LEADING

Mid-Cap Research

July 18, 2011

Kortek (052330 KQ)

Product diversification - the new growth engine

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Leading Traffic Light: Green

Kortek is…

- ✓ A producer of industrial displays used in slot machine, PID, medical equipment, multi display and IDB display
- ✓ Never recorded a loss during the past 23 years since it was founded in 1987

Green light because:

- ✓ Recovery of the casino industry
- ✓ Successfully expanded into PID and medical equipment display
- ✓ New growth momentum from multi display and IDB display without huge investment

Growth potential:

- ➢ Revenue growth will continue in line with the recovery of the global casino industry
- ➢ Expansion into new displays, including multi display and IDB display, should help the company diversify revenue sources

Management & shareholder concern:

- ➢ CEO Han Gu Lee (29.6% stake) founded Kortek in 1987 and has been with the company since
- ➢ Dividend yield of 3% is low, but the company is channeling cash to capital investment for future growth in new business areas

Free cashflow generation:

- ➢ Consistent handsome positive free cashflow during the past decade as no huge investment is needed in business expansion
- ➢ Cautious approach toward new investments to preserve its cash holdings

Valuation:

- ➢ Kortek is highly undervalued as it trades at P/E of 5.1X 2011 EPS and 5.3X 2012 EPS
- ➢ TP of W13,600 was derived by applying P/E of 8.2X, which is 50% discount to the global slot machine makers' 2011E average P/E of 16.4X

CAVEAT EMPTOR!!! – Watch out for…

- ➢ Investors' preconception about the casino industry as a "Sin Industry"
- ➢ A possibility of slower than expected global casino industry recovery due to the lagging global economy recovery

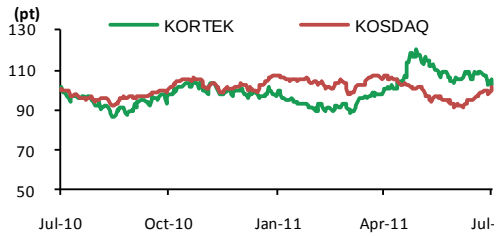
BUY

Target Price (KRW)	**13,600**
Current Price (KRW)	**8,450**
Upside potential	**60.9%**

Key Data	**July 15, 2011**
Sector	Display
KOSDAQ	507
Market Cap. (Wbn)	107.6
Shares Outstanding	12.7m
Foreign Ownership (%)	14.0%
52 Week High (W)	9,670
Low (W)	6,980
60-d avg. turnover (Wbn)	1.0
Major Shareholders	**(%)**
Han Gu Lee	29.6

Performance (%)	**1M**	**6M**	**12M**
Absolute	-0.2	5.0	3.8
Relative	-9.3	10.2	2.8

Relative Performance



Valuation Forecast

FY	Sales (Wbn)	% chg yoy	OP (Wbn)	OPM (%)	NP (Wbn)	EPS (W)	EPS Growth (%)	P/E (x)	EV/EBITDA (x)	ROE (%)	P/B (x)
2008	138.6	63.4	20.2	14.5	4.1	329	(50.7)	15.8	4.94	5.1	1.2
2009	146.4	5.6	14.3	9.7	12.9	1,013	207.5	8.4	6.29	13.2	1.0
2010	151.0	3.1	14.4	9.5	16.0	1,260	24.4	6.2	4.31	13.9	0.9
2011E	189.7	25.7	19.7	10.4	21.1	1,658	31.6	5.1	3.40	17.0	0.8
2012E	234.8	23.8	24.9	10.6	20.4	1,599	(3.5)	5.3	2.9	15.4	0.8
2013E	287.1	22.3	30.7	10.7	25.9	2,036	27.3	4.2	2.3	17.6	0.7

Key check points for Kortek

✓ Beneficiary of the global casino industry recovering from global financial crisis

Number of tourists visiting Las Vegas casino increased 4.8% YoY in April and 5.0% YoY YTD. The April figure is the highest since global financial crisis, which indicates that the worst of the economic slowdown is behind Las Vegas and 2011 could be the beginning of the recovery of the casino industry. Las Vegas Convention and Visitors Authority (LVCVA) expects the number of tourists visiting Las Vegas to increase throughout 2011 and major casinos are expected to be profitable for the first time in three years (Page 15).

✓ Customer diversification in full swing

One of Kortek's risks was a single customer risk: sales to International Game Technology (IGT) accounted for 64.4% of the total 2010 sales. Even though IGT is the global top casino slot machine maker, high dependence on single customer is obviously a risk. However, Kortek has diversified its customer base successfully by utilizing its track record of supplying casino displays to global No.1 slot machine maker, namely IGT. Kortek has successfully secured 4 of the global top 5 casino slot machine makers as customers: IGT, Aristocrat, WMS, and Konami (Page 16).

✓ Successful expansion into medical equipment, PID, IDB and multi display

Kortek is successfully increasing non-casino display revenue in an effort to diversify its product line. The proportion of casino display sales dropped from 79.2% in 2008 to 62.9% in 2010 as the company expanded into new business areas such as medical equipment, Public Information Display (PID), Interactive Digital Board (IDB) display, and multi display. The company could enter these markets without huge investment as such new products could be made with the existing technologies. Going forward, we expect the company to enter into aerospace display and military displays to become a supplier of highly value-added industry-specific displays (Page 17).

✓ 2011E P/E of 5.1X, highly undervalued

The shares are trading at 2011E P/E of 5.1X and we believe it is highly undervalued as its main customers, global casino slot machine makers, are traded at an average 2011E P/E of 16.4X. Given the apparent recovery and growth of the global casino slot machine industry, Kortek's earnings growth momentum is expected to follow the suit. As the company is only one of the parts providers in casino slot machine and parts makers are usually discounted 40-50% to the finished product maker, we applied 50% discount on global slot machine makers' average 2011E P/E of 16.4X to arrive at our target P/E of 8.2X, which yields the target price of W13,600 per share (Page 14).

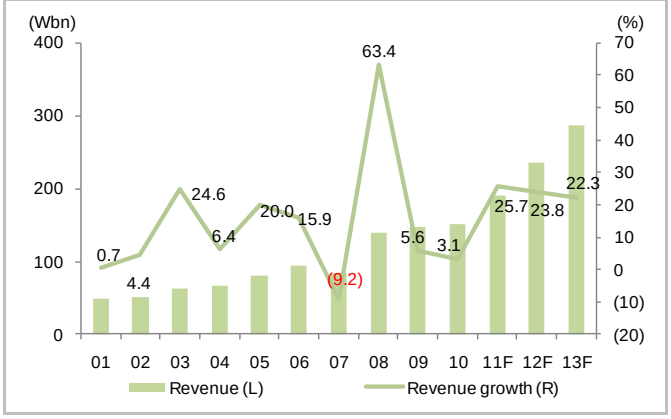
Section 1: Company at a glance

Top global slot machine display vendor

Producer of industrial displays used in casino slot machine, medical equipment, PID and multi display

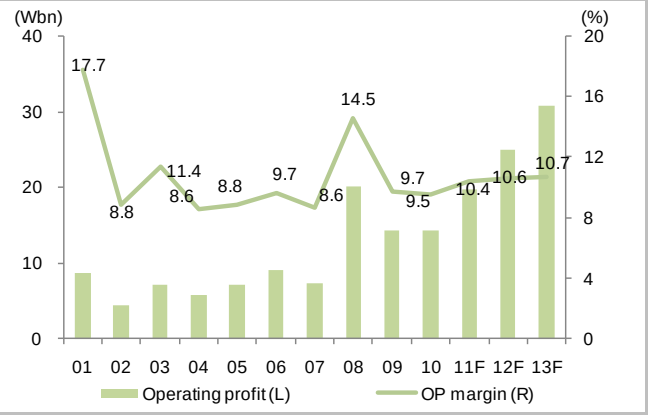
Kortek is a leading producer of industrial displays used in casino slot machine, medical equipment and Public Information Display (PID). It has 50% market share in the global casino slot machine displays industry and is expected to benefit directly from the global casino industry recovery. Kortek has successfully diversified its slot machine display customers to remove a single customer risk. Also, it expanded its business into medical equipment display, PID, multi display and IDB display. We expect 2011E sales and OP to increase 25.7% YoY and 37.2% YoY, respectively.

Chart 1. Revenue and growth trend



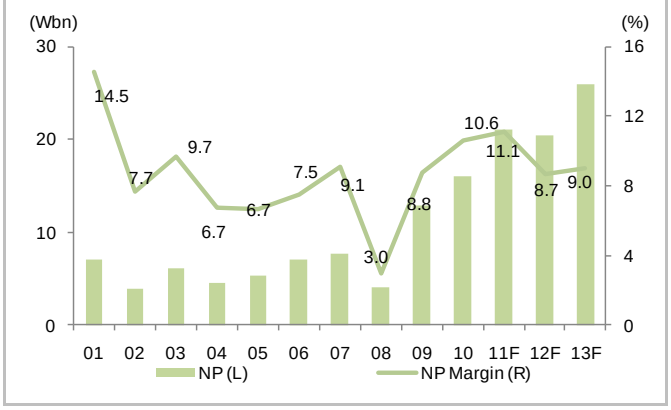
Source: Company data, Leading Research Center

Chart 2. Operating profit and OPM trend



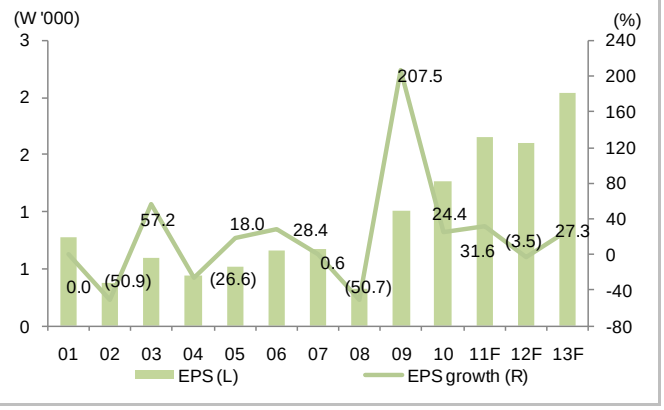
Source: Company data, Leading Research Center

Chart 3. Net profit and NP margin trend



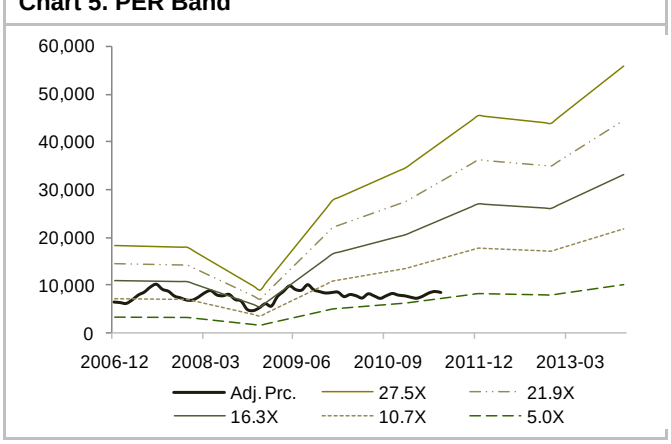
Source: Company data, Leading Research Center

