

Buy EUR 139.00 (EUR 150.00) Price EUR 108.00 Upside 28.7 %	Value Indicators: EUR DCF: 139.09	Share data: Bloomberg: GKS GR Reuters: GKSG ISIN: DE0007571424	Description: Leading software company for stationary retailers
	Market Snapshot: EUR m Market cap: 191.8 No. of shares (m): 1.9 EV: 195.5 Freefloat MC: 75.8 Ø Trad. Vol. (30d): 176.24 th	Shareholders: Freefloat 39.5 % GK Software Holding 49.6 % SAP 5.3 % Rainer Gläß 3.3 % Stephan Kronmüller 2.3 %	Risk Profile (WRe): 2018e Beta: 1.4 Price / Book: 4.2 x Equity Ratio: 40 % Net Fin. Debt / EBITDA: 0.1 x Net Debt / EBITDA: 0.2 x

Potential licence revenues have yet to fully materialise

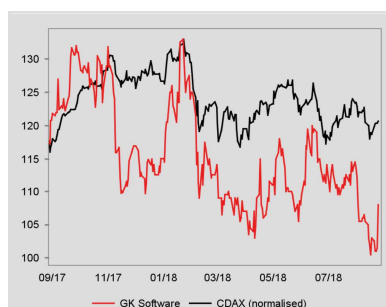
Stated Figures Q2/2018: in EUR m					Comment on Figures:			
	Q2/18	Q2/18e	Q2/17	yoy	6M/18	6M/17	yoy	■ GK Software's preliminary quarterly figures, presented on Friday (24.08.2018), fell short of the expectations (WRe). ■ Worth mentioning in this regard is that the shortfall in revenue was mainly explained by licence revenues.
Sales	25.3	28.0	24.0	5.4%	49.0	44.1	110%	
EBITDA	1.0	3.6	4.3	-75.7%	2.4	5.3	-54.9%	
<i>margin</i>	4.1%	12.9%	17.9%		4.9%	12.0%		

GK Software has successfully entered the US market. This is seen not only in the impressive sales successes of the last years but also in the gaining of two further customers in the US after the end of the second quarter. This comes in the wake of a decision by Hy-Vee, a prominent retailer, in favour of OmniPOS in the first quarter. The strategic prospects thus remain very good. In the coming years too, American retailers, who are under considerable competitive pressure to innovate, will be instrumental in advancing retail-related topics. This will include, in all probability, very large corporations, which will acquire the GK solution under licence via the SAP organisation (cooperation partner). This is linked to considerable margin potential for GK.

However, if delays arise in this context, as seen in Q2, it can lead to considerable distortion of the temporary profitability situation. The new forecasts (WRe) are still based on the assumption of ongoing customer acquisition in the US but, in terms of the revenue mix, more defensive distribution is implied. The share of services and sales conducted by in-house providers and necessary to access important markets is now increased to a higher level than initially assumed (WRe). In the long term, we continue to expect GK to catch up with the large software producers as regards the margin.

The GK share continues to be rated Buy with a price target of EUR 139 (150).

Changes in Estimates:							Comment on Changes:		
FY End: 31.12. in EUR m	2018e (old)	+ / -	2019e (old)	+ / -	2020e (old)	+ / -	■ Considerable reduction in the forecasts, especially for the current year, in which the share of licence revenues may come in well below the expectations (WRe). For the coming years too, it is now assumed that a greater share of service revenues and sales expenditure is necessary to gain and subsequently carry out projects. ■ In the long term, the expectation of a 17%-EBIT margin remains unchanged based on implied increases in maintenance and cloud revenues as well as effective sales via cooperation partners.		
Sales	109.8	0.2 %	126.3	0.2 %	145.2	0.2 %			
EBITDA	20.6	-24.9 %	26.3	-17.6 %	30.2	-3.2 %			
EBIT	15.5	-33.2 %	20.3	-22.8 %	23.4	-4.2 %			
EPS	0.0	-33.4 %	0.0	-22.9 %	0.0	-4.3 %			

