

# Singapore Company Guide

# UMS Holdings

Version 12 | Bloomberg: UMSH SP | Reuters: UMSH.SI

Refer to important disclosures at the end of this report

DBS Group Research . Equity

27 Aug 2018

## HOLD (Downgrade from BUY)

Last Traded Price ( 27 Aug 2018): S\$0.825 (STI : 3,225.62)

Price Target 12-mth: S\$0.86 (5% upside) (Prev S\$1.01)

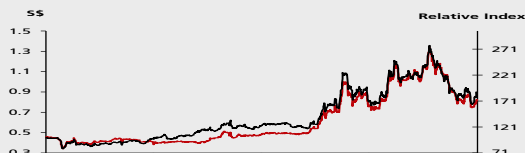
### Analyst

Carmen Tay +65 6682 3719 carmentay@db.com

### What's New

- Key client AMAT's disappointing sales outlook may have negative implications for UMS over the near term
- But underlying demand drivers remain supportive longer term
- Ahead of a recovery in order flows, UMS's attractive prospective yield of 7.4% should help hold up the stock
- Downgrade to HOLD with a lower TP of S\$0.86, mainly as we impute lower growth for FY18F-19F

### Price Relative



### Forecasts and Valuation

FY Dec (\$m)	2016A	2017A	2018F	2019F
Revenue	104	162	138	133
EBITDA	30.0	59.6	55.5	56.5
Pre-tax Profit	24.7	55.2	48.5	49.3
Net Profit	22.6	52.0	45.6	46.3
Net Pft (Pre Ex.)	22.6	52.0	45.6	46.3
Net Pft Gth (Pre-ex) (%)	(34.1)	130.3	(12.3)	1.6
EPS (S cts)	5.26	9.70	8.50	8.64
EPS Pre Ex. (S cts)	5.26	9.70	8.50	8.64
EPS Gth Pre Ex (%)	(34)	84	(12)	2
Diluted EPS (S cts)	5.26	9.70	8.50	8.64
Net DPS (S cts)	6.00	5.60	6.00	6.00
BV Per Share (S cts)	44.2	40.1	42.6	45.2
PE (X)	15.7	8.5	9.7	9.6
PE Pre Ex. (X)	15.7	8.5	9.7	9.6
P/Cash Flow (X)	10.5	11.3	6.1	7.5
EV/EBITDA (X)	10.4	6.7	6.7	6.3
Net Div Yield (%)	7.3	6.8	7.3	7.3
P/Book Value (X)	1.9	2.1	1.9	1.8
Net Debt/Equity (X)	CASH	CASH	CASH	CASH
ROAE (%)	11.8	25.7	20.6	19.7
Earnings Rev (%):			(9)	(14)
Consensus EPS (S cts):			9.2	9.6
Other Broker Recs:		B: 2	S: 0	H: 0

Source of all data on this page: Company, DBS Bank, Bloomberg Finance L.P

## Dragged by AMAT's weaker outlook

**Downgrade to HOLD with a lower TP of S\$0.86 as AMAT's disappointing sales outlook may have negative implications for UMS over the near-term.** During its recent 3Q18 results, AMAT gave a disappointing sales outlook, which could directly impact UMS's Endura business (which contributes c.50% of top-line, on average) over the near term and give rise to a weaker 2H18 vs 1H18.

To reflect this, we have lowered our earnings projections for FY18F/19F by 9%/14%, mainly on more conservative revenue estimates. Against a valuation multiple of 10x FY19F PE, we arrive at a lower TP of S\$0.86. Downgrade to HOLD, as UMS' prospective 7.4% yield should limit any further significant downside to share price.

**Where we differ:** We have assumed a larger discount to larger peers' 12x FY19F PE compared to consensus given its higher customer concentration risk vs peers.

**Potential catalysts:** Higher demand for semiconductor equipment, diversification away from key client, earnings-accretive M&As.

**Positive long-term demand drivers for key client AMAT's chip equipment augurs well for UMS.** Notwithstanding fluctuations in near-term operating performance – which are typical of semiconductor-related stocks, the vast application potential of chips is set to drive robust demand growth for semiconductor equipment over the medium-to-long term. This augurs well for UMS given its primary role in the manufacture of components for various semiconductor equipment and sub-assembly for Applied Materials's flagship Endura deposition system – especially given the successful extension of the Endura contract in early 2017.

### Valuation:

**Downgrade to HOLD with a lower TP of S\$0.86** on a valuation multiple of 10x FY19F PE (vs larger peers' 12x). Meanwhile, an attractive prospective yield of 7.4% is on offer.

### Key Risks to Our View:

**Key client risk.** Historically, c.90% of UMS's revenues on average can be attributed to Applied Materials. Disruptions to the relationship or weakness in Applied Materials's end-demand could significantly weigh on UMS's performance.

### At A Glance

Issued Capital (m shrs)	536
Mkt. Cap (S\$m/US\$m)	443 / 324
Major Shareholders (%)	
Andy Luong	20.1
Free Float (%)	79.9
3m Avg. Daily Val (US\$m)	3.1
ICB Industry : Industrials / Electronic & Electrical Equipment	

## WHAT'S NEW

## Offers prospective 7.4% yield ahead of recovery

Applied Materials' disappointing sales outlook suggests that UMS's sales performance could be impacted over the near term. During its recent 3Q18 results, AMAT gave a disappointing sales outlook, which could directly impact UMS's Endura business over the near term.

While a faster-than-expected ramp-up on its higher-margin Components segment could help offset weaker demand for Endura and defend its industry-leading margins, we choose to be more conservative on UMS's near-term sales outlook for now as it will likely take time before efforts to further cultivate this segment bear fruit.

