

Kone

Company report

08/31/2022



Erkki Vesola
+358 50 549 5512
erkki.vesola@inderes.fi

This report is a summary translation of the report “Heikentynyt Kiina-näkymä syö nousuvaraa” published on 08/30/2022 at 7:25 pm.

inde
res.

Weakened China outlook eats into upside

The worsening problems in China's real estate sector have led us to significantly cut our estimates for 2023-2024. Due to the full valuation of the stock and the negative share price drivers, we downgrade the share to Reduce and cut the target price to EUR 44.00 (was 51.00).

The problems in the Chinese construction market are complex

The Chinese construction market is still very important for KONE (around 40% of orders and 30% of net sales), but there aren't yet any signs of the expected market recovery that we anticipated in our Q2 comment. Housing project starts in China fell by more than -40% y-o-y in July for the fourth consecutive month and the number of homes sold has fallen by -22% to -42% y-o-y over the same period. The problems in the Chinese housing market are complex. The typical purchase of an unfinished home is proving disastrous for many homebuyers as construction projects fall through as property developers are unable to raise sufficient finance due to poor demand. Developers have typically used the advances they receive from apartments to finance working capital instead of depositing them in escrow accounts. As recently as July, 86% of new homes in China were sold under construction. The cracks in the system have led to a spiral: 1) homebuyers have threatened to default on their loans in droves if housing is not completed; 2) there is a lack of conventional financing for struggling property developers and the Chinese government's July commitment to local governments to ensure housing completion has been ineffective; 3) property developers have so far been able to suspend construction with near impunity if they run out of money; and 4) the collapse of confidence in the whole system has led to a sharp fall in house prices, which in turn is freezing both trading and new project starts. According to a recent assessment by TS Lombard, the Chinese real estate sector is facing years of stagnation.

Construction volumes are not growing much elsewhere either

Among KONE's other major markets, European building construction volumes are expected to grow by approximately 2% p.a. in 2022-2023 (source: Euroconstruct). In the US, building construction volumes are forecast to fall by 6% in 2022 and grow by only 1% in 2023 (source: edzarenski.com). Due to strong cost inflation in building materials and labor, the market will grow significantly in monetary terms, but this won't benefit KONE, as the cause of inflation is in the upstream part of the value chain and KONE can only pass cost inflation on to its own prices.

Estimate changes reflect a more cautious approach to China

Due to the expected weakness of the Chinese market, we have lowered the group's net sales estimates for 2023-2024 by 5-6%. This is based on our assumption of a -25% drop in the Chinese new equipment market in 2023 (previous expectation +8% y-o-y).

Valuation does not indicate significant upside

The total expected return on KONE's share at 2023-2024 multiples is around 4-5%, which is below our required return of around 7%. Based on this, the risk-adjusted expected return for the share is weak. The 2023 EV/EBIT (15x) is 5% above the peer median and in line with nearest competitors Otis and Schindler. There is a 23% upside to the DCF, but the conditions for realizing this potential are currently weak.

Recommendation

Reduce

(previous Accumulate)

44.00 EUR

(previous EUR 51.00)

Share price:

40.89



Key figures

	2021	2022e	2023e	2024e
Revenue	10514	10888	10760	11296
growth-%	6%	4%	-1%	5%
EBIT adj.	1309.8	1138.7	1275.9	1419.4
EBIT-% adj.	12.5 %	10.5 %	11.9 %	12.6 %
Net Income	1014.2	834.3	979.7	1094.4
EPS (adj.)	1.98	1.70	1.89	2.11

P/E (adj.)	31.8	24.1	21.6	19.4
P/B	10.3	7.3	7.0	6.6
Dividend yield-%	3.3 %	4.2 %	4.2 %	4.5 %
EV/EBIT (adj.)	23.3	17.0	15.1	13.4
EV/EBITDA	19.9	14.4	12.4	11.2
EV/S	2.9	1.8	1.8	1.7

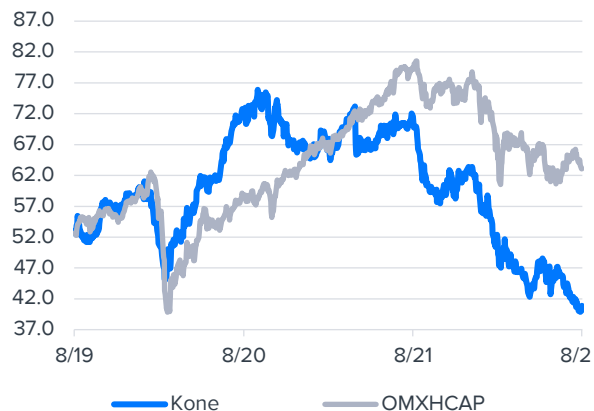
Source: Inderes

Guidance

(Unchanged)

