

Medtech
Results Comment

April 22, 2019

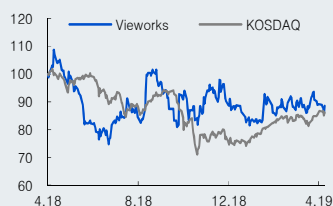
(Maintain) Buy
Target Price (12M, W) 45,000
Share Price (04/19/19, W) 33,900
Expected Return 33%

 OP (19F, Wbn) 27
 Consensus OP (19F, Wbn) 28

 EPS Growth (19F, %) 12.5
 Market EPS Growth (19F, %) -15.3
 P/E (19F, x) 14.5
 Market P/E (19F, x) 11.8
 KOSDAQ 762.57

 Market Cap (Wbn) 339
 Shares Outstanding (mn) 10
 Free Float (%) 70.1
 Foreign Ownership (%) 33.7
 Beta (12M) 0.23
 52-Week Low 28,600
 52-Week High 41,600

(%)	1M	6M	12M
Absolute	-1.2	2.0	-18.5
Relative	-2.9	-1.0	-5.7


Mirae Asset Daewoo Co., Ltd.

[Medtech/Healthcare Solutions]

Choong-hyun Kim, CFA

+822-3774-1740

choonghyun.kim@miraeasset.com

Vieworks

(100120 KQ)

Slightly disappointing results

1Q19 review: Revenue misses consensus

For 1Q19, Vieworks reported revenue of W29.5bn (+0.4% YoY), below the consensus. We attribute the revenue miss to weakness in the core flat-panel digital radiography (FP-DR) and industrial vision system businesses. We believe "other" revenue grew sharply, driven by imaging detectors. Operating profit improved markedly YoY to W5.5bn (+35.4% YoY; OP margin of 18.8%), but missed the consensus due to slower top-line growth.

Expansion of new businesses will be key in 2019

1) New businesses: Thin-film transistor (TFT)-based RF detectors are considered one of the company's new growth engines. While they can be used for a number of applications, we think the high-growth dental sector, especially in China, holds the most promise. We believe that Vieworks will focus on quality and price competitiveness in order to penetrate the dental segment (which is dominated by CMOS detectors).

2) Industrial vision systems: The impact of unfavorable comparisons caused by panel makers' OLED capex cycle (which began in 2H16) has been fading since end-1H18. Because the business is based on orders, revenue still tends to be volatile. That said, it is encouraging that a major earnings overhang has been removed, and the introduction of foldable displays is raising expectations. We believe that time delay integration (TDI) line scan cameras, the company's next growth driver, are also slowly beginning to generate revenue growth.

3) Medical detectors (FP-DR): The global FP-DR market's game of chicken appears to be nearing an end. The OP margin of the market's no. 1 supplier (which drove ASP lower) has collapsed, going from 16.8% in 1Q16 to 5.6% in 4Q18, while many low-end Chinese suppliers are now being forced out of the market. That said, we believe the medical detector business will serve as a steady cash cow going forward rather than a major source of revenue growth.

Maintain Buy and TP of W45,000

We maintain our Buy rating and target price of W45,000 on Vieworks. The stock currently trades at a 12-month forward P/E of 13.8x, a historical low and discount to global peers (17.7x).

Vieworks has grown over the years by continuously expanding into new areas, from charge-coupled device (CCD) cameras to FP-DRs in 2012 and industrial cameras in 2016. Among the company's current new businesses, the dental detector segment looks the most promising. The dental detector business is exhibiting stable growth and is likely to determine the extent of earnings upside going forward.

That said, given the company's B2B business structure, we believe it is important to take a long-term approach. As the company's margin structure has a low exposure to fixed costs, we think OP margin will recover sharply once top-line growth gains momentum.

FY (Dec.)	12/16	12/17	12/18	12/19F	12/20F	12/21F
Revenue (Wbn)	117	123	131	140	156	168
OP (Wbn)	30	29	23	27	32	35
OP margin (%)	25.6	23.6	17.6	19.3	20.5	20.8
NP (Wbn)	27	20	21	23	27	29
EPS (W)	2,697	1,963	2,077	2,337	2,713	2,912
ROE (%)	27.7	16.6	15.6	15.5	15.7	14.7
P/E (x)	22.2	20.8	15.9	14.5	12.5	11.6
P/B (x)	5.4	3.2	2.3	2.0	1.8	1.6
Dividend yield (%)	0.3	0.5	0.9	0.9	0.9	0.9

Note: All figures are based on consolidated K-IFRS; NP refers to net profit attributable to controlling interests

Source: Company data, Mirae Asset Daewoo Research estimates

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Table 1. 1Q19 review

(Wbn, %, %p)

	1Q18	4Q18	1Q19P			Growth	
			Preliminary	Mirae Asset Daewoo	Consensus	YoY	QoQ
Revenue	29.4	37.6	29.5	34.3	35.2	0.4	-21.5
Operating profit	4.1	7.1	5.5	6.7	6.4	35.4	-21.9
OP margin (%)	13.9	18.9	18.8	19.5	18.1	4.9	-0.1
Pretax profit	3.8	7.7	6.9	6.8	6.8	80.9	-10.2
Net profit	3.2	5.5	5.6	5.6	5.6	75.9	1.8

Note: All figures are based on consolidated K-IFRS.

Source: FnGuide, company data, Mirae Asset Daewoo Research estimates

Table 2. Earnings forecast revisions

(Wbn, W, %)

	Previous		Revised		% chg.		Notes
	19F	20F	19F	20F	19F	20F	
Revenue	145.7	161.3	139.9	156.1	-4.0	-3.3	Reflected 1Q19 results
Operating profit	28.6	33.6	26.6	32.2	-7.0	-4.2	
Pretax profit	28.8	33.9	28.4	33.0	-1.3	-2.6	
Net profit	23.7	27.9	23.4	27.1	-1.4	-2.6	
EPS (W)	2,369	2,785	2,337	2,713	-1.4	-2.6	

Note: All figures are based on consolidated K-IFRS.