Chart 4. EPS and EPS growth trend



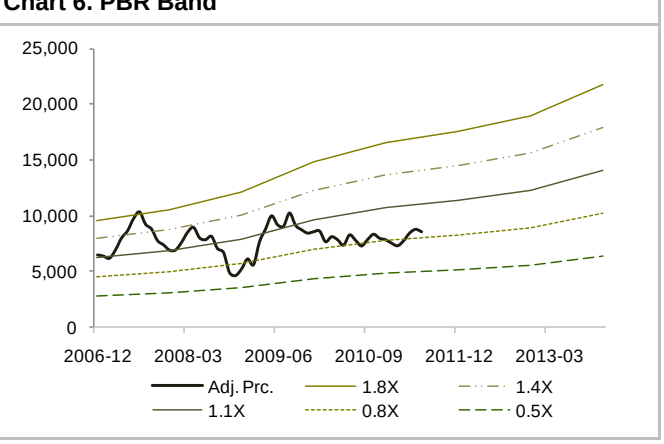
Source: Company data, Leading Research Center

Chart 5. PER Band



Source: Company data, Leading Research Center

Chart 6. PBR Band



Source: Company data, Leading Research Center

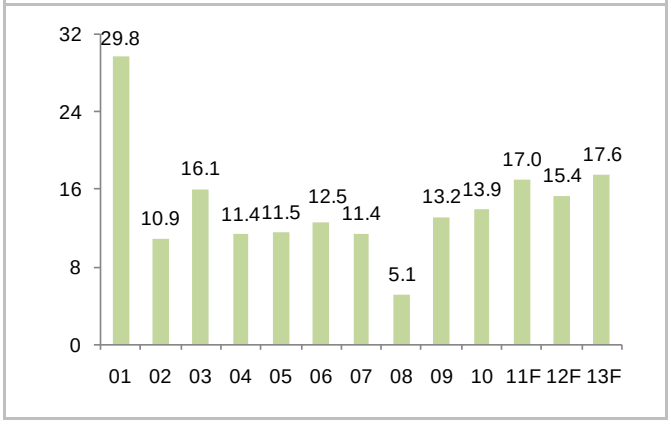
Section 2: Is the company a value creator?

Excellent value creator with a double digit ROE

Excellent value creator with strong ROE and ROIC-WACC spread

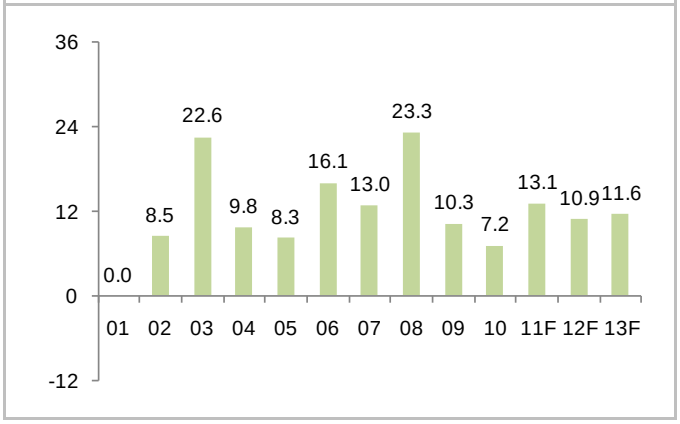
The company is an excellent value creator given that its ROIC consistently exceeded WACC by more than 10% since it was listed in KOSDAQ in 2001. Also, ROE remained at a double digit since 2001 except in 2008 when global financial crisis damaged global casino industry and negatively affected the company's earnings. However, ROE quickly picked up to a double digit level from 2009 with diversification of its business portfolio and customer bases.

Chart 7. ROE (%)



Source: Company data, Leading Research Center

Chart 8. ROIC less WACC (%)



Source: Company data, Leading Research Center

Value creation to continue with business diversification

Successfully expanded business portfolio to medical equipment display and PID

On the back of steady sales from its casino display business, the company expands its operations to medical equipment display, PID successfully. PID sales were only W0.4bn and in 2008 but quickly rose to W21.8bn in 2010 and 2013E sales are expected to reach W32.9bn. Medical sales were also only W0.9bn in 2006 but recorded W6.2bn in 2010 and 2013E sales are expected to reach W15.9bn.

Next growth momentum to come from multi display and IDB display

Kortek's next growth momentum is expected to come from multi display and Interactive Digital Board (IDB) display. In particular, multi display division has much higher OP margin than other operations as it is a specialty display. We expect Multi display and IDB display sales to increase 83.8% YoY to W10.6bn and 42 times to W23.5bn in 2011E, respectively.

Going forward, we expect the company to enter into aerospace and military displays to become a supplier of highly value-added industry-specific displays.

Section 3: Is the company a cash generator and share cash with shareholders?

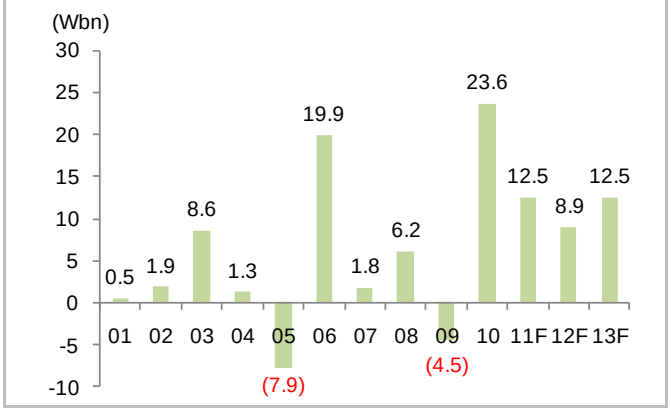
Strong free cash flow generator

Handsome positive free cash flow during the past decade

Kortek consistently generated handsome free cashflow during the past decade, except in 2005 and 2009. In 2005 free cashflow was negative because of the temporary increase in trade receivables.

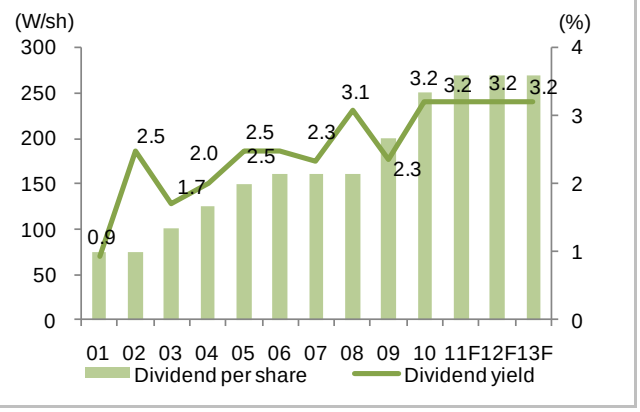
Also free cashflow was negative in 2009 as the company made a huge investment when it relocated its plants to Songdo. The relocation was a step in the right direction to expand casino display business, as well as to jump-start medical, PID, multi display and IDB display.

Chart 9. Free cashflow trend



Source: Company data, Leading Research Center

Chart 10. Dividend per share and yield trend



Source: Company data, Leading Research Center

Consistently increased its dividend yield since 2001

Even though Kortek has consistently increased its dividend yield since the company started to return its profit to investors in 2001, the dividend yield was only 3.2% in 2010.

The low dividend is due to the company policy of actively investing in new businesses for the future growth. Going forward, the dividend yield may not increase much, but investors could be rewarded with growth in revenue and earnings.

Table 1. Dividend and Dividend yield trend

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011F	2012F	2013F
Dividend payout (Wbn)	0.6	0.8	1.0	1.1	1.6	1.7	2.0	1.9	2.5	3.2	3.4	3.4	3.4
Dividend payout ratio (%)	8.9	19.7	15.6	25.4	29.1	24.2	25.6	46.4	19.8	19.8	16.3	16.9	13.3
Dividend per share	75	75	100	125	150	160	160	160	200	250	270	270	270
Yield (%)*	0.9	2.5	1.7	2.0	2.5	2.5	2.3	3.1	2.3	3.2	3.2	3.2	3.2

Note: Dividend yield based on the closing price of the year
Source: Company data, Leading Research Center

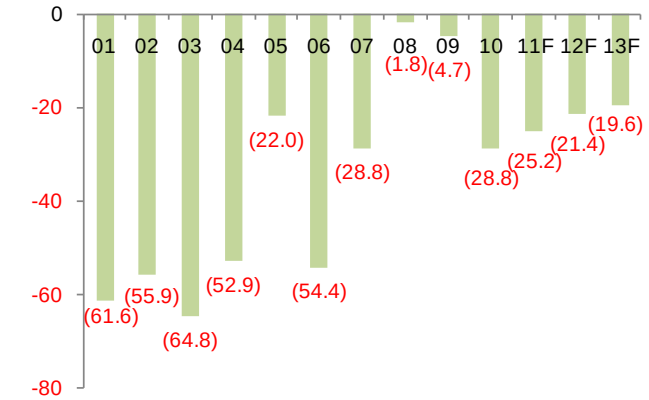
Section 4: Are the debt and interest burden manageable?

Zero debt….

No debt, no interest expenses

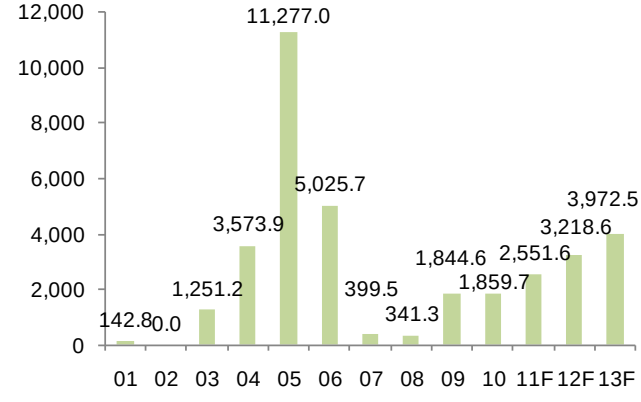
Kortek has no interest bearing debt or interest expense burden.

Chart 11. Net debt-to-equity ratio (%)



Source: Company data, Leading Research Center

Chart 12. Interest coverage (X)



Source: Company data, Leading Research Center

Section 5: What is the management philosophy?