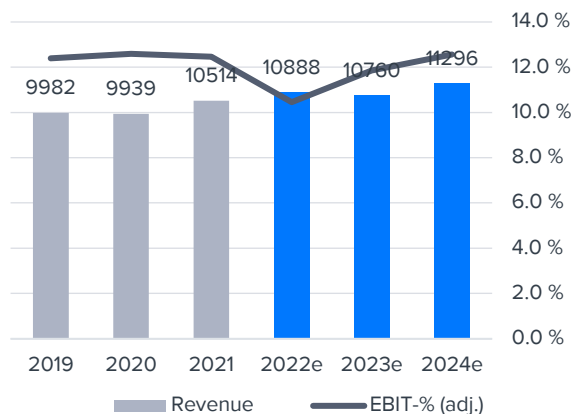
KONE estimates that in 2022, its sales growth will be in the range of -1 to +3% at comparable exchange rates as compared to 2021. The adjusted EBIT is expected to be in the range of EUR 1,130–1,210 million.

Share price



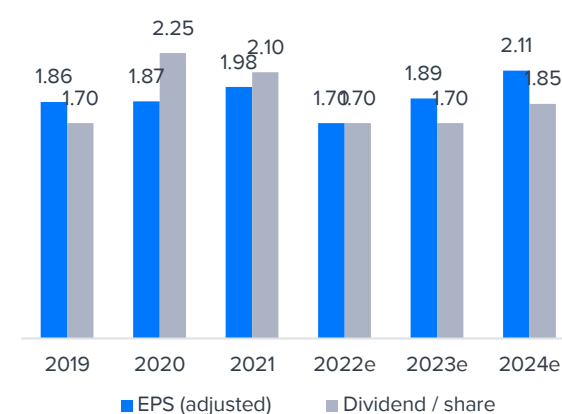
Source: Millstream Market Data AB

Revenue and EBIT %



Source: Inderes

EPS and dividend



Source: Inderes



Value drivers

- Market recovery on the Western market
- Growth in the maintenance markets in China and other Asian countries
- More dynamic pricing and operational efficiency measures support margins
- Rise of new digital services



Risk factors

- Deterioration of the Chinese construction market and tightening price competition
- Transferring component price pressures to own product prices is not fully successful
- Standing out with digital services proves difficult

Valuation	2022e	2023e	2024e
Share price	40.9	40.9	40.9
Number of shares, millions	518.4	518.4	518.4
Market cap	21197	21197	21197
EV	19360	19266	18989
P/E (adj.)	24.1	21.6	19.4
P/E	25.4	21.6	19.4
P/FCF	27.9	21.8	18.5
P/B	7.3	7.0	6.6
P/S	1.9	2.0	1.9
EV/Sales	1.8	1.8	1.7
EV/EBITDA	14.4	12.4	11.2
EV/EBIT (adj.)	17.0	15.1	13.4
Payout ratio (%)	105.5 %	89.8 %	87.5 %
Dividend yield-%	4.2 %	4.2 %	4.5 %

Source: Inderes

Estimate changes reflect a more cautious approach to China

Estimate changes 2022e-2024e

- Due to the expected weakness of the Chinese market, we have lowered our group net sales estimates for 2023-2024 by 5-6%, reflecting our assumption of a 25% drop in the Chinese new equipment market in 2023 (previous expectation +8% y-o-y). The changes in our estimates for other markets are minor.
- Our estimate for the adjusted EBIT margin is now 11.9% (was 12.8%) in 2023 and 12.6% (was 12.9%) for 2024. The margin decline is driven by 1) negative earnings drivers; 2) the impact of the net sales estimate adjustments in China, where margins are wider than the group average; and 3) our revised estimates for the volume and price components of net sales changes.
- Our net sales estimates for 2022-2024 are 2-8% lower than the July 26 consensus forecast (Vara Research). Our new CAGR expectation is 2.4%, against a consensus of 4.9%.
- Our estimates for the 2022-2024 adjusted EBIT margin are 0.1-0.3 percentage points higher than consensus.

