

## Expecting growth to continue despite MBU headwinds

Detection Technology will report Q3 earnings this Friday, October 25th. We'll be looking for commentary regarding the market outlook and possible effects of trade politics, with special focus on the extent of the slowdown in medical imaging market growth and the effects of the ramp-down of one of DT's key medical customer's product in H2. Despite some short-term headwinds, we remain positive to the investment case. Our BUY rating and target price of EUR 23.5 remain intact ahead of Q3.

### Expecting strong growth in SBU, MBU softness in turn

While the security imaging market is experiencing strong demand due to increase in Chinese investments and increasing CT investments related to new EU and US airport standards, DT noted in its Q2 report that it expects a temporary slowdown in medical imaging market growth. DT has guided for Q3 sales to grow above 10%, with SBU net sales growing and MBU sales decreasing. For Q3, we estimate SBU growing 37% and MBU declining 13% y/y, with total Q3 net sales growing 13.6% y/y to 27.9 MEUR (27.6 MEUR cons). Our Q3 EBIT estimate is 4.9 MEUR (5.2 MEUR cons) compared to 5.1 MEUR in Q3'18.

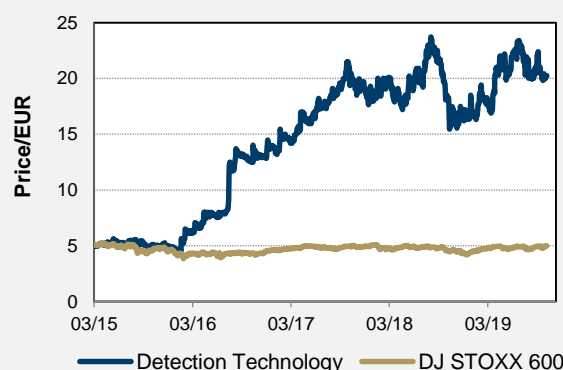
### Flat EBIT this year, but growth story continues

For full year 2019E, we expect net sales to grow 14% to 107 MEUR driven by SBU's return to growth of 28% after a weaker 2018. We expect '19E MBU net sales growth to decline 7.6% due to the temporary slowdown in customer demand and the ramp-down of key customer's product in H2. We expect '19E EBIT to be at last year's level due to increase in R&D spending, increasing share of SBU sales affecting the mix, as well as increased pricing competition in both segments.

### BUY rating and TP of 23.5 euros maintained ahead of Q3

Despite the short visibility and trade politics being unpredictable, we see investment case intact due to strong market drivers, especially in China, as well as DT's compelling strategy and execution capabilities. Our estimates, as well as our BUY rating and target price of 23.5 euros remain unchanged ahead of the Q3 report.

Rating BUY



Share price, EUR (Last trading day's closing price) 20.25  
Target price, EUR 23.5

Latest change in 04-Feb-19  
Latest report on company 05-Aug-19  
Research paid by issuer: YES  
No. of shares outstanding, 14,375  
No. of shares fully diluted, 14,875  
Market cap, EURm 291  
Free float, % -  
Exchange rate -  
Reuters code DETEC.HE  
Bloomberg code DETEC FH  
Average daily volume, -  
Next interim report 25-Oct-19  
Web site <http://www.deetee.com/investors/>