Source: Mirae Asset Daewoo Research estimates

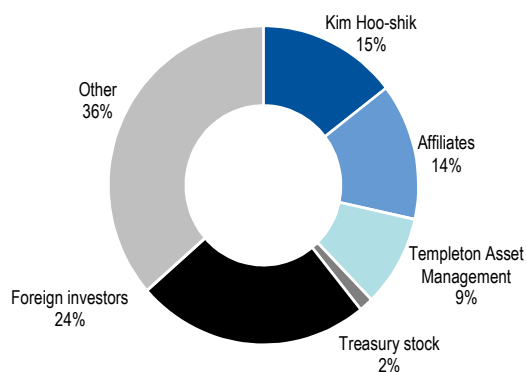
Table 3. Quarterly and annual earnings

(Wbn, %)

	1Q18	2Q18	3Q18	4Q18	1Q19P	2Q19F	3Q19F	4Q19F	2018	2019F	2020F
Revenue	29.4	30.7	33.8	37.6	29.5	33.6	37.4	39.4	131.4	139.9	156.1
FP-DR	16.5	13.7	16.7	19.0	13.6	13.7	16.6	19.0	65.9	62.9	68.6
Industrial cameras	10.3	14.2	13.1	12.7	10.0	13.7	14.2	14.6	50.4	52.5	58.4
Other	2.6	2.7	4.0	5.8	5.9	6.2	6.6	5.8	15.1	24.5	29.1
Operating profit	4.1	4.4	7.0	7.1	5.5	6.4	7.1	7.6	22.6	26.6	32.2
Pretax profit	3.8	7.1	6.6	7.7	6.9	6.5	7.3	7.8	25.1	27.9	33.0
Net profit	3.2	6.4	5.6	5.5	5.6	5.4	6.0	6.4	20.8	23.0	27.1
OP margin (%)	13.9	14.4	20.6	18.9	18.8	18.9	19.1	19.3	17.2	19.0	20.6
Pretax margin (%)	12.9	23.1	19.5	20.4	21.7	19.3	19.5	19.7	19.1	20.0	21.1
Net margin (%)	10.9	20.8	16.7	14.9	17.8	15.9	16.0	16.2	15.8	16.4	17.4

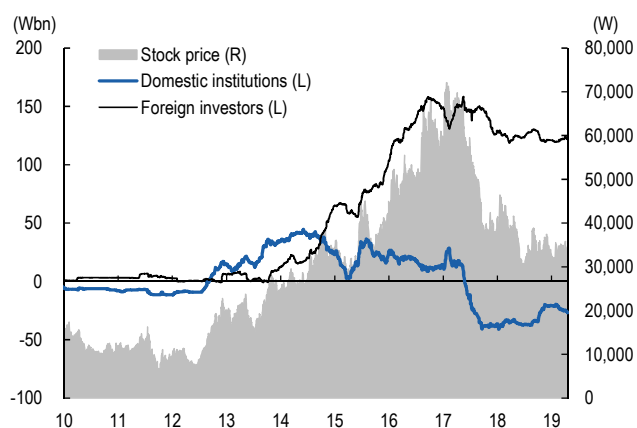
Source: Company data, Mirae Asset Daewoo Research estimates

Figure 1. Ownership breakdown



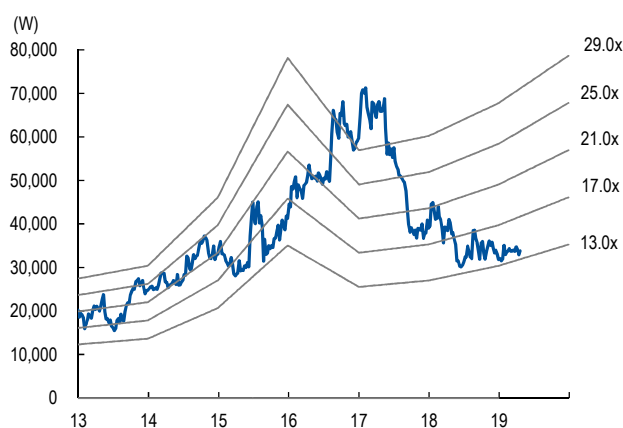
Source: Bloomberg, Mirae Asset Daewoo Research

Figure 2. Institutional and foreign net buying vs. share price



Source: Bloomberg, Mirae Asset Daewoo Research

Figure 3. P/E band chart



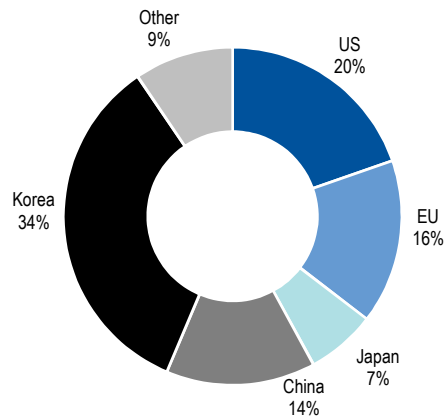
Source: FnGuide, Mirae Asset Daewoo Research

