

MIDEA [000333.CH]

Riding consumption upgrade

Midea, with its brand portfolio, product range, scale and distribution network, is one of the most competitive manufacturers of home appliances in the world. We are positive on the Company, whose focus on a new premium brand launch, margin expansion and assimilation of the Kuka and Toshiba in the next few years, should sustain an earnings CAGR of 26% from 2017-2019. We initiate coverage on the company with a BUY rating, with a 12 month target price of RMB 67, which represents a 22% upside.

Investment Highlights

Premiumization to Expand Margins: Midea is one of the most competitive home appliance manufacturers in terms of product range, market share, distribution network and customer loyalty. Its brand portfolio also includes prestigious names such as *Toshiba*, *Cuchen*, and *Electrolux*. Midea is introducing a new domestic high-end brand in Aug/Sept. 2018 and it is expected to raise ASPs through price hikes and new model introduction.

Air Conditioner to Drive Earnings: Air conditioners account for 48% of the Company's gross profit as a result of the exceptional growth last year. This year, demand remains strong, and we expect an ASP increase of RMB300-400 to drive revenue and margin growth.

International Business Upside. Exports account for 43% of Midea's sales (36% ex-Robotics) and 30% of company gross profit. We believe the margin will improve in the medium term as Midea shifts its business model from OEM/ODM products to its own branded products, which currently comprise only 30% of international sales.

Robotics: 2018 earnings bump, long term profit engine. China's low penetration of industrial robots and Midea's new ownership of Kuka will sustain long term growth for Midea's robotics segment. Thanks in part to lower PPA expenses, the robotics segment's share of gross profits would increase to ~9% in 2018, up from 6% in 2017.

Valuation attractive in light of earnings growth. We are forecasting 26% earnings CAGR for 2017-2019, based on margin expansion from the new premium brand and exports. This places our estimates 22% above current street expectations. Our TP, at 16x 2019 earnings, is justifiable for a business with a secure franchise, and earnings growing above 20%. Risk factors include: (i) A slowdown in China real estate and air conditioner sales; (ii) Loss of market share as a result of price hikes; and (iii) RMB appreciation which would harm Midea's exports.

	2016	2017	2018E	2019E	2020E
Revenue (RMB Mn)	159,842	241,919	276,958	308,571	341,427
Growth (%)		51%	14%	11%	11%
Net Profit (RMB Mn)	14,684	17,284	21,577	27,373	34,214
Growth (%)		18%	25%	27%	25%
EPS (RMB)	2.28	2.63	3.29	4.17	5.21
PER (x)	24.1	20.9	16.7	13.2	10.5
PBR (x)	5.8	4.9	4.1	3.4	2.8

Sources: Company Annual Report, CGIS Research

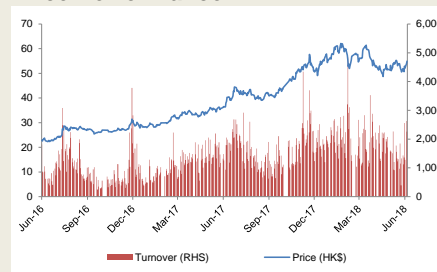
Home Appliances Sector

Buy

Close: RMB 54.97 (June 5, 2018)

Target Price: RMB 67 (+22%)

Price Performance



Market Cap	US\$56,544m
Shares Outstanding	6,590m
Free Float	45%
52W High	RMB\$62.69
52W Low	RMB\$36.20
3M Avg Daily T/O:	US\$222m
Major Shareholders:	Midea Hld Co (34%)

Sources: Company, Bloomberg

Jeff Dorr – Analyst

(852) 3698 6323
jeffreydorr@chinastock.com.hk

Johnson Cheung – Research Director

(852) 3698 6275
johnsoncheung@chinastock.com.hk

VALUATION

We have a target price of RMB 67, based on a 16x multiple of our 2019 earnings forecast. This valuation is supported by the 20%+ earnings CAGR during 2017-2020 and Midea's ROE of over 20%.

Our top line expectations are below street, but our higher gross margin assumptions put our estimates ~8% above 2019 consensus earnings. From 2017-2019, we project earnings growth CAGR of 26%, higher than consensus earnings growth of 21%.

Midea and Qingdao Haier, two of the three large appliance manufacturers, both trade for 12-13x 2019E consensus earnings. Midea and Haier both have diverse product portfolios. Gree, the third large appliance manufacturer, is a pure play on air conditioning. Gree's lower multiple is on account of the volatile nature of its core air conditioning business, its recent dividend cut, and current overhang on the stock due potential change in leadership.

At 16x 2019E PER, Midea's valuation would be higher than domestic manufacturers and in line with the international manufacturers.

Figure 1: Peer Comparison

	Ticker	Mkt cap	Price	PER			EPS growth		PEG	P/B	EV/EBITDA			Yield	ROE
		US\$ m	(lc)	2017	2018E	2019E	2018E	2019E	2018E	2017	2017	2018E	2019E	2017	2017
A share															
Midea*	000333 CH	51,345	54.97	20.9	16.7	13.2	25.0%	27.0%	0.7	4.9	13.8	11.2	8.9	2.4%	23.6%
Gree	000651 CH	42,267	45.12	12.1	10.4	9.1	17.0%	13.9%	0.6	4.1	7.2	5.1	4.4	0.0%	34.1%
Qingdao Haier	600690 CH	17,660	18.60	16.4	14.2	12.2	15.2%	16.0%	0.9	3.5	11.5	8.3	6.7	1.8%	21.5%
Robam	002508 CH	4,970	33.63	21.2	18.0	14.6	17.8%	23.3%	1.0	5.9	16.6	14.2	11.3	1.6%	27.8%
Supor	002032 CH	6,279	49.10	30.7	25.2	20.9	21.7%	20.4%	1.2	7.8	24.7	20.7	17.4	1.5%	25.3%
Little Swan	000418 CH	5,606	64.62	27.2	22.0	18.0	23.5%	21.9%	0.9	5.8	18.9	13.8	10.6	1.5%	21.4%
Median				21.0	17.3	13.9	19.8%	21.2%	0.9	5.3	15.2	12.5	9.8	1.55%	24.43%
H share															
Haier Electronics	1169 HK	9,647	27.00	18.6	15.3	13.0	21.1%	17.7%	0.7	3.0	14.8	11.6	9.0	0.7%	16.1%
Int'l															
Whirlpool	WHR US	10,618	149.99	31.4	9.6	8.6	224.7%	13.0%	0.0	2.5	7.3	7.3	6.9	2.9%	8.1%
Electrolux	ELUXB SS	7,645	221.30	11.1	12.0	10.8	-7.5%	10.9%	-1.6	3.1	7.2	5.7	6.1	3.4%	27.9%
Rinnai	5947 JP	4,987	10,510.00	24.5	23.9	23.1	2.3%	3.5%	10.3	2.0	10.8	10.3	9.7	0.8%	8.2%
SEB	SK FP	9,007	155.50	20.6	17.9	15.9	15.0%	12.6%	1.2	4.4	18.2	12.2	11.0	1.3%	21.2%
De'Longhi	DLG IM	4,029	23.34	19.6	18.8	17.1	4.5%	9.7%	4.2	3.4	11.0	10.4	9.8	4.3%	17.4%
Median				20.6	17.9	15.9	4.5%	10.9%	1.2	3.1	10.8	10.3	9.7	2.9%	17.4%