Operational result drivers 2022-2024e:

- Intensity and speed of volume change in China
- Changes in the price competition situation
- Success in reducing product costs
- Global supply chain performance

Estimate revisions	2022e	2022	Change	2023e	2023e	Change	2024e	2024e	Change
MEUR / EUR	Old	New	%	Old	New	%	Old	New	%
Revenue	10835	10888	0%	11492	10760	-6%	11922	11296	-5%
EBIT (exc. NRIs)	1116	1139	2%	1466	1276	-13%	1543	1419	-8%
EBIT	1070	1093	2%	1466	1276	-13%	1543	1419	-8%
PTP	1074	1097	2%	1480	1288	-13%	1563	1436	-8%
EPS (excl. NRIs)	1.66	1.70	2%	2.17	1.89	-13%	2.30	2.11	-8%
DPS	1.70	1.70	0%	1.90	1.70	-11%	2.00	1.85	-8%

Source: Inderes

Valuation does not indicate significant upside

Negative drivers, recommendation down to Reduce

Even with our new estimates, KONE is not overvalued, but the justified upside margin is narrow. The near-term drivers are largely bearish, as major problems in the Chinese real estate sector, high cost inflation in the construction sector, rising interest rates and a weakening global economy do not foresee significant growth in the elevator market in the coming years. Possible positive price drivers in the future include evidence of improving margins as a result of own pricing and efficiency programs, as well as signs of a resolution of China's real estate problems. For the latter, however, the trend in recent months has been the opposite.

Due to the rather tight valuation of the stock and the negative share price drivers, we reduce the recommendation to Reduce and cut the target price to EUR 44.00 (was 51.00). The change in target price is broadly in line with our 2023 estimate changes.

Risk-adjusted expected return not attractive

The total expected return on KONE's share (upside potential in the share price based on earnings growth and expected change in valuation multiple plus dividend yield) at 2023-24 multiples is around 4-5%, which is below our required return of around 7%. Based on this, the risk-adjusted expected return for the share is weak.

Multiples in line with closest peers

As KONE has about EUR 1.3 billion in net assets, the EV/EBIT ratio is better suited than the P/E to assess peer group pricing. EV/EBIT at 2023 multiples (15x) is 5% above the median of peers and in line with nearest competitors Otis and Schindler. KONE's greater

dependence on the Chinese market than its competitors (KONE 33%; Otis 20% and Schindler 18% by 2021) is currently more of a disadvantage than an advantage for KONE, and certainly doesn't support higher valuation multiples than its competitors.

Solid upside potential to the DCF value

Our DCF model indicates a EUR 50 value for KONE's share to which the upside is 23%. However, in the current market situation, the conditions for realizing this potential are very weak.

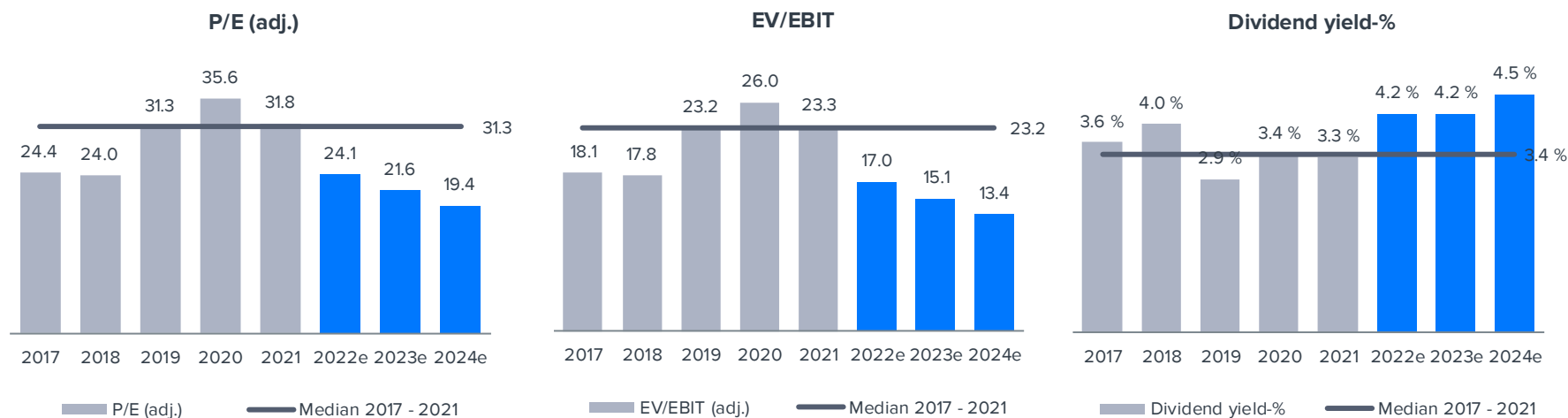
Valuation	2022e	2023e	2024e
Share price	40.9	40.9	40.9
Number of shares, millions	518.4	518.4	518.4
Market cap	21197	21197	21197
EV	19360	19266	18989
P/E (adj.)	24.1	21.6	19.4
P/E	25.4	21.6	19.4
P/FCF	27.9	21.8	18.5
P/B	7.3	7.0	6.6
P/S	1.9	2.0	1.9
EV/Sales	1.8	1.8	1.7
EV/EBITDA	14.4	12.4	11.2
EV/EBIT (adj.)	17.0	15.1	13.4
Payout ratio (%)	105.5 %	89.8 %	87.5 %
Dividend yield-%	4.2 %	4.2 %	4.5 %