Table 4. Global peer valuation table

Company	Market cap	OP margin (%)			P/E (x)			P/S (x)			ROE (%)			EV/EBITDA (x)		
		18	19F	20F	18	19F	20F	18	19F	20F	18	19F	20F	18	19F	20F
GE	92,586	-16.7	8.5	9.5	16.2	16.9	14.2	0.7	0.7	0.8	-52.4	12.1	14.3	-	12.0	11.1
Siemens	46,972	14.6	17.8	18.6	28.3	21.8	19.8	2.7	2.6	2.5	20.9	17.9	18.0	16.1	14.0	12.9
Canon	43,157	8.7	8.3	8.4	13.6	14.6	14.5	0.9	1.1	1.1	8.9	8.1	8.0	5.6	7.7	7.8
Philips	41,858	9.5	13.3	14.4	25.1	19.3	16.6	1.8	1.7	1.6	9.1	13.0	14.6	10.9	10.7	9.7
Hitachi	35,886	6.3	8.1	8.4	17.0	16.6	8.4	0.4	0.4	0.4	5.9	6.0	11.5	5.3	4.7	4.3
Terumo	24,530	18.5	18.0	19.2	33.6	29.7	26.1	3.9	4.0	3.8	11.2	13.1	13.2	-	16.4	14.8
Fujifilm	27,454	5.4	8.3	9.8	19.1	16.7	13.6	0.9	1.1	1.1	5.6	6.1	6.9	6.5	8.7	7.6
Hologic	13,200	-7.4	29.9	30.6	35.4	18.0	16.5	3.6	3.5	3.4	-15.0	23.7	22.4	55.4	13.3	12.5
Teledyne	10,396	14.4	14.9	15.2	29.8	27.3	25.3	3.1	3.0	2.9	16.0	-	-	15.3	17.0	15.8
Konica Minolta	5,663	5.2	6.0	5.8	11.6	13.3	13.5	0.5	0.5	0.5	8.8	7.6	7.1	4.8	5.8	5.9
Varex Imaging	1,390	5.8	10.1	11.2	31.5	26.3	21.9	1.6	1.6	1.5	4.7	12.5	11.7	14.0	12.9	11.5
Agfa-Gevaert	850	2.6	-	-	-	12.7	10.5	0.3	0.3	0.3	-9.1	11.1	10.9	6.3	4.9	4.6
Vieworks	336	17.2	18.7	19.4	14.4	14.4	12.6	2.5	2.3	2.1	15.6	15.3	15.1	10.5	8.9	7.7
Rayence	280	18.2	19.6	20.3	17.4	12.8	11.3	2.3	2.1	1.9	8.7	11.2	11.4	6.7	5.9	5.6
Average		7.3	14.0	14.7	22.5	18.6	16.0	1.8	1.8	1.7	2.8	12.1	12.7	13.1	10.2	9.4

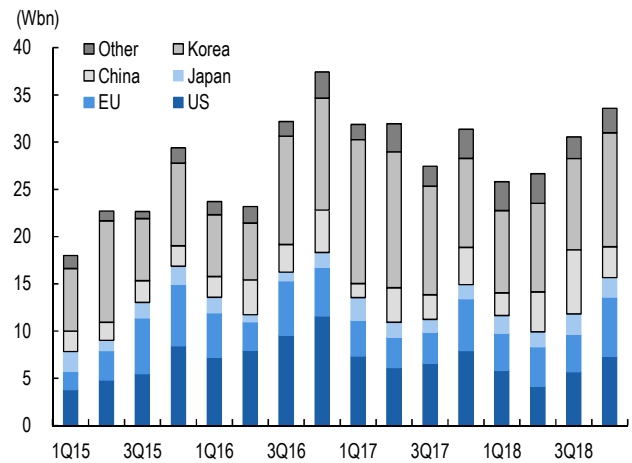
Source: Bloomberg, Mirae Asset Daewoo Research

Figure 4. Revenue breakdown: Exports vs. domestic (2018)



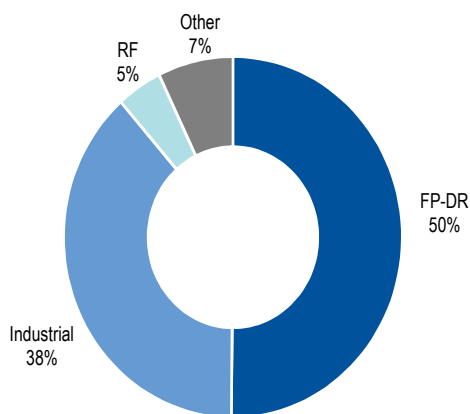
Source: Company data, Mirae Asset Daewoo Research

Figure 5. Revenue: Exports vs. domestic



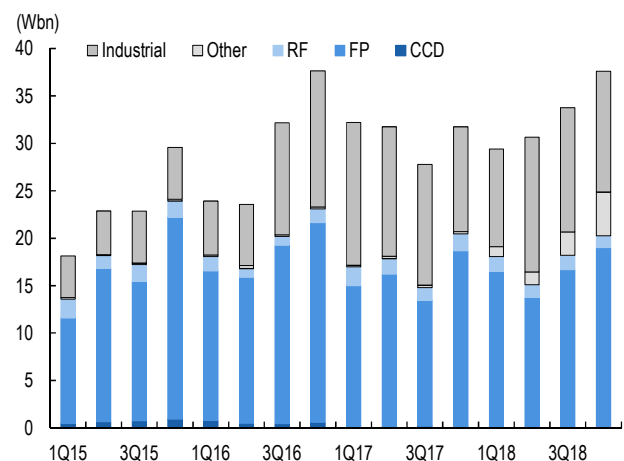
Source: Company data, Mirae Asset Daewoo Research

Figure 6. Revenue breakdown by product (2018)



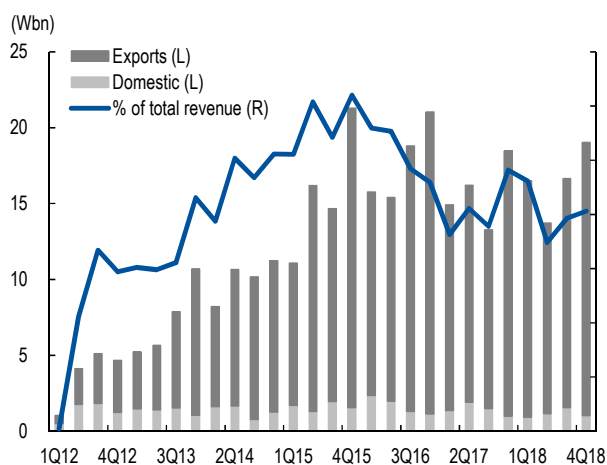
Source: Company data, Mirae Asset Daewoo Research