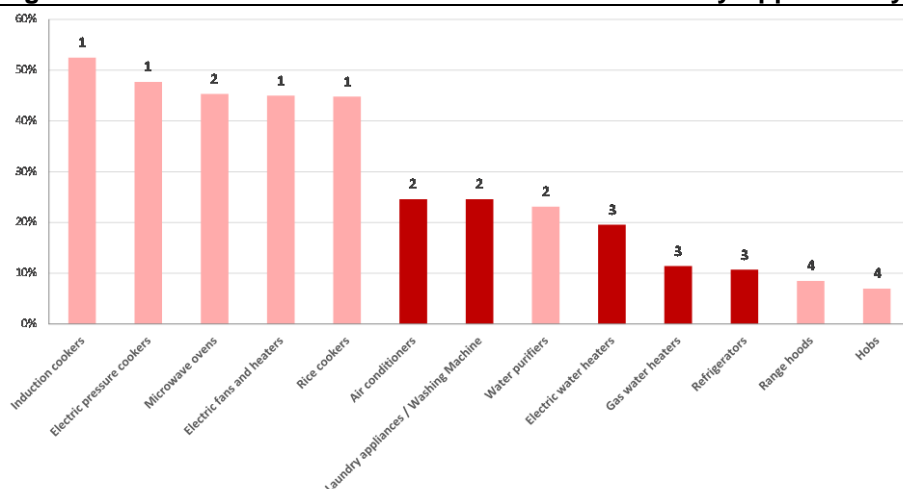
Sources: Bloomberg, CGIS Research

Note: * Midea figures based on CGIS forecast

PREMIUMIZATION TO DRIVE MARGIN UPLIFT

Midea is one China's top three leading producers of large appliances including air conditioning, refrigerators, and washing machines. Not only does it have extremely high brand recognition, being one of the top three in most product segments, it is the only major appliance manufacturer that has a strong offering in both small and large appliances.

Figure 3: Midea's China Offline Market Share and Rank by Appliance Type

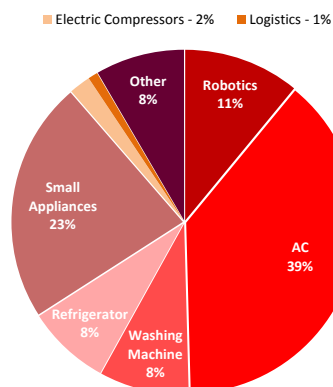


Sources: Company Annual Report, CGIS Research

Small Appliances: Key driver for Consumer Appliances Segment

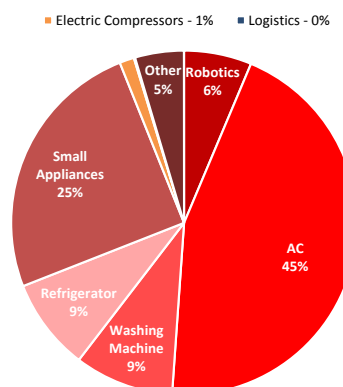
Midea's broad product range differentiates it from chief competitors Gree and Haier. In our estimates, air conditioning and small appliances were the two most significant profit drivers for Midea in 2017. These two products account for 62% of revenues but approximately 70% of its gross profit. Midea is particularly strong in small appliances, where it has held a leading share in induction cookers, pressure cookers, and rice cookers for over a decade.

Figure 4: Revenue Mix (2017E)



Sources: Company Annual Report, CGIS Research

Figure 5: Gross Profit Mix (2017E)



Sources: Company Annual Report, CGIS Research

New Premium Brand Launch

While Midea is best known for its mid-tier ASP products, the company is taking steps to move up market. Midea is introducing a new premium brand, which should roll out in August/September 2018. At launch, the premium brand will only target select product categories, but eventually will expand to cover all of Midea's existing product categories. The products will be priced at or above Haier's existing high-end products, Casarte. We highlight that Haier's high end Casarte product line has been enjoying rapid growth in certain product categories. For example, Casarte comprised under 2.5% of Haier's washing machine sales in 2014, but 7% of segment revenue by 2017.

M&A and JV Strategy to Drive Margin Increase

Although details of the premium brand are scarce (Midea is keeping the brandname secret for now), Midea itself is no stranger to high-end products. It has been active in M&A transactions as well as forming JVs with premium brands to move up market in the appliance industry.

Figure 6: Midea's Recent M&A and JV Activity

Timeline	Events
2018	Privatized Welling Holding
2017	Acquisition of KUKA and Servotronic; JV with Electrolux
2015-2016	Acquisition of Toshiba Lifestyle and Clivet JV with Bosch, SIIX, YASAKAWA, Cuchen
2008-2013	Series of JV with Carrier in China, Egypt, LatAm, India and Philippines
2010	Listed asset motors asset in Welling
2008	Acquisition of Little Swan
2005	Acquisition of Jiangsu Chunhua; started vacuum business
2004	Acquisition of Hualing and Royalstar; started refrigerators and laundry business Acquisition of Chongqing General Chiller and Jiangsu Qingjiang Electric Motor Manufacturing Co
2001	Acquisition of Magnetron from Sanyo
1999	Started two JVs with Indesit on dishwashers and motors
1998	Introduced commercial A/C to China Acquisition of Macro, Toshiba A/C compressor factory and Wuhu Liguang Airconditioning Co
1992	Established Welling Holding and started appliances motors business
1980-1997 (Entered home appliance market)	Organic growth of domestic business

Source: Company Reports, CGIS

For example, Midea's Toshiba acquisition in 2016 provides Midea with upmarket branding and access to Toshiba's 5,000 patents for the next 40 years. Toshiba's primarily competes in washing machines, air conditioners, refrigerators, microwaves, vacuum cleaners, and electric cookers – most which falls into Midea's broad consumer appliance category. In China, Toshiba's appliances are priced at a significant premium to Midea. For example, Midea's best-selling microwave on TMall retails for RMB 379 vs. Toshiba's most popular unit, which retails for RMB 2,000.