Source: Inderes

Valuation table

Valuation	2017	2018	2019	2020	2021	2022e	2023e	2024e	2025e
Share price	45.7	41.6	58.3	66.5	63.0	40.9	40.9	40.9	40.9
Number of shares, millions	514.8	516.1	518.4	518.4	518.4	518.4	518.4	518.4	518.4
Market cap	23525	21489	30212	34452	32679	21197	21197	21197	21197
EV	21777	19758	28677	32555	30582	19360	19266	18989	18796
P/E (adj.)	24.4	24.0	31.3	35.6	31.8	24.1	21.6	19.4	18.7
P/E	24.6	25.6	32.4	36.7	32.2	25.4	21.6	19.4	18.7
P/FCF	29.1	28.7	43.8	25.5	26.9	27.9	21.8	18.5	18.7
P/B	7.8	7.0	9.5	10.9	10.3	7.3	7.0	6.6	6.2
P/S	2.7	2.4	3.0	3.5	3.1	1.9	2.0	1.9	1.8
EV/Sales	2.5	2.2	2.9	3.3	2.9	1.8	1.8	1.7	1.6
EV/EBITDA	16.7	17.0	20.0	22.4	19.9	14.4	12.4	11.2	10.7
EV/EBIT (adj.)	18.1	17.8	23.2	26.0	23.3	17.0	15.1	13.4	12.8
Payout ratio (%)	88.8 %	101.1 %	94.5 %	124.1 %	107.2 %	105.5 %	89.8 %	87.5 %	90.0 %
Dividend yield-%	3.6 %	4.0 %	2.9 %	3.4 %	3.3 %	4.2 %	4.2 %	4.5 %	4.8 %

Source: Inderes



Peer group valuation

Peer group valuation	Market cap	EV	EV/EBIT		EV/EBITDA		EV/S		P/E		Dividend yield-%		P/B
Company	MEUR	MEUR	2022e	2023e	2022e	2023e	2022e	2023e	2022e	2023e	2022e	2023e	2022e
Schindler Holding AG	18684	16538	17.0	14.3	13.2	11.3	1.4	1.4	26.6	21.8	2.2	2.5	4.4
Assa Abloy AB	22621	25418	15.3	13.4	12.7	11.1	2.4	2.1	19.0	16.8	2.1	2.3	3.0
Koninklijke Philips NV	14942	21615	17.7	11.9	8.2	7.0	1.2	1.1	12.4	10.3	5.3	5.3	1.0
Otis Worldwide Corp	31179	37205	17.3	16.4	15.9	15.0	2.7	2.6	23.2	21.0	1.5	1.7	
Ingersoll Rand Inc	19325	20837	18.6	16.9	15.0	13.9	3.6	3.4	20.8	18.7	0.2	0.1	2.2
Johnson Controls International PLC	37556	46548	16.3	14.2	12.6	11.1	1.8	1.8	18.1	15.2	2.4	2.6	2.2
Gree Electric Appliances Inc of Zhuhai	24721	21580	5.6	5.0	4.7	4.2	0.7	0.7	6.9	6.2	8.0	8.8	1.5
Dover Corp	18324	21143	13.9	12.9	11.6	10.9	2.5	2.4	15.0	14.0	1.6	1.7	3.9
Daikin Industries Ltd	51131	51133							32.5	27.5	0.8	0.9	3.9
Honeywell International Inc	129852	140885	18.6	17.0	16.1	14.8	3.9	3.7	22.2	20.0	2.1	2.2	7.2
Lennox International Inc	8636	10269	15.4	14.7	13.8	13.2	2.2	2.2	17.1	16.1	1.5	1.4	
Melco International Development Ltd	1016	8921		70.3	31.3	10.0	4.5	2.6			0.1	0.1	3.4
Kone (Inderes)	21197	19360	17.0	15.1	14.4	12.4	1.8	1.8	24.1	21.6	4.2	4.2	7.3
Average			15.6	18.8	14.1	11.1	2.4	2.2	19.4	17.1	2.3	2.5	3.3
Median			16.6	14.3	13.2	11.1	2.4	2.2	19.0	16.8	1.8	2.0	3.2
Diff-% to median			2%	5%	8%	11%	-24%	-17%	27%	29%	128%	112%	125%

Source: Refinitiv / Inderes. NB: The market cap Inderes uses does not consider own shares held by the company.