Stable and continuous growth with cautious investment

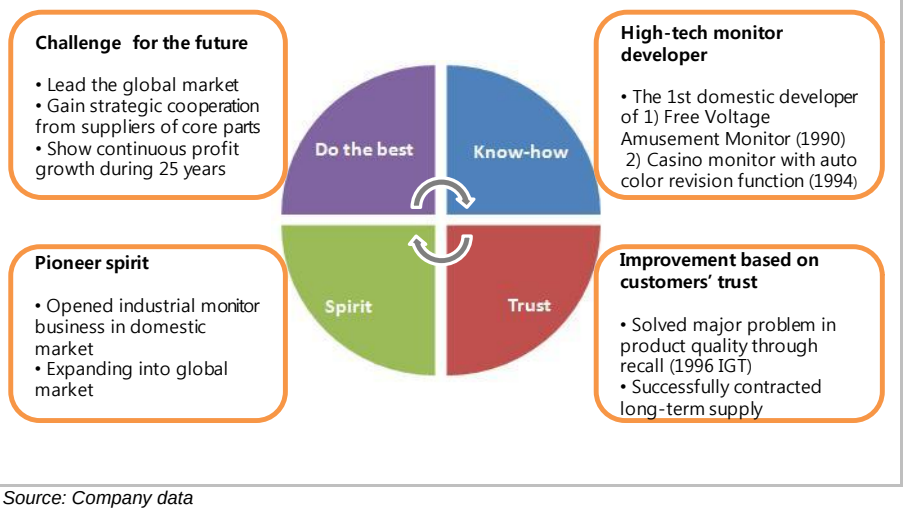
The first domestic company to manufacture and export arcade games and slot machine monitors

As the first domestic arcade game monitor developer, Kortek is aiming to become global No.1 value-added industry-specific dispay vendor. In an attempt to become a global player in an industry larger than arcade games, the Kortek management tapped the casino display industry in 1994. Utilizing its existing and newly develped display technology, the company successfully penetrated the industry and secured IGT as a customer only 3-4 years after it tapped the market. Such a daring challenge of the management made Kortek the largest slot machine display producer in the world with global market share of 50%.

Growth based on customer's confidence and cautious investment

The management believes that the company needs to grow, but any capital investment should be reviewed for viability of future revenue generation. Such conservative philosophy allowed the company to secured long-term contracts and successfully enter new businesses without making huge investment. Rather, it extracted new technology from existing technologies and production facilities.

Chart 13. Kortek Management Philosophy



Source: Company data

Kortek is controlled by the major shareholder and CEO Han Gu Lee, who has 29.6% of the company. Mr. Lee established Kortek and devoted most of his professional career at Kortek for the past 25 years since 1986 when he founded the company.

Little concern for minor shareholders

We believe the company has little concern from minor shareholders. The company justifies low dividend yield of 3% with the management philosophy of reserving cash for making investments for the future growth.

However, the company has over W30bn in cash and an average free cashflow of over W10bn per year is expected during the next three years. Thus, we believe the company's claim that it is not paying a reasonable dividend because it is reserving cash for a future growth is not so persuasive.

CEO Profile

Lee, Han Gu

Professional experience

1986 ~ Present	CEO, Kortek
1974 ~ 1985	CEO, Dongwoo

Section 6: Peer group comparison

Kortek valuation is excellent compared to global casino slot machine makers

Since finding a listed peer companies in the global slot machine display market, we selected four global slot machine makers, which are also Kortek's main customers for valuation comparison.

2011E P/E of 5.1X even though 2011E & 2012E sales growth are highest among its peers

When compared to global slot machine makers, Kortek is highly undervalued as Kortek's 2011E P/E of 5.1X is much lower than the global slot machine makers' 2011E average P/E of 16.4X despite the fact that Kortek is expected to show the highest sales growth in 2011E and 2012E with business diversification.

Lowest EV/EBITDA and P/B among its peers

Kortek's OP margin is lower than its peers as the company is not a finished goods maker but a part maker. However, EV/EBITDA is much lower than the peer group and P/B ratio is also at the lowest end among peers.

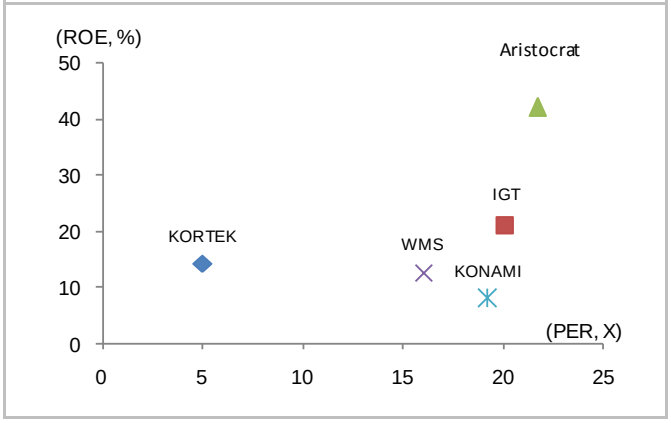
Table 2. Global casino slot machine maker peer group comparison

Name	Ticker	Country	Market Cap	Sales (US$m)				OP Margin (%)			
				09	10	11E	12E	09	10	11E	12E
KORTEK	052330 KQ	KOREA	99.4	115.4	130.6	176.7	232.3	9.7	9.5	10.4	10.6
INTL GAME TECH	IGT US	UNITED STATES	5,419.2	2,091.6	1,987.2	1,954.2	2,101.2	21.5	25.2	25.8	27.0
ARISTOCRAT LEISU	ALL AU	AUSTRALIA	1,260.7	720.7	626.4	762.8	909.5	-20.6	15.2	14.0	17.2
WMS INDS	WMS US	UNITED STATES	1,608.8	706.4	765.1	791.6	828.2	19.3	21.9	19.0	21.5
KONAMI (US)	KNM US	JAPAN	3,629.1	2,826.9	3,018.8	3,143.0	3,177.0	8.1	9.4	10.3	11.1

Company	P/E (X)				EV/EBITDA (X)				P/B (X)				ROE (%)			
	09	10	11E	12E	09	10	11E	12E	09	10	11E	12E	09	10	11E	12E
KORTEK	8.4	6.2	5.1	5.3	6.1	4.2	3.4	2.9	1.0	0.8	0.8	0.8	13.2	13.9	17.0	15.4
INTL GAME TECH	28.3	16.8	20.1	17.1	11.2	7.7	9.1	8.1	6.0	3.5	3.7	3.4	22.0	22.0	21.2	25.1
ARISTOCRAT LEISU	N/A	20.6	21.8	11.9	N/A	13.4	10.7	7.2	13.9	8.4	5.5	4.4	37.6	37.6	42.3	42.3
WMS INDS	20.5	21.6	16.1	13.9	6.8	8.3	6.2	5.5	2.6	2.8	1.8	1.6	15.0	15.0	12.5	13.8
KONAMI (US)	N/A	N/A	19.2	16.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.9	6.9	8.2	N/A

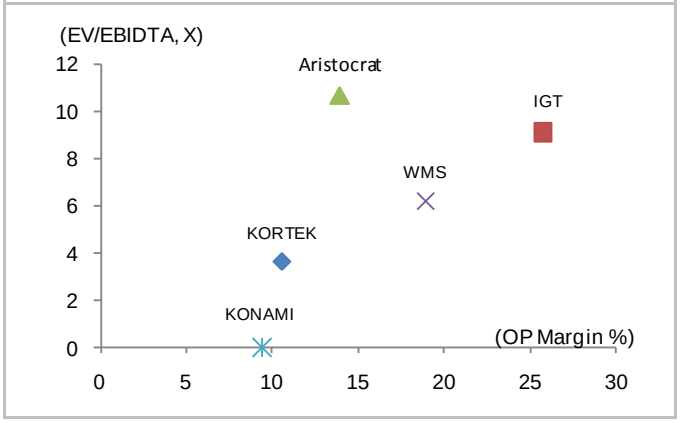
Source: Company data, DataStream forecast, Leading Research Center

Chart 14. A Peer Group PER vs. ROE



Source: Company data, Leading Research Center

Chart 15. A Peer Group EV/EBITDA vs. OP margin



Source: Company data, Leading Research Center

Section 7: Kortek is undervalued…Or is it?

Kortek valuation is excellent compared to market and industry

Kortek is trading at 50% discount to the market in terms of PER valuation. The company has been traded at 25-45% discount to the market in the past 5 years as investors considered casino industry as a "Sin Industry" and most of sales came from a single business and single customer without diversification.

Although the company used to be traded at 15~30% discounts to the market in 2007 with global casino industry booming, global financial crisis in 2008 directly influenced the global casino industry, deteriorating Kortek's earnings.

Current PER valuation of 50% discount to the market is unfair

However, we believe current PER valuation of 50% discount to the market is unfair and Kortek is undervalued as follows:

1. There are clear signs that global casino industry is recovering.
2. The company successfully has diversified its customer bases in slot machine display by securing 4 of the global top 5 slot machine makers as customers.
3. Casino sales proportion was as reduced to 62.9% in 2010 through business expansion into medical equipment display, PID and IDB. We expect casino sales proportion to reduce to 52.1% in 2012E.

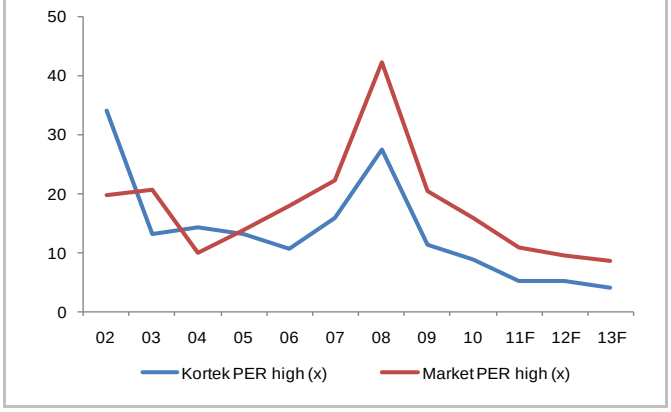
Therefore, we believe Kortek's P/E valuations in 2011F, 2012F and 2013F are overly discounted the market too much. Considering the sustainable earnings from slot machine display and growth momentum from the new products, the company's discount range should be narrowed to at least the levels previous to the global financial crisis of 2008.

