux Display Corp.	27.25	48.50	78%	0	5	3
Chi Mei Optoelectronics Corp.	13.75	23.00	67%	2	8	4
AU Optronics Corp.	23	39	67%	0	14	6
Sharp Corp.	614	1,000	63%	2	10	1
Samsung Electronics Co. Ltd.	438000.00	635000.00	45%	1	4	11

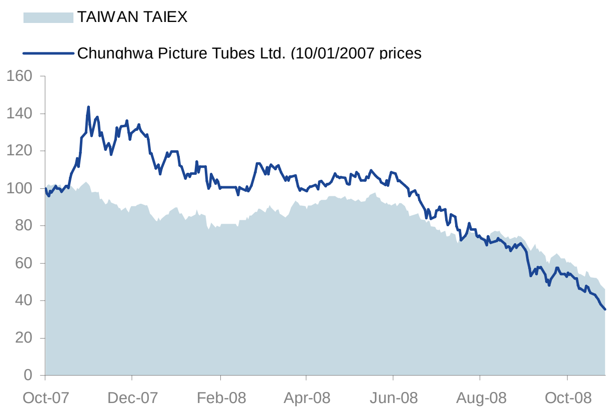
Source: Company Data, Factset

Exhibit 8

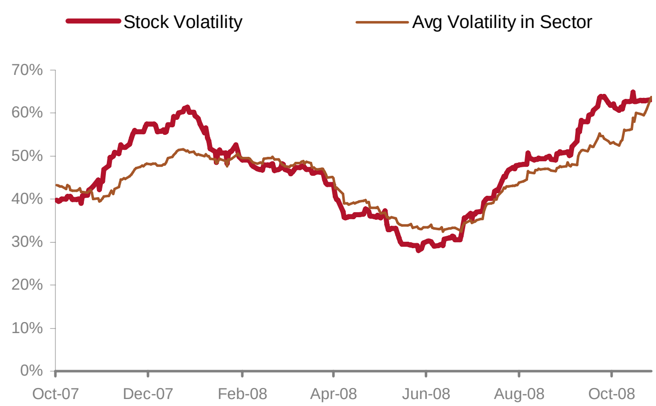
CPT: Price Performance and Volatility

Pchange 12mo	Pchange 6 mo	Pchange 3 mo	Pchange 1mo
-72.9%	-67.3%	-55.8%	-36.5%
-64.9%	-63.1%	-46.5%	-37.9%

Price Performance vs Index



Stock Volatility vs Sector Volatility



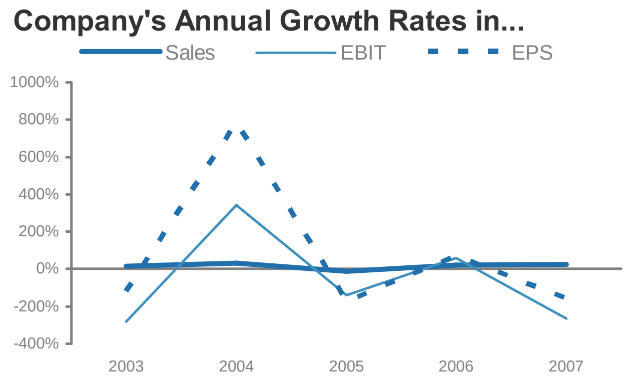
Price Performance and Volatility vs. Industry Peer Group