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BUY HOLD SELL

## KEY FIGURES

	Sales EURm	EBIT EURm	EBIT %	FCF EURm	EPS EUR	P/E (x)	EV/Sales (x)	EV/EBIT (x)	FCF yield %	DPS EUR
2017	89.0	19.9	22.4%	16.4	1.09	16.5	2.6	11.5	6.6	0.35
2018	93.9	18.5	19.7%	1.6	1.03	15.1	2.2	11.1	0.7	0.38
2019E	106.7	18.9	17.7%	13.9	1.02	19.9	2.5	14.0	4.8	0.38
2020E	122.0	23.1	18.9%	14.5	1.27	15.9	2.1	11.1	5.0	0.47
2021E	139.3	26.5	19.0%	15.8	1.47	13.8	1.8	9.3	5.4	0.59
Market cap, EURm	291		Gearing 2019E, %			-44.2	CAGR EPS 2018-21, %		12.5	
Net debt 2019E, EURm	-27		Price/book 2019E			4.8	CAGR sales 2018-21, %		14.1	
Enterprise value, EURm	264		Dividend yield 2019E, %			1.9	ROE 2019E, %		26.2	
Total assets 2019E, EURm	83		Tax rate 2019E, %			18.4	ROCE 2019E, %		31.2	
Goodwill 2019E, EURm	0		Equity ratio 2019E, %			73.5	PEG, P/E 19/CAGR		1.4	

## INTERIM FIGURES

EVLI ESTIMATES, EURm	2018Q1	2018Q2	2018Q3	2018Q4	2018	2019Q1	2019Q2	2019Q3E	2019Q4E	2019E	2020E	2021E
Net sales	19.3	24.4	24.6	25.6	93.9	23.1	27.5	27.9	28.2	106.7	122.0	139.3
EBITDA	4.3	5.9	5.7	5.0	20.9	4.4	5.5	5.5	6.4	21.9	25.6	29.3
<i>EBITDA margin (%)</i>	<i>22.3</i>	<i>24.3</i>	<i>23.1</i>	<i>19.5</i>	<i>22.3</i>	<i>19.2</i>	<i>20.0</i>	<i>19.6</i>	<i>22.8</i>	<i>20.5</i>	<i>21.0</i>	<i>21.0</i>
EBIT	3.7	5.3	5.1	4.4	18.5	3.9	4.8	4.9	5.4	18.9	23.1	26.5
<i>EBIT margin (%)</i>	<i>19.2</i>	<i>21.7</i>	<i>20.7</i>	<i>17.3</i>	<i>19.7</i>	<i>16.7</i>	<i>17.5</i>	<i>17.5</i>	<i>19.0</i>	<i>17.7</i>	<i>18.9</i>	<i>19.0</i>
Net financial items	-0.3	0.2	-0.1	0.2	-0.1	0.0	-0.7	-0.1	-0.1	-1.0	-0.2	0.0
Pre-tax profit	3.4	5.5	5.0	4.6	18.4	3.9	4.2	4.7	5.2	18.0	22.9	26.4
Tax	-0.5	-1.1	-0.5	-1.5	-3.6	-0.3	-0.9	-1.0	-1.0	-3.3	-4.6	-5.3
<i>Tax rate (%)</i>	<i>14.3</i>	<i>20.6</i>	<i>9.6</i>	<i>32.3</i>	<i>19.4</i>	<i>9.1</i>	<i>22.9</i>	<i>21.1</i>	<i>19.2</i>	<i>18.4</i>	<i>20.0</i>	<i>20.0</i>
Net profit	2.9	4.4	4.5	3.1	14.9	3.5	3.2	3.7	4.2	14.7	18.3	21.2
EPS	0.20	0.31	0.31	0.22	1.03	0.24	0.22	0.26	0.29	1.02	1.27	1.47
EPS adjusted (diluted no. of shares)	0.20	0.30	0.30	0.21	1.00	0.24	0.22	0.25	0.28	0.99	1.23	1.42
Dividend per share	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.38	0.47	0.59
<b>SALES, EURm</b>												
MBU	7.5	9.2	11.5	10.1	38.3	8.6	8.1	10.0	8.7	35.4	40.8	46.9
SBU	11.8	15.2	13.1	15.5	55.6	14.5	19.4	17.9	19.5	71.3	81.3	92.4
Total	19.3	24.4	24.6	25.6	93.9	23.1	27.5	27.9	28.2	106.7	122.0	139.3
<b>SALES GROWTH, Y/Y %</b>												
<i>MBU</i>	<i>10.0</i>	<i>26.3</i>	<i>29.2</i>	<i>24.7</i>	<i>23.2</i>	<i>15.0</i>	<i>-12.1</i>	<i>-13.0</i>	<i>-13.9</i>	<i>-7.6</i>	<i>15.2</i>	<i>15.0</i>
<i>SBU</i>	<i>-2.5</i>	<i>16.0</i>	<i>-1.5</i>	<i>-20.1</i>	<i>-4.0</i>	<i>22.9</i>	<i>27.6</i>	<i>36.9</i>	<i>25.8</i>	<i>28.3</i>	<i>13.9</i>	<i>13.8</i>
<i>Total</i>	<i>2.0</i>	<i>19.7</i>	<i>10.8</i>	<i>-6.9</i>	<i>5.5</i>	<i>19.8</i>	<i>12.6</i>	<i>13.6</i>	<i>10.2</i>	<i>13.7</i>	<i>14.3</i>	<i>14.2</i>
<b>EBIT, EURm</b>												
Total	3.7	5.3	5.1	4.4	18.5	3.9	4.8	4.9	5.4	18.9	23.1	26.5
<b>EBIT margin, %</b>												
<i>Total</i>	<i>19.2</i>	<i>21.7</i>	<i>20.7</i>	<i>17.3</i>	<i>19.7</i>	<i>16.7</i>	<i>17.5</i>	<i>17.5</i>	<i>19.0</i>	<i>17.7</i>	<i>18.9</i>	<i>19.0</i>