But underlying demand drivers point toward a steady growth profile over the medium-to-long term. Near-term expectations aside, rosy demand forecasts for chips in attractive end-sectors such as automotive and IoT also bode well for semiconductor equipment companies' prospects over the medium-to-long term. SEMI (the global industry association serving the manufacturing supply chain for the electronics industry) projects that connectivity, data centres, communications, automotive, and advanced software will spur strong demand for semiconductors through 2025 as follows:

Applications	Semiconductor Value (US\$)		
	2017	2025F	CAGR (%)
IoT	\$16 bn	\$62 bn	6%
Automotive	\$32 bn	\$51 bn	18%

Source: SEMI

Applications	Market Size (US\$)		
	2017	2025F	CAGR (%)
Augmented Reality / Virtual Reality	\$4 bn	\$131 bn	55%
Artificial Intelligence	\$5 bn	\$50 bn	33%

Source: SEMI

## EARNINGS AND RECOMMENDATIONS

**Downgrade to HOLD with a lower TP of S\$0.86, mainly as we lower sales assumptions for FY18F-19F.** While UMS typically delivers a seasonally stronger second half, we believe that AMAT's weaker outlook guidance could spill over to UMS as soon as 3Q18 given short order lead times, which may result in a weaker 2H vs 1H18. As such, we now assume a 15%/4% decline in FY18F/FY19F sales vs 5% growth p.a. previously.

There are slightly higher gross margin assumptions of 55%/57% for FY18F/19F to reflect management's optimism over increasing contributions from the higher-margin Components segment in subsequent quarters. Overall, we lower FY18F/19F earnings by 9%/14% respectively and arrive at a lower TP of S\$0.86 (based on 10x FY19F earnings). Downgrade to HOLD.

**Meanwhile, a sustainable 6-Sct dividend (prospective 8% yield) is on offer.** UMS has been paying 6 Scts per share each year over the last five years, and at least 5 Scts per share historically. All else equal, we believe a 6-Sct dividend for FY18F is achievable for UMS given steady operating cash flows and net cash of >S\$20m (which translates into c.4 Scts per share) which can be used to support dividend payments in the event of fluctuations in operating performance.

## Quarterly / Interim Income Statement (S\$m)

FY Dec	2Q2017	1Q2018	2Q2018	% chg yoy	% chg qoq
Revenue	42.7	37.5	35.3	(17.4)	(5.9)
Cost of Goods Sold	(20.9)	(16.0)	(12.7)	(39.3)	(20.6)
<b>Gross Profit</b>	<b>21.8</b>	<b>21.5</b>	<b>22.6</b>	<b>3.5</b>	<b>5.0</b>
Other Oper. (Exp)/Inc	(8.1)	(8.3)	(8.2)	1.5	(1.1)
<b>Operating Profit</b>	<b>13.8</b>	<b>13.3</b>	<b>14.4</b>	<b>4.7</b>	<b>8.8</b>
Other Non Opg (Exp)/Inc	(1.2)	(1.1)	1.41	nm	nm
Associates & JV Inc	0.0	0.02	(0.1)	nm	nm
Net Interest (Exp)/Inc	0.0	(0.1)	(0.1)	nm	-
Exceptional Gain/(Loss)	0.0	0.0	0.0	-	-
<b>Pre-tax Profit</b>	<b>12.6</b>	<b>12.2</b>	<b>15.7</b>	<b>24.7</b>	<b>28.9</b>
Tax	(1.3)	(0.9)	(1.3)	1.2	45.5
Minority Interest	0.19	0.13	0.12	(38.1)	(9.3)
<b>Net Profit</b>	<b>11.5</b>	<b>11.4</b>	<b>14.5</b>	<b>26.2</b>	<b>27.2</b>
Net profit bef Except.	11.5	11.4	14.5	26.2	27.2
EBITDA	13.6	13.3	17.0	24.8	27.5
<b>Margins (%)</b>					
Gross Margins	51.1	57.4	64.0		
Opg Profit Margins	32.2	35.3	40.9		
Net Profit Margins	26.9	30.4	41.1		

Source of all data: Company, DBS Bank

## CRITICAL DATA POINTS TO WATCH

**Critical Factors**

**Higher fab equipment spending.** As procurement of semiconductor equipment tends to lag construction of new fabs/facilities by chipmakers and foundries by 12-18 months, we believe that the new construction of new 300mm fabs in 2015 and 2016 provides support for more robust growth in equipment spending in 2017 and 2018. The pick-up in key client Applied Materials's and UMS's orders in recent quarters also confirm this.

Similarly, SEMI also predicts that fab equipment spending will reach an industry all-time record of US\$60.1bn in 2018.

**Riding on Applied Materials's positive outlook.** As a long-standing manufacturing partner to Applied Materials in the manufacture of components for various semiconductor equipment, and as the main manufacturer and sub-assembler of Applied Materials's flagship Endura deposition system, UMS naturally benefits from the uplift in demand for Applied Materials's higher-tech wafer fabrication equipment.

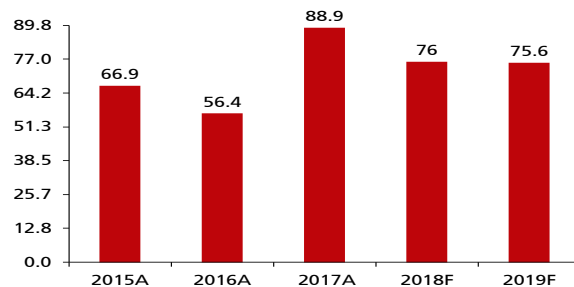
Benefitting from the current semiconductor upcycle and recovering strongly from the trough in FY16, UMS's earnings grew c.30% y-o-y to S\$52m in FY17 - and notwithstanding fluctuations in near-term performance, is set to grow further ahead as it ramps up on its higher-margin components business, and as cost and tax savings arising from its Penang shift kicks in.

**Strong cash flow generation underpins expectations of dividend of 6 Scts per share for FY18F.** Despite operating in a highly cyclical industry, the group's strengths lie in its stable cash flow generation (even after paying dividends). Coupled with the current uptick in orders, this allows the group to finance upcoming capex needs internally, while providing support for a 6-Sct dividend to be paid.