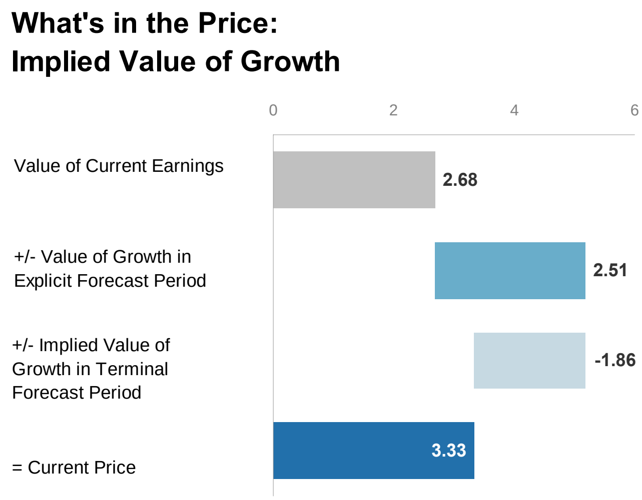
	12 mo. Δ (%)	3 mo. Δ (%)	1 mo. Δ (%)	12 mo. volatility (%)
Samsung Electronics Co. Ltd.	-48.1%	-46.8%	-36.2%	41.0%
HannStar Display Corp.	-57.1%	-47.0%	-34.8%	52.2%
Sharp Corp.	-58.3%	-53.4%	-41.9%	46.5%
AU Optronics Corp.	-64.2%	-45.8%	-39.5%	47.8%
Chi Mei Optoelectronics Corp.	-67.5%	-54.1%	-39.2%	45.8%
Chunghwa Picture Tubes Ltd.	-73.0%	-58.8%	-37.5%	50.4%
LG Display Co. Ltd.	-76.1%	-61.6%	-54.2%	50.9%
Innolux Display Corp.	-81.0%	-49.9%	-37.6%	64.3%

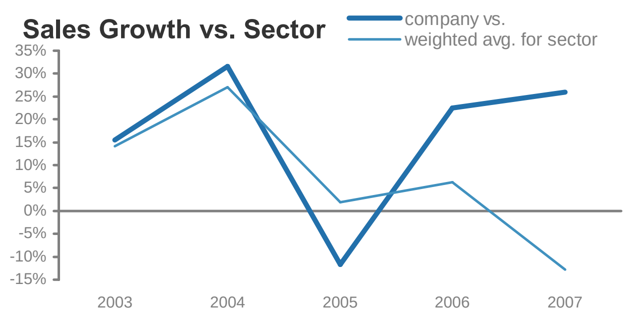
Source: Company Data, Factset

Exhibit 9

CPT Growth vs. Peer Group

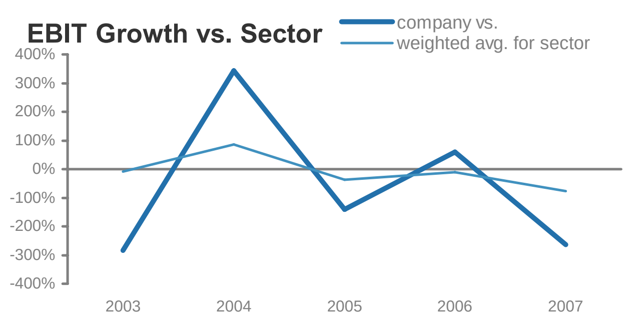


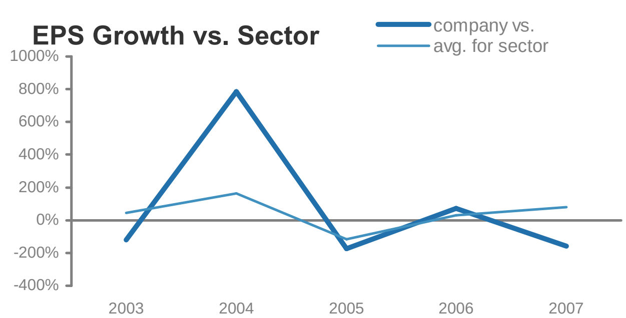




What's in the Price:
Implied Terminal Growth Rate vs. Peers

	Cost of Equity	Implied terminal growth rate (years 4+)
Hannstar Display C	10.7%	27.3%
Chi Mei Optoelectr	10.7%	21.9%
Chunghwa Picture T	**10.8%**	**18.1%**
Au Optronics Corp	10.8%	16.1%
Innolux Display Co	10.7%	-3.0%
Samsung Electronic	10.0%	-3.5%
Lg Display Co Ltd	10.2%	-5.9%