Figure 7. Revenue by product



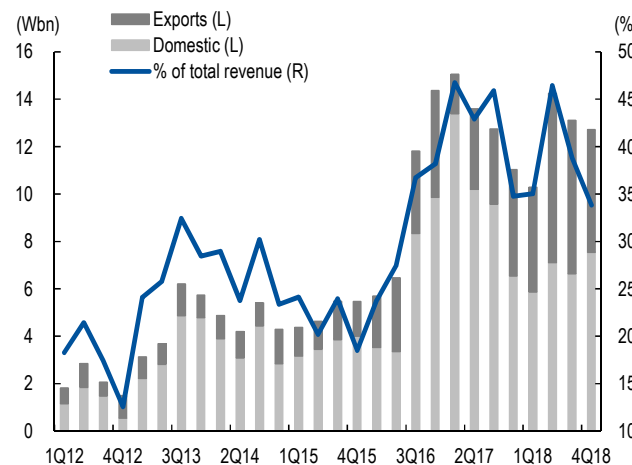
Source: Company data, Mirae Asset Daewoo Research

Figure 8. Medical detector revenue

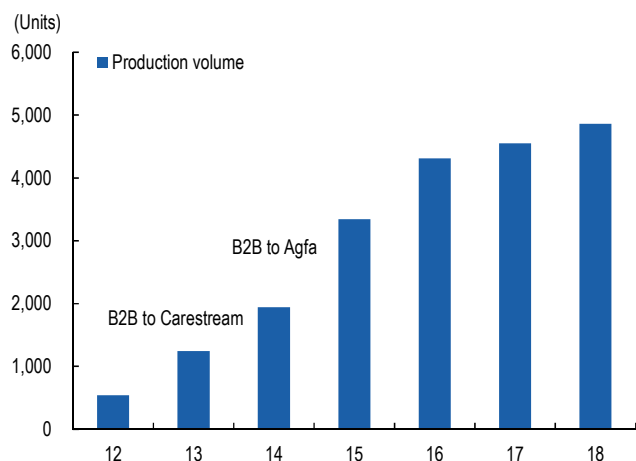


Source: Company data, Mirae Asset Daewoo Research

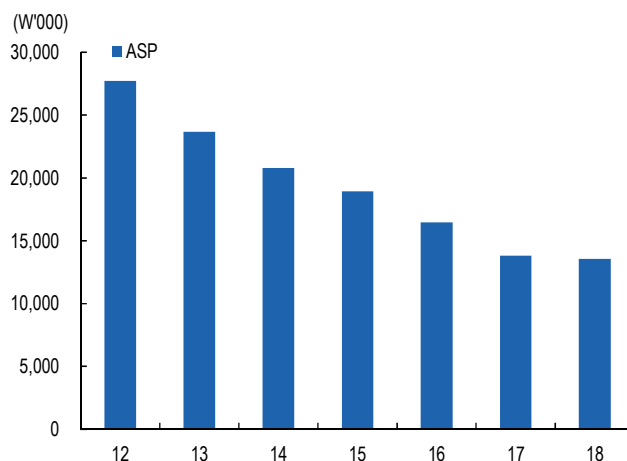
Figure 9. Industrial camera revenue



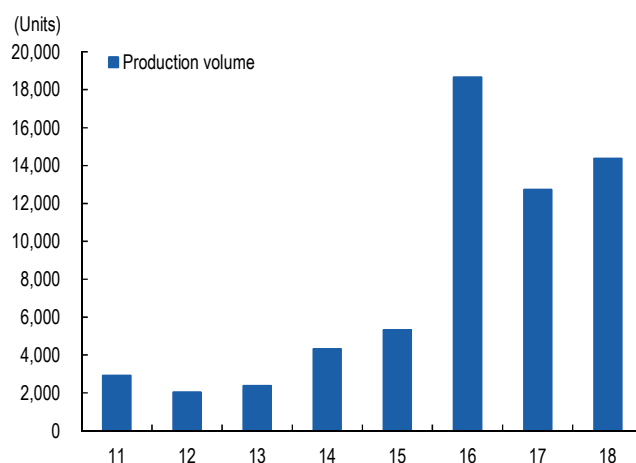
Source: Company data, Mirae Asset Daewoo Research

Figure 10. FP-DR production volume

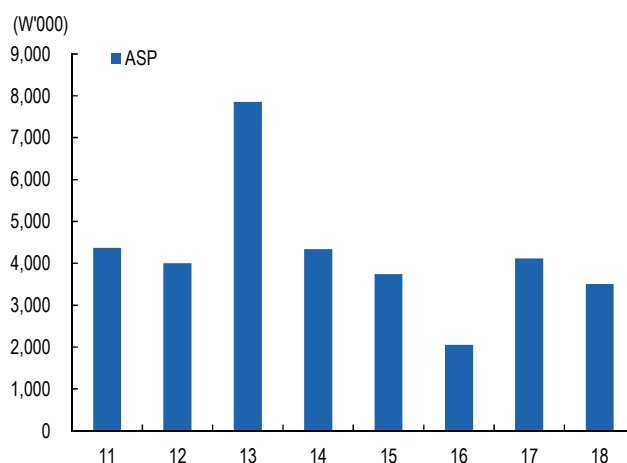
Source: Company data, Mirae Asset Daewoo Research