Table 3. Discount in Kortek PER to market PER

(x, %)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011F	2012F	2013F
Kortek PER high	14.7	34.1	13.2	14.2	13.2	10.6	15.9	27.5	11.3	8.8	5.1	5.3	4.2
Market PER high	57.6	19.9	20.7	9.9	13.9	17.9	22.3	42.4	20.4	16.0	10.8	9.5	8.6
Discount to market	**74.5**	**(71.5)**	**36.4**	**(43.7)**	**5.1**	**40.7**	**28.8**	**35.2**	**44.7**	**44.9**	**52.8**	**44.4**	**51.7**
Kortek PER low	8.9	7.9	4.4	5.7	7.8	7.7	9.2	10.7	5.0	5.5	5.1	5.3	4.2
Market PER low	26.5	9.9	10.2	5.7	7.2	11.0	10.9	16.2	9.8	9.6	10.8	9.5	8.6
Discount to market	**66.5**	**20.2**	**57.5**	**(1.1)**	**(7.4)**	**30.2**	**15.3**	**34.0**	**48.4**	**42.6**	**52.8**	**44.4**	**51.7**

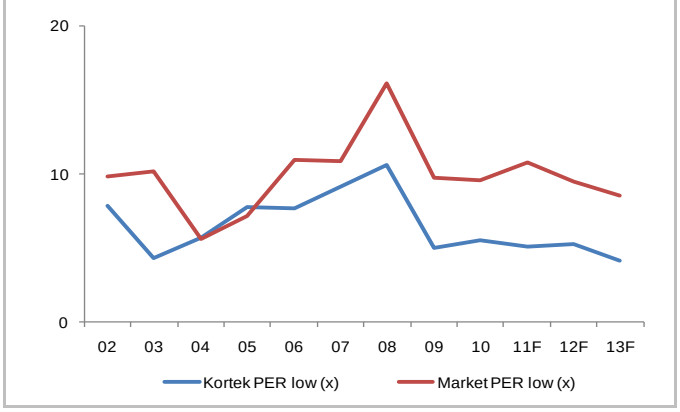
Source: Company data, Leading Research Center
**Market = KOSPI + KOSDAQ*

Chart 16. Kortek PER high vs. Market PER high



Source: Company data, Leading Research Center

Chart 17. Kortek PER low vs. Market PER low



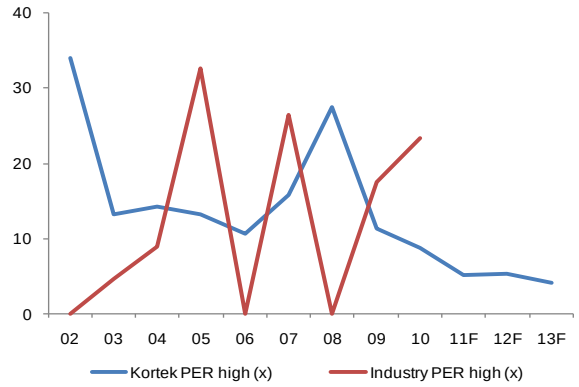
Source: Company data, Leading Research Center

Comparing to domestic display industry PER is meaningless

We believe comparing Kortek's PER with industry PER serves no meaning as domestic display industry PER has been fluctuating as they rode the wave of display industry cycle. However, Kortek has been dealing with less cyclical industry, namely casino display, and has been profitable during the past 23 years.

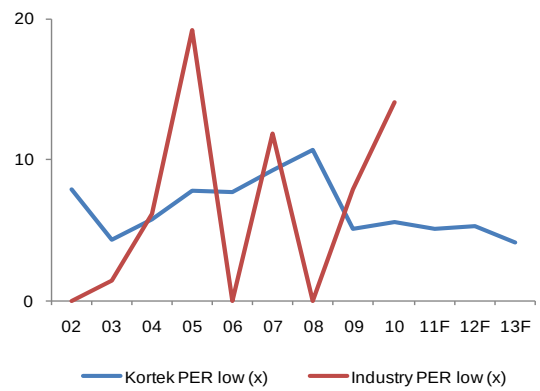
Value-added industry-specific display industry is not as cyclical or unpredictable as the traditional display industry. Therfore we believe comparing Kortek to average display industry is not meaningful.

Chart 18. Kortek PER high vs. Industry PER high



Source: Company data, Leading Research Center

Chart 19. Kortek PER low vs. Industry PER low



Source: Company data, Leading Research Center

Section 8: FX exposure

FX impact

1% drop and 5% drop in W/US$ rate decreases OP by 2.5% and12.3%, respectively in 2011E

Kortek is an export driven company with 95% of total revenues settled in US$. On cost side, 90% of raw material imports are settled in US$ (amount of raw materials imports are about 85% of sales). As a result, about 75% of US$ settlements are naturally hedged, leaving about 30% of total sales are exposed to the KRW/US$ fluctuation. We expect these ratios to continue into the foreseeable future.

1% drop in W/US$ rate decreases OP by 2.5% in 2011E and 2.4% in 2012E. And 5% drop in W/US$ rate decreases OP by 12.3% in 2011E and12.1% 2012E.

Table 4. 2011E FX sensitivity

% chg in KRW/US$ rate	-5%	-1%	Base	1%	5%
Year-end KRW/US$	**1,020**	**1,063**	**1,074**	**1,085**	**1,128**
Year-avg KRW/US$	**1,028**	**1,071**	**1,082**	**1,093**	**1,136**
Revenue (Wbn)	180.7	187.9	189.7	191.5	198.7
Operating profit	17.3	19.2	19.7	20.2	22.2
NP (Wbn)	18.7	20.6	21.1	21.6	23.5
EPS (W)	1,468	1,620	1,658	1,696	1,848
P/E	5.6	5.1	5.0	4.9	4.5
Revenue change (%)	(4.8)	(0.9)	0.0	1.0	4.8
OP change (%)	(12.3)	(2.5)	0.0	2.5	12.3
NP change (%)	(11.5)	(2.3)	0.0	2.3	11.5
EPS change (%)	(11.5)	(2.3)	0.0	2.3	11.5

Source: Company data, Leading Research Center

Table 5. 2012E FX sensitivity

% chg in KRW/US$ rate	-5%	-1%	Base	1%	5%
Year-end KRW/US$	**960**	**1,001**	**1,011**	**1,021**	**1,062**
Year-avg KRW/US$	**979**	**1,020**	**1,030**	**1,040**	**1,082**
Revenue (Wbn)	223.7	232.6	234.8	237.0	246.0
Operating profit	21.9	24.3	24.9	25.5	27.9
NP (Wbn)	17.4	19.8	20.4	21.0	23.4
EPS (W)	1,363	1,552	1,599	1,647	1,836
P/E	6.1	5.3	5.2	5.0	4.5
Revenue change (%)	(4.8)	(0.9)	0.0	1.0	4.8
OP change (%)	(12.1)	(2.4)	0.0	2.4	12.1
NP change (%)	(14.8)	(3.0)	0.0	3.0	14.8
EPS change (%)	(14.8)	(3.0)	0.0	3.0	14.8

Source: Company data, Leading Research Center

Table 6. 2013E FX sensitivity

% chg in KRW/US$ rate	-5%	-1%	Base	1%	5%
Year-end KRW/US$	**1,014**	**1,056**	**1,067**	**1,078**	**1,120**
Year-avg KRW/US$	**1,002**	**1,044**	**1,055**	**1,066**	**1,108**
Revenue (Wbn)	273.5	284.4	287.1	289.8	300.7
Operating profit	27.0	30.0	30.7	31.5	34.4
NP (Wbn)	22.2	25.2	25.9	26.7	29.6
EPS (W)	1,746	1,978	2,036	2,094	2,325
P/E	4.7	4.2	4.1	3.9	3.5
Revenue change (%)	(4.8)	(1.0)	0.0	0.9	4.8
OP change (%)	(12.0)	(2.4)	0.0	2.4	12.0
NP change (%)	(14.2)	(2.8)	0.0	2.8	14.2
EPS change (%)	(14.2)	(2.8)	0.0	2.8	14.2

Source: Company data, Leading Research Center

Section 9: High Entry barrier

High entry barrier as 1) small orders with customer specified models, 2) knowledge over various slot machines, 3) modification request from each customer

Among the casino display vendors around the world, seven companies (including Kortek) produce 80% of the total supply. It is difficult to enter such an oligopolistic casino display industry for the following three reasons:

First, a mass production is difficult as orders are usually small volume of variety of display types to fit specified models of slot machines. For this reason, only specialized small companies with a production infrastructure that could adapt to such orders could satisfy customer demand.

Second, as casino displays are slot machine parts to be integrated into slot machines, there needs to be sufficient knowledge on how each type of display fits corresponding slot machines. A large number of seasoned specialists and skilled manual work is necessary to satisfy its customers.

Third, the customers have high number of different modification requests on each product. Once slot machine makers establishes a relationship with a supplier, it is hard for the slot machine makers to change the display supplier easily as it takes 2-3 years to test and verify whether the supplier could satisfy high number of different modification requests.

Approval from US Gaming Commission needed to change the parts in slot machine

In the case of the US, when new slot machines are made or parts of machines are changed, the US Gaming Commission must approve them before they can be placed in a casino. Also, there are additional expenses of three months down time and $5,000-$7,000 in costs. Considering the inconvenience and the cost, slot machine makers are reluctant to change the parts supplier, hence the competition is less fierce PC displays, TVs or other home appliances.

Section 10: Company and operations overview

The global top slot machine display vendor

Established in 1986, specializes mostly in displays for casino slot machines

Kortek, established in 1986, is an industrial display vendor, which specializes mostly in displays for casino slot machines. The company has been profitable for the past 23 years and dominates the global casino display market with 50% global market share. The company is the largest display vendor to International Game Technologies (IGT), the largest slot machine maker in the world.

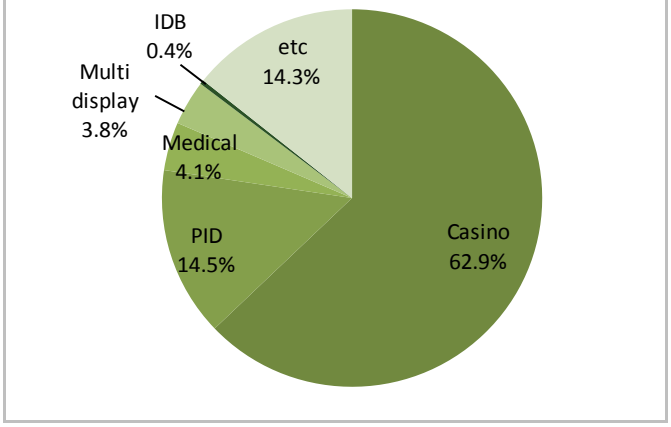
Successful business expansion into medical equipment, PID, multi display and IDB display

The company has been expanding its business successfully during the past three years into medical equipment display, PID and multi display and IDB display. The company could enter those markets without huge investment as those new products were extension from the existing technologies. The company secured NEC as a medical equipment display customer, NEC as a PID customer, BARCO as a multi display customer and SMART as an IDB display customer.