Midea's 60% owned JV with Cuchen is an example of a JV which will help Midea move up the value chain. Cuchen is South Korea's second largest producer of electric cookers, with approximately 40% market share. Through this JV, Midea will manufacture Cuchen's products and gain expertise in high end electric cookers, while Cuchen will benefit from Midea's manufacturing scale and distribution.

Similarly, Midea's JV with Electrolux is focused on introducing Electrolux's premium brand, AEG, to the China market. The AEG brand was officially launched in China at the Appliance & Electronics World Expo in Shanghai on March 8, 2018. As the figures shows, Midea's high-end brands are priced significantly higher than the Midea brand.

TMall: Toshiba Top Selling Microwaves (Sorted by Popularity)

 <p>¥1999.00 3期免息 (每满500减50) 赠礼 Toshiba/东芝 A3-231D日本变频光波 东芝官方旗舰店</p> <p>月成交 23笔 评价 26</p>	 <p>¥9999.00 3期免息 (每满500减50) 赠礼 Toshiba/东芝 A7-3200日本变频光波 东芝官方旗舰店</p> <p>月成交 11笔 评价 16</p>	 <p>¥4999.00 3期免息 (每满500减50) 赠礼 Toshiba/东芝 A5-251D日本变频光波 东芝官方旗舰店</p> <p>月成交 2笔 评价 4</p>	 <p>¥4999.00 6期免息 Toshiba/东芝 A5-251D微波炉烤箱 东芝官方旗舰店</p> <p>月成交 1笔 评价 22</p>	 <p>¥9999.00 6期免息 Toshiba/东芝 A7-3200变频光波烤一体机 东芝官方旗舰店</p> <p>月成交 0笔 评价 4</p>
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Source: TMall, CGIS Research

TMall: Midea Top Selling Microwaves (Sorted by Popularity)

 <p>¥379.00 [每满300减30] 赠礼 Midea/美的 M1-L213C 变频微波炉 随心烹饪 美的官方旗舰店 更多优惠</p> <p>该款月成交 2.4万笔</p>	 <p>¥549.00 [每满300减30] 赠礼 Midea/美的 M3-L2318 变频智能蒸汽变频微波炉光波炉 美的官方旗舰店 更多优惠</p> <p>该款月成交 1.2万笔</p>	 <p>¥899.00 [每满300减30] 赠礼 Midea/美的 X3-233A 变频立方变频微波炉 美的官方旗舰店 更多优惠</p> <p>该款月成交 3662笔</p>	 <p>¥439.00 [每满300减30] 赠礼 Midea/美的 M1-L2138 21升经典转盘微波炉 加热更均匀 美的官方旗舰店 更多优惠</p> <p>该款月成交 2256笔</p>	 <p>¥439.00 [每满300减30] 赠礼 Midea/美的 M1-L2028 一键四烤 食品级石英反射内胆 美的官方旗舰店 更多优惠</p> <p>该款月成交 2037笔</p>
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Source: TMall, CGIS Research

TMall: Cuchen Top Selling Pressure Cookers (Sorted by Popularity)

 <p>¥1199.00 6期免息 (每满500减50) 赠礼 CUCHEN/酷晨 C15-FC1001FCN 智能家用电压力锅 6L大容量 cuchen官方旗舰店</p> <p>该款月成交 27笔</p>	 <p>¥4599.00 6期免息 (每满500减50) 赠礼 CUCHEN/酷晨 C1H-LX1001EDCN 1400W cuchen官方旗舰店</p> <p>该款月成交 1笔</p>	 <p>¥2298.00 6期免息 (每满500减50) 赠礼 CUCHEN/酷晨 C1H-LWA1000CN 1250W 8L超大 智能电压力锅 cuchen官方旗舰店</p> <p>该款月成交 4笔</p>	 <p>¥1799.00 6期免息 (每满500减50) 赠礼 CUCHEN/酷晨 C15-FA1001DVCN cuchen官方旗舰店</p> <p>该款月成交 0笔</p>	 <p>¥1799.00 3期免息 (每满500减50) 赠礼 CUCHEN/酷晨 WHC-VE06505 1000W enclonova海外旗舰店</p> <p>该款月成交 0笔</p>
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Source: TMall, CGIS Research

TMall: Midea Top Selling Pressure Cookers (Sorted by Popularity)

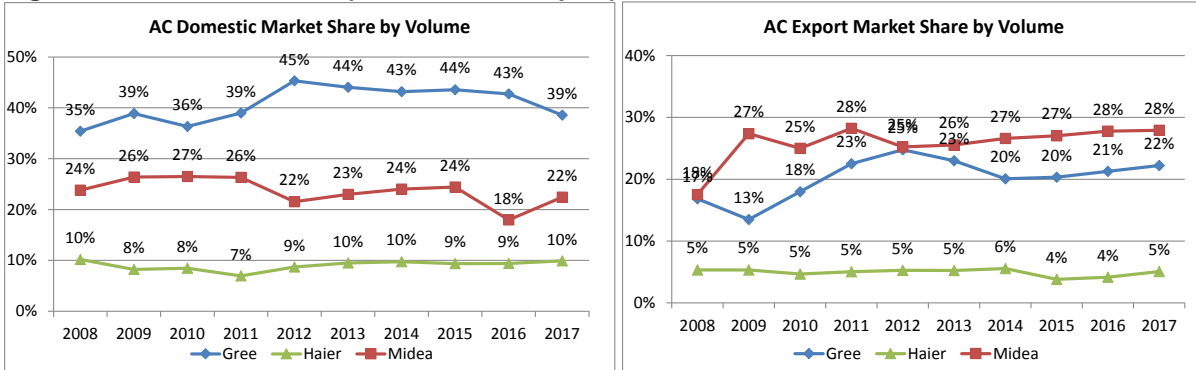
 <p>¥159.00 [每满300减30] 赠礼 Midea/美的 MB-WFS3018Q 24小时智能预约 可拆内胆设计 美的官方旗舰店 更多优惠</p> <p>该款月成交 5.8万笔</p>	 <p>¥299.00 [每满300减30] 赠礼 Midea/美的 MY-VL50Simple101 一键排气七段压力随心调 美的官方旗舰店 更多优惠</p> <p>该款月成交 3.8万笔</p>	 <p>¥179.00 [每满300减30] 赠礼 Midea/美的 MB-WFD4016 800W 拉丝不锈钢机身 一键柴火炖 美的官方旗舰店 更多优惠</p> <p>该款月成交 2.8万笔</p>	 <p>¥259.00 [每满300减30] 赠礼 Midea/美的 MB-WFS4028 智能柴火炖 拉丝不锈钢 加厚内胆 美的官方旗舰店 更多优惠</p> <p>该款月成交 1.3万笔</p>	 <p>¥269.00 [每满300减30] 赠礼 Midea/美的 MY-QC50A5 七段调压 一键排气 双十入味 美的官方旗舰店 更多优惠</p> <p>该款月成交 8752笔</p>
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Source: TMall, CGIS Research

AIR CONDITIONING: CONTINUE TO DRIVE EARNINGS

The air conditioning segment is Midea's most important product category, representing 45% of gross profit. Domestically, the AC market is dominated by three players Gree, Midea, and Haier, which control roughly ~70% of the market. Gree is the leading player in the domestic China AC market. However, Midea is relatively stronger in the export market, where it leads in market share.