Figure 11. FP-DR ASP

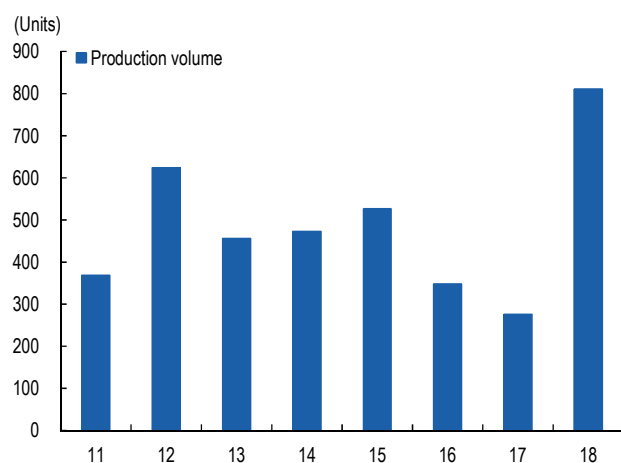
Source: Company data, Mirae Asset Daewoo Research

Figure 12. Industrial camera production volume

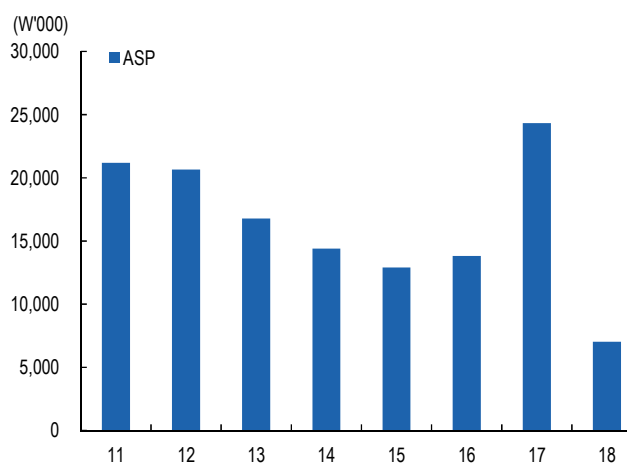
Source: Company data, Mirae Asset Daewoo Research

Figure 13. Industrial camera ASP

Source: Company data, Mirae Asset Daewoo Research

Figure 14. RF detector production volume

Source: Company data, Mirae Asset Daewoo Research

Figure 15. RF detector ASP

Source: Company data, Mirae Asset Daewoo Research

Table 5. Global X-ray system market

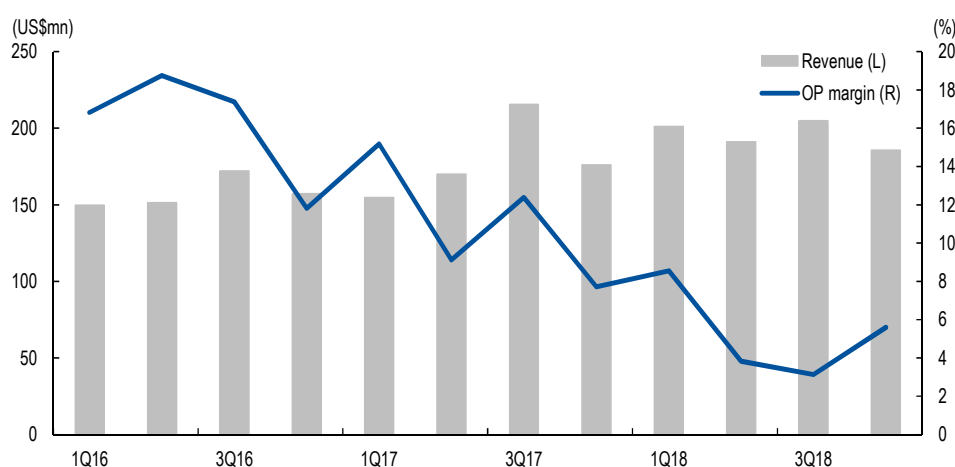
Market	Type	ASP	Producers	Customers
New	FP-DR	W200-300mn	GE, Siemens, Philips, Toshiba, etc.	Large hospitals
Replacement Retrofit	W30-60mn	Agfa, Carestream, Fuji, Konica, Canon, etc.		Small/mid-sized clinics and hospitals

Source: Mirae Asset Daewoo Research

Table 6. Policy tailwinds for digital X-ray systems: Consolidated Appropriations Act (%)

Type	Year	Medicare price cut
Film	2017	20
	2018	7
CR	2023	10

Source: Mirae Asset Daewoo Research

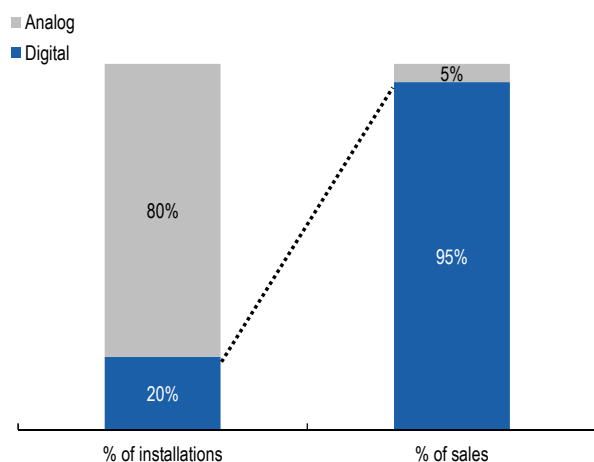
Figure 16. Varex's revenue and OP margin