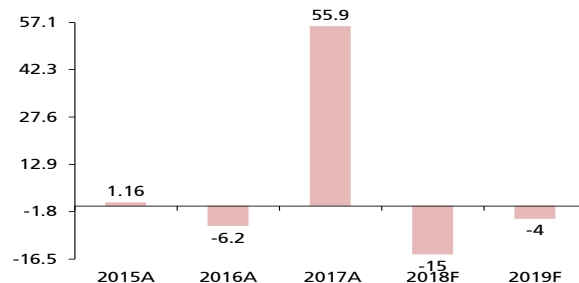
**In the longer term, UMS's diversification into other businesses could also bear fruit.** In 2017, UMS acquired a 51% stake in water and chemical engineering solutions company, Kalf Engineering. Kalf has secured seven projects worth approximately S\$13m, which is expected to contribute to the group's performance in FY18F.

In 2016, the group also diversified into aerospace components via a 10% stake in All Star Fortress Sdn Bhd (ASF). While we think that ASF is unlikely to be profitable within the next 2-3 years, risks inherent in this diversification remain low given the small initial investment. These investments should provide the group with alternate growth opportunities in the medium-to-long term, and provide diversification away from the cyclical semiconductor business.

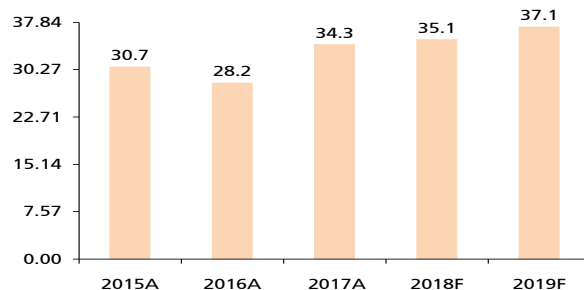
Gross Profit (\$\$ m)



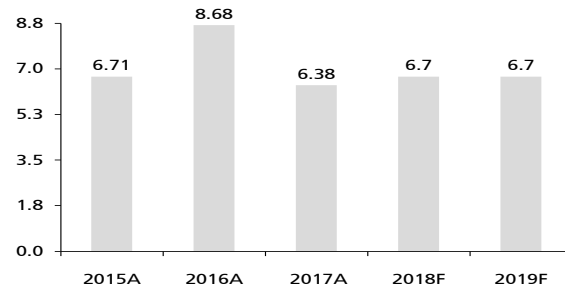
Revenue Growth (%)



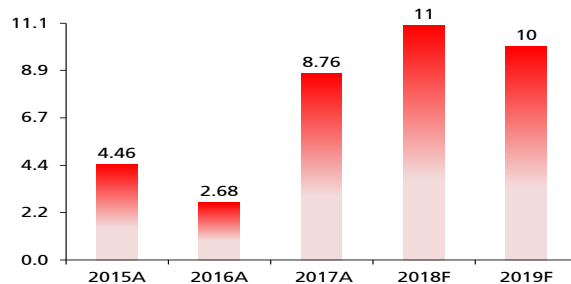
Operating Profit Margin (%)



Effective Tax Rate (%)

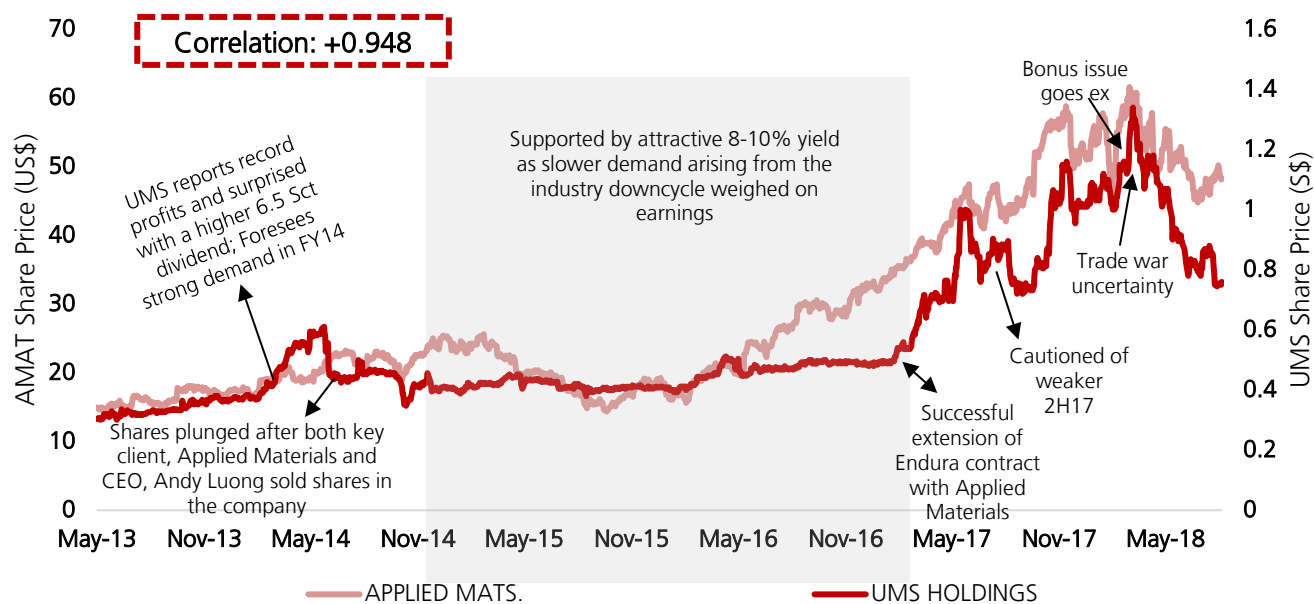


Capex (\$\$ m)



Source: Company, DBS Bank

**Appendix 1:** A look at Company's listed history – what drives its share price?



Source: DBS Bank, Bloomberg Finance L.P.

## UMS Holdings

### Balance Sheet:

**Healthy balance sheet.** UMS's net cash position remained healthy at S\$11.6m as at 30 June 2018, even after accounting for the S\$28.2m investment in JEP Holdings.

### Share Price Drivers:

**Acquisition of new clients.** As part of its strategy, UMS has also embarked on new customer acquisition efforts and is actively seeking sustainable, margin-accretive opportunities outside of the cyclical semiconductor industry.