Figure 7: AC Market Share (Domestic vs. Export)



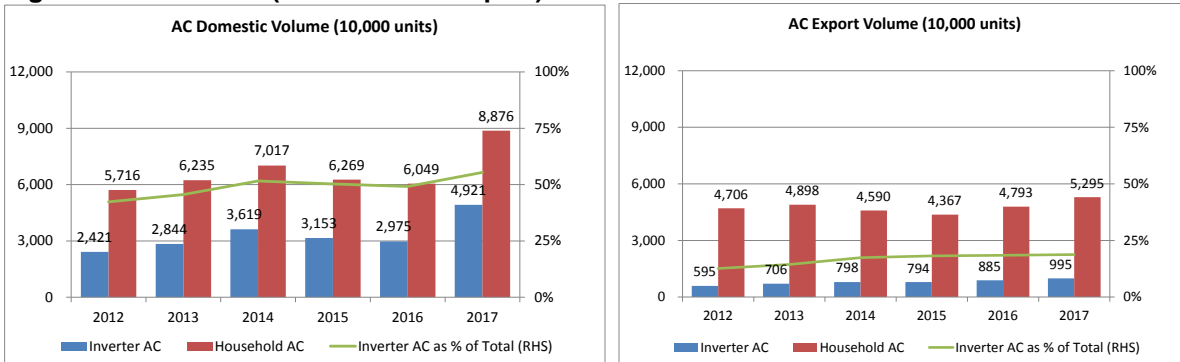
Sources: Wind, CGIS Research

Sources: Wind, CGIS Research

Q1 2018: AC Growth Still Strong

2017 was a boom year for China's AC market due to hot weather, low channel inventory, and a recovering property market following 2015 lows. In volume terms, China's domestic AC market grew 47% YoY to approx. 89 Mln units. In the export market, AC sales grew ~10% to 53 Mln units.

Figure 8: AC Growth (Domestic vs. Export)



Sources: Wind, CGIS Research

Wind: Company Annual Report, CGIS Research

As of Q1, 2018, the air conditioning market in China is continuing to experience strong growth::

- Gree grew top line revenues 37% in Q1 2018
- Midea's air conditioning business grew +40% YoY in Q1 2018, with sell-in and end-user installations both tracking. In April, Midea's AC growth decelerated to 20% YoY.
- Haier AC revenue grew ~20% YoY in Q1 2018, with segment revenue growing ~20% YoY

For full year 2018, we expect Midea's AC segment to grow ~20% YoY, in line with current management expectations.

Midea may benefit from higher pricing

In our discussions with Midea, management noted that Gree typically charges a RMB ~800 premium over Midea for a similarly configured unit. This premium is consistent with our checks in the market place. In addition, we've noticed that ASPs of Gree's top selling products on TMall, Gome, and Suning's online stores are materially higher than Midea:

Figure 9: Top Selling Online ACs by Brand

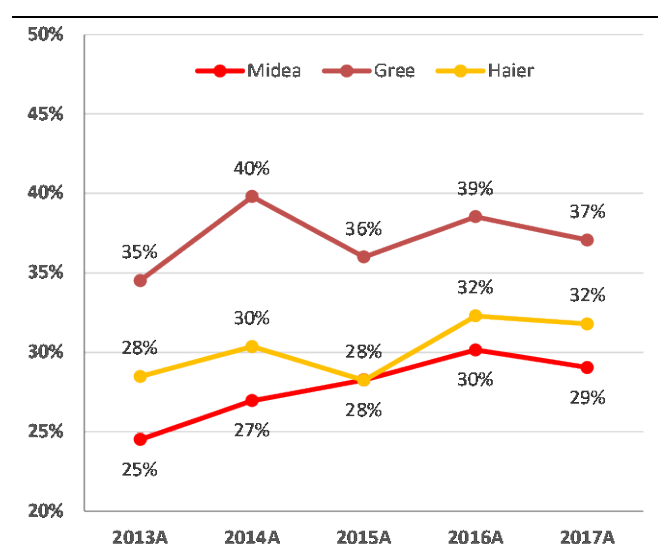
Online Top Selling Air-Conditioner Retail Prices (rmb, monthly, as of 30 May 2018)						
	Tmall		Gome		Suning	
Make	Model (Power)	Price	Model (Power)	Price	Model (Power)	Price
Gree	Fengcai 35GW (inverter)	*3,449	Comfort Style 26GW (inverter)	4,199	Trait Ideal 35GW	3,399
Midea	iQingchun 26GW	*2,099	Zhihu 35GW	2,349	Zhihu 35GW	2,399
Haier	Le+ 32GW	*2,199	Zhi+ 35GW	2,399	Zhi+ 35GW	*2,799

*Under promotion

Source: TMall, CGIS Research

As a result of its lower ASPs, Midea's gross margins lag its peers in the AC segment.

Figure 10: AC Gross Margin by Manufacturer (Estimated)



Sources: Company Annual Report, CGIS Research

Note: Before new segmentation was introduced, gross margin for AC segment was 30.6% in 2016 vs. 30.1% (as shown)

Midea Closing the Gap

For 2018, we understand that, as a result of new models and price increases, ASPs on Midea's AC units would increase by RMB 300-400. Instead of lagging Gree's pricing by a historical factor of RMB 700-800, Midea will now would increase by of RMB 300-400.

This price hike, combined with stable raw material prices, should support Midea's gross margin expansion in 2018. We model gross margins for air conditioning to expand from 29% in 2017 to 31%-32% in 2018-2020. Our gross margin assumptions for Midea are still below Gree, but in line with Haier's current AC margins.