VALUATION RESULTS	BASE CASE DETAILS	VALUATION ASSUMPTIONS	ASSUMPTIONS FOR WACC
Current share price	20.25 PV of Free Cash Flow	126 Long-term growth, %	2.5 Risk-free interest rate, %
DCF share value	23.07 PV of Horizon value	193 WACC, %	8.5 Market risk premium, %
Share price potential, %	13.9 Unconsolidated equity	0 Spread, %	0.0 Debt risk premium, %
Maximum value	23.1 Marketable securities	22 Minimum WACC, %	8.5 Equity beta coefficient
Minimum value	23.1 Debt - dividend	-10 Maximum WACC, %	8.5 Target debt ratio, %
Horizon value, %	60.5 Value of stock	332 Nr of shares, Mn	14.4 Effective tax rate, %

DCF valuation, EURm	2018	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	Horizon
Net sales	94	107	122	139	159	168	177	184	189	195	200	205
<i>Sales growth, %</i>	<i>5.5</i>	<i>13.7</i>	<i>14.3</i>	<i>14.2</i>	<i>14.0</i>	<i>6.0</i>	<i>5.0</i>	<i>4.0</i>	<i>3.0</i>	<i>3.0</i>	<i>2.5</i>	<i>2.5</i>
Operating income (EBIT)	19	19	23	26	27	27	28	29	30	31	32	33
<i>Operating income margin, %</i>	<i>19.7</i>	<i>17.7</i>	<i>18.9</i>	<i>19.0</i>	<i>17.0</i>	<i>16.0</i>	<i>16.0</i>	<i>16.0</i>	<i>16.0</i>	<i>16.0</i>	<i>16.0</i>	<i>16.0</i>
+ Depreciation+amort.	2	3	3	3	4	4	4	4	5	5	5	
EBITDA	21	22	26	29	31	31	32	34	35	36	37	
- Paid taxes	-4	-3	-5	-5	-5	-5	-6	-6	-6	-6	-6	
- Change in NWC	-10	1	-3	-4	-4	-2	-2	-2	-1	-1	-1	
<i>NWC / Sales, %</i>	<i>25.9</i>	<i>21.8</i>	<i>21.9</i>	<i>21.9</i>	<i>21.9</i>	<i>21.9</i>	<i>21.9</i>	<i>21.9</i>	<i>21.9</i>	<i>21.9</i>	<i>21.9</i>	
+ Change in other liabs	0	0	0	0	0	0	0	0	0	0	0	
- Operative CAPEX	-5	-5	-3	-4	-6	-5	-5	-5	-5	-5	-5	
<i>opCAPEX / Sales, %</i>	<i>5.6</i>	<i>4.4</i>	<i>2.5</i>	<i>3.1</i>	<i>3.5</i>	<i>3.1</i>	<i>2.8</i>	<i>2.7</i>	<i>2.7</i>	<i>2.7</i>	<i>2.7</i>	
- Acquisitions	0	0	0	0	0	0	0	0	0	0	0	
+ Divestments	0	0	0	0	0	0	0	0	0	0	0	
- Other items	0	0	0	0	0	0	0	0	0	0	0	
= FCFF	2	15	15	16	16	19	20	21	23	23	24	414
= Discounted FCFF		14	13	13	12	13	13	13	12	12	11	193
= DFCF min WACC		14	13	13	12	13	13	13	12	12	11	193
= DFCF max WACC		14	13	13	12	13	13	13	12	12	11	193