Source: Company data, Mirae Asset Daewoo Research

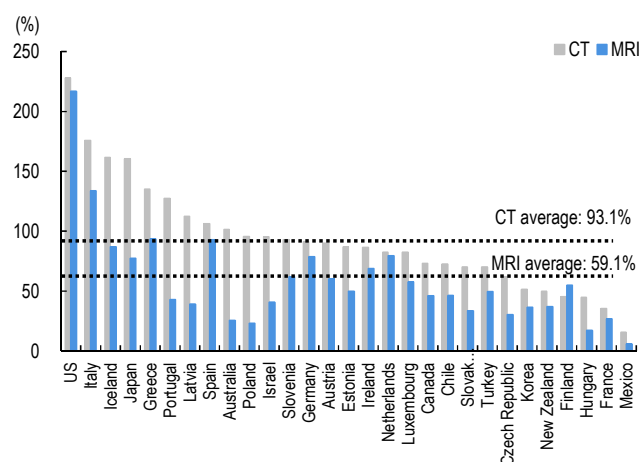
Table 7. Types of X-ray systems and players

Type				Characteristics	Domestic competitors	Overseas competitors	ASP
Digital	DR	Indirect conversion	TFT (A-Si)	<ul style="list-style-type: none">- Economical, large-sized sensors can be used (suitable for static images)- Highly durable due to the use of nonconductive substrates- Afterimages make it difficult to generate videos (time needed for response recovery)- Used for general medical, veterinary, and industrial purposes	<ul style="list-style-type: none">- Rayence- Vieworks- DRTECH	<ul style="list-style-type: none">- Varian- Trixell	W10-30mn
			CMOS	<ul style="list-style-type: none">- High-speed video images can be acquired- High-resolution sensors can be used- Large-sized design potential is limited due to cost/ingot size issues- Used for dental, breast cancer diagnosis, and industrial purposes	<ul style="list-style-type: none">- Rayence	<ul style="list-style-type: none">- Varian- DALSA	W10-15mn
			CCD	<ul style="list-style-type: none">- Images obtained with CCD camera- Cheaper than other options- Low picture quality; high radiation- Used for medical, veterinary, and industrial purposes	<ul style="list-style-type: none">- Vieworks		W2-10mn
		Direct conversion	TFT (A-Se)	<ul style="list-style-type: none">- X-ray energy is converted into electrical signals- Low noise levels; high productivity- Low radiation	<ul style="list-style-type: none">- DRTECH	<ul style="list-style-type: none">- Hologic	
		CR		<ul style="list-style-type: none">- Replaces existing films- Imaging plate (IP) on which fluorescent materials are applied is used- IP can be used repeatedly after removing X-ray residue		<ul style="list-style-type: none">- Carestream- Agfa- Fuji	
Analog			<ul style="list-style-type: none">- X-rays that penetrate the human body are detected via a film- Film development and storage areas are needed- Inability to transmit images and limitations to quality				

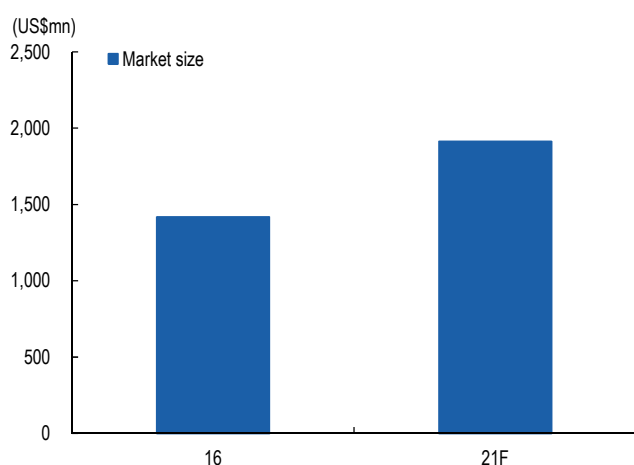
Source: Mirae Asset Daewoo Research

Figure 17. Global installations/sales breakdown of X-ray systems

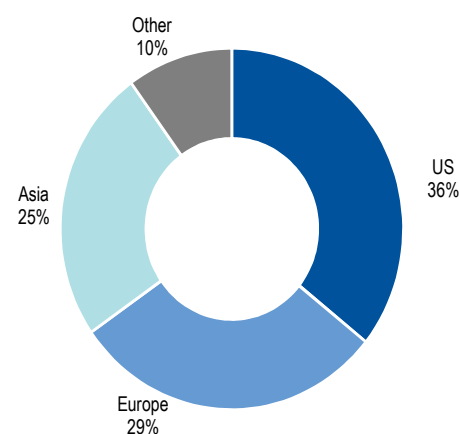
Source: Industry data, Mirae Asset Daewoo Research

Figure 18. CT and MRI machine penetration rates in OECD countries

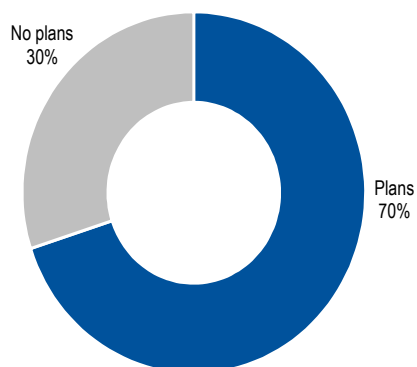
Source: OECD, Mirae Asset Daewoo Research

Figure 19. Market outlook for FP-DR detectors

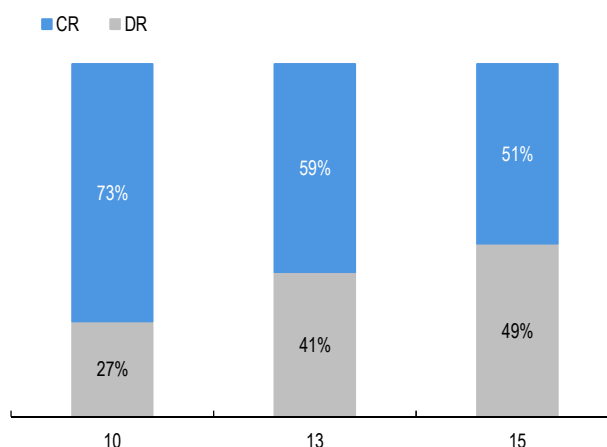
Source: MarketsandMarkets, Mirae Asset Daewoo Research