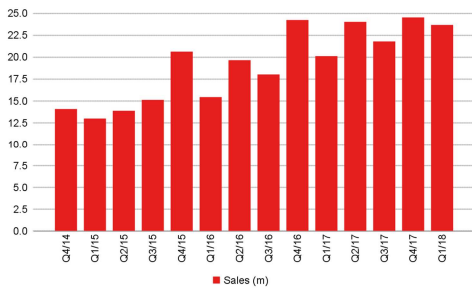


Rel. Performance vs CDAX:	
1 month:	-1.7 %
6 months:	-2.4 %
Year to date:	-1.5 %
Trailing 12 months:	-6.6 %

Company events:	
30.08.18	Q2
26.11.18	Q3

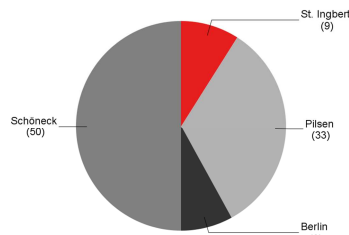
FY End: 31.12. in EUR m	CAGR (17-20e)	2014	2015	2016	2017	2018e	2019e	2020e
Sales	17.2 %	44.6	62.6	77.3	90.5	110.0	126.5	145.5
Change Sales yoy		5.1 %	40.3 %	23.5 %	17.0 %	21.6 %	15.0 %	15.0 %
Gross profit margin		89.6 %	87.6 %	90.6 %	90.6 %	90.6 %	90.6 %	90.6 %
EBITDA	49.4 %	0.0	2.2	7.8	8.8	15.5	21.6	29.2
Margin		0.1 %	3.5 %	10.1 %	9.7 %	14.1 %	17.1 %	20.1 %
EBIT	64.9 %	-3.0	-1.3	3.9	5.0	10.3	15.7	22.4
Margin		-6.8 %	-2.0 %	5.1 %	5.5 %	9.4 %	12.4 %	15.4 %
Net income	59.6 %	-1.9	-1.5	2.8	3.9	7.3	11.1	15.8
EPS	59.5 %	-0.99	-0.79	1.50	2.05	3.82	5.82	8.32
EPS adj.	59.5 %	-0.99	-0.79	1.50	2.05	3.82	5.82	8.32
DPS	-	0.00	0.00	0.00	0.00	0.50	0.50	0.50
Dividend Yield		n.a.	n.a.	n.a.	n.a.	0.5 %	0.5 %	0.5 %
FCFPS		-1.15	0.20	0.63	3.70	0.05	1.94	4.65
FCF / Market cap		-3.4 %	-0.3 %	1.4 %	3.9 %	0.1 %	1.9 %	4.6 %
EV / Sales		1.6 x	1.2 x	1.3 x	2.0 x	1.8 x	1.5 x	1.3 x
EV / EBITDA		n.a.	33.7 x	12.5 x	20.9 x	12.7 x	9.0 x	6.4 x
EV / EBIT		n.a.	n.a.	24.8 x	36.7 x	19.0 x	12.4 x	8.3 x
P / E		n.a.	n.a.	30.8 x	46.0 x	26.6 x	17.4 x	12.2 x
P / E adj.		n.a.	n.a.	30.8 x	46.0 x	26.6 x	17.4 x	12.2 x
FCF Potential Yield		1.6 %	2.8 %	7.3 %	4.5 %	6.4 %	8.8 %	12.2 %
Net Debt		-7.4	8.8	10.5	3.7	3.6	0.9	-7.0
ROCE (NOPAT)		n.a.	n.a.	8.1 %	10.6 %	15.9 %	20.9 %	26.3 %
Guidance:	n.a.							

Sales development
in EUR m



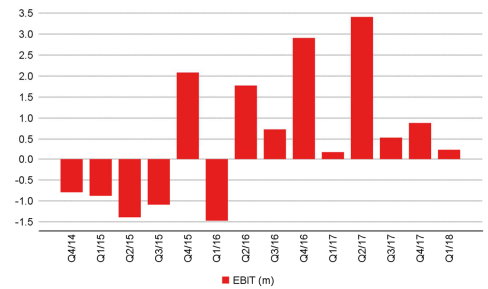
Source: Warburg Research

Employees per location
2018e; in %



Source: Warburg Research

EBIT development
in EUR m



Source: Warburg Research

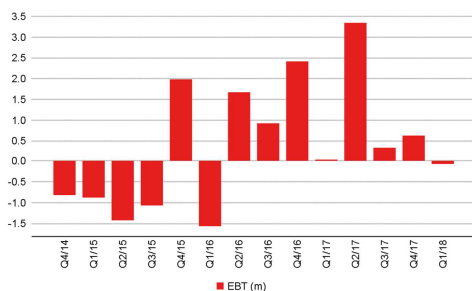
Company Background

- GK Software is the leading software supplier for retailers.
- As well as standard processes, GK Software solutions facilitate special requirements such as bonus programmes, the recording of fiscal details and the seamless integration in back-end solutions.
- The business activities of GK Software divides into two segments - the sale of product licences and the corresponding services.