Sales breakdown in 2010: casino display – 62.9%, PID – 22.3% and medical equipment display – 4.1%

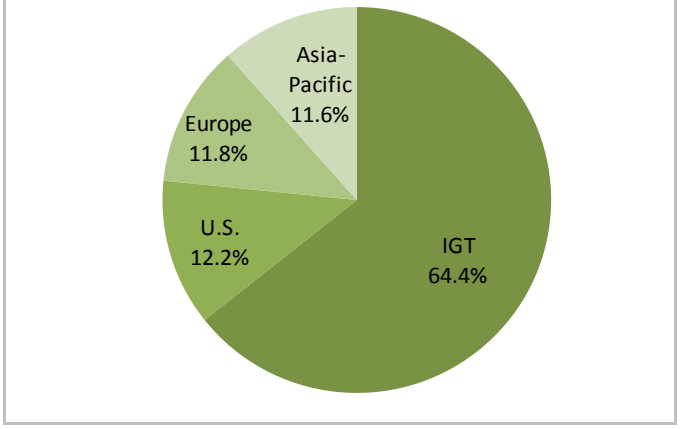
The sales breakdown in 2010 was as follows: (i) 62.9% casino display, (ii) 14.5% Public Information Display (PID), (iii) 4.1% medical equipment display (Chart 18). Casino display account for the largest part of sales and 64.4% of the company's casino display sales were from IGT in 2010. In an effort to reduce the dependency on IGT, the company started to diversify its customer bases to Aristocrat, WMS and Konami. As a result, Kortek is now providing casino displays to four of global top five slot machine makers.

Chart 20. Sales breakdown (2010)



Source: Company data

Chart 21. Casino sales breakdown by customer (2010)



Source: Company data

2011E sales and OP are expected to rise 25.4% YoY and 36.9% YoY, respectively

We expect the company's 2011E sales and operating profit to rise 25.7% YoY to W189.7bn and 37.2% YoY to W19.7bn, respectively. Given the number of visitors to Las Vegas, a sign of recovery in the casino industry is very clear (Page 15). We believe there will be more demand for new casino machines with industrial recovery and Kortek should directly benefit as the company provides casino displays to most of global top casino machine makers.

New businesses such as IDB display and multi display sales are expected to rise sharply in 2011E since the company has secured global top customers and successfully developed new models. IDB display and multi display are expected to record sales of W23.5bn and W10.6bn in 2011E, respectively.

To become value-added, industry-specific displays supplier

Going forward, we expect the company to enter into aerospace and military displays to become a supplier of highly value-added, industry-specific displays.

Initiate coverage with BUY and a target price of W13,600

Initiate coverage with a BUY recommendation and TP of W13,600

We initiate coverage on Kortek with a BUY recommendation with a target price of W13,600. The target price was derived by applying 2011E P/E of 8.2X , which is 50% discount to global casino slot machine makers' 2011E average P/E of 16.4X.

We applied 50% discount on valuation as the company is one of the parts providers in casino slot machine. Parts makers are usually discounted 40-50% to the finished product makers.

Kortek has new growth engines such as IDB display and multi display on the back of steady revenue from casino display business. Hence, we believe applying P/E of 8.2x is very reasonable.

Kortek's valuation was compared against global casino slot machine makers as more than 60% of total sales come from casino display and global top 4 casino slot machine makers. Naturally, there is a high correlation between global casino machine makers' earnings forecast and Kortek's earnings forecast.

The following are four key investment points for Kortek:

Number of visitors in Las Vegas to rise and 2011 will mark the beginning of a recovery

First, recovery of global casino industry: The number of tourists visiting Las Vegas casino was up 4.8% YoY in April and up 5.0% YTD. The number of visitors in April 2011 was the highest since global financial crisis. This indicates that the worst of the economic slowdown is behind Las Vegas and 2011 will mark the beginning of a recovery. Las Vegas Convention and Visitors Authority (LVCVA) expect major casinos will be profitable for the first time in three years.

Successful customer diversification with a track record of supplying casino displays to IGT

Second, customer diversification in casino display: Kortek was highly dependent on a single casino slot machine maker, namely IGT who used to account for 63.7% of Kortek's casino sales in 2008. However the company has diversified its customer base successfully and secured four of the global top five casino slot machine makers as customers, which are IGT, Aristocrat, WMS and Konami (USA & AU). Therefore, we expect the sales proportion of IGT in total slot machine display sales to decrease from 64.4% in 2010 to 58.4% in 2013E with customer diversification.

Expanding business into medical equipment display, PID, multi display and IDB display

Third, business expansion to medical equipment display and PID: Its 79.2% of total sales came from casino display in 2008. Therefore, the company needed to diversify its business not to be swayed by the ups and downs of the casino industry. On the back of steady revenue from its casino display business, the company has expanded its operations into medical equipment display, PID and IDB display successfully. The company could enter those markets without huge investment as those new products were extensions from the existing technologies.

New growth momentum from multi display and IDB display

Finally, new growth momentum from multi display and IDB display: With secured customers, Kortek is launching new models for multi display and IDB display in 2H11. Multi display is expected to grow 83.8% YoY in 2011E and 80.0% YoY in 2012E as its application is expected to expand from education to defense and to security. IDB display is expected to grow tremendously from W0.5bn in 2010 to W23.5bn in 2011E as Kortek's main customer for IDB display is SMART Tech, a leading provider of IDB with global M/S of 47% in 2010.

Recovery of global casino industry

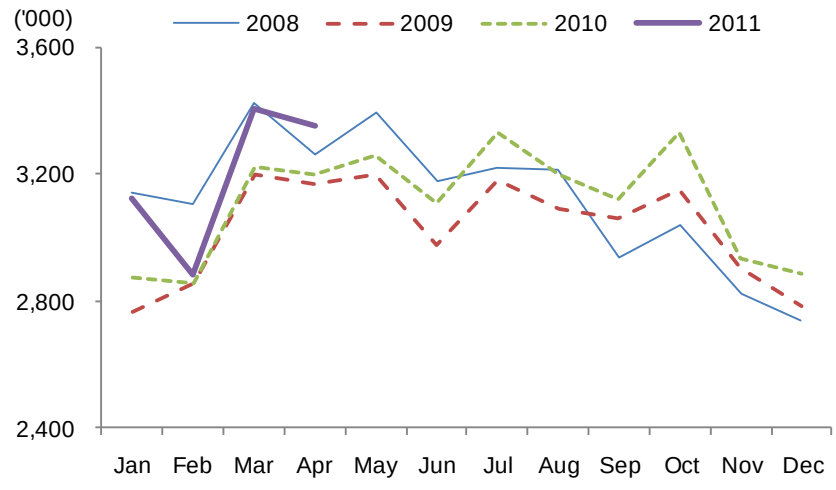
Number of visitors to Las Vegas to rise and 2011 will mark the beginning of a recovery

Global casino industry has begun a slow recovery after enduring two tough years. The number of visitors to Las Vegas was the highest in April 2011 since the 2008 global financial crisis. This indicates that the worst of the economic slowdown is behind Las Vegas and 2011 will mark the beginning of a recovery. Las Vegas Convention and Visitors Authority (LVCVA) expect the number of visitors to continue to increase through 2011 and major casinos would be profitable for the first time in three years.

Room occupancy rate is also recovering, recording 87.7% in April

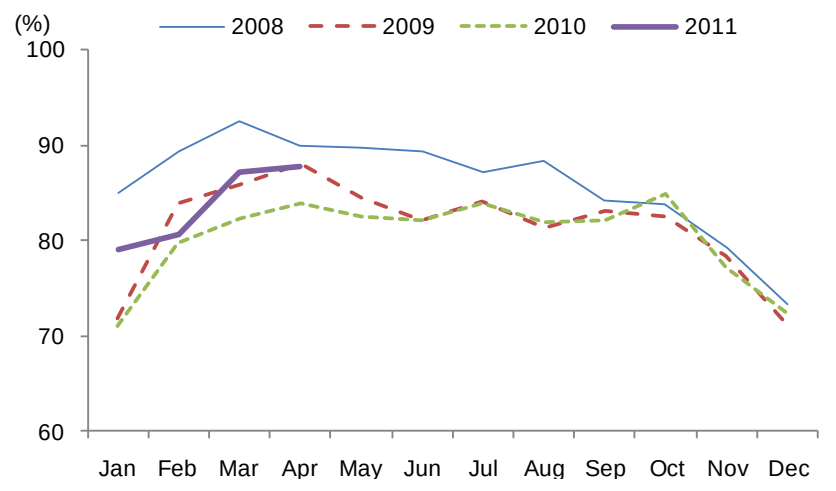
Room occupancy rate in Las Vegas is also recovering. The room occupancy rate in April 2011 was 87.7%, up 3.7%p YoY and average YTD room occupancy rate was up 4.3%p. Even though the rate hasn't reached the 2008 level, we expect it to recover slowly to the pre-financial crisis level.

Chart 22. Number of visitors in Las Vegas casino



Source: Las Vegas convention & Visitors Authority

Chart 23. Room occupancy rate in Las Vegas



Source: Las Vegas convention & Visitors Authority

Casino display sales growth with customer diversification

Secured 4 of global top 5 casino slot machine makers

The company secured four of global top five slot machine makers as customers. Its main slot machine display customers are IGT, Aristocrat, WMS and Konami (USA & AU). Successful customer diversification eliminated the concern over the high dependence on single casino slot machine maker, International Game Technology (IGT) as 63.7% of casino sales came from IGT in 2008.

Diversifying customer bases with track record of supplying displays to IGT

Even though IGT is the global No. 1 casino slot machine maker, high dependence on single customer could be a risk as its sales could fluctuate easily. Kortek has diversified its customer bases successfully with the track record of supplying casino display to IGT.

Chart 24. Slot machine display sales trend

Source: Company data, Leading Research Center

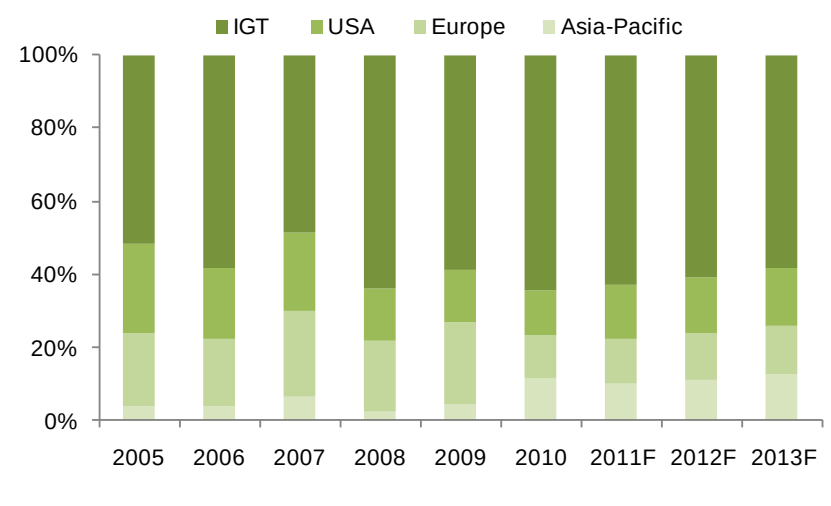
IGT proportion to fall from 64.4% in 2010 to 58.4% in 2013E

We expect the sales proportion of IGT in total casino sales to fall from 64.4% in 2010 to 58.4% in 2013E with an expansion in customer base.