Figure 20. FP-DR detector M/S by region

Source: MarketsandMarkets, Mirae Asset Daewoo Research

Figure 21. Proportion of US hospitals with plans to convert to digital X-ray systems

Source: IMV, Mirae Asset Daewoo Research

Figure 22. US X-ray M/S: Computed radiography (CR) vs. digital radiography (DR)

Source: IMV, Mirae Asset Daewoo Research

Vieworks (100120 KQ/Buy/TP: W45,000)

Comprehensive Income Statement (Summarized)

(Wbn)	12/18	12/19F	12/20F	12/21F
Revenue	131	140	156	168
Cost of Sales	66	69	76	82
Gross Profit	65	71	80	86
SG&A Expenses	43	45	47	51
Operating Profit (Adj)	23	27	32	35
Operating Profit	23	27	32	35
Non-Operating Profit	2	1	1	1
Net Financial Income	0	1	1	1
Net Gain from Inv in Associates	0	0	0	0
Pretax Profit	25	28	33	36
Income Tax	4	5	6	7
Profit from Continuing Operations	21	23	27	29
Profit from Discontinued Operations	0	0	0	0
Net Profit	21	23	27	29
Controlling Interests	21	23	27	29
Non-Controlling Interests	0	0	0	0
Total Comprehensive Profit	21	23	27	29
Controlling Interests	20	23	27	29
Non-Controlling Interests	0	0	0	0
EBITDA	26	29	35	37
FCF (Free Cash Flow)	18	24	27	29
EBITDA Margin (%)	19.8	20.7	22.4	22.0
Operating Profit Margin (%)	17.6	19.3	20.5	20.8
Net Profit Margin (%)	16.0	16.4	17.3	17.3

Statement of Financial Condition (Summarized)

(Wbn)	12/18	12/19F	12/20F	12/21F
Current Assets	107	130	158	187
Cash and Cash Equivalents	47	67	91	116
AR & Other Receivables	22	23	25	26
Inventories	24	25	27	28
Other Current Assets	14	15	15	17
Non-Current Assets	50	47	45	43
Investments in Associates	0	0	0	0
Property, Plant and Equipment	39	37	35	34
Intangible Assets	6	5	5	4
Total Assets	156	177	203	230
Current Liabilities	13	14	15	16
AP & Other Payables	7	7	7	8
Short-Term Financial Liabilities	0	0	0	0
Other Current Liabilities	6	7	8	8
Non-Current Liabilities	2	2	2	3
Long-Term Financial Liabilities	0	0	0	0
Other Non-Current Liabilities	2	2	2	3
Total Liabilities	16	16	17	18
Controlling Interests	141	161	185	211
Capital Stock	5	5	5	5
Capital Surplus	10	10	10	10
Retained Earnings	131	152	176	202
Non-Controlling Interests	0	0	0	0
Stockholders' Equity	141	161	185	211

Cash Flows (Summarized)

(Wbn)	12/18	12/19F	12/20F	12/21F
Cash Flows from Op Activities	28	24	27	29
Net Profit	21	23	27	29
Non-Cash Income and Expense	9	7	8	8
Depreciation	2	2	2	2
Amortization	1	1	1	0
Others	6	4	5	6
Chg in Working Capital	1	-2	-3	-3
Chg in AR & Other Receivables	3	-1	-1	-1
Chg in Inventories	-1	-1	-2	-2
Chg in AP & Other Payables	-1	0	0	0
Income Tax Paid	-4	-5	-6	-7
Cash Flows from Inv Activities	-15	0	0	0
Chg in PP&E	-9	0	0	0
Chg in Intangible Assets	0	0	0	0
Chg in Financial Assets	6	0	0	0
Others	-12	0	0	0
Cash Flows from Fin Activities	-5	-3	-3	-3
Chg in Financial Liabilities	0	0	0	0
Chg in Equity	0	0	0	0
Dividends Paid	-2	-3	-3	-3
Others	-3	0	0	0
Increase (Decrease) in Cash	9	21	23	25
Beginning Balance	37	47	67	91
Ending Balance	47	67	91	116

Source: Company data, Mirae Asset Daewoo Research estimates

Forecasts/Valuations (Summarized)

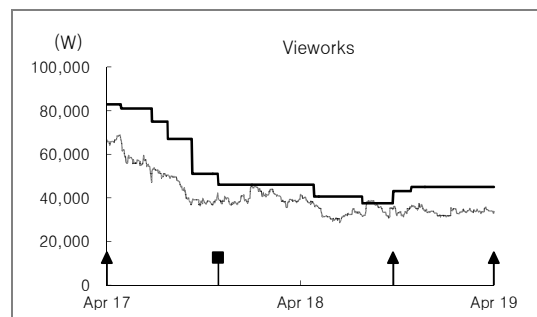
	12/18	12/19F	12/20F	12/21F
P/E (x)	15.9	14.5	12.5	11.6
P/CF (x)	10.9	11.1	9.8	9.2
P/B (x)	2.3	2.0	1.8	1.6
EV/EBITDA (x)	10.9	9.2	7.1	5.9
EPS (W)	2,077	2,337	2,713	2,912
CFPS (W)	3,016	3,052	3,457	3,699
BPS (W)	14,665	16,706	19,123	21,740
DPS (W)	300	300	300	300
Payout ratio (%)	14.2	12.7	10.9	10.2
Dividend Yield (%)	0.9	0.9	0.9	0.9
Revenue Growth (%)	6.5	6.9	11.4	7.7
EBITDA Growth (%)	-18.8	11.5	20.7	5.7
Operating Profit Growth (%)	-20.7	17.4	18.5	9.4
EPS Growth (%)	5.8	12.5	16.1	7.3
Accounts Receivable Turnover (x)	6.0	6.3	6.6	6.7
Inventory Turnover (x)	5.7	5.7	6.0	6.1
Accounts Payable Turnover (x)	18.9	15.2	16.0	16.3
ROA (%)	14.1	14.0	14.2	13.5
ROE (%)	15.6	15.5	15.7	14.7
ROIC (%)	22.3	24.2	29.3	31.1
Liability to Equity Ratio (%)	11.1	10.2	9.4	8.7
Current Ratio (%)	796.0	929.3	1,057.8	1,188.2
Net Debt to Equity Ratio (%)	-34.9	-43.5	-50.5	-56.3
Interest Coverage Ratio (x)	350.1	999.0	1,206.4	1,306.1