Income statement

Income statement	2020	2021	Q1'22	Q2'22	Q3'22e	Q4'22e	2022e	2023e	2024e	2025e
Revenue	9939	10514	2442	2555	2751	3140	10888	10760	11296	11698
Group	9939	10514	2442	2555	2751	3140	10888	10760	11296	11698
EBITDA	1452	1539	234	253	384	477	1349	1560	1701	1756
Depreciation	-239.0	-244.0	-62.9	-64.3	-64.3	-64.3	-255.8	-283.6	-281.9	-289.0
EBIT (excl. NRI)	1251	1310	197	209	320	413	1139	1276	1419	1467
EBIT	1213	1295	171	189	320	413	1093	1276	1419	1467
Group	1213	1295	171	189	320	413	1093	1276	1419	1467
Net financial items	11.4	25.5	-0.4	-8.9	6.0	7.0	3.7	12.0	16.7	22.1
PTP	1224	1321	171	180	326	420	1097	1288	1436	1489
Taxes	-276.9	-298.1	-39.3	-41.4	-75.0	-96.6	-252.3	-296.2	-330.3	-342.5
Minority interest	-8.1	-8.5	-2.2	-3.4	-2.5	-2.1	-10.2	-12.0	-11.4	-10.6
Net earnings	939	1014	129	135	248	321	834	980	1094	1136
EPS (adj.)	1.868	1.981	0.298	0.300	0.479	0.620	1.697	1.890	2.111	2.191
EPS (rep.)	1.812	1.956	0.249	0.261	0.479	0.620	1.609	1.890	2.111	2.191
Key figures	2020	2021	Q1'22	Q2'22	Q3'22e	Q4'22e	2022e	2023e	2024e	2025e
Revenue growth-%	-0.4 %	5.8 %	5.0 %	-9.1 %	5.4 %	13.5 %	3.6 %	-1.2 %	5.0 %	3.6 %
Adjusted EBIT growth-%	1.1 %	4.7 %	-21.3 %	-44.1 %	-2.0 %	14.9 %	-13.1 %	12.0 %	11.2 %	3.4 %
EBITDA-%	14.6 %	14.6 %	9.6 %	9.9 %	14.0 %	15.2 %	12.4 %	14.5 %	15.1 %	15.0 %
Adjusted EBIT-%	12.6 %	12.5 %	8.0 %	8.2 %	11.6 %	13.2 %	10.5 %	11.9 %	12.6 %	12.5 %
Net earnings-%	9.5 %	9.6 %	5.3 %	5.3 %	9.0 %	10.2 %	7.7 %	9.1 %	9.7 %	9.7 %

Source: Inderes

Balance sheet

Assets	2020	2021	2022e	2023e	2024e
Non-current assets	2748	2915	3009	3002	3027
Goodwill	1327	1405	1405	1405	1405
Intangible assets	223	217	214	213	214
Tangible assets	710	737	837	831	855
Associated companies	0.0	0.0	0.0	0.0	0.0
Other investments	144	147	142	142	142
Other non-current assets	19.2	22.9	23.5	23.5	23.5
Deferred tax assets	325	386	388	388	388
Current assets	6044	6805	7047	6964	7311
Inventories	597	718	743	735	771
Other current assets	0.0	0.0	0.0	0.0	0.0
Receivables	2818	3202	3316	3277	3440
Cash and equivalents	2629	2885	2988	2953	3100
Balance sheet total	8792	9720	10056	9967	10339

Source: Inderes

Liabilities & equity	2020	2021	2022e	2023e	2024e
Equity	3197	3199	2946	3045	3260
Share capital	66.2	66.2	66.2	66.2	66.2
Retained earnings	2747	2549	2296	2395	2610
Hybrid bonds	0.0	0.0	0.0	0.0	0.0
Revaluation reserve	0.0	0.0	0.0	0.0	0.0
Other equity	362	559	559	559	559
Minorities	22.6	25.0	25.0	25.0	25.0
Non-current liabilities	790	1000	1303	1207	1114
Deferred tax liabilities	204	218	206	206	206
Provisions	155	152	164	164	164
Long term debt	244	435	781	684	591
Convertibles	0.0	0.0	0.0	0.0	0.0
Other long term liabilities	187	194	153	153	153
Current liabilities	4805	5521	5806	5715	5965
Short term debt	265	117	210	184	159
Payables	4540	5405	5597	5531	5807
Other current liabilities	0.0	0.0	0.0	0.0	0.0
Balance sheet total	8792	9720	10056	9967	10339