Competitive Quality

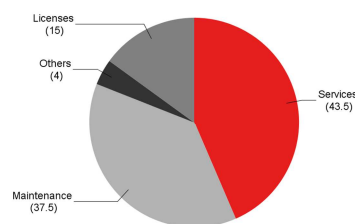
- The structural advantages of GK Software are compelling:
- GK Software's leading solution is completely Java-based, which makes it lean, platform independent and means it can be operated on the existing customer infrastructure.
- For many retail projects, GK competitors tend to undercalculate their bids and as a consequence are unable to complete the project on time and within budget.
- GK has outstanding reference clients (Hornbach, Kaufhof, Douglas, Netto, Tchibo, T-Punkt, Thalia, JYSK Nordic...)
- At the same time, GK Software's personnel costs are, depending on the location, often about 20% below those of a similar project team of a large system integrator.

EBT development
in EUR m



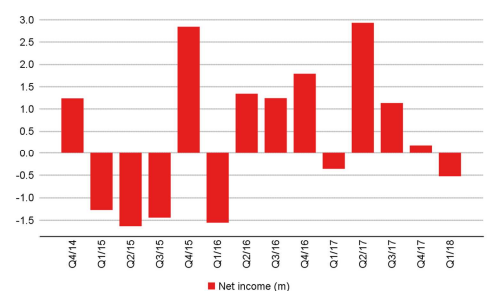
Source: Warburg Research

Sales by segments
2018e; in %



Source: Warburg Research

Net income development
in EUR m



Source: Warburg Research

DCF model

Figures in EUR m	Detailed forecast period			Transitional period										Term. Value
	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	
Sales	110.0	126.5	145.5	158.6	168.1	178.2	188.9	200.2	212.2	224.9	238.4	250.3	262.9	
Sales change	21.6 %	15.0 %	15.0 %	9.0 %	6.0 %	6.0 %	6.0 %	6.0 %	6.0 %	6.0 %	6.0 %	5.0 %	5.0 %	2.5 %
EBIT	10.3	15.7	22.4	24.6	26.9	28.5	32.1	34.0	36.1	38.2	40.5	42.6	44.7	
EBIT-margin	9.4 %	12.4 %	15.4 %	15.5 %	16.0 %	16.0 %	17.0 %	17.0 %	17.0 %	17.0 %	17.0 %	17.0 %	17.0 %	
Tax rate (EBT)	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	29.0 %	
NOPAT	7.3	11.1	15.9	17.5	19.1	20.2	22.8	24.2	25.6	27.1	28.8	30.2	31.7	
Depreciation	5.2	5.9	6.8	7.9	8.4	8.9	7.6	6.0	6.4	2.2	2.4	2.5	2.6	
in % of Sales	4.7 %	4.7 %	4.7 %	5.0 %	5.0 %	5.0 %	4.0 %	3.0 %	3.0 %	1.0 %	1.0 %	1.0 %	1.0 %	
Changes in provisions	0.0	0.0	0.0	-1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Change in Liquidity from														
- Working Capital	4.1	3.1	3.6	2.4	1.8	1.9	2.0	2.1	2.2	2.4	2.5	2.2	2.3	
- Capex	8.2	10.2	10.2	9.5	8.4	8.9	5.7	6.0	4.2	2.2	2.4	2.5	2.6	
Capex in % of Sales	7.5 %	8.1 %	7.0 %	6.0 %	5.0 %	5.0 %	3.0 %	3.0 %	2.0 %	1.0 %	1.0 %	1.0 %	1.0 %	
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Free Cash Flow (WACC Model)	0.2	3.8	8.9	12.1	17.4	18.4	22.7	22.1	25.6	24.8	26.3	28.1	29.5	30
PV of FCF	0.2	3.3	7.3	9.0	11.9	11.5	13.0	11.6	12.3	10.9	10.6	10.3	9.9	153
share of PVs	3.92 %			40.40 %										55.68 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	0.00 %	Financial Strength	1.40
Cost of debt (after tax)	4.2 %	Liquidity (share)	1.30
Market return	7.00 %	Cyclicality	1.50
Risk free rate	1.50 %	Transparency	1.50
		Others	1.30
WACC	9.20 %	Beta	1.40