Sustainable growth not only customer diversification but also developing own new models

Kortek is also supplying new model called Multi layer Display (MLD) exclusively to IGT. Slot players are able to experience 3D effect without using 3D glasses with MLD applied slot machines. As MLD is IGT exclusive model, Kortek developed another model called Kortek TransMissive TransParent (KTMP), which combines video game and reel game (slot machine with an arm bar) together. Other casino slot makers such as Aristocrat, WMS and ADP are considerating on adopting KTMP to counteract on IGT's MLD.

Chart 25. Proportion in slot machine display sales



Source: Company data, Leading Research Center

Expansion into new businesses to diversify sales

Diversifying business to medical equipment display, PID, multi display and IDB display

On the back of steady revenue from its casino display business, Kortek expanded its operations into medical equipment display, PID and IDB display successfully. The company could enter those markets without huge investment as those new products were extension from the existing technologies.

Secured global top players as customers in diversified business

The company has secured NEC as a major PID customer since 2008 and has been showing meaningful sales from 2010. As NEC is the global No. 2 PID maker, the company should be the main beneficiary of NEC's growth. It also has secured Siemens and GE for medical equipment display. PID and medical equipment display have already started to contribute on earnings.

We expect Kortek's next growth momentum to come from IDB display and multi display. The company secured SMART, global top IDB maker, and Barco, also global top industrial specialty display maker as a main customer. We expect IDB display and multi display to show meaningful figures from 2011E.

The proportion of casino sales to fall to 57.9% in 2011E and 52.1% in 2012E

The proportion of casino sales among total sales was 69.1% in 2009 and 62.9% in 2010. We expect the casino proportion to fall to 57.9% in 2011E and 52.1% in 2012E with business diversification.

Table 7. Sales breakdown trend

(Wbn)	2008	2009	2010	2011F	2012F	2013F
Casino	109.7	101.2	94.9	109.8	122.4	136.2
PID	0.4	2.8	21.8	22.9	26.3	32.9
Medical Equipment	3.5	4.6	6.2	9.8	12.3	15.9
Interactive LED board	-	-	0.5	23.5	44.6	64.7
Multi display	-	2.1	5.8	10.6	19.1	27.7
Others	25.0	35.7	21.7	13.1	10.1	9.6

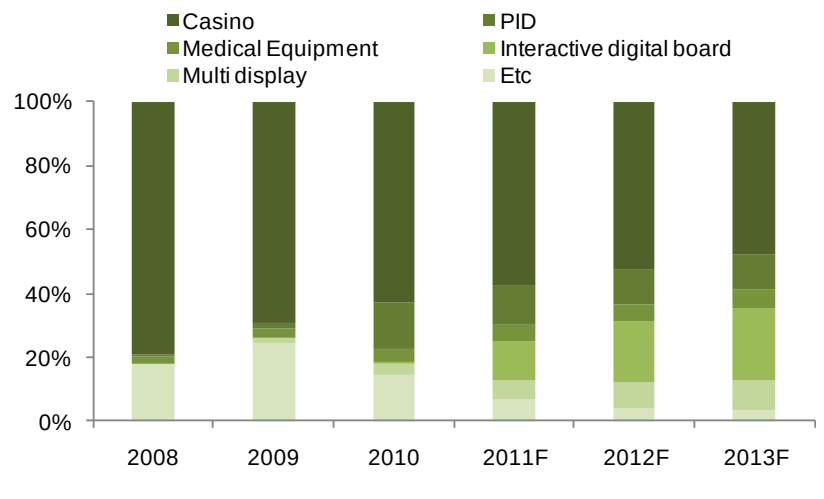
Source: Company data, Leading Research Center

Table 8. Trend of sales proportion by business

(%)	2008	2009	2010	2011F	2012F	2013F
Casino	79.1	69.1	62.9	57.9	52.1	47.4
PID	0.3	1.9	14.4	12.0	11.2	11.4
Medical Equipment	2.5	3.1	4.1	5.2	5.2	5.5
Interactive LED board	0.0	0.0	0.3	12.4	19.0	22.5
Multi display	0.0	1.5	3.8	5.6	8.1	9.7
Others	18.0	24.4	14.4	6.9	4.3	3.4

Source: Company data, Leading Research Center

Chart 26. Sales proportion by business trend



Source: Company data, Leading Research Center

1) Medical equipment display

Medical equipment display sales to rise 57.6% YoY to W9.8bn in 2011E

We expect sales of medical equipment display to grow 57.6% YoY to W9.8bn in 2011E and 25.0% YoY to W12.3bn in 2012E.

Successfully registered as a global display vendor for GE and Siemens in 2010

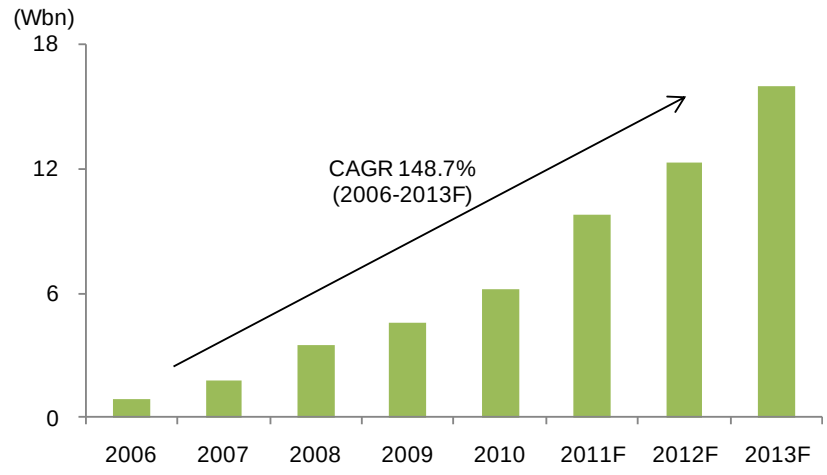
Kortek successfully registered as a global display vendor for GE and Siemens in 2010. Because the medical equipment market requires a high degree of technology and trustworthiness, there are large barriers to entry. Thus, securing a registry with GE and Siemens is a clear sign that Kortek's technology and trustworthiness has been verified by global top players in the medical equipment industry.

The demand for medical equipment is growing at a rapid 7-20% in the developing markets of Asia. As CRT medical displays are replaced by LCD medical displays, we expect demand for Kortek's products to rise.

Chart 27. Medical equipment display pictures

Source: Company data

Chart 28. Medical equipment display sales trend



Source: Company data, Leading Research Center

2) Public Information Display and Multi Display

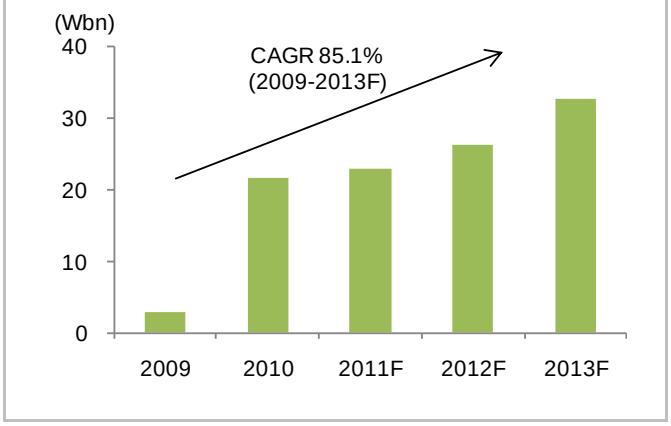
PID sales are expected to reach W22.9bn in 2011E and W26.3bn in 2012E

Though PID sales were only W0.4bn in 2008, we expect it to grow to W22.9bn in 2011E. PID is a high value-added large screen display and commonly found in public places, like airports, hotels, and used by companies to display information, such as advertisements. Due to the large number of Korean display panel suppliers, Kortek has advantages of securing a supply of raw materials domestically. Also, it could bargain for a better price, which allows price competitiveness in the world market. NEC which is a global No. 2 PID maker is the main customer.

Multi Display sales are expected to reach W10.6bn in 2011E and W19.1bn in 2012E

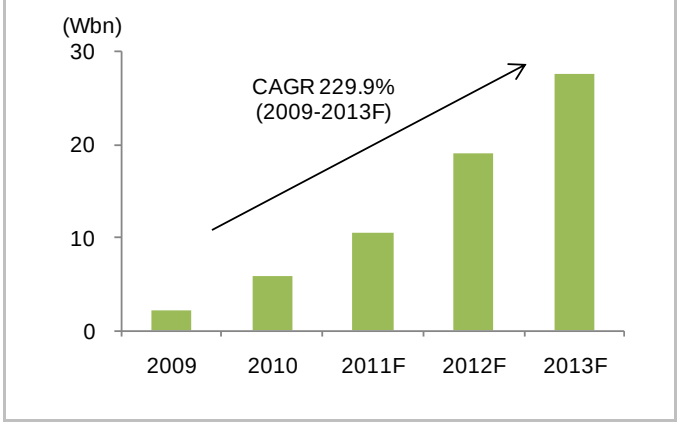
Kortek also provides Multi Display to BARCO, global No.1 industrial display maker. Kortek has been successfully supplying 46-inch NSL from 2009 and planning to supply new models such as 55-inch NSL, 46-inch & 55-inch LDX. We expect multi display sales to rise 83.1% YoY to W10.6bn in 2011E and 80.0% YoY to W19.1bn in 2012E. PID is expected to show sustainable growth with expanded application from education to defense & security.