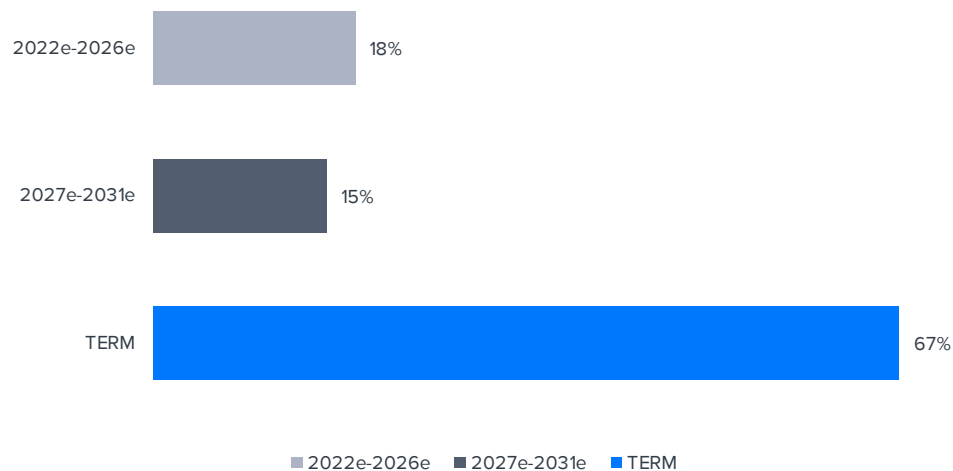
DCF calculation

DCF model	2021	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	2031e	TERM
EBIT (operating profit)	1295	1093	1276	1419	1467	1491	1513	1532	1548	1561	1600	
+ Depreciation	244	256	284	282	289	302	308	314	320	326	332	
- Paid taxes	-346.1	-265.8	-296.2	-330.3	-342.5	-349.0	-354.9	-360.1	-364.7	-368.6	-378.4	
- Tax, financial expenses	-5.5	-11.6	-10.2	-9.4	-8.7	-8.3	-7.9	-7.5	-7.1	-6.6	-6.2	
+ Tax, financial income	11.2	12.5	13.0	13.2	13.8	14.3	14.7	15.2	15.6	16.1	16.5	
- Change in working capital	359	52.7	-18.0	75.8	56.7	55.8	54.7	53.3	51.8	50.0	47.9	
Operating cash flow	1558	1137	1248	1451	1475	1506	1528	1547	1564	1578	1612	
+ Change in other long-term liabilities	4.7	-29.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
- Gross CAPEX	-349.3	-348.0	-277.3	-307.0	-339.3	-323.3	-329.9	-336.3	-342.5	-348.6	-364.9	
Free operating cash flow	1213	759	971	1144	1136	1183	1198	1210	1221	1229	1247	
+/- Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
FCFF	1213	759	971	1144	1136	1183	1198	1210	1221	1229	1247	30075
Discounted FCFF		743	890	982	914	891	845	800	756	713	678	16347
Sum of FCFF present value		24559	23816	22927	21945	21031	20140	19294	18494	17738	17024	16347
Enterprise value DCF		24559										
- Interesting bearing debt		-194.2										
+ Cash and cash equivalents		2885										
-Minorities		-181.4										
-Dividend/capital return		-1087.5										
Equity value DCF		26003										
Equity value DCF per share		50.2										

Wacc	
Tax-% (WACC)	23.5 %
Target debt ratio (D/(D+E))	0.0 %
Cost of debt	3.5 %
Equity Beta	1.00
Market risk premium	4.75%
Liquidity premium	0.00%
Risk free interest rate	2.0 %
Cost of equity	6.8 %
Weighted average cost of capital (WACC)	6.8 %