Valuation (m)

Present values 2030e	122		
Terminal Value	153		
Financial liabilities	32		
Pension liabilities	2		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	22	No. of shares (m)	1.9
Equity Value	263	Value per share (EUR)	139.09

Sensitivity Value per Share (EUR)

Beta	WACC	Terminal Growth							Beta	WACC	Delta EBIT-margin						
		1.75 %	2.00 %	2.25 %	2.50 %	2.75 %	3.00 %	3.25 %			-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.58	10.2 %	111.36	113.11	114.97	116.96	119.07	121.33	123.76	1.58	10.2 %	103.68	108.10	112.53	116.96	121.38	125.81	130.24
1.49	9.7 %	120.51	122.60	124.84	127.23	129.80	132.55	135.52	1.49	9.7 %	112.97	117.72	122.48	127.23	131.98	136.74	141.49
1.45	9.5 %	125.54	127.84	130.30	132.94	135.78	138.83	142.13	1.45	9.5 %	118.14	123.07	128.01	132.94	137.88	142.81	147.75
1.40	9.2 %	130.93	133.46	136.17	139.09	142.23	145.63	149.31	1.40	9.2 %	123.70	128.83	133.96	139.09	144.22	149.35	154.48
1.35	9.0 %	136.71	139.50	142.50	145.73	149.22	153.01	157.13	1.35	9.0 %	129.71	135.05	140.39	145.73	151.07	156.41	161.76
1.31	8.7 %	142.92	146.00	149.33	152.92	156.81	161.05	165.68	1.31	8.7 %	136.21	141.78	147.35	152.92	158.49	164.06	169.63
1.22	8.2 %	156.83	160.64	164.76	169.24	174.14	179.50	185.41	1.22	8.2 %	150.98	157.07	163.15	169.24	175.33	181.42	187.51

- GK has been able to grow strongly in recent years and, last but not least, convince in terms of profitability
- The technological leadership position and the cooperation with SAP form a good basis for further growth
- This leading position in the world provides considerable scope for sales and earnings

Valuation	2014	2015	2016	2017	2018e	2019e	2020e
Price / Book	2.6 x	2.2 x	2.8 x	4.6 x	4.2 x	3.4 x	2.7 x
Book value per share ex intangibles	11.68	2.03	4.18	7.02	12.51	18.67	27.75
EV / Sales	1.6 x	1.2 x	1.3 x	2.0 x	1.8 x	1.5 x	1.3 x
EV / EBITDA	n.a.	33.7 x	12.5 x	20.9 x	12.7 x	9.0 x	6.4 x
EV / EBIT	n.a.	n.a.	24.8 x	36.7 x	19.0 x	12.4 x	8.3 x
EV / EBIT adj.*	n.a.	n.a.	24.8 x	36.7 x	19.0 x	12.4 x	8.3 x
P / FCF	n.a.	n.a.	73.7 x	25.5 x	n.a.	52.3 x	21.8 x
P / E	n.a.	n.a.	30.8 x	46.0 x	26.6 x	17.4 x	12.2 x
P / E adj.*	n.a.	n.a.	30.8 x	46.0 x	26.6 x	17.4 x	12.2 x
Dividend Yield	n.a.	n.a.	n.a.	n.a.	0.5 %	0.5 %	0.5 %
FCF Potential Yield (on market EV)	1.6 %	2.8 %	7.3 %	4.5 %	6.4 %	8.8 %	12.2 %