If successful, this could accelerate earnings growth going forward.

**M&A opportunities.** Following its recent 70% stake acquisition in Starke, UMS continues to be on the lookout for diversification opportunities (outside of the semiconductor industry) with good long-term growth potential. If successful, these new avenues of growth could help drive further re-rating of the share price.

**Potential takeover target.** UMS has only one large shareholder, with a 20% stake. With the renewal of the Endura contract providing good earnings visibility, progress in growing its higher-margin Components business alongside Applied Materials, consistently strong cash flows and net cash position, we see UMS as an attractive takeover target.

### Key Risks:

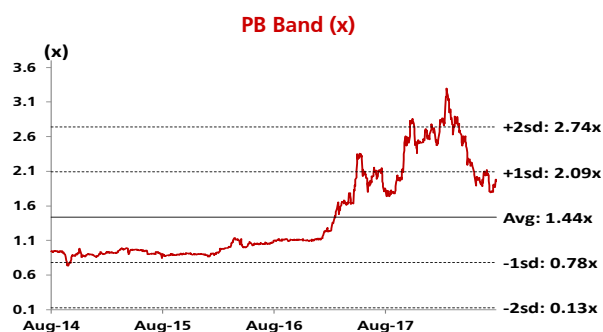
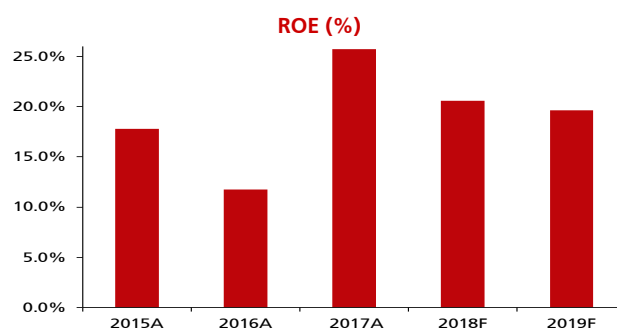
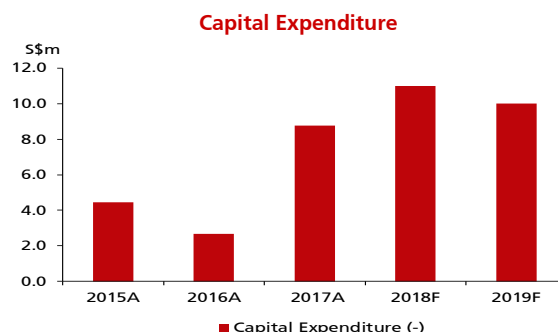
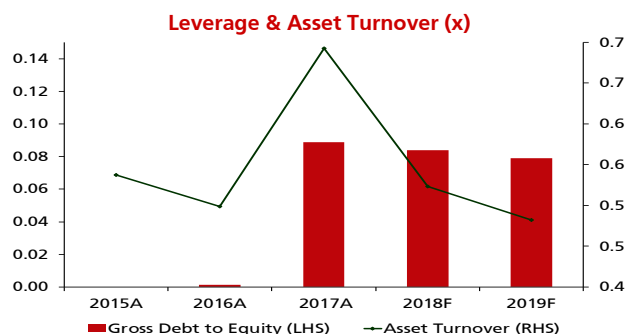
**Key client risk – Applied Materials.** UMS's performance is closely tied to that of Applied Materials. Management estimates that between 80% and 90% of UMS's revenues are attributable to Applied Materials.

Disruptions to the relationship (i.e. loss of market share) or weakness in Applied Materials's end-demand could significantly weigh on UMS's performance.

**Underlying demand for semiconductor manufacturing equipment.** As demand for semiconductor manufacturing equipment is largely driven by capex cycles of chipmakers and foundries, an extension of the life cycle of existing systems or slowdown in global economy could result in deferments in their planned capital investments.

### Company Background

UMS Holdings (UMSH SP) is an integrated OEM for front-end semiconductor equipment manufacturing, providing both component manufacturing and sub-assembly services, primarily to key client, Applied Materials.



Source: Company, DBS Bank

**Key Assumptions**

FY Dec	2015A	2016A	2017A	2018F	2019F
Gross Profit (\$\$ m)	66.9	56.4	88.9	76.0	75.6
Revenue Growth (%)	1.16	(6.2)	55.9	(15.0)	(4.0)
Operating Profit Margin	30.7	28.2	34.3	35.1	37.1
Effective Tax Rate (%)	6.71	8.68	6.38	6.70	6.70
Capex (\$\$ m)	4.46	2.68	8.76	11.0	10.0

**Income Statement (\$\$m)**

FY Dec	2015A	2016A	2017A	2018F	2019F
Revenue	111	104	162	138	133
Cost of Goods Sold	(44.2)	(47.8)	(73.6)	(62.2)	(57.0)
<b>Gross Profit</b>	<b>66.9</b>	<b>56.4</b>	<b>88.9</b>	<b>76.0</b>	<b>75.6</b>
Other Opng (Exp)/Inc	(32.8)	(27.0)	(33.2)	(27.5)	(26.4)
<b>Operating Profit</b>	<b>34.1</b>	<b>29.4</b>	<b>55.7</b>	<b>48.5</b>	<b>49.2</b>
Other Non Opg (Exp)/Inc	2.51	(4.7)	(0.4)	(0.4)	(0.4)
Associates & JV Inc	0.0	0.0	0.0	0.0	0.0
Net Interest (Exp)/Inc	0.13	0.15	0.0	0.48	0.52
Exceptional Gain/(Loss)	0.0	0.0	0.0	0.0	0.0
<b>Pre-tax Profit</b>	<b>36.8</b>	<b>24.7</b>	<b>55.2</b>	<b>48.5</b>	<b>49.3</b>
Tax	(2.5)	(2.1)	(3.5)	(3.3)	(3.3)
Minority Interest	0.0	0.0	0.32	0.32	0.33
Preference Dividend	0.0	0.0	0.0	0.0	0.0
<b>Net Profit</b>	<b>34.3</b>	<b>22.6</b>	<b>52.0</b>	<b>45.6</b>	<b>46.3</b>
Net Profit before Except.	34.3	22.6	52.0	45.6	46.3
EBITDA	44.1	30.0	59.6	55.5	56.5
<b>Growth</b>					
Revenue Gth (%)	1.2	(6.2)	55.9	(15.0)	(4.0)
EBITDA Gth (%)	24.5	(31.9)	98.4	(6.7)	1.7
Opg Profit Gth (%)	24.8	(14.0)	89.7	(13.0)	1.5
Net Profit Gth (Pre-ex) (%)	37.6	(34.1)	130.3	(12.3)	1.6
<b>Margins &amp; Ratio</b>					
Gross Margins (%)	60.2	54.1	54.7	55.0	57.0
Opg Profit Margin (%)	30.7	28.2	34.3	35.1	37.1
Net Profit Margin (%)	30.9	21.7	32.0	33.0	34.9
ROAE (%)	17.8	11.8	25.7	20.6	19.7
ROA (%)	16.6	10.8	22.2	17.3	16.8
ROCE (%)	17.7	11.7	24.2	18.9	18.2
Div Payout Ratio (%)	75.1	114.0	57.7	70.6	69.5
Net Interest Cover (x)	NM	NM	NM	NM	NM