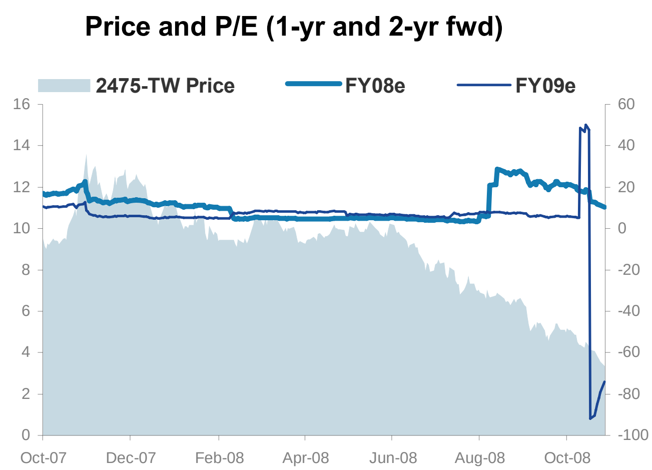


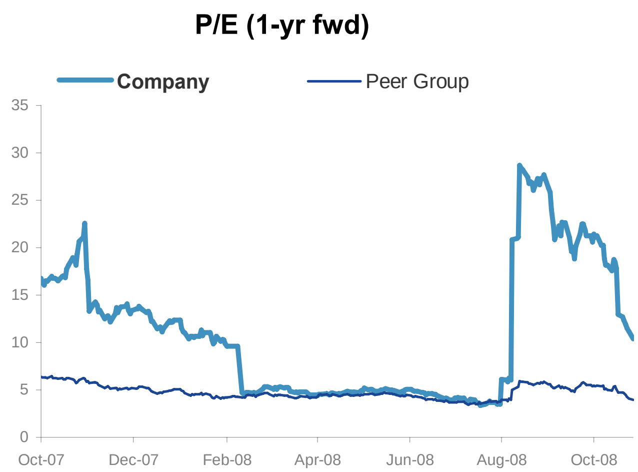


Source: Company Data, Factset

Exhibit 10
CPT: Valuation vs. Peers

ROE	ROI	Gross mrgn	Pchange 3 mo
9.6%	7.1%	13.9%	-55.8%
18.3%	12.4%	17.4%	-46.5%





Relative Valuation vs. Industry Peers

	P/E (FY1)	P/E (FY2)	P/Book	EV/Ebitda	EPS growth (2yr CAGR)
Sharp Corp.	12.0	12.0	1.5	2	7%
Samsung Electronics Co. Ltd.	11.4	11.2	1.3	4	7%
Chunghwa Picture Tubes Ltd.	10.1	-72.0	1.0	2	
Innolux Display Corp.	7.7	6.7	3.2	2	468%
HannStar Display Corp.	6.6	20.0	1.1	1	
AU Optronics Corp.	4.1	21.9	1.7	2	63%
Chi Mei Optoelectronics Corp.	4.0	51.2	1.5	3	89%
LG Display Co. Ltd.	3.7	9.5	2.1	2	57%