EXPORTS: MARGIN OPPORTUNITY

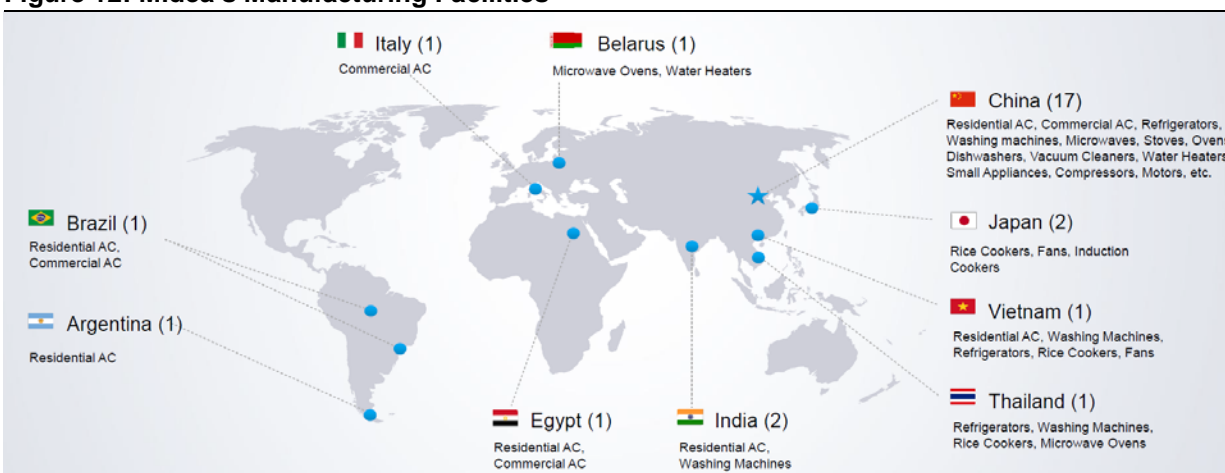
Midea derives 43% of its total revenue (35% of its appliances revenue) from international markets, while Gree and Haier historically have derived 15-20% respectively. Midea sells products to over 200 countries around the globe, and owns 12 production facilities outside of China (in addition to 17 production centres domestically).

Figure 11: Midea Leads in Export Market Share by Volume Across Categories

Company	AC		Refrigerator		WM	
	Domestic	Export	Domestic	Export	Domestic	Export
Midea	22%	28%	12.4%	15%	30%	19%
Gree	39%	22%	NA	NA	NA	NA
Haier	10%	5%	31%	4%	33%	9%
Hisense Kelon	NA	NA	12%	13%	NA	NA

Source: Annual Reports, CGIS Research

Figure 12: Midea's Manufacturing Facilities

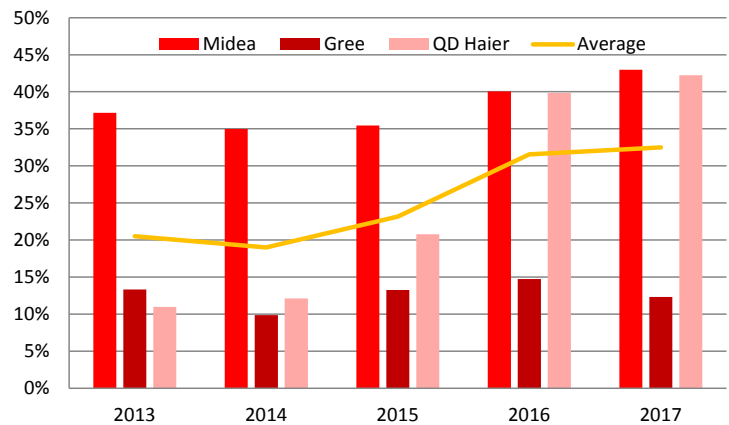


Source: Company Presentation, CGIS Research

We are positive to Midea's exposure to markets outside of China in the following ways:

1. International diversification insulates Midea from swings in China's domestic economy real estate market
2. Sales to countries with lower penetration rates of appliance ownership exposes Midea to geographies with higher potential long-term growth.
3. Margins to improve in the medium term as Midea shifts from OEM business model to its own branded products. Gross margins on international sales are currently about 5% lower than domestic sales. According to Midea, 70% of exports are comprised of OEM and ODM business, with only 30% of the mix comprised of Midea's branded products.

Figure 13: International Sales as % Total Revenue by Manufacturer



Source: Annual Reports, CGIS Research

ROBOTICS: PPA EXPENSE WINDING DOWN

PPA Expense Winding Down

Midea has been active in expanding into the robotics field in recent years. Robotics overlaps with its core manufacturing business and provides a new growth driver and further diversification for the company. In 2017, Midea acquired Germany's Kuka, a leading robotics company, by boosting its stake in Kuka from 13.5% to 94.55%. Midea spent EUR 3.7 Bln (RMB 27 Bln) for 81% of Kuka.

Although robotics only comprised ~6% of Midea's gross profit in 2017, we expect this figure to increase to 9% in 2018. The increase in gross profit for 2018 is driven by acquisition expenses beginning to roll off. In 2017, Midea wrote off ~RMB 2.4 Bln on the Kuka and Toshiba acquisitions, but annual amortization will reduce to ~RMB 0.6 Bln in 2018. On this basis, we expect gross margin for the robotics segment to rebound to ~21% in 2018, up from 14.5% in 2017.

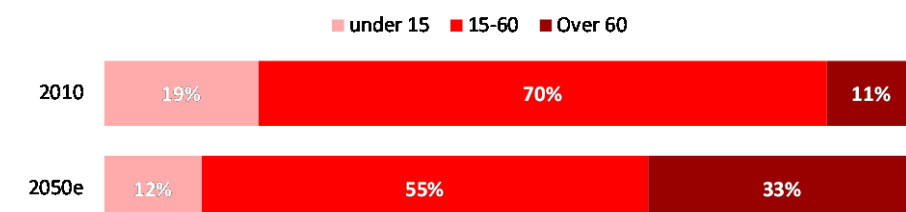
Midea - Building Robotics Expertise

Midea's Kuka acquisition was not Midea's first foray into the robotics field. Prior completing the Kuka acquisition in 2017, Midea owned 13.5% of Kuka, and has been gradually building expertise in the robotics market for several years. Some important steps include the following:

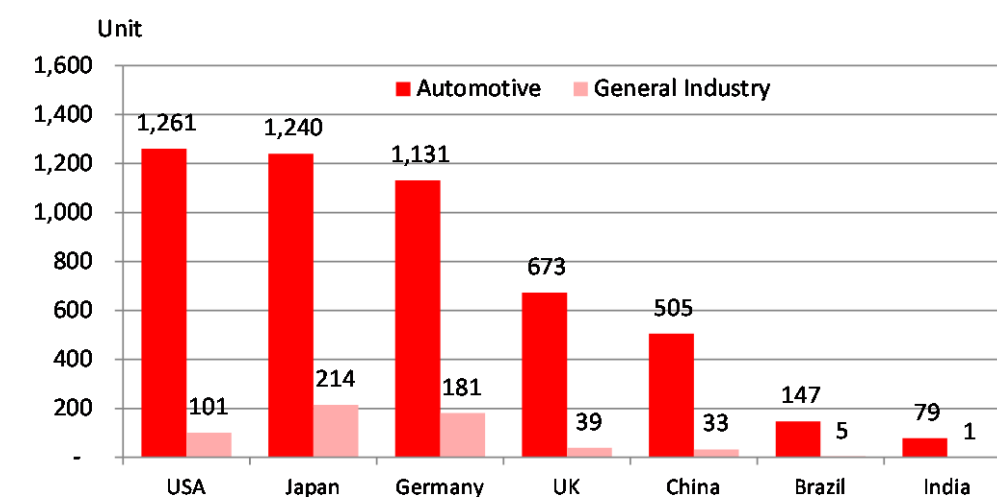
1. Prior to the Kuka acquisition, Midea was a long term Kuka customer, spending ~RMB 1-1.5 Bln annually on Kuka robots. Midea uses Kuka's robots primarily for packaging, transportation, and paint spraying tasks. Midea's increased use of robotics helped the company reduce its staff count from 200,000 in 2011 to around 120,000 by 2016.
2. In 2015, Midea invested USD 65 Mln to enter into two JVs with Japanese robot manufacturer Yaskawa. Yaskawa is one of the top 4 robotics producers globally, which include ABB (ABBN.VX), Fanuc (6954.JP), Yaskawa (6506.JP), and Kuka. One of the JVs is focused on bringing Yaskawa's robots for elder care and physical therapy to the China market. The second JV is focused on bringing Yaskawa's industrial robots to the China market.
3. In 2016, Midea purchased 17.8% of Anhui Efort for USD 8 Mln (RMB 45 Mln). Anhui Efort builds robots for car painting (auto industry), as well as logistics, welding, painting, and assembly.
4. In 2017, Midea acquired a controlling stake in Servotronix for USD 170 Mln. Servotronix an Israeli tech company which provides motion control systems including servo drives, encoders, and multi axis motion controllers for industrial robots.

Long Term Robotics Opportunity

Growth prospects for robotics in China are promising for three reasons: (1) increasing wage rates in the manufacturing sector, (2) an aging population, and (3) low robotics penetration, especially outside the auto industry.

Figure 13: China's Changing Demographics


Source: KPMG, Company Reports

Figure 14: Robot Density (Robots per 10,000 Employees)


Source: IFR, CGIS Research

Kuka, based in Germany, has been historically more focused on the German automotive market. At the time of acquisition, around half of Kuka's sales were from the auto segment, and half of sales come from Europe. In this context, Kuka is relatively underexposed to the China market, with only ~18% of sales from China in 2017. China was responsible for ~30% of total robot demand in 2016, or 87,000 out of 288,000 robots sold according to the International Federation of Robotics Federation (IFR). China's share is expected to further increase 40% of global robot sales by 2020.

Midea's local market knowledge, production capabilities, and relationships can support Kuka's development in China. Midea's customer relationships in fields such as logistics may also prove value accretive. In 2017, for example, Kuka entered into a JV with Annto Logistics, Midea's logistics subsidiary which is focused on appliance distribution. The JV between Annto and Kuka will develop a standardized logistics system for Annto's customers – allowing Kuka to leverage Annto's customer relationships.

General Industry Robotics Driving Growth

Kuka reorganized its business segments in Q1 2018. The new Auto segment (formerly Systems) comprises about 50% of Kuka's revenue mix. Globally Kuka is the leading provider of robots to the auto industry, but the company is trying to diversify into less heavily penetrated fields such as general

manufacturing assembly (Industries segment, 30% of revenue) and company intra-logistics (Consumer & Logistics segment, 20% of revenue).

Kuka grew 18% YoY in 2018 and earned a 3% EBIT margin. By 2020, management expects Kuka to achieve revenues of EUR 4.5Bln, implying 10% CAGR growth. Considering Kuka's 2013-2017 growth CAGR of 18%, we think management's expectations of 10% growth through 2020 are conservative. Through 2020, management expects EBIT margins to improve to ~7.5%, up from 3.9% adjusted EBIT margins in 2017 on the back of growth in general industry and logistics.

Figure 15: Robotics Revenue/Margin Guidance by Segment (2018-2020)

Segment	Revenue*	Growth	Est. EBIT Margin
Auto	53.3%	5.0%	8.5%
Industries	31.7%	15.0%	13.0%
Logistics / Consumer	19.6%	10.0%	7.0%

Source: Company Presentation, CGIS Research

Note: * Percentages do not total to 100% due to intersegment elimination

RISK FACTORS

Earnings Volatility

The residential air conditioning business in China is highly volatile due to its dependency on weather, the real estate market, and channel inventory swings. In particular, the investment community has limited insight into distributor inventory levels. Visibility is poor, and the segment comprises nearly half of revenue and gross profit.

Loss of Sales Volume

Midea is hiking prices on air conditioners and closing its pricing differential with Gree. It remains to be seen if the market will accept these price increases, and if Midea can continue to maintain its current level of market share in a scenario with higher pricing.

Interest and Investment Income

Over the past 5 years, net interest income and investment income have contributed, on average, over RMB 2 Bln per year to PBT. In 2017 for instance, net interest income and investment income contributed ~10% of PBT. A change in interest rate or unexpected loss on investment income could impact earnings

Integration Risks

Midea has been active in the M&A market, most recently with the acquisition of Kuka and Toshiba. Toshiba was loss making in 2017 and a turnaround is still pending. Regarding Kuka, robotics is a relatively new field for Midea. The robotics industry in China is highly fragmented, with small scale robotics companies with government subsidies competing for market share. It remains to be seen if these small scale robotics companies can compete with Kuka, which could impact Kuka's market share and profitability

Commodity Prices

Raw material prices comprise 85% of COGS. In years when important commodity prices such as copper and steel rise, management has traditionally implemented ASP hikes. However, management may not always have the ability to completely offset increases in raw material costs

RMB Appreciation

Exports comprise a meaningful portion of Midea's revenue and profit. These export contracts are typically priced in USD. If the RMB appreciates meaningfully to the USD, Midea's profitability could be adversely impacted

COMPANY BACKGROUND

History of the Group

Midea Group was founded by He Xiangjian in Shunde, Guangdong in 1968. Starting with only RMB 5,000 to open a workshop for the production of bottle lids, He Xiangjian has since turned Midea into one of the most successful private companies in China, as well as a Fortune Global 500 company.