Source: Company, DBS Bank

## Quarterly / Interim Income Statement (\$m)

FY Dec	2Q2017	3Q2017	4Q2017	1Q2018	2Q2018
Revenue	42.7	39.3	38.7	37.5	35.3
Cost of Goods Sold	(20.9)	(16.2)	(16.1)	(16.0)	(12.7)
<b>Gross Profit</b>	<b>21.8</b>	<b>23.1</b>	<b>22.5</b>	<b>21.5</b>	<b>22.6</b>
Other Oper. (Exp)/Inc	(8.1)	(7.9)	(9.3)	(8.3)	(8.2)
<b>Operating Profit</b>	<b>13.8</b>	<b>15.2</b>	<b>13.3</b>	<b>13.3</b>	<b>14.4</b>
Other Non Opg (Exp)/Inc	(1.2)	(0.4)	2.18	(1.1)	1.41
Associates & JV Inc	0.0	0.0	0.0	0.02	(0.1)
Net Interest (Exp)/Inc	0.0	0.0	0.0	(0.1)	(0.1)
Exceptional Gain/(Loss)	0.0	0.0	0.0	0.0	0.0
<b>Pre-tax Profit</b>	<b>12.6</b>	<b>14.9</b>	<b>15.4</b>	<b>12.2</b>	<b>15.7</b>
Tax	(1.3)	(1.5)	0.46	(0.9)	(1.3)
Minority Interest	0.19	0.16	0.0	0.13	0.12
<b>Net Profit</b>	<b>11.5</b>	<b>13.6</b>	<b>15.8</b>	<b>11.4</b>	<b>14.5</b>
Net profit bef Except.	11.5	13.6	15.8	11.4	14.5
EBITDA	13.6	15.9	16.5	13.3	17.0

## Growth

Revenue Gth (%)	2.3	(7.9)	(1.7)	(3.0)	(5.9)
EBITDA Gth (%)	0.2	16.4	3.6	(18.9)	27.5
Opg Profit Gth (%)	2.9	10.6	(13.0)	0.0	8.8
Net Profit Gth (Pre-ex) (%)	2.8	18.1	16.8	(28.0)	27.2

## Margins

Gross Margins (%)	51.1	58.8	58.3	57.4	64.0
Opg Profit Margins (%)	32.2	38.7	34.3	35.3	40.9
Net Profit Margins (%)	26.9	34.5	40.9	30.4	41.1

## Balance Sheet (\$m)

FY Dec	2015A	2016A	2017A	2018F	2019F
Net Fixed Assets	34.8	31.7	38.8	42.3	44.6
Invts in Associates & JVs	0.0	0.0	0.0	0.0	0.0
Other LT Assets	84.1	83.2	87.7	87.7	87.7
Cash & ST Invts	38.9	42.6	59.6	89.2	106
Inventory	37.4	31.7	49.6	30.7	25.0
Debtors	12.4	20.9	23.4	18.9	18.1
Other Current Assets	0.0	0.0	0.0	0.0	0.0
<b>Total Assets</b>	<b>208</b>	<b>210</b>	<b>259</b>	<b>269</b>	<b>281</b>
ST Debt	0.0	0.25	19.0	19.0	19.0
Creditor	9.76	16.6	18.1	14.6	13.4
Other Current Liab	1.98	2.21	3.29	3.25	3.30
LT Debt	0.0	0.0	0.0	0.0	0.0
Other LT Liabilities	1.42	1.68	4.99	4.99	4.99
Shareholder's Equity	194	189	215	229	243
Minority Interests	0.0	0.0	(1.3)	(1.6)	(2.0)
<b>Total Cap. &amp; Liab.</b>	<b>208</b>	<b>210</b>	<b>259</b>	<b>269</b>	<b>281</b>
Non-Cash Wkg. Capital	38.0	33.9	51.7	31.6	26.4
Net Cash/(Debt)	38.9	42.4	40.6	70.2	87.0
Debtors Turn (avg days)	41.5	58.4	49.8	55.9	50.9
Creditors Turn (avg days)	103.4	113.4	91.3	109.2	103.8
Inventory Turn (avg days)	351.0	297.5	214.4	268.0	205.9
Asset Turnover (x)	0.5	0.5	0.7	0.5	0.5
Current Ratio (x)	7.6	5.0	3.3	3.8	4.2
Quick Ratio (x)	4.4	3.3	2.1	2.9	3.5
Net Debt/Equity (X)	CASH	CASH	CASH	CASH	CASH
Net Debt/Equity ex MI (X)	CASH	CASH	CASH	CASH	CASH
Capex to Debt (%)	N/A	1,077.5	46.1	57.9	52.6
Z-Score (X)	17.3	11.4	7.8	7.8	7.7