Source: Company Data, Factset

Exhibit 11

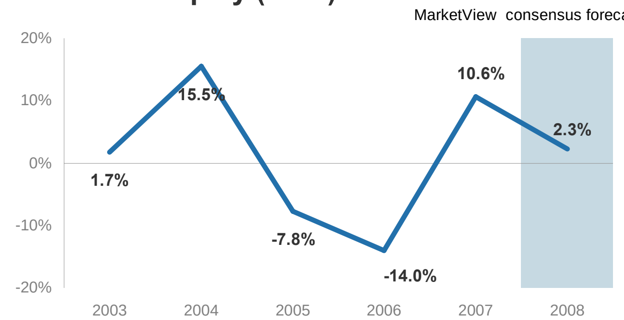
CPT Profitability Analysis

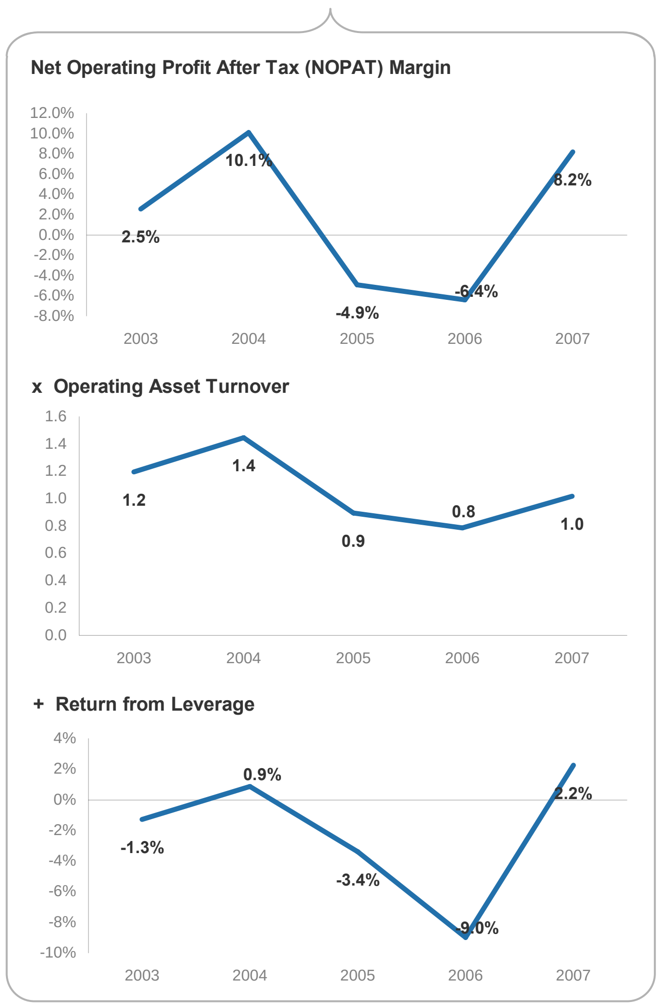
ROA	ROE	EBIT margin	Payout ratio
5.5%	9.6%	8.4%	2.7%
9.8%	18.3%	11.8%	2.3%

ROE Analysis

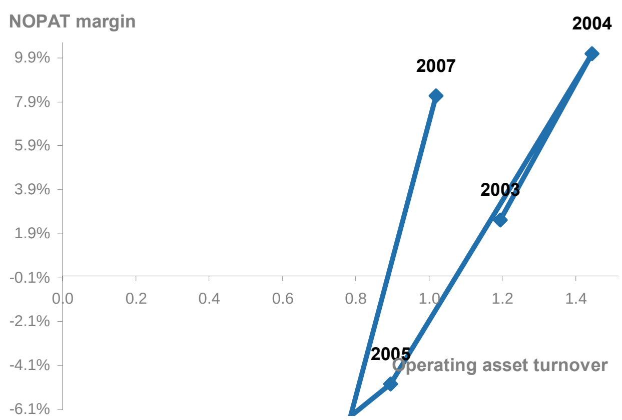
Return on equity (ROE) is the percentage return on capital raised from (or reinvested by) shareholders. The return on equity (ROE) metric is calculated by dividing net income by beginning shareholders' equity. ROE can also be decomposed into return on net operating assets plus the leverage effect (both financial and other). Finally, ROE can be calculated by the sum of return on net operating assets (RNOA), return from leverage, and return on net other funding. All calculations yield the same result. ROE is used for absolute and relative stock and sector valuation.

Return on Equity (ROE)

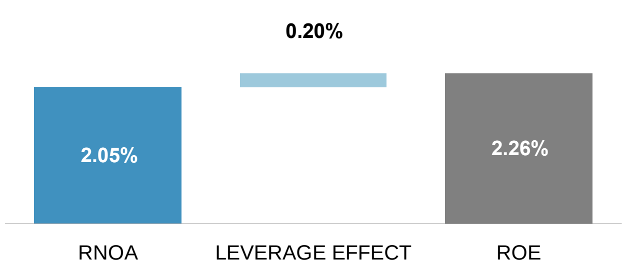




Profitability Map



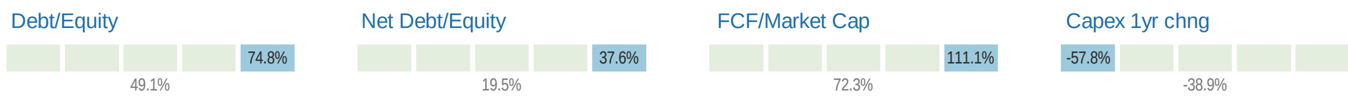
ROE Decomposition (2008)