INCOME STATEMENT, EURm	2014	2015	2016	2017	2018	2019E	2020E	2021E
Sales	33.1	42.8	75.5	89.0	93.9	106.7	122.0	139.3
<i>Sales growth (%)</i>	<i>8.9</i>	<i>29.2</i>	<i>76.5</i>	<i>17.9</i>	<i>5.5</i>	<i>13.7</i>	<i>14.3</i>	<i>14.2</i>
EBITDA	4.8	5.8	17.3	22.1	20.9	21.9	25.6	29.3
<i>EBITDA margin (%)</i>	<i>14.6</i>	<i>13.4</i>	<i>22.9</i>	<i>24.9</i>	<i>22.3</i>	<i>20.5</i>	<i>21.0</i>	<i>21.0</i>
Depreciation	-0.7	-1.3	-2.5	-2.2	-2.4	-2.9	-2.5	-2.8
EBITA	4.1	4.5	14.8	19.9	18.5	18.9	23.1	26.5
Goodwill amortization / writedown	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	4.1	4.5	14.8	19.9	18.5	18.9	23.1	26.5
<i>EBIT margin (%)</i>	<i>12.4</i>	<i>10.5</i>	<i>19.6</i>	<i>22.4</i>	<i>19.7</i>	<i>17.7</i>	<i>18.9</i>	<i>19.0</i>
Reported EBIT	3.1	3.4	14.8	19.9	18.5	18.9	23.1	26.5
<i>EBIT margin (reported) (%)</i>	<i>9.4</i>	<i>8.0</i>	<i>19.6</i>	<i>22.4</i>	<i>19.7</i>	<i>17.7</i>	<i>18.9</i>	<i>19.0</i>
Net financials	-0.3	-2.4	-0.7	-0.5	-0.1	-1.0	-0.2	0.0
Pre-tax profit	3.8	2.1	14.1	19.4	18.4	18.0	22.9	26.4
Taxes	0.0	-0.1	-3.2	-4.2	-3.6	-3.3	-4.6	-5.3
Minority shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net profit	2.8	0.9	10.9	15.2	14.9	14.7	18.3	21.2
Cash NRIs	-1.0	-1.1	0.0	0.0	0.0	0.0	0.0	0.0
Non-cash NRIs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>BALANCE SHEET, EURm</b>								
Assets								
Fixed assets	4	7	6	6	9	11	11	13
Goodwill	0	0	0	0	0	0	0	0
Right of use assets	0	0	0	0	0	0	0	0
Inventory	6	7	11	9	13	15	17	20
Receivables	7	14	22	21	27	26	29	33
Liquid funds	3	7	16	27	22	32	37	45
Total assets	20	35	54	62	71	83	94	110
Liabilities								
Shareholder's equity	1	21	31	42	51	61	73	88
Minority interest	0	0	0	0	0	0	0	0
Convertibles	0	0	0	0	0	0	0	0
Lease liabilities	0	0	0	0	0	0	0	0
Deferred taxes	0	0	0	0	0	0	0	0
Interest bearing debt	11	1	7	5	4	5	1	0
Non-interest bearing current liabilities	7	11	14	15	15	17	20	22
Other interest-free debt	1	2	3	1	0	0	0	0
Total liabilities	20	35	54	62	71	83	94	110
<b>CASH FLOW, EURm</b>								
+ EBITDA	5	6	17	22	21	22	26	29
- Net financial items	-1	4	8	11	0	-1	0	0
- Taxes	0	0	-1	-3	-4	-3	-5	-5
- Increase in Net Working Capital	0	-2	-11	1	-10	1	-3	-4
+/- Other	-1	-8	-9	-12	0	0	0	0
= Cash flow from operations	3	0	5	18	7	19	17	20
- Capex	-1	-5	-2	-2	-5	-5	-3	-4
- Acquisitions	0	0	0	0	0	0	0	0
+ Divestments	0	0	0	0	0	0	0	0
= Free cash flow	1	-4	3	16	2	14	14	16
+/- New issues/buybacks	0	19	0	-1	0	0	0	0
- Paid dividend	0	0	-1	-3	-5	-5	-5	-7
+/- Other	-3	-10	6	-1	-1	1	-4	-1
Change in cash	-1	4	8	11	-4	10	5	8