Source: Company, DBS Bank



## Cash Flow Statement (\$m)

FY Dec	2015A	2016A	2017A	2018F	2019F
Pre-Tax Profit	36.8	24.7	55.2	48.5	49.3
Dep. & Amort.	7.43	5.43	4.32	7.48	7.69
Tax Paid	(2.8)	(2.7)	(2.1)	(3.3)	(3.3)
Assoc. & JV Inc/(loss)	0.0	0.05	0.04	0.0	0.0
Chg in Wkg.Cap.	(4.9)	0.53	(18.4)	20.1	5.20
Other Operating CF	(0.7)	5.79	0.02	0.0	0.0
<b>Net Operating CF</b>	<b>35.8</b>	<b>33.9</b>	<b>39.2</b>	<b>72.9</b>	<b>58.9</b>
Capital Exp.(net)	(4.5)	(2.7)	(8.8)	(11.0)	(10.0)
Other Invt.(net)	0.0	0.0	0.0	0.0	0.0
Invt in Assoc. & JV	0.0	(0.9)	(0.1)	0.0	0.0
Div from Assoc & JV	0.0	0.0	0.0	0.0	0.0
Other Investing CF	0.12	0.14	(2.1)	0.0	0.0
<b>Net Investing CF</b>	<b>(4.3)</b>	<b>(3.4)</b>	<b>(11.0)</b>	<b>(11.0)</b>	<b>(10.0)</b>
Div Paid	(25.7)	(25.7)	(26.8)	(32.2)	(32.2)
Chg in Gross Debt	0.0	0.25	18.8	0.0	0.0
Capital Issues	0.0	0.0	0.0	0.0	0.0
Other Financing CF	0.25	0.0	(0.4)	0.0	0.0
<b>Net Financing CF</b>	<b>(25.5)</b>	<b>(25.5)</b>	<b>(8.5)</b>	<b>(32.2)</b>	<b>(32.2)</b>
Currency Adjustments	(0.5)	(1.3)	(2.8)	0.0	0.0
Chg in Cash	5.39	3.69	17.0	29.7	16.8
Opg CFPS (\$ cts)	9.48	7.77	10.7	9.83	10.0
Free CFPS (\$ cts)	7.30	7.27	5.67	11.5	9.12

Source: Company, DBS Bank

## Target Price &amp; Ratings History



Note: Share price and Target price are adjusted for corporate actions.

Source: DBS Bank

Analyst: Carmen Tay

DBS Bank recommendations are based on Absolute Total Return\* Rating system, defined as follows:

**STRONG BUY** (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)

**BUY** (>15% total return over the next 12 months for small caps, >10% for large caps)

**HOLD** (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)

**FULLY VALUED** (negative total return i.e. > -10% over the next 12 months)

**SELL** (negative total return of > -20% over the next 3 months, with identifiable catalysts within this time frame)

*Share price appreciation + dividends*

Completed Date: 27 Aug 2018 18:37:30 (SGT)

Dissemination Date: 27 Aug 2018 18:56:11 (SGT)

Sources for all charts and tables are DBS Bank unless otherwise specified.

#### GENERAL DISCLOSURE/DISCLAIMER

**This report is prepared by DBS Bank Ltd.** This report is solely intended for the clients of DBS Bank Ltd, its respective connected and associated corporations and affiliates only and no part of this document may be (i) copied, photocopied or duplicated in any form or by any means or (ii) redistributed without the prior written consent of DBS Bank Ltd.

The research set out in this report is based on information obtained from sources believed to be reliable, but we (which collectively refers to DBS Bank Ltd, its respective connected and associated corporations, affiliates and their respective directors, officers, employees and agents (collectively, the "DBS Group") have not conducted due diligence on any of the companies, verified any information or sources or taken into account any other factors which we may consider to be relevant or appropriate in preparing the research. Accordingly, we do not make any representation or warranty as to the accuracy, completeness or correctness of the research set out in this report. Opinions expressed are subject to change without notice. This research is prepared for general circulation. Any recommendation contained in this document does not have regard to the specific investment objectives, financial situation and the particular needs of any specific addressee. This document is for the information of addressees only and is not to be taken in substitution for the exercise of judgement by addressees, who should obtain separate independent legal or financial advice. The DBS Group accepts no liability whatsoever for any direct, indirect and/or consequential loss (including any claims for loss of profit) arising from any use of and/or reliance upon this document and/or further communication given in relation to this document. This document is not to be construed as an offer or a solicitation of an offer to buy or sell any securities. The DBS Group, along with its affiliates and/or persons associated with any of them may from time to time have interests in the securities mentioned in this document. The DBS Group, may have positions in, and may effect transactions in securities mentioned herein and may also perform or seek to perform broking, investment banking and other banking services for these companies.

Any valuations, opinions, estimates, forecasts, ratings or risk assessments herein constitutes a judgment as of the date of this report, and there can be no assurance that future results or events will be consistent with any such valuations, opinions, estimates, forecasts, ratings or risk assessments. The information in this document is subject to change without notice, its accuracy is not guaranteed, it may be incomplete or condensed, it may not contain all material information concerning the company (or companies) referred to in this report and the DBS Group is under no obligation to update the information in this report.

This publication has not been reviewed or authorized by any regulatory authority in Singapore, Hong Kong or elsewhere. There is no planned schedule or frequency for updating research publication relating to any issuer.

The valuations, opinions, estimates, forecasts, ratings or risk assessments described in this report were based upon a number of estimates and assumptions and are inherently subject to significant uncertainties and contingencies. It can be expected that one or more of the estimates on which the valuations, opinions, estimates, forecasts, ratings or risk assessments were based will not materialize or will vary significantly from actual results. Therefore, the inclusion of the valuations, opinions, estimates, forecasts, ratings or risk assessments described herein IS NOT TO BE RELIED UPON as a representation and/or warranty by the DBS Group (and/or any persons associated with the aforesaid entities), that:

- (a) such valuations, opinions, estimates, forecasts, ratings or risk assessments or their underlying assumptions will be achieved, and
- (b) there is any assurance that future results or events will be consistent with any such valuations, opinions, estimates, forecasts, ratings or risk assessments stated therein.