Midea Electric first went public in 1993 in Shenzhen. It was controlled by Midea Holding, which is owned by He Xiangjian and his family. In August 2012, the board of Midea Group announced named Fang Hongbo, Chairman and President of Guangdong Midea Electric, was subsequently named as the new Chairman of Midea Group.

In 2013, Midea went under restructuring. Midea Electric was delisted, and Midea Group (000333 CH) made its IPO. After listing, the business of Midea Holding was limited to non-core activities including property and financial investments. Midea Holding still holds 33.6% of the list co. and is controlled by He Xiangjian and his family.

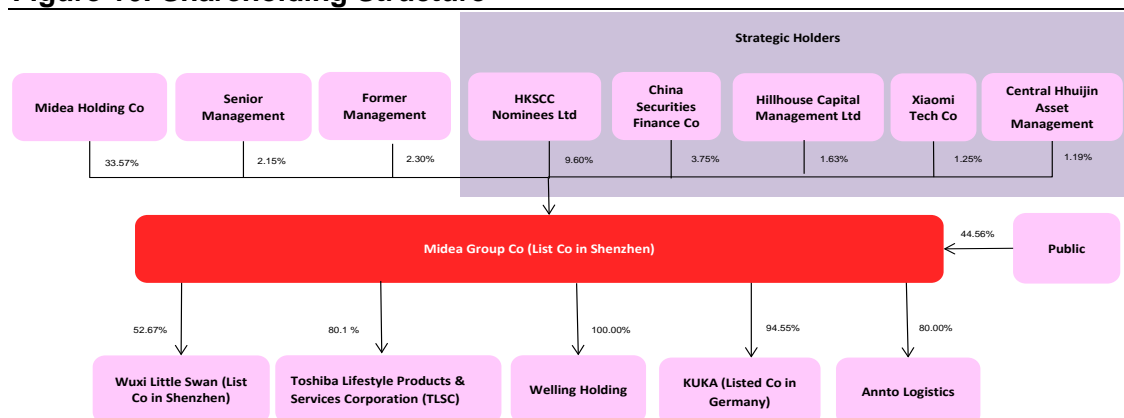
At the end of 2014, the Chinese electronics giant Xiaomi invested RMB1.2 billion by acquiring 1.3% shares of Midea Group, inaugurating a meaningful partnership between the two domestic giants. As of the end of 2017, Midea has established a global platform of more than 200 subsidiaries, over 60 overseas branches and 12 strategic business units.

Shareholding Structure

At the latest date, the current Chairman of Midea Group Fang Hongbo owns 2.1% of the Company, with the rest of the board owning 0.05% of the company. The founder of Midea Group He Xiangjian still indirectly owns a nearly 35% stake.

In the end of 2014, Xiaomi acquired a 1.3% stake in Midea Group with RMB1.27 billion, obtaining the right to nominate one senior management member as a director. Midea Group's board of directors currently consists of 10 board members. Xiaomi and Midea both describe their relationship as a strategic partnership that mutually benefits their own 'eco system'. The capital tie-up with Xiaomi is seen as a welcomed change in terms of Midea's ambition in becoming the domestic leader of smart home appliances.

Figure 16: Shareholding Structure



Sources: Company Annual Report, Bloomberg, CGIS Research

FINANCIAL MODEL

P&L Observations:

- 1.) From 2013-2016, Midea's gross margins increased steadily as a result of improving product mix and gradual price hikes in a benign commodity pricing environment. Gross margins declined in 2017 on account of higher commodity prices and PPA expenses from the Kuka and Toshiba acquisition.
- 2.) Midea's profit before tax exceeds EBIT due to investment income, among other adjustments. Over the past five years, investment income has averaged ~10% of pretax profit, though this figure declined to high single digits in 2016-2017. We suspect the majority of this income is coming from investments in wealth management products held in "Other Current Assets" on the balance sheet.

Figure 17: Simplified Consolidated Statement of Profit and Loss

P&L (RMB Mln)	2016	2017	2018E	2019E	2020E
Sales Revenue	159,842	241,919	276,958	308,571	341,427
COGS	(115,615)	(180,461)	(200,915)	(220,923)	(242,005)
Gross profit	44,226	61,458	76,042	87,648	99,422
Sale tax	(1,077)	(1,416)	(1,662)	(1,543)	(1,707)
Selling and distribution costs	(17,678)	(26,739)	(31,850)	(35,486)	(37,557)
General and administrative expense	(9,621)	(14,780)	(16,894)	(18,514)	(20,486)
Total EBIT	15,850	18,523	25,636	32,105	39,672
Depreciation & Amortisation	3,578	6,696	4,674	4,836	5,061
EBITDA	19,428	25,219	30,310	36,941	44,734
Net finance and other costs	183	(1,339)	(747)	(397)	84
Investment income	1,286	1,830	1,830	1,830	1,830
Other gains/losses	6	2,613	0	0	0
Non-operating income (expense)	1,591	227	227	227	227
Pre-Tax Profit	18,915	21,855	26,946	33,765	41,813
Tax Expense	(3,053)	(3,244)	(4,042)	(5,065)	(6,272)
Net Profit After Tax	15,862	18,611	22,904	28,700	35,541
Minority Interest	1,178	1,328	1,328	1,328	1,328
Earnings to Equity Owners	14,684	17,284	21,577	27,373	34,214
EPS (Basic)	2.29	2.66	3.32	4.22	5.27
EPS (Diluted)	2.28	2.63	3.29	4.17	5.21
DPS	1.00	1.20	1.47	1.87	2.34
% YoY growth					
Revenue	14.7%	51.3%	14.5%	11.4%	10.6%
Gross profit	20.6%	39.0%	23.7%	15.3%	13.4%
EBIT	17.1%	16.9%	38.4%	25.2%	23.6%
Net profit	15.6%	17.7%	24.8%	26.9%	25.0%
Margins and ratios					
Gross profit margin	27.7%	25.4%	27.5%	28.4%	29.1%
EBITDA Margin	12.2%	10.4%	10.9%	12.0%	13.1%
EBIT Margin	9.9%	7.7%	9.3%	10.4%	11.6%
Net Profit Margin	9.2%	7.1%	7.8%	8.9%	10.0%

Sources: Company Annual Report, CGIS Research

Balance Sheet Observations:

- 1.) Inventory increased steeply in 2017, but this could be the result of year-end effect and consolidation of Kuka
- 2.) Other current liabilities are comprised mostly of accrued sales rebates and accrued installation costs.
- 3.) In 2017, Midea's debt increased due to the acquisition of Kuka (RMB 27bn).