KEY FIGURES	2015	2016	2017	2018	2019E	2020E	2021E
M-cap	63	188	250	224	291	291	291
Net debt (excl. convertibles)	-6	-9	-22	-18	-27	-36	-45
Enterprise value	57	179	228	206	264	255	246
Sales	43	76	89	94	107	122	139
EBITDA	6	17	22	21	22	26	29
EBIT	5	15	20	19	19	23	26
Pre-tax	2	14	19	18	18	23	26
Earnings	2	11	15	15	15	18	21
Equity book value (excl. minorities)	21	31	42	51	61	73	88
<b>Valuation multiples</b>							
EV/sales	1.3	2.4	2.6	2.2	2.5	2.1	1.8
EV/EBITDA	9.9	10.3	10.3	9.8	12.1	10.0	8.4
EV/EBITA	12.7	12.1	11.5	11.1	14.0	11.1	9.3
EV/EBIT	12.7	12.1	11.5	11.1	14.0	11.1	9.3
EV/OCF	150.8	36.6	12.5	29.8	14.2	14.6	12.2
EV/FCFF	-15.0	48.3	13.6	121.2	18.0	17.5	15.6
P/FCFE	-14.5	57.3	15.3	136.9	20.9	20.1	18.4
P/E	14.2	17.2	16.5	15.1	19.9	15.9	13.8
P/B	3.0	6.1	6.0	4.4	4.8	4.0	3.3
Target EV/EBITDA	0.0	0.0	0.0	0.0	14.2	11.8	10.0
Target EV/EBIT	0.0	0.0	0.0	0.0	16.4	13.1	11.1
Target EV/FCF	0.0	0.0	0.0	0.0	22.3	20.9	18.5
Target P/B	0.0	0.0	0.0	0.0	5.6	4.6	3.8
Target P/E	0.0	0.0	0.0	0.0	23.9	19.1	16.5
<b>Per share measures</b>							
Number of shares	12,951	13,426	13,901	14,375	14,375	14,375	14,375
Number of shares (diluted)	12,951	13,426	13,901	14,849	14,875	14,875	14,875
EPS	0.15	0.81	1.09	1.03	1.02	1.27	1.47
Operating cash flow per share	0.03	0.36	1.31	0.48	1.30	1.22	1.40
Free cash flow per share	-0.34	0.24	1.18	0.11	0.97	1.01	1.10
Book value per share	1.63	2.30	3.00	3.57	4.21	5.11	6.11
Dividend per share	0.07	0.25	0.35	0.38	0.38	0.47	0.59
Dividend payout ratio, %	45.5	30.8	32.1	36.7	37.0	37.0	40.0
Dividend yield, %	1.4	1.8	1.9	2.4	1.9	2.3	2.9
FCF yield, %	-6.9	1.7	6.6	0.7	4.8	5.0	5.4
<b>Efficiency measures</b>							
ROE	17.7	41.9	41.8	32.0	26.2	27.3	26.2
ROCE	23.0	48.2	47.4	36.4	31.2	33.0	32.7
<b>Financial ratios</b>							
Inventories as % of sales	15.8	14.0	9.6	14.2	14.0	14.0	14.0
Receivables as % of sales	32.5	28.6	24.1	28.4	24.0	24.0	24.0
Non-interest bearing liabilities as % of sales	26.5	18.7	16.8	16.4	16.0	16.0	16.0
NWC/sales, %	19.6	21.5	15.7	25.9	21.8	21.9	21.9
Operative CAPEX/sales, %	11.1	2.1	2.1	5.6	4.4	2.5	3.1
CAPEX/sales (incl. acquisitions), %	11.1	2.1	2.1	5.6	4.4	2.5	3.1
FCFF/EBITDA	-0.7	0.2	0.8	0.1	0.7	0.6	0.5
Net debt/EBITDA, book-weighted	-1.1	-0.5	-1.0	-0.9	-1.2	-1.4	-1.5
Debt/equity, market-weighted	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Equity ratio, book-weighted	60.7	57.8	67.5	73.0	73.5	78.8	80.1
Gearing, %	-29.5	-29.2	-52.3	-35.6	-44.2	-48.7	-51.0

