Financial Analysis

Consolidated financial analysis (2015-2019)

		2015	2016	2017	2018	2019
Financial structure	Liabilities to assets ratio (%)	58.17	56.28	57.60	53.95	51.81
	Long-term fund to PP&E ratio (%)	192.85	253.36	221.53	256.51	285.33
Solvency	Current ratio (%)	57.70	89.87	57.28	69.40	67.17
	Quick ratio (%)	49.88	77.88	48.71	58.59	53.39
	Interest coverage ratio (%)	2,585.36	2,949.77	2,883.04	3,039.18	2,984.90
Operations	Accounts receivable turnover ¹ (x)	5.57	5.55	5.85	14.08	14.81
	Average collection days ¹	65.52	65.76	62.39	25.92	24.64
	Inventory turnover (x)	12.46	11.08	11.58	12.70	12.92
	Accounts payable turnover (x)	11.11	11.45	10.57	11.20	12.44
	Average days sales	29.29	32.94	31.51	28.74	28.25
	Property, plant and equipment turnover (x)	2.46	2.60	2.79	2.95	3.32
	Total asset turnover (x)	0.75	0.76	0.77	0.77	0.80
Profitability	Return on assets (%)	10.84	10.72	10.12	9.77	8.83
	Return on equity attributable to owners of the parent company (%)	26.19	25.54	23.64	21.84	19.21
	Pre-tax income as a % of paid-in capital	53.10	56.10	51.54	51.66	47.25
	Net income margin (%)	13.92	13.66	12.76	12.20	10.68
	EPS (NT\$)	5.76	5.63	5.21	5.01	4.51
Cash flow	Cash flow ratio (%)	43.57	83.45	53.68	71.09	67.87
	Cash flow adequacy ratio (%)	99.96	99.82	100.84	107.37	112.96
	Cash reinvestment rate (%)	5.43	8.79	7.79	7.45	7.58
Leverage	Operating leverage	2.84	2.74	2.79	2.88	2.93
	Financial leverage	1.04	1.03	1.03	1.03	1.03

Note 1: In accordance with IFRS 15 "Revenue from Contracts with Customers" accounts receivables of bundle sales are recognized as contract assets since 2018, causing significant changes of relative ratios in 2018 compared with the previous year.

Stand-alone financial analysis (2015-2019)

		2015	2016	2017	2018	2019
Financial structure	Liabilities to assets ratio (%)	58.32	56.42	57.70	54.18	51.10
	Long-term fund to PP&E ratio (%)	258.53	375.18	357.74	423.47	492.60
Solvency	Current ratio (%)	33.19	60.90	39.66	43.43	40.08
	Quick ratio (%)	25.78	50.07	33.15	37.24	31.97
	Interest coverage ratio (%)	2,426.13	2,887.46	2,716.04	2,700.99	2,603.12
Operations	Accounts receivable turnover ¹ (x)	5.58	4.56	3.97	9.33	9.32
	Average collection days ¹	65.41	80.04	91.93	39.12	39.16
	Inventory turnover (x)	8.34	6.07	6.19	6.23	6.87
	Accounts payable turnover (x)	13.52	14.38	13.32	17.67	27.34
	Average days sales	43.76	60.13	58.96	58.58	53.12
	Property, plant and equipment turnover (x)	2.58	2.69	2.87	2.82	2.98
	Total asset turnover (x)	0.59	0.57	0.53	0.47	0.44
Profitability	Return on assets (%)	11.49	11.26	10.51	10.08	9.14
	Return on equity (%)	26.19	25.54	23.64	21.84	19.21
	Pre-tax income as a % of paid-in capital	49.01	51.95	46.09	45.38	40.36
	Net profit margin (%)	18.74	19.02	19.28	20.81	19.99
	EPS (NT\$)	5.76	5.63	5.21	5.01	4.51
Cash flow	Cash flow ratio (%)	28.39	60.67	38.65	48.50	48.38
	Cash flow adequacy ratio (%)	77.55	74.13	76.51	83.91	89.36
	Cash reinvestment rate (%)	0.75	4.26	3.45	2.68	2.93
Leverage	Operating leverage	3.28	2.93	3.38	3.69	3.92
	Financial leverage	1.06	1.04	1.05	1.06	1.07

Explanation of significant changes in 2019 compared with the previous year:

Accounts payable turnover increased in 2019 compared with 2018 due to lower average inventory in 2019

Note 1: In accordance with IFRS 15"Revenue from Contracts with Customers," accounts receivables of bundled sales are recognized as contract assets since 2018, causing significant changes of relative ratios in 2018 compared with the previous year.

Note 1: The financial data for 2015-2019 have been duly audited by independent auditors.

Note 2: Formulas for the above tables:

Financial structure

- (1) Debt to asset ratio = Total liabilities / Total assets
- (2) Long-term fund to PP&E ratio = (Shareholders' equity + Long-term liabilities) / Net PP&E

Solvency

- (1) Current ratio = Current assets / Current liabilities
- (2) Quick ratio = (Current assets Inventory Prepaid expenses) / Current liabilities
- (3) Interest coverage ratio = Income before interest and taxes / Interest expense

Operations

- (1) Accounts receivable turnover = Net revenue / Average accounts receivable
- (2) Average collection days = 365 / AR turnover
- (3) Inventory turnover = COGS / Average inventory
- (4) Accounts payable turnover = COGS / Average accounts payable
- (5) Average days sales = 365 / Inventory turnover
- (6) PP&E turnover = Net revenue / Average net PP&E
- (7) Total asset turnover = Net revenue / Average total assets

Profitability

- (1) Return on assets = [Net income + Interest expense x (1 Tax rate)] / Average assets
- (2) Return on equity = Net income / Average equity
- (3) Net income margin = Net income / Net sales
- (4) EPS = (Net income Preferred stock dividends) / Weighted average outstanding shares

Cash flow

- (1) Cash flow ratio = Cash flow from operating activities / Current liabilities
- (2) Cash flow adequacy ratio = Net cash flow from operating activities for the past 5 years / (Capital expenditure + Increases in inventory + Cash dividends for the past 5 years)
- (3) Cash reinvestment rate = (Cash flow from operating activities Cash dividends) / (Gross PP&E + Long-term investments + Other assets + Working capital) (Note: Use zero if working capital value is negative)

Leverage

- (1) Operating leverage = (Net revenue Variable operating costs and expenses) / Operating income
- (2) Financial leverage = Operating income / (Operating income Interest expense)