Please contact the primary analyst for valuation methodologies and assumptions associated with the covered companies or price targets.

Any assumptions made in this report that refers to commodities, are for the purposes of making forecasts for the company (or companies) mentioned herein. They are not to be construed as recommendations to trade in the physical commodity or in the futures contract relating to the commodity referred to in this report.

DBSVUSA, a US-registered broker-dealer, does not have its own investment banking or research department, has not participated in any public offering of securities as a manager or co-manager or in any other investment banking transaction in the past twelve months and does not engage in market-making.

#### ANALYST CERTIFICATION

The research analyst(s) primarily responsible for the content of this research report, in part or in whole, certifies that the views about the companies and their securities expressed in this report accurately reflect his/her personal views. The analyst(s) also certifies that no part of his/her compensation was, is, or will be, directly or indirectly, related to specific recommendations or views expressed in the report. The research analyst (s) primarily responsible for the content of this research report, in part or in whole, certifies that he or his associate<sup>1</sup> does not serve as an officer of the issuer or the new listing applicant (which includes in the case of a real estate investment trust, an officer of the management company of the real estate investment trust; and in the case of any other entity, an officer or its equivalent counterparty of the entity who is responsible for the management of the issuer or the new listing applicant) and the research analyst(s) primarily responsible for the content of this research report or his associate does not have financial interests<sup>2</sup> in relation to an issuer or a new listing applicant that the analyst reviews. DBS Group has procedures in place to eliminate, avoid and manage any potential conflicts of interests that may arise in connection with the production of research reports. The research analyst(s) responsible for this report operates as part of a separate and independent team to the investment banking function of the DBS Group and procedures are in place to ensure that confidential information held by either the research or investment banking function is handled appropriately. There is no direct link of DBS Group's compensation to any specific investment banking function of the DBS Group.

#### COMPANY-SPECIFIC / REGULATORY DISCLOSURES

1. DBS Bank Ltd, DBS HK, DBS Vickers Securities (Singapore) Pte Ltd ("DBSVS") or their subsidiaries and/or other affiliates do not have a proprietary position in the securities recommended in this report as of 31 Jul 2018.
2. Neither DBS Bank Ltd nor DBS HK market makes in equity securities of the issuer(s) or company(ies) mentioned in this Research Report.

#### Compensation for investment banking services:

3. DBSVUSA does not have its own investment banking or research department, nor has it participated in any public offering of securities as a manager or co-manager or in any other investment banking transaction in the past twelve months. Any US persons wishing to obtain further information, including any clarification on disclosures in this disclaimer, or to effect a transaction in any security discussed in this document should contact DBSVUSA exclusively.


#### Disclosure of previous investment recommendation produced:

4. DBS Bank Ltd, DBS Vickers Securities (Singapore) Pte Ltd ("DBSVS"), their subsidiaries and/or other affiliates may have published other investment recommendations in respect of the same securities / instruments recommended in this research report during the preceding 12 months. Please contact the primary analyst listed in the first page of this report to view previous investment recommendations published by DBS Bank Ltd, DBS Vickers Securities (Singapore) Pte Ltd ("DBSVS"), their subsidiaries and/or other affiliates in the preceding 12 months.

<sup>1</sup> An associate is defined as (i) the spouse, or any minor child (natural or adopted) or minor step-child, of the analyst; (ii) the trustee of a trust of which the analyst, his spouse, minor child (natural or adopted) or minor step-child, is a beneficiary or discretionary object; or (iii) another person accustomed or obliged to act in accordance with the directions or instructions of the analyst.

<sup>2</sup> Financial interest is defined as interests that are commonly known financial interest, such as investment in the securities in respect of an issuer or a new listing applicant, or financial accommodation arrangement between the issuer or the new listing applicant and the firm or analysis. This term does not include commercial lending conducted at arm's length, or investments in any collective investment scheme other than an issuer or new listing applicant notwithstanding the fact that the scheme has investments in securities in respect of an issuer or a new listing applicant.

## RESTRICTIONS ON DISTRIBUTION

<b>General</b>	This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation.
<b>Australia</b>	<p>This report is being distributed in Australia by DBS Bank Ltd. ("DBS") or DBS Vickers Securities (Singapore) Pte Ltd ("DBSVS"). DBS holds Australian Financial Services Licence no. 475946.</p> <p>DBSVS is exempted from the requirement to hold an Australian Financial Services Licence under the Corporation Act 2001 ("CA") in respect of financial services provided to the recipients. DBSVS is regulated by the Monetary Authority of Singapore under the laws of Singapore, which differ from Australian laws.</p> <p>Distribution of this report is intended only for "wholesale investors" within the meaning of the CA.</p>
<b>Hong Kong</b>	<p>This report has been prepared by a person(s) who is not licensed by the Hong Kong Securities and Futures Commission to carry on the regulated activity of advising on securities in Hong Kong pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong). This report is being distributed in Hong Kong and is attributable to DBS Bank (Hong Kong) Limited, a registered institution registered with the Hong Kong Securities and Futures Commission to carry on the regulated activity of advising on securities pursuant to the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong).</p> <p>For any query regarding the materials herein, please contact Carol Wu (Reg No. AH8283) at equityresearch@db.com</p>
<b>Indonesia</b>	This report is being distributed in Indonesia by PT DBS Vickers Sekuritas Indonesia.
<b>Malaysia</b>	<p>This report is distributed in Malaysia by AllianceDBS Research Sdn Bhd ("ADBSR"). Recipients of this report, received from ADBSR are to contact the undersigned at 603-2604 3333 in respect of any matters arising from or in connection with this report. In addition to the General Disclosure/Disclaimer found at the preceding page, recipients of this report are advised that ADBSR (the preparer of this report), its holding company Alliance Investment Bank Berhad, their respective connected and associated corporations, affiliates, their directors, officers, employees, agents and parties related or associated with any of them may have positions in, and may effect transactions in the securities mentioned herein and may also perform or seek to perform broking, investment banking/corporate advisory and other services for the subject companies. They may also have received compensation and/or seek to obtain compensation for broking, investment banking/corporate advisory and other services from the subject companies.</p> <p style="text-align: right;">   Wong Ming Tek, Executive Director, ADBSR </p>
<b>Singapore</b>	This report is distributed in Singapore by DBS Bank Ltd (Company Regn. No. 196800306E) or DBSVS (Company Regn No. 198600294G), both of which are Exempt Financial Advisers as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. DBS Bank Ltd and/or DBSVS, may distribute reports produced by its respective foreign entities, affiliates or other foreign research houses pursuant to an arrangement under Regulation 32C of the Financial Advisers Regulations. Where the report is distributed in Singapore to a person who is not an Accredited Investor, Expert Investor or an Institutional Investor, DBS Bank Ltd accepts legal responsibility for the contents of the report to such persons only to the extent required by law. Singapore recipients should contact DBS Bank Ltd at 6327 2288 for matters arising from, or in connection with the report.
<b>Thailand</b>	This report is being distributed in Thailand by DBS Vickers Securities (Thailand) Co Ltd.