**COMPANY DESCRIPTION:** Detection Technology Oyj is a Finland-based company providing X-ray imaging products and services for medical, security and industrial applications. It is engaged in design, manufacture and marketing of X-ray imaging components and subsystems, such as detectors, photodiodes, and parts and components

**INVESTMENT CASE:**

OWNERSHIP STRUCTURE	SHARES	EURm	%
Ac Invest Seven B.V.	5,205,167	105.405	36.2%
OP-Finland Value Fund	651,065	13.184	4.5%
Ilmarinen Mutual Pension Insurance Company	554,000	11.219	3.9%
Varma Mutual Pension Insurance Company	515,000	10.429	3.6%
Sijoitusrahasto Aktia Capital	484,762	9.816	3.4%
Fondita Nordic Micro Cap	390,000	7.897	2.7%
Evli Finnish Small Cap Fund	327,259	6.627	2.3%
Martola Hannu Veikko	322,875	6.538	2.2%
Saastopankki Kotimaa	200,000	4.050	1.4%
Ten largest	8,650,128	175.165	60%
Residual	5,725,302	115.937	40%
Total	14,375,430	291.102	100%

**EARNINGS CALENDAR**

October 25, 2019

Q3 report

**OTHER EVENTS**

**COMPANY MISCELLANEOUS**

CEO: Hannu Martola

Elektroniikkatie 10, 90590 Oulu

CFO: Petri Hijanen

Tel: +358 20 766 9700

IR: Johanna Tarkiainen

## DEFINITIONS

P/E	$\frac{\text{Price per share}}{\text{Earnings per share}}$	EPS	$\frac{\text{Profit before extraord. items and taxes} - \text{income taxes} + \text{minority interest}}{\text{Number of shares}}$
P/BV	$\frac{\text{Price per share}}{\text{Shareholders' equity} + \text{taxed provisions per share}}$	DPS	Dividend for the financial period per share
Market cap	Price per share * Number of shares	OCF (Operating cash flow)	EBITDA – Net financial items – Taxes – Increase in working capital – Cash NRIs ± Other adjustments
EV (Enterprise value)	Market cap + net debt + minority interest at market value – share of associated companies at market value	FCF (Free cash flow)	Operating cash flow – operative CAPEX – acquisitions + divestments
EV/Sales	$\frac{\text{Enterprise value}}{\text{Sales}}$	FCF yield, %	$\frac{\text{Free cash flow}}{\text{Market cap}}$