Chart 29. PID sales trend



Source: Company data, Leading Research Center

Chart 30. Multi Display sales trend



Source: Company data, Leading Research Center

3) Interactive Digital Board Display

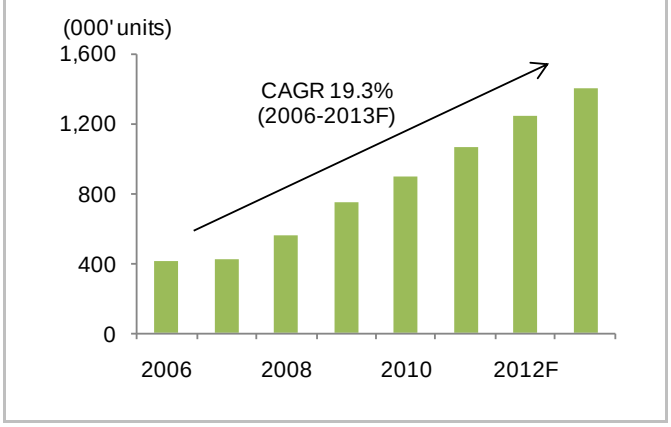
IDB display sales to grow from W0.5bn in 2010 to W23.5bn in 2011E

We expect IDB display to show the highest growth momentum in 2011E. Though IDB display sales were only W0.5bn in 2010, we expect it to grow tremendously in 2011E to W23.5bn as the company already recorded sales of W2.7bn in 1Q11 and there are new models coming out in 2H11. Kortek's main customer for IDB display is SMART Tech, a leading provider of IDB with global market share of 47% in 2010.

Globally 1.4million IDB are expected to be sold in 2013E

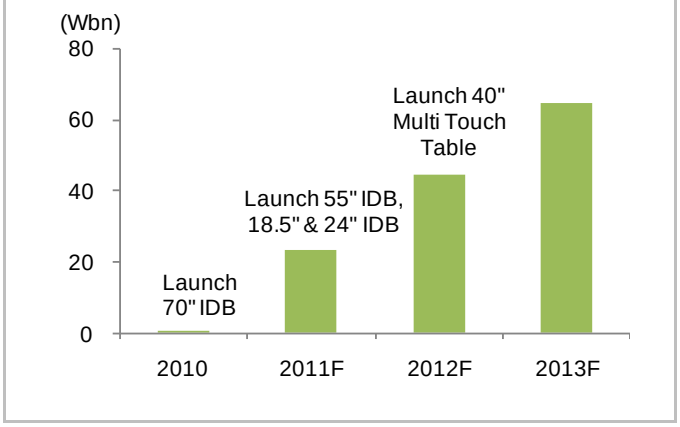
Globally, over 1 million units of IDB are expected to be sold in 2011E and 1.4 million units in 2013E as education and business customers around the world continue to adopt IDB technology into their classrooms, offices and meeting rooms.

Chart 31. Global IDB market trend



Source: Futuresource Consulting

Chart 32. IDB display sales trend



Source: Company data, Leading Research Center

Sales growth of 25.7% in 2011E and 23.8% in 2012E

Sales of W189.7bn, up 25.7% YoY and OP of W19.7bn, up 37.2% YoY are expected in 2011E

Kortek is expected to record 2011E sales of W189.7bn, up 25.7% YoY and operating profit of W19.7bn, up 37.2%, respectively. This is due to 1) global casino industry recovery, 2) diversification in casino customer bases and 3) earnings from medical equipment display, IDB display and multi display to rise. We also expect OP margin to rise from 9.5% in 2010 to 10.4% in 2011E with better product mix of higher OP margin.

Sales of W234.8bn, up 23.8% YoY and OP of W24.9bn, up 26.1% YoY are expected in 2012E

2012E sales and operating profit are expected to reach W234.8bn, up 23.8% YoY and W24.9bn, up 26.1% YoY, respectively. As we can see from the number of visitors in Las Vegas, the global casino industry is recovering. Also the orders from casino customers are recovering with new model changes. Old casino display and model changes are expected as many casinos delayed upgrades due to the global financial crisis. New business such as IDB display and multi displays should be in full swing form 2012E.

Table 9. Quarterly Earnings Forecast

(Wbn, %)	1Q11	2Q11	3Q11F	4Q11F	1Q12F	2Q12F	3Q12F	4Q12F
Revenue	39.4	42.5	49.7	58.1	47.1	51.7	62.2	73.8
OP	4.5	4.6	5.1	5.6	4.9	5.4	6.6	8.0
Pre-tax Income	4.7	6.1	4.9	5.7	4.9	5.4	7.0	8.5
NP	4.3	6.0	4.8	5.9	3.9	4.3	5.5	6.7
OP margin	11.4	10.8	10.2	9.6	10.4	10.5	10.6	10.8
Pre-tax margin	11.8	14.3	9.9	9.8	10.4	10.5	11.2	11.5
NP margin	11.0	14.2	9.8	10.1	8.2	8.3	8.9	9.1

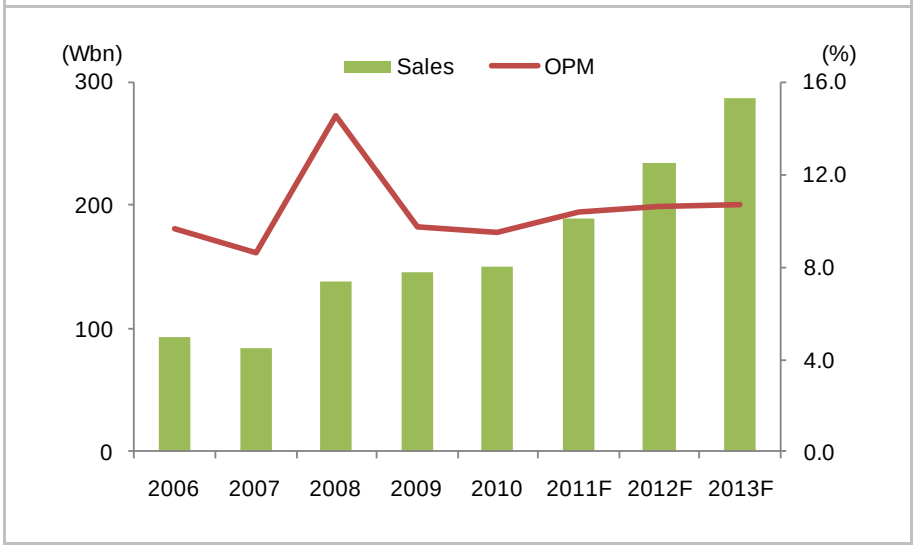
Source: Company data, Leading Research Center

Table 10. Yearly Earnings Forecast

(Wbn, %)	Earnings Forecast				Growth (%)		
	2010	2011F	2012F	2013F	2011F	2012F	2013F
Revenue	151.0	189.7	234.8	287.1	25.7	23.8	22.3
OP	14.4	19.7	24.9	30.7	37.2	26.1	23.4
Pre-tax Income	16.6	21.3	25.8	32.8	28.2	20.9	27.3
NP	16.0	21.1	20.4	25.9	31.6	-3.5	27.3
OP margin	9.5	10.4	10.6	10.7	0.9	0.2	0.1
Pre-tax margin	11.0	11.2	11.0	11.4	0.2	-0.3	0.4
NP margin	10.6	11.1	8.7	9.0	0.5	-2.5	0.4

Source: Company data, Leading Research Center

Chart 33. Sales and OPM forecast



Source: Company data, Leading Research Center

Summary of financials

Income statement

(Wbn)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011F	2012F	2013F
Revenue	**48.5**	**50.7**	**63.1**	**67.2**	**80.6**	**93.4**	**84.8**	**138.6**	**146.4**	**151.0**	**189.7**	**234.8**	**287.1**
% chg yoy	0.7	4.4	24.6	6.4	20.0	15.9	(9.2)	63.4	5.6	3.1	25.7	23.8	22.3
COGS	35.6	40.0	47.8	53.6	62.6	72.2	65.3	101.6	114.0	117.0	146.5	181.0	221.1
Gross profit	**12.9**	**10.7**	**15.3**	**13.6**	**18.0**	**21.2**	**19.5**	**37.0**	**32.4**	**34.0**	**43.3**	**53.8**	**66.0**
GP margin (%)	26.6	21.1	24.3	20.3	22.3	22.7	23.0	26.7	22.1	22.5	22.8	22.9	23.0
SG&A	**4.3**	**6.2**	**8.1**	**7.9**	**10.9**	**12.2**	**12.2**	**16.8**	**18.1**	**19.6**	**23.5**	**28.9**	**35.3**
Operating income	**8.6**	**4.5**	**7.2**	**5.7**	**7.1**	**9.0**	**7.3**	**20.2**	**14.3**	**14.4**	**19.7**	**24.9**	**30.7**
OP margin (%)	17.7	8.8	11.4	8.6	8.8	9.7	8.6	14.5	9.7	9.5	10.4	10.6	10.7
Non-operating income	1.4	1.9	2.3	2.3	2.5	3.4	5.2	9.2	7.6	7.3	7.1	6.7	7.8
Interest income	0.6	0.8	0.7	0.5	0.7	1.3	1.1	0.6	0.2	0.9	0.8	0.9	1.0
Net FX translation gains	0.1	(0.3)	0.0	(0.8)	(0.0)	(0.6)	0.0	0.9	(0.3)	(0.5)	(1.5)	(1.3)	(1.2)
Non-operating expenses	0.6	1.5	1.4	2.0	2.4	2.9	2.3	24.2	8.8	5.0	5.5	5.8	5.7
Interest expenses	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Profit before tax	**9.5**	**4.9**	**8.1**	**6.1**	**7.3**	**9.4**	**10.2**	**5.2**	**13.0**	**16.6**	**21.3**	**25.8**	**32.8**
Tax	2.4	1.0	2.0	1.6	1.9	2.5	2.5	1.1	0.2	0.6	0.2	5.4	6.9
Tax rate (%)	25.4	19.9	24.2	25.6	26.0	26.1	24.5	20.3	1.4	3.5	1.0	21.0	21.0
Net income	**7.1**	**3.9**	**6.1**	**4.5**	**5.4**	**7.0**	**7.7**	**4.1**	**12.9**	**16.0**	**21.1**	**20.4**	**25.9**