Source: Inderes

Cash flow distribution



Summary

Income statement	2019	2020	2021	2022e	2023e	Per share data	2019	2020	2021	2022e	2023e
Revenue	9981.8	9938.5	10514.1	10887.6	10760.0	EPS (reported)	1.80	1.81	1.96	1.61	1.89
EBITDA	1434.0	1451.9	1539.3	1348.9	1559.5	EPS (adj.)	1.86	1.87	1.98	1.70	1.89
EBIT	1192.5	1212.9	1295.3	1093.1	1275.9	OCF / share	2.45	2.80	3.00	2.19	2.41
PTP	1217.6	1224.3	1320.8	1096.8	1287.9	FCF / share	1.33	2.61	2.34	1.46	1.87
Net Income	931.4	939.3	1014.2	834.3	979.7	Book value / share	6.12	6.12	6.12	5.63	5.83
Extraordinary items	-44.9	-37.6	-14.5	-45.6	0.0	Dividend / share	1.70	2.25	2.10	1.70	1.70
Balance sheet	2019	2020	2021	2022e	2023e	Growth and profitability	2019	2020	2021	2022e	2023e
Balance sheet total	8613.3	8792.0	9720.4	10055.6	9966.7	Revenue growth-%	10%	0%	6%	4%	-1%
Equity capital	3192.8	3197.2	3199.2	2946.0	3045.5	EBITDA growth-%	23%	1%	6%	-12%	16%
Goodwill	1366.5	1327.0	1405.2	1405.2	1405.2	EBIT (adj.) growth-%	11%	1%	5%	-13%	12%
Net debt	-1703.2	-2120.8	-2332.9	-1997.1	-2084.9	EPS (adj.) growth-%	7%	0%	6%	-14%	11%
Cash flow	2019	2020	2021	2022e	2023e	EBITDA-%	14.4 %	14.6 %	14.6 %	12.4 %	14.5 %
EBITDA	1434.0	1451.9	1539.3	1348.9	1559.5	EBIT (adj.)-%	12.4 %	12.6 %	12.5 %	10.5 %	11.9 %
Change in working capital	102.5	314.2	358.7	52.7	-18.0	EBIT-%	11.9 %	12.2 %	12.3 %	10.0 %	11.9 %
Operating cash flow	1271.3	1453.9	1557.7	1136.7	1248.1	ROE-%	29.9 %	29.6 %	31.9 %	27.4 %	33.0 %
CAPEX	-595.8	-144.0	-349.3	-348.0	-277.3	ROI-%	35.3 %	33.7 %	36.1 %	29.9 %	33.9 %
Free cash flow	689.1	1351.8	1213.1	759.1	970.7	Equity ratio	46.5 %	45.5 %	41.2 %	36.8 %	39.1 %
Valuation multiples	2019	2020	2021	2022e	2023e	Gearing	-53.3 %	-66.3 %	-72.9 %	-67.8 %	-68.5 %
EV/S	2.9	3.3	2.9	1.8	1.8						
EV/EBITDA (adj.)	20.0	22.4	19.9	14.4	12.4						
EV/EBIT (adj.)	23.2	26.0	23.3	17.0	15.1						
P/E (adj.)	31.3	35.6	31.8	24.1	21.6						
P/E	9.5	10.9	10.3	7.3	7.0						
Dividend-%	2.9 %	3.4 %	3.3 %	4.2 %	4.2 %						

Source: Inderes

Disclaimer and recommendation history

The information presented in Inderes reports is obtained from several different public sources that Inderes considers to be reliable. Inderes aims to use reliable and comprehensive information, but Inderes does not guarantee the accuracy of the presented information. Any opinions, estimates and forecasts represent the views of the authors. Inderes is not responsible for the content or accuracy of the presented information. Inderes and its employees are also not responsible for the financial outcomes of investment decisions made based on the reports or any direct or indirect damage caused by the use of the information. The information used in producing the reports may change quickly. Inderes makes no commitment to announcing any potential changes to the presented information and opinions.

The reports produced by Inderes are intended for informational use only. The reports should not be construed as offers or advice to buy, sell or subscribe investment products. Customers should also understand that past performance is not a guarantee of future results. When making investment decisions, customers must base their decisions on their own research and their estimates of the factors that influence the value of the investment and take into account their objectives and financial position and use advisors as necessary. Customers are responsible for their investment decisions and their financial outcomes.

Reports produced by Inderes may not be edited, copied or made available to others in their entirety, or in part, without Inderes' written consent. No part of this report, or the report as a whole, shall be transferred or shared in any form to the United States, Canada or Japan or the citizens of the aforementioned countries. The legislation of other countries may also lay down restrictions pertaining to the distribution of the information contained in this report. Any individuals who may be subject to such restrictions must take said restrictions into account.

Inderes issues target prices for the shares it follows. The recommendation methodology used by Inderes is based on the share's 12-month expected total shareholder return (including the share price and dividends) and takes into account Inderes' view of the risk associated with the expected returns. The recommendation policy consists of four tiers: Sell, Reduce, Accumulate and Buy. As a rule, Inderes' investment recommendations and target prices are reviewed at least 2–4 times per year in connection with the companies' interim reports, but the recommendations and target prices may also be changed at other times depending on the market conditions. The issued recommendations and target prices do not guarantee that the share price will develop in line with the estimate. Inderes primarily uses the following valuation methods in determining target prices and recommendations: Cash flow analysis (DCF), valuation multiples, peer group analysis and sum of parts analysis. The valuation methods and target price criteria used are always company-specific and they may vary significantly depending on the company and (or) industry.

Inderes' recommendation policy is based on the following distribution relative to the 12-month risk-adjusted expected total shareholder return.