*Adjustments made for: -

Consolidated profit & loss

In EUR m	2014	2015	2016	2017	2018e	2019e	2020e
Sales	44.6	62.6	77.3	90.5	110.0	126.5	145.5
Change Sales yoy	5.1 %	40.3 %	23.5 %	17.0 %	21.6 %	15.0 %	15.0 %
Increase / decrease in inventory	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Own work capitalised	0.5	0.5	0.4	0.0	1.1	1.3	1.5
Total Sales	45.1	63.1	77.7	90.5	111.1	127.8	146.9
Material expenses	5.2	8.3	7.7	8.5	11.4	13.2	15.1
Gross profit	40.0	54.9	70.0	81.9	99.7	114.6	131.8
<i>Gross profit margin</i>	<i>89.6 %</i>	<i>87.6 %</i>	<i>90.6 %</i>	<i>90.6 %</i>	<i>90.6 %</i>	<i>90.6 %</i>	<i>90.6 %</i>
Personnel expenses	28.7	39.7	47.7	57.8	64.9	73.4	80.0
Other operating income	2.2	1.7	1.8	5.2	6.1	7.0	8.0
Other operating expenses	13.4	14.7	16.3	20.5	25.3	26.6	30.5
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	0.0	2.2	7.8	8.8	15.5	21.6	29.2
<i>Margin</i>	<i>0.1 %</i>	<i>3.5 %</i>	<i>10.1 %</i>	<i>9.7 %</i>	<i>14.1 %</i>	<i>17.1 %</i>	<i>20.1 %</i>
Depreciation of fixed assets	0.9	1.0	1.1	1.4	1.7	1.9	2.2
EBITA	-0.9	1.2	6.7	7.4	13.9	19.7	27.1
Amortisation of intangible assets	1.2	1.5	1.8	2.2	3.3	3.8	4.4
Goodwill amortisation	0.9	1.0	1.0	0.2	0.2	0.3	0.3
EBIT	-3.0	-1.3	3.9	5.0	10.3	15.7	22.4
<i>Margin</i>	<i>-6.8 %</i>	<i>-2.0 %</i>	<i>5.1 %</i>	<i>5.5 %</i>	<i>9.4 %</i>	<i>12.4 %</i>	<i>15.4 %</i>
EBIT adj.	-3.0	-1.3	3.9	5.0	10.3	15.7	22.4
Interest income	0.2	0.2	0.1	0.1	0.2	0.2	0.2
Interest expenses	0.1	0.3	0.6	0.8	0.3	0.3	0.3
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	-3.0	-1.4	3.5	4.3	10.2	15.6	22.3
<i>Margin</i>	<i>-6.7 %</i>	<i>-2.2 %</i>	<i>4.5 %</i>	<i>4.8 %</i>	<i>9.3 %</i>	<i>12.3 %</i>	<i>15.3 %</i>
Total taxes	-1.1	0.1	0.6	0.5	3.0	4.5	6.5
Net income from continuing operations	-1.9	-1.5	2.8	3.9	7.3	11.1	15.8
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income before minorities	-1.9	-1.5	2.8	3.9	7.3	11.1	15.8
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	-1.9	-1.5	2.8	3.9	7.3	11.1	15.8
<i>Margin</i>	<i>-4.2 %</i>	<i>-2.4 %</i>	<i>3.7 %</i>	<i>4.3 %</i>	<i>6.6 %</i>	<i>8.7 %</i>	<i>10.9 %</i>
Number of shares, average	1.9	1.9	1.9	1.9	1.9	1.9	1.9
EPS	-0.99	-0.79	1.50	2.05	3.82	5.82	8.32
EPS adj.	-0.99	-0.79	1.50	2.05	3.82	5.82	8.32

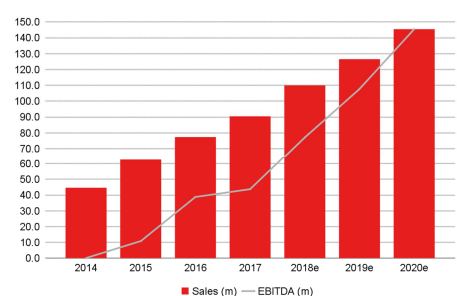
*Adjustments made for:

Guidance: n.a.