EV/EBITDA	$\frac{\text{Enterprise value}}{\text{Earnings before interest, tax, depreciation and amortization}}$	Operative CAPEX/sales	$\frac{\text{Capital expenditure} - \text{divestments} - \text{acquisitions}}{\text{Sales}}$
EV/EBIT	$\frac{\text{Enterprise value}}{\text{Operating profit}}$	Net working capital	Current assets – current liabilities
Net debt	Interest bearing debt – financial assets	Capital employed/Share	$\frac{\text{Total assets} - \text{non-interest bearing debt}}{\text{Number of shares}}$
Total assets	Balance sheet total	Gearing	$\frac{\text{Net debt}}{\text{Equity}}$
Div yield, %	$\frac{\text{Dividend per share}}{\text{Price per share}}$	Debt/Equity, %	$\frac{\text{Interest bearing debt}}{\text{Shareholders' equity} + \text{minority interest} + \text{taxed provisions}}$
Payout ratio, %	$\frac{\text{Total dividends}}{\text{Earnings before extraordinary items and taxes} - \text{income taxes} + \text{minority interest}}$	Equity ratio, %	$\frac{\text{Shareholders' equity} + \text{minority interest} + \text{taxed provisions}}{\text{Total assets} - \text{interest-free loans}}$
ROCE, %	$\frac{\text{Profit before extraordinary items} + \text{interest expenses} + \text{other financial costs}}{\text{Balance sheet total} - \text{non-interest bearing debt (average)}}$	CAGR, %	Cumulative annual growth rate = Average growth per year
ROE, %	$\frac{\text{Profit before extraordinary items and taxes} - \text{income taxes}}{\text{Shareholder's equity} + \text{minority interest} + \text{taxed provisions (average)}}$		

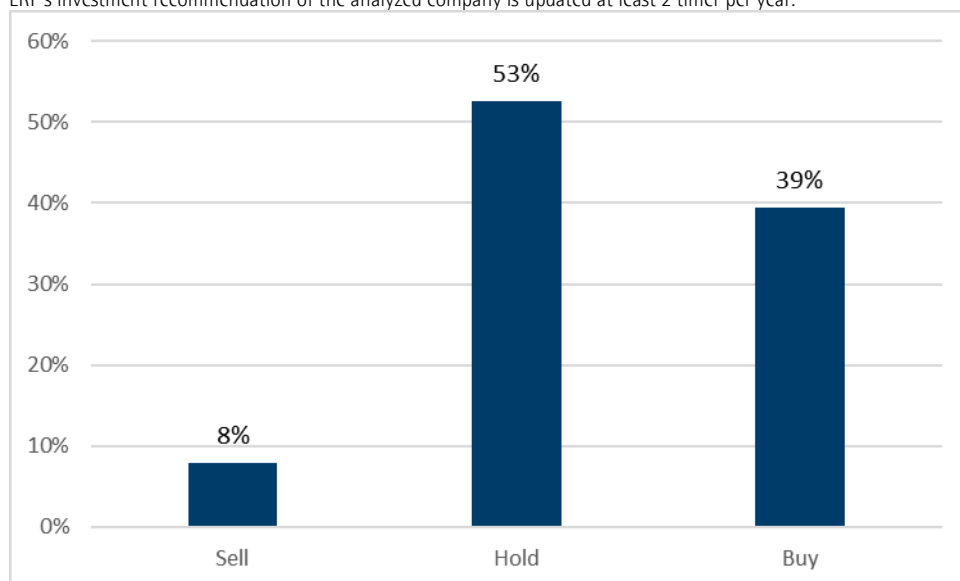
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Investment recommendations are defined as follows:

Target price compared to share price	Recommendation
< -10 %	SELL
-10 – (+10) %	HOLD
> 10 %	BUY

ERP's investment recommendation of the analyzed company is updated at least 2 timer per year.



The graph above shows the distribution of ERP's recommendations of companies under coverage in 1st of February 2019. If recommendation is not given, it is not mentioned here.

Name(s) of the analyst(s): Forslund

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