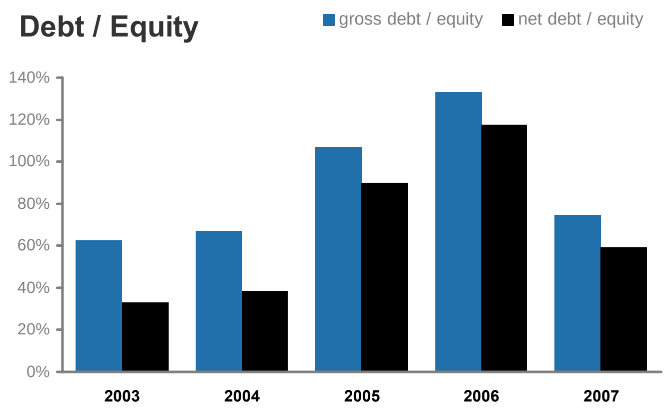


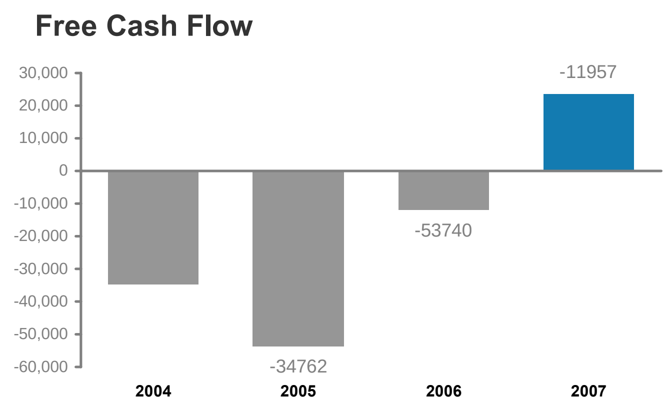
Source: Company Data, Factset

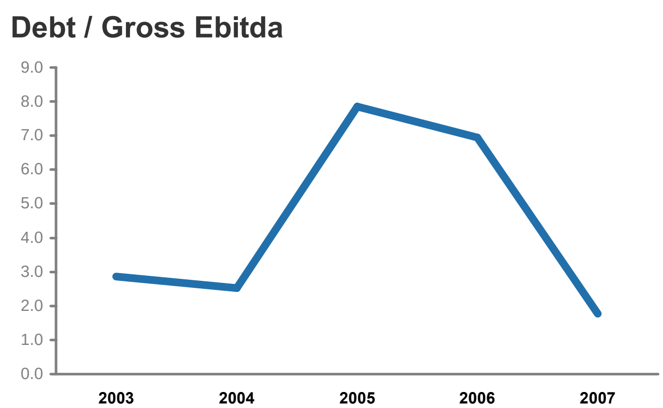
Exhibit 12

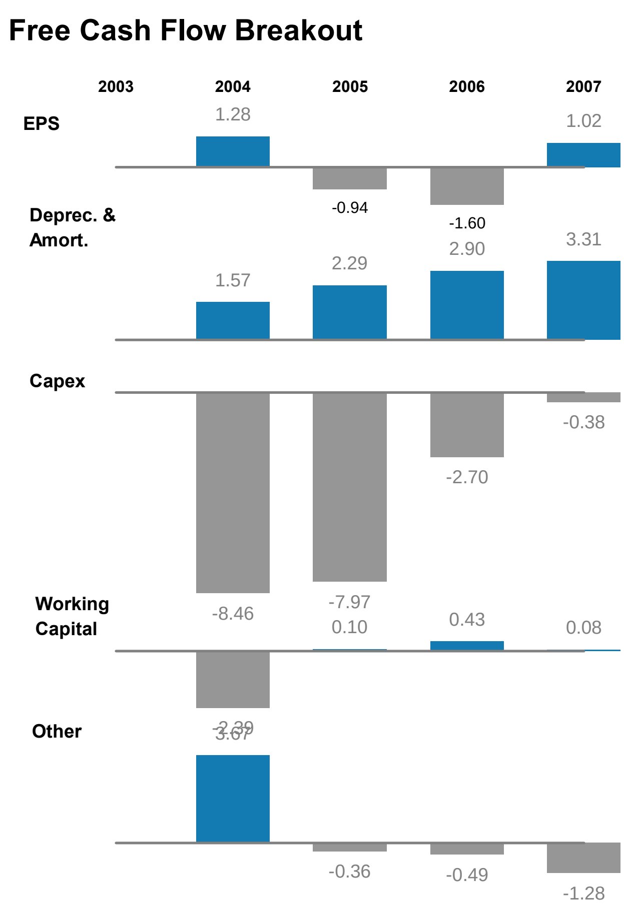
CPT: Leverage and Cash Flows Analysis

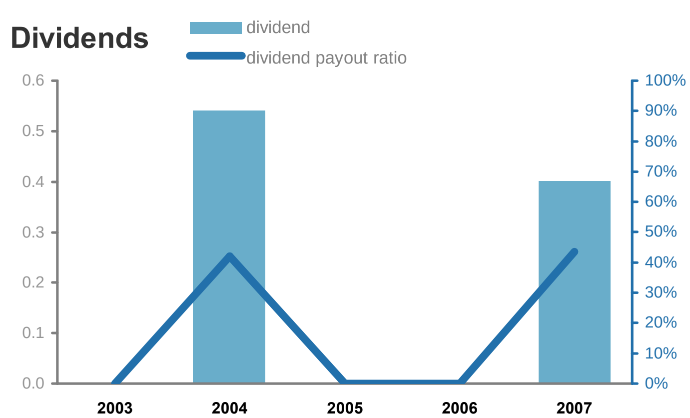












Source: Company Data, Factset

Exhibit 13
CPT: Factor Analysis

	Chunghwa Picture Tubes Ltd. percentile range (vs. peers) 0–20	20–40	40–60	60–80	80–100%	Peer Median
Valuation						
P/E LTM			11.0x			10.4x
P/E (FY1)			4.2x			5.9x
P/E (FY2)	-72.0x					10.0x
P/Book	1.0x					1.5x
P/CF	2.7x					3.8x
P/Sales	0.6x					1.0x
EV/Ebitda		1.9x				2.1x
EV/Sales			0.5x			0.5x
Performance						
Pchange 1mo			-36.5%			-37.9%
Pchange 3 mo	-55.8%					-46.5%
Pchange 6 mo		-67.3%				-63.1%
Pchange 12mo	-72.9%					-64.9%
Efficiency						
Cash Turn		3.6x				4.7x
Fix Asset Turn	0.7x					0.9x
Inventory Turn				13.7x		13.0x
Total Asset Turn	0.7x					0.9x
Work Cap Turn					150.4x	6.4x
LTD/Work Cap					47.4x	0.7x
Cash Flow						
FCF/Market Cap					111.1%	72.3%
FCF/Sales			22.0%			24.3%
Liquidity						
Cash ratio			39.8%			39.7%
Quick ratio	86.0%					114.3%
Current ratio	101.4%					132.7%