<b>United Kingdom</b>	<p>This report is produced by DBS Bank Ltd which is regulated by the Monetary Authority of Singapore.</p> <p>This report is disseminated in the United Kingdom by DBS Vickers Securities (UK) Ltd, ("DBSVUK"). DBSVUK is authorised and regulated by the Financial Conduct Authority in the United Kingdom.</p> <p>In respect of the United Kingdom, this report is solely intended for the clients of DBSVUK, its respective connected and associated corporations and affiliates only and no part of this document may be (i) copied, photocopied or duplicated in any form or by any means or (ii) redistributed without the prior written consent of DBSVUK. This communication is directed at persons having professional experience in matters relating to investments. Any investment activity following from this communication will only be engaged in with such persons. Persons who do not have professional experience in matters relating to investments should not rely on this communication.</p>
<b>Dubai International Financial Centre</b>	<p>This research report is being distributed by DBS Bank Ltd., (DIFC Branch) having its office at PO Box 506538, 3rd Floor, Building 3, East Wing, Gate Precinct, Dubai International Financial Centre (DIFC), Dubai, United Arab Emirates. DBS Bank Ltd., (DIFC Branch) is regulated by The Dubai Financial Services Authority. This research report is intended only for professional clients (as defined in the DFSA rulebook) and no other person may act upon it.</p>
<b>United Arab Emirates</b>	<p>This report is provided by DBS Bank Ltd (Company Regn. No. 196800306E) which is an Exempt Financial Adviser as defined in the Financial Advisers Act and regulated by the Monetary Authority of Singapore. This report is for information purposes only and should not be relied upon or acted on by the recipient or considered as a solicitation or inducement to buy or sell any financial product. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situation, or needs of individual clients. You should contact your relationship manager or investment adviser if you need advice on the merits of buying, selling or holding a particular investment. You should note that the information in this report may be out of date and it is not represented or warranted to be accurate, timely or complete. This report or any portion thereof may not be reprinted, sold or redistributed without our written consent.</p>
<b>United States</b>	<p>This report was prepared by DBS Bank Ltd. DBSVUSA did not participate in its preparation. The research analyst(s) named on this report are not registered as research analysts with FINRA and are not associated persons of DBSVUSA. The research analyst(s) are not subject to FINRA Rule 2241 restrictions on analyst compensation, communications with a subject company, public appearances and trading securities held by a research analyst. This report is being distributed in the United States by DBSVUSA, which accepts responsibility for its contents. This report may only be distributed to Major U.S. Institutional Investors (as defined in SEC Rule 15a-6) and to such other institutional investors and qualified persons as DBSVUSA may authorize. Any U.S. person receiving this report who wishes to effect transactions in any securities referred to herein should contact DBSVUSA directly and not its affiliate.</p>
<b>Other jurisdictions</b>	<p>In any other jurisdictions, except if otherwise restricted by laws or regulations, this report is intended only for qualified, professional, institutional or sophisticated investors as defined in the laws and regulations of such jurisdictions.</p>

**DBS Regional Research Offices**

---

**HONG KONG**

**DBS Bank (Hong Kong) Limited**

Contact: Carol Wu  
18th Floor Man Yee Building  
68 Des Voeux Road Central  
Central, Hong Kong  
Tel: 65 6878 8888  
Fax: 65 65353 418  
e-mail: equityresearch@dbs.com  
Participant of the Stock Exchange of Hong Kong

**MALAYSIA**

**AllianceDBS Research Sdn Bhd**

Contact: Wong Ming Tek (128540 U)  
19th Floor, Menara Multi-Purpose,  
Capital Square,  
8 Jalan Munshi Abdullah 50100  
Kuala Lumpur, Malaysia.  
Tel.: 603 2604 3333  
Fax: 603 2604 3921  
e-mail: general@alliancedbs.com

**SINGAPORE**

**DBS Bank Ltd**

Contact: Janice Chua  
12 Marina Boulevard,  
Marina Bay Financial Centre Tower 3  
Singapore 018982  
Tel: 65 6878 8888  
Fax: 65 65353 418  
e-mail: equityresearch@dbs.com  
Company Regn. No. 196800306E

**INDONESIA**

**PT DBS Vickers Sekuritas (Indonesia)**

Contact: Maynard Priajaya Arif  
DBS Bank Tower  
Ciputra World 1, 32/F  
Jl. Prof. Dr. Satrio Kav. 3-5  
Jakarta 12940, Indonesia  
Tel: 62 21 3003 4900  
Fax: 6221 3003 4943  
e-mail: research@id.dbsvickers.com

**THAILAND**

**DBS Vickers Securities (Thailand) Co Ltd**

Contact: Chanpen Sirithanarattanakul  
989 Siam Piwat Tower Building,  
9th, 14th-15th Floor  
Rama 1 Road, Pathumwan,  
Bangkok Thailand 10330  
Tel. 66 2 857 7831  
Fax: 66 2 658 1269  
e-mail: research@th.dbs.com  
Company Regn. No 0105539127012  
Securities and Exchange Commission, Thailand