Buy The 12-month risk-adjusted expected shareholder return of the share is very attractive

Accumulate The 12-month risk-adjusted expected shareholder return of the share is attractive

Reduce The 12-month risk-adjusted expected shareholder return of the share is weak

Sell The 12-month risk-adjusted expected shareholder return of the share is very weak

The assessment of the 12-month risk-adjusted expected total shareholder return based on the above-mentioned definitions is company-specific and subjective. Consequently, similar 12-month expected total shareholder returns between different shares may result in different recommendations, and the recommendations and 12-month expected total shareholder returns between different shares should not be compared with each other. The counterpart of the expected total shareholder return is Inderes' view of the risk taken by the investor, which varies considerably between companies and scenarios. Thus, a high expected total shareholder return does not necessarily lead to positive performance when the risks are exceptionally high and, correspondingly, a low expected total shareholder return does not necessarily lead to a negative recommendation if Inderes considers the risks to be moderate.

The analysts who produce Inderes' research and Inderes employees cannot have 1) shareholdings that exceed the threshold of significant financial gain or 2) shareholdings exceeding 1% in any company subject to Inderes' research activities. Inderes Oyj can only own shares in the target companies it follows to the extent shown in the company's model portfolio investing real funds. All of Inderes Oyj's shareholdings are presented in itemised form in the model portfolio. Inderes Oyj does not have other shareholdings in the target companies analysed. The remuneration of the analysts who produce the analysis are not directly or indirectly linked to the issued recommendation or views. Inderes Oyj does not have investment bank operations.

Inderes or its partners whose customer relationships may have a financial impact on Inderes may, in their business operations, seek assignments with various issuers with respect to services provided by Inderes or its partners. Thus, Inderes may be in a direct or indirect contractual relationship with an issuer that is the subject of research activities. Inderes and its partners may provide investor relations services to issuers. The aim of such services is to improve communication between the company and the capital markets. These services include the organisation of investor events, advisory services related to investor relations and the production of investor research reports.

More information about research disclaimers can be found at www.inderes.fi/research-disclaimer.

Recommendation history (>12 mo)

Date	Recommendation	Target price	Share price
4/28/2017	Reduce	41.00 €	42.84 €
7/19/2017	Reduce	41.00 €	43.44 €
9/29/2017	Reduce	41.00 €	44.80 €
10/27/2017	Sell	41.00 €	47.09 €
1/26/2018	Reduce	43.00 €	45.24 €
4/27/2018	Reduce	43.00 €	42.03 €
7/20/2018	Reduce	43.00 €	47.30 €
10/26/2018	Reduce	42.00 €	40.60 €
1/25/2019	Reduce	40.00 €	42.73 €
4/29/2019	Sell	41.00 €	48.90 €
7/19/2019	Sell	41.00 €	51.12 €
10/24/2019	Sell	42.00 €	54.18 €
1/29/2020	Sell	45.00 €	61.02 €
3/24/2020	Sell	42.00 €	46.90 €
4/23/2020	Sell	46.00 €	55.00 €
7/20/2020	Sell	48.00 €	64.28 €
9/23/2020	Sell	61.00 €	73.38 €
10/23/2020	Sell	61.00 €	71.26 €
1/29/2021	Sell	61.00 €	67.08 €
4/30/2021	Sell	61.00 €	66.12 €
7/21/2021	Sell	61.00 €	70.82 €
11/1/2021	Reduce	59.00 €	58.72 €
2/3/2022	Reduce	57.00 €	56.80 €
5/2/2022	Accumulate	51.00 €	46.09 €
7/15/2022	Accumulate	51.00 €	45.85 €
7/22/2022	Accumulate	51.00 €	44.38 €
8/31/2022	Reduce	44.00 €	40.89 €



Inderes' mission is to connect listed companies and investors. We produce high-quality research and content for the needs of our extensive investor community.

At Inderes we believe that open data is every investor's fundamental right. We guarantee investors' access to award-winning research, insightful video content and an active investor community.

For listed companies we ensure that there is always high-quality information available on the company for investors and shareholders for decision making, and that data collected from investors can be utilized by the companies.

Over 100 Finnish listed companies want to serve their shareholders and investors through us by utilizing our company research services, data driven IR services, content creation and consulting.

Inderes Oyj

Itämerentori 2

FI-00180 Helsinki, Finland

+358 10 219 4690

Award-winning research at [inderes.fi](https://www.inderes.fi)



STARMINE
ANALYST AWARDS
FROM REFINITIV



THOMSON REUTERS
ANALYST AWARDS



Juha Kinnunen
2012, 2016, 2017, 2018, 2019, 2020



Mikael Rautanen
2014, 2016, 2017, 2019



Sauli Vilén
2012, 2016, 2018, 2019, 2020



Antti Viljakainen
2014, 2015, 2016, 2018, 2019, 2020



Olli Koponen
2020



Joni Grönqvist
2019, 2020



Erkki Vesola
2018, 2020



Petri Gostowski
2020



Atte Riikola
2020

**Research belongs
to everyone.**