APPENDIX 1

Important Disclosures & Disclaimers

2-Year Rating and Target Price History

Company (Code)	Date	Rating	Target Price
Vieworks(100120)	11/14/2018	Buy	45,000
	10/11/2018	Buy	43,000
	08/14/2018	Trading Buy	37,500
	05/15/2018	Trading Buy	40,600
	11/15/2017	Trading Buy	46,000
	09/27/2017	Buy	51,000
	08/12/2017	Buy	67,000
	07/13/2017	Buy	75,000
	05/16/2017	Buy	81,000
	04/11/2017	Buy	83,000



Stock Ratings

Buy	: Relative performance of 20% or greater
Trading Buy	: Relative performance of 10% or greater, but with volatility
Hold	: Relative performance of -10% and 10%
Sell	: Relative performance of -10%

Industry Ratings

Overweight	: Fundamentals are favorable or improving
Neutral	: Fundamentals are steady without any material changes
Underweight	: Fundamentals are unfavorable or worsening

Ratings and Target Price History (Share price (—), Target price (—), Not covered (≡), Buy (▲), Trading Buy (■), Hold (●), Sell (◆))

* Our investment rating is a guide to the relative return of the stock versus the market over the next 12 months.

* Although it is not part of the official ratings at Mirae Asset Daewoo Co., Ltd., we may call a trading opportunity in case there is a technical or short-term material development.

* The target price was determined by the research analyst through valuation methods discussed in this report, in part based on the analyst's estimate of future earnings.

* The achievement of the target price may be impeded by risks related to the subject securities and companies, as well as general market and economic conditions.

Equity Ratings Distribution & Investment Banking Services

	Buy	Trading Buy	Hold	Sell
Equity Ratings Distribution	83.52%	8.24%	8.24%	0.00%
Investment Banking Services	82.61%	4.35%	13.04%	0.00%

* Based on recommendations in the last 12-months (as of March 31, 2019)

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Mirae Asset Daewoo International Network

Mirae Asset Daewoo Co., Ltd. (Seoul)

Global Equity Sales Team
Mirae Asset Center 1 Building
26 Eulji-ro 5-gil, Jung-gu, Seoul 04539
Korea

Tel: 82-2-3774-2124

Mirae Asset Securities (USA) Inc.

810 Seventh Avenue, 37th Floor
New York, NY 10019
USA

Tel: 1-212-407-1000

PT. Mirae Asset Sekuritas Indonesia

Equity Tower Building Lt. 50
Sudirman Central Business District
Jl. Jend. Sudirman, Kav. 52-53 Jakarta Selatan
12190
Indonesia
Tel: 62-21-515-3281

Mirae Asset Securities Mongolia UTsK LLC

#406, Blue Sky Tower, Peace Avenue 17
1 Khoroo, Sukhbaatar District
Ulaanbaatar 14240
Mongolia

Tel: 976-7011-0806

Shanghai Representative Office

38T31, 38F, Shanghai World Financial Center
100 Century Avenue, Pudong New Area Shanghai
200120
China

Tel: 86-21-5013-6392

Mirae Asset Securities (HK) Ltd.

Suites 1109-1114, 11th Floor
Two International Finance Centre
8 Finance Street, Central
Hong Kong
China
Tel: 852-2845-6332

Mirae Asset Wealth Management (USA) Inc.

555 S. Flower Street, Suite 4410,
Los Angeles, California 90071
USA

Tel: 1-213-262-3807

Mirae Asset Securities (Singapore) Pte. Ltd.

6 Battery Road, #11-01
Singapore 049909
Republic of Singapore

Tel: 65-6671-9845

Mirae Asset Investment Advisory (Beijing) Co., Ltd

2401B, 24th Floor, East Tower, Twin Towers
B12 Jianguomenwai Avenue, Chaoyang District
Beijing 100022
China

Tel: 86-10-6567-9699

Ho Chi Minh Representative Office

7F, Saigon Royal Building
91 Pasteur St.
District 1, Ben Nghe Ward, Ho Chi Minh City
Vietnam

Tel: 84-8-3910-7715

Mirae Asset Securities (UK) Ltd.

41st Floor, Tower 42
25 Old Broad Street,
London EC2N 1HQ
United Kingdom

Tel: 44-20-7982-8000

Mirae Asset Wealth Management (Brazil) CCTVM

Rua Funchal, 418, 18th Floor, E-Tower Building Vila
Olimpia
Sao Paulo - SP
04551-060
Brasil
Tel: 55-11-2789-2100

Mirae Asset Securities (Vietnam) LLC

7F, Saigon Royal Building
91 Pasteur St.
District 1, Ben Nghe Ward, Ho Chi Minh City
Vietnam

Tel: 84-8-3911-0633 (ext.110)

Beijing Representative Office

2401A, 24th Floor, East Tower, Twin Towers
B12 Jianguomenwai Avenue, Chaoyang District
Beijing 100022
China

Tel: 86-10-6567-9699 (ext. 3300)