	Chunghwa Picture Tubes Ltd. percentile range (vs. peers) 0–20	20–40	40–60	60–80	80–100%	Peer Median
Growth						
EPS 1yr fwd			-21.7%			-27.5%
EPS 2yr fwd						-22.3%
EPS 1yr hist					792.8%	264.6%
EPS 3yr hist	-11.3%					10.0%
EPS 5yr hist						25.4%
BVPS 1yr hist	7.1%					24.5%
DPS 1yr hist						728.3%
EBIT 1yr hist		-264.7%				0.9%
Sales 1yr hist			25.9%			30.5%
Quality						
ROA	5.5%					9.8%
ROE	9.6%					18.3%
EBIT margin	8.4%					11.8%
Net inc. margin	5.5%					9.8%
Payout ratio			2.7%			2.3%
Gross mrgn	13.9%					17.4%
ROI	7.1%					12.4%
Financial Leverage						
Debt/Assets					32.3%	23.9%
Debt/Equity					74.8%	49.1%
Net Debt/Equity					37.6%	19.5%
Capex Discipline						
Capex/Deprec	23.4%					55.2%
Capex/Sales	3.9%					8.6%
FCF/EPS					416.7%	272.8%
Depr 1yr chng		17.6%				24.0%
Shares out 1yr chng					4.3%	0.3%
Capex 1yr chng	-57.8%					-38.9%

Source Company Data, Factset

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	Coverage Universe		Investment Banking Clients (IBC)		
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Underweight/Sell	**387**	**17%**	**90**	**14%**	**23%**
Total	**2,216**		**660**		

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