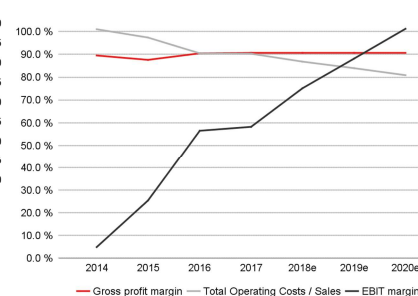
Financial Ratios

	2014	2015	2016	2017	2018e	2019e	2020e
Total Operating Costs / Sales	101.1 %	97.4 %	90.4 %	90.3 %	86.9 %	83.9 %	80.9 %
Operating Leverage	n.a.	-1.4 x	n.a.	1.6 x	5.0 x	3.4 x	2.9 x
EBITDA / Interest expenses	0.3 x	6.7 x	12.2 x	11.2 x	51.7 x	72.1 x	97.5 x
Tax rate (EBT)	37.4 %	-8.5 %	18.1 %	10.5 %	29.0 %	29.0 %	29.0 %
Dividend Payout Ratio	0.0 %	0.0 %	0.0 %	0.0 %	13.1 %	8.6 %	6.0 %
Sales per Employee	105,677	145,313	175,985	201,806	240,607	271,273	305,847

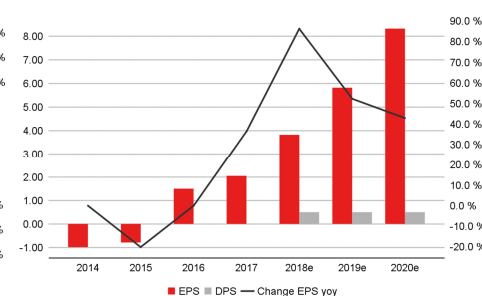
Sales, EBITDA in EUR m



Operating Performance in %



Performance per Share



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

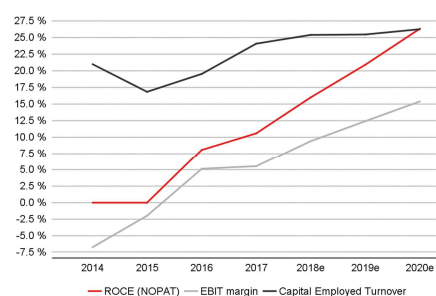
Consolidated balance sheet

In EUR m	2014	2015	2016	2017	2018e	2019e	2020e
Assets							
Goodwill and other intangible assets	8.5	25.2	23.8	25.4	22.2	20.5	18.2
thereof other intangible assets	2.9	20.2	18.8	21.4	18.4	17.0	15.0
thereof Goodwill	5.5	5.0	5.0	4.0	3.8	3.5	3.2
Property, plant and equipment	5.0	5.8	8.9	14.2	20.4	26.4	32.0
Financial assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other long-term assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed assets	13.4	30.9	32.7	39.6	42.6	46.9	50.3
Inventories	1.2	1.7	1.2	1.0	1.7	1.9	2.2
Accounts receivable	9.2	12.6	18.0	17.7	21.5	24.8	28.5
Liquid assets	10.2	7.4	6.0	30.5	30.6	33.3	41.2
Other short-term assets	10.7	15.2	13.7	17.8	17.8	17.8	17.8
Current assets	31.2	36.8	38.9	67.0	71.6	77.9	89.8
Total Assets	44.7	67.7	71.6	106.6	114.2	124.7	140.0
Liabilities and shareholders' equity							
Subscribed capital	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Capital reserve	18.2	18.2	18.5	20.5	20.5	20.5	20.5
Retained earnings	0.0	0.0	0.0	0.0	7.3	17.4	32.3
Other equity components	10.4	8.9	11.3	16.3	16.3	16.2	16.3
Shareholders' equity	30.6	29.0	31.7	38.7	46.0	56.0	71.0
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total equity	30.6	29.0	31.7	38.7	46.0	56.0	71.0
Provisions	4.1	6.0	3.6	3.7	3.7	3.7	3.7
thereof provisions for pensions and similar obligations	1.7	1.5	1.7	1.9	1.9	1.9	1.9
Financial liabilities (total)	1.1	14.7	14.8	32.3	32.3	32.3	32.3
thereof short-term financial liabilities	0.3	3.2	5.8	10.3	10.3	10.3	10.3
Accounts payable	1.6	2.1	2.2	1.8	2.2	2.6	3.0
Other liabilities	7.2	15.9	19.3	30.0	30.0	30.0	30.0
Liabilities	14.1	38.7	39.9	67.9	68.3	68.7	69.1
Total liabilities and shareholders' equity	44.7	67.7	71.6	106.6	114.2	124.7	140.0