Figure 18: Simplified Consolidated Statement of Financial Position

Balance sheet (RMB Mln)	2016	2017	2018E	2019E	2020E
Cash & Equivalents	27,169	48,274	51,272	56,892	67,879
Trade and other receivables	22,022	31,041	34,200	39,515	43,439
Inventories	15,627	29,444	25,114	27,615	30,251
Prepayments	1,587	1,672	1,672	1,672	1,672
Available-for-sale investments	0	0	0	0	0
Other current assets	54,216	59,380	64,380	69,380	74,380
Total current assets	120,621	169,811	176,639	195,074	217,621
Long-term equity investment	2,212	2,634	2,634	2,634	2,634
PPE, net	21,057	22,601	23,976	25,791	28,008
Intangible assets	6,869	15,167	14,657	14,178	13,727
Investment properties	494	421	421	421	421
Goodwill	5,731	28,904	28,904	28,904	28,904
Deferred tax assets	3,030	4,023	4,023	4,023	4,023
Other non-current assets	10,587	4,547	4,547	4,547	4,547
Total non-current assets	49,979	78,296	79,161	80,497	82,264
Total assets	170,601	248,107	255,800	275,571	299,884
Salary payable	3,154	5,248	5,248	5,248	5,248
Prepayments	10,252	17,409	17,409	17,409	17,409
Tax payable	2,364	3,544	3,544	3,544	3,544
Notes payable	18,485	25,208	24,556	27,002	29,578
Short-term borrowings	3,024	2,584	2,584	2,584	2,584
Accounts payable	25,357	35,145	33,486	36,820	40,334
Other current liabilities	26,546	29,954	29,954	29,954	29,954
Total current liabilities	89,184	119,092	116,782	122,561	128,652
Bonds payable	4,819	4,553	4,553	4,553	4,553
Long-term borrowings	2,254	32,986	27,986	22,986	17,986
Deferred tax liabilities	1,832	3,973	3,973	3,973	3,973
Other long term liabilities	3,535	4,578	4,578	4,578	4,578
Total non-current liabilities	12,440	46,090	41,090	36,090	31,090
Total liabilities	101,624	165,182	157,871	158,651	159,742
Shareholders Fund	61,127	73,737	87,413	105,077	126,972
Minority Interest	7,850	9,188	10,515	11,843	13,170
Total S/H Equity	68,977	82,925	97,928	116,919	140,143
Total Liab & S/H Fund	170,601	248,107	255,800	275,571	299,884

Sources: Company Annual Report, CGIS Research

Cash Flow Observations:

- 1.) From 2013 to 2017, Midea spent approximately net RMB 10bn per year on “Investments.” We suspect most of these investments are going into Wealth Management Products (WMPs), which are booked in “Other Current Assets.” We suspect these Wealth Management Products account for the majority of Investment Income (see P&L).
- 2.) D&A expense declines in 2018 as PPE expense from the Kuka and Toshiba acquisitions rolls off
- 3.) In recent years, Midea has maintained a dividend payout ratio of 45%
- 4.) In 2017, the large Acquisition cash outflow is due to the Kuka acquisition.

Figure 19: Simplified Consolidated Statement of Cash Flows

Cash flow (RMB Mln)	2016	2017	2018E	2019E	2020E
Net Income	15,862	18,611	22,904	28,700	35,541
Depreciation & Amortization	3,578	6,696	4,674	4,836	5,061
Change in Working Cap	9,090	2,815	(1,140)	(2,036)	(469)
Other Non Cash Adjustments	(1,834)	(3,680)	0	0	0
Operating Cash Flow	26,695	24,443	26,438	31,501	40,133
Acquisitions	(2,900)	(25,850)	0	0	0
Capex	(2,323)	(3,218)	(5,539)	(6,171)	(6,829)
Asset Sales	464	1,441	0	0	0
Investments	(90,881)	(94,967)	(5,000)	(5,000)	(5,000)
Cash recovered from investment	73,905	85,127	0	0	0
Others	1,954	2,728	0	0	0
Investing Cashflow	(19,781)	(34,740)	(10,539)	(11,171)	(11,829)
Dividend (ordinary)	(5,121)	(6,466)	(7,901)	(9,709)	(12,318)
Equity Raised	815	1,668	0	0	0
Debt Movements	7,391	25,891	(5,000)	(5,000)	(5,000)
Others	(2,925)	(1,442)	0	0	0
Financing Cashflow	160	19,652	(12,901)	(14,709)	(17,318)
FCF	6,914	(10,297)	15,899	20,329	28,305

Sources: Company Annual Report, CGIS Research

Figure 20: Summary of Operating Metrics

Operating Figures	2016	2017	2018E	2019E	2020E
Revenue growth					
Consumer Appliances	NA	29.0%	10.0%	12.0%	12.0%
Air Conditioning	NA	38.7%	21.5%	11.7%	9.8%
Robotics	NA	NA	9.7%	9.3%	9.5%
Other	NA	64.0%	10.0%	10.0%	10.0%
Total	14.7%	51.3%	14.5%	11.4%	10.6%
Gross Margin					
Consumer Appliances	27.8%	27.4%	28.0%	29.0%	30.0%
Air Conditioning	30.1%	29.0%	31.0%	32.0%	32.0%
Robotics	NA	14.5%	22.0%	23.0%	26.0%
Other	16.9%	13.6%	14.0%	14.0%	14.0%
Total	27.7%	25.4%	27.5%	28.4%	29.1%
OPEX (as % Revenue)					
Selling Expense	11.1%	11.1%	11.5%	11.5%	11.0%
G&A	6.0%	6.1%	6.1%	6.0%	6.0%
EBIT margin	9.9%	7.7%	9.3%	10.4%	11.6%
Tax Rate	16%	15%	15%	15%	15%
Net profit margin	9.2%	7.1%	7.8%	8.9%	10.0%
Days receivables (including bills)	50	37	41	43	43
Days payables (including bills)	122	104	104	104	104
Days inventories	41	45	45	45	45
Current ratio(x)	1.4	1.4	1.5	1.6	1.7
Quick ratio(x)	1.2	1.2	1.3	1.4	1.5
Asset/equity(x)	2.8	3.4	2.9	2.6	2.4
Net debt/equity	-28%	-11%	-18%	-25%	-34%
EBITDA interest coverage(x)	52.4	26.1	18.9	26.3	37.1
ROE	24%	23%	25%	26%	27%

Sources: Company Annual Report, CGIS Research

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20/F, Wing On Centre, 111 Connaught Road Central, Sheung Wan, Hong Kong. General line: 3698-6888.