Balance sheet

(Wbn)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011F	2012F	2013F
Cash & deposit	13.7	14.4	21.4	9.8	5.0	23.0	21.8	1.5	7.8	4.1	4.1	4.5	6.0
Marketable securities	0.1	0.1	0.0	0.4	0.0	7.2	0.0	0.7	0.0	0.0	0.0	0.0	0.0
A/R	5.5	6.0	4.0	3.4	24.4	9.8	15.0	20.2	26.1	19.2	24.7	32.9	43.1
Other quick assets	0.9	1.2	0.6	1.9	1.7	1.2	0.6	1.2	4.3	3.2	4.0	4.0	5.0
Total quick assets	27.2	28.2	29.6	26.9	37.6	43.5	37.3	23.8	41.7	57.4	60.8	66.4	79.1
Inventory	4.3	6.5	8.0	12.6	9.8	12.4	7.6	14.6	16.0	26.1	28.5	32.9	37.3
Total current assets	**31.5**	**34.8**	**37.6**	**39.5**	**47.5**	**55.9**	**44.9**	**38.4**	**57.7**	**83.4**	**89.2**	**99.2**	**116.4**
Investments	0.3	0.0	0.4	0.4	8.6	4.1	23.1	20.0	23.4	8.4	7.0	8.0	9.0
Tangible assets	7.2	7.3	7.6	7.3	7.1	6.7	14.8	48.2	46.4	45.4	45.4	46.0	49.0
Others	0.4	0.8	1.4	1.8	2.7	2.4	4.0	4.5	4.1	4.5	7.8	8.1	9.1
Total non-current assets	**7.9**	**8.1**	**9.4**	**9.5**	**18.4**	**13.2**	**41.9**	**72.6**	**73.8**	**58.3**	**60.2**	**62.1**	**67.1**
Total assets	**39.4**	**42.9**	**47.0**	**49.0**	**65.9**	**69.1**	**86.8**	**111.1**	**131.6**	**141.7**	**149.4**	**161.3**	**183.5**
Trade Payables	1.9	2.1	3.7	3.4	5.8	3.3	5.3	8.5	2.0	10.7	11.7	13.6	15.5
Short-term borrowings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0	0.0
Current portion of LT debt	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Others	2.4	1.5	2.3	1.6	4.5	4.4	4.3	6.4	8.3	4.6	5.0	5.5	6.0
Total current liabilities	**4.3**	**3.6**	**6.0**	**4.9**	**10.3**	**8.1**	**9.5**	**15.8**	**16.4**	**15.3**	**16.7**	**19.1**	**21.5**
Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Long-term debt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Allow for retirement reserve	0.0	0.1	0.0	0.2	0.4	0.7	0.9	1.1	1.7	1.7	1.7	1.7	1.7
Others	1.4	1.6	2.3	3.1	2.5	1.3	0.9	8.3	4.0	3.4	3.5	3.0	2.5
Total LT liabilities	**1.4**	**1.7**	**2.4**	**3.3**	**3.0**	**2.0**	**1.7**	**9.4**	**5.7**	**5.1**	**5.2**	**4.7**	**4.2**
Total liabilities	**5.7**	**5.3**	**8.4**	**8.2**	**13.3**	**10.1**	**11.3**	**25.2**	**22.1**	**20.4**	**21.9**	**23.8**	**25.7**
Paid-in capital	5.1	5.1	5.1	5.2	5.2	5.3	6.2	6.3	6.4	6.4	6.2	6.2	6.2
Capital surplus	16.2	16.2	16.2	16.9	17.5	18.5	28.8	30.4	32.8	32.8	32.8	30.8	29.8
Retained earnings	12.1	16.0	21.3	24.9	29.1	34.5	40.6	42.7	53.7	67.2	84.8	101.8	124.2
Capital adjustments	0.3	0.3	(4.1)	(6.2)	0.8	0.7	(0.1)	6.4	16.6	15.0	3.7	(1.2)	(2.4)
Total shareholder's equity	**33.7**	**37.6**	**38.6**	**40.8**	**52.6**	**59.0**	**75.5**	**85.8**	**109.5**	**121.3**	**127.5**	**137.5**	**157.8**

Free cashflow analysis

(Wbn)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011F	2012F	2013F
Net profit	**7.1**	**3.9**	**6.1**	**4.5**	**5.4**	**7.0**	**7.7**	**4.1**	**12.9**	**16.0**	**21.1**	**20.4**	**25.9**
add non-cash expenses	**1.3**	**1.7**	**1.7**	**2.1**	**3.8**	**3.9**	**4.7**	**23.6**	**8.9**	**6.8**	**6.3**	**5.8**	**7.3**
Depreciation	0.6	0.8	0.9	1.0	0.9	0.7	0.6	0.7	1.4	1.8	1.8	1.8	1.8
Equity method losses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other non-cash exp	0.7	0.9	0.9	1.2	2.9	3.2	4.1	22.9	7.4	5.0	4.5	4.0	5.5
subtract non-cash income	**0.0**	**0.2**	**0.1**	**0.4**	**0.6**	**0.3**	**3.4**	**1.3**	**3.1**	**3.5**	**4.0**	**4.5**	**5.0**
Equity method gains	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other non-cash incomes	0.0	0.2	0.1	0.4	0.6	0.3	3.4	1.3	3.1	3.5	4.0	4.5	5.0
Cash from operation	**8.3**	**5.3**	**7.8**	**6.3**	**8.6**	**10.6**	**9.0**	**26.4**	**18.6**	**19.3**	**23.4**	**21.7**	**28.2**
Capital expenditure	5.0	0.9	1.2	0.6	0.7	0.2	8.8	11.2	9.3	1.3	4.0	2.0	3.0
Increase in working capital	2.9	2.5	(2.1)	4.4	15.7	(9.5)	(1.6)	9.0	13.9	(5.6)	6.9	10.8	12.7
Free cash flow	**0.5**	**1.9**	**8.6**	**1.3**	**(7.9)**	**19.9**	**1.8**	**6.2**	**(4.5)**	**23.6**	**12.5**	**8.9**	**12.5**
Dividends	0.0	0.6	0.8	1.0	1.1	1.6	1.7	2.0	1.9	2.5	3.4	3.4	3.4
Net investments	(0.2)	(0.3)	0.4	0.0	8.2	(4.5)	19.0	(3.1)	3.4	(15.0)	(1.4)	1.0	1.0
Share issues	13.3	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0	0.0	0.0	0.0	0.0
Increase in debt	(2.3)	0.0	0.0	0.0	0.0	0.5	(0.5)	0.9	5.3	(6.2)	0.0	0.0	0.0
Others	2.1	5.3	(66.4)	(8.3)	(11.3)	3.6	19.1	(4.5)	41.0	(14.1)	4.0	5.0	6.0
Net cash flow	**9.7**	**(3.8)**	**73.9**	**8.6**	**(5.9)**	**19.7**	**(28.8)**	**12.7**	**(45.5)**	**44.0**	**6.5**	**(0.5)**	**2.0**
Beginning cash	8.7	13.7	14.4	21.4	9.8	5.0	23.0	21.8	1.5	7.8	51.8	58.3	57.7
Ending cash	13.7	14.4	21.4	9.8	5.0	23.0	21.8	1.5	7.8	4.1	58.3	57.7	59.8

Key ratios and stability ratios

(Wbn)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011F	2012F	2013F
Current ratio	733.1	965.4	623.4	799.3	459.2	686.4	470.3	243.3	352.2	544.7	533.7	520.2	542.0
Quick ratio	448.9	567.2	420.3	276.0	284.4	489.2	384.8	141.4	206.8	152.5	172.1	195.9	228.5
Inv holding period (days)	48.9	49.4	55.5	70.1	65.4	56.3	55.9	39.8	49.0	65.7	67.9	61.8	57.9
A/R collection period (days)	26.3	41.4	28.8	20.2	63.0	66.7	53.2	46.3	57.7	54.7	42.2	44.7	48.3
A/P period (days)	19.3	17.4	21.6	22.2	28.0	22.3	26.0	23.2	16.6	18.2	27.5	24.9	23.5
Interest bear debt (Wbn)	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.9	6.2	0.0	0.0	0.0	0.0
Interest bear debt/equity (%)	0.0	0.0	0.0	0.0	0.0	0.8	0.0	1.0	5.6	0.0	0.0	0.0	0.0
Net int. bear debt (Wbn)	(20.8)	(21.0)	(25.0)	(21.6)	(11.5)	(32.1)	(21.8)	(1.6)	(5.1)	(34.9)	(32.1)	(29.5)	(31.0)
Net debt/equity (%)	(61.6)	(55.9)	(64.8)	(52.9)	(22.0)	(54.4)	(28.8)	(1.8)	(4.7)	(28.8)	(25.2)	(21.4)	(19.6)
Liability/equity (%)	16.8	14.0	21.8	20.2	25.3	17.1	14.9	29.4	20.2	16.8	17.2	17.3	16.3
Interest coverage (X)	142.8	0.0	1251.2	3573.9	11277.0	5025.7	399.5	341.3	1844.6	1859.7	2551.6	3218.6	3972.5

Valuations and margins

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011F	2012F	2013F
EV/EBITDA (X)	7.1	11.9	7.4	9.2	9.1	5.7	10.0	4.9	6.3	4.3	3.4	2.9	2.3
EPS (W)	773	380	597	438	517	664	667	329	1,013	1,260	1,658	1,599	2,036
EPS y-y (%)	N/A	(50.9)	57.2	(26.6)	18.0	28.4	0.6	(50.7)	207.5	24.4	31.6	(3.5)	27.3
PER (X)	10.9	22.2	14.1	19.3	16.3	12.7	12.7	25.7	8.3	6.7	5.1	5.3	4.2
BVPS (W)	3,693	3,670	3,762	3,954	5,057	5,611	6,545	6,836	8,626	9,528	10,015	10,801	12,393
P/BVPS (X)	2.3	2.3	2.2	2.1	1.7	1.5	1.3	1.2	1.0	0.9	0.8	0.8	0.7
Dividend (W)	0	75	100	125	150	160	160	160	200	250	270	270	270
Yield (%)	0.9	0.9	1.2	1.5	1.8	1.9	1.9	1.9	2.4	3.0	3.2	3.2	3.2
ROE (%)	29.8	10.9	16.1	11.4	11.5	12.5	11.4	5.1	13.2	13.9	17.0	15.4	17.6
ROA (%)	23.8	9.5	13.6	9.4	9.4	10.3	9.9	4.2	10.6	11.7	14.5	13.1	15.0
GP margin (%)	26.6	21.1	24.3	20.3	22.3	22.7	23.0	26.7	22.1	22.5	22.8	22.9	23.0
OP margin (%)	17.7	8.8	11.4	8.6	8.8	9.7	8.6	14.5	9.7	9.5	10.4	10.6	10.7
NP margin (%)	14.5	7.7	9.7	6.7	6.7	7.5	9.1	3.0	8.8	10.6	11.1	8.7	9.0
EBITDA margin (%)	19.1	10.9	13.3	10.7	10.4	10.9	9.9	15.4	11.1	11.2	11.7	11.7	11.6
ROIC (%)	0.0	24.4	36.6	26.7	20.6	24.1	20.6	33.9	19.4	17.5	23.5	20.9	22.3
WACC (%)	0.0	15.9	14.0	16.9	12.3	8.0	7.6	10.6	9.1	10.3	10.3	10.0	10.7
ROIC less WACC (%)	0.0	8.5	22.6	9.8	8.3	16.1	13.0	23.3	10.3	7.2	13.1	10.9	11.6

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