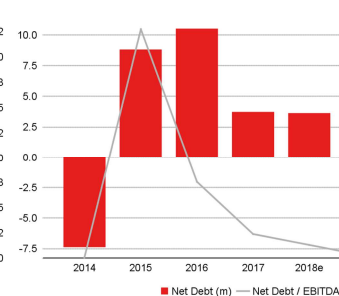
Financial Ratios

	2014	2015	2016	2017	2018e	2019e	2020e
Efficiency of Capital Employment							
Operating Assets Turnover	3.4 x	4.5 x	3.0 x	3.0 x	2.7 x	2.6 x	2.5 x
Capital Employed Turnover	1.9 x	1.7 x	1.8 x	2.1 x	2.2 x	2.2 x	2.3 x
ROA	-13.9 %	-4.9 %	8.6 %	9.8 %	17.1 %	23.6 %	31.5 %
Return on Capital							
ROCE (NOPAT)	n.a.	n.a.	8.1 %	10.6 %	15.9 %	20.9 %	26.3 %
ROE	-5.8 %	-5.0 %	9.3 %	11.1 %	17.2 %	21.7 %	24.9 %
Adj. ROE	-5.8 %	-5.0 %	9.3 %	11.1 %	17.2 %	21.7 %	24.9 %
Balance sheet quality							
Net Debt	-7.4	8.8	10.5	3.7	3.6	0.9	-7.0
Net Financial Debt	-9.0	7.3	8.8	1.8	1.7	-1.0	-8.9
Net Gearing	-24.1 %	30.3 %	33.1 %	9.6 %	7.9 %	1.6 %	-9.9 %
Net Fin. Debt / EBITDA	n.a.	337.6 %	112.8 %	21.0 %	11.3 %	n.a.	n.a.
Book Value / Share	16.2	15.4	16.8	20.3	24.2	29.4	37.3
Book value per share ex intangibles	11.7	2.0	4.2	7.0	12.5	18.7	27.7

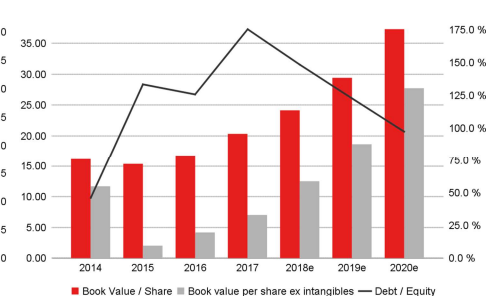
ROCE Development



Net debt in EUR m



Book Value per Share in EUR



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

Consolidated cash flow statement

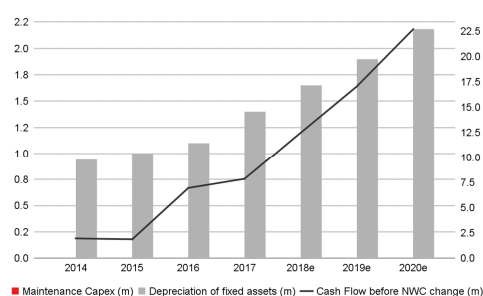
In EUR m	2014	2015	2016	2017	2018e	2019e	2020e
Net income	-1.9	-1.5	2.8	3.9	7.3	11.1	15.8
Depreciation of fixed assets	0.9	1.0	1.1	1.4	1.7	1.9	2.2
Amortisation of goodwill	0.9	1.0	1.0	0.2	0.2	0.3	0.3
Amortisation of intangible assets	1.2	1.5	1.8	2.2	3.3	3.8	4.4
Increase/decrease in long-term provisions	0.8	0.7	0.2	0.2	0.0	0.0	0.0
Other non-cash income and expenses	0.0	-0.8	0.0	0.0	0.0	0.0	0.0
Cash Flow before NWC change	1.9	1.9	6.9	7.9	12.4	17.0	22.7
Increase / decrease in inventory	-0.1	-0.1	0.5	0.2	-0.7	-0.2	-0.3
Increase / decrease in accounts receivable	-0.4	-0.4	-5.4	0.3	-3.8	-3.3	-3.7
Increase / decrease in accounts payable	-0.2	-0.2	-3.6	0.2	0.4	0.4	0.4
Increase / decrease in other working capital positions	-1.6	1.0	5.2	6.6	0.0	0.0	0.0
Increase / decrease in working capital (total)	-2.3	0.3	-3.4	7.3	-4.1	-3.1	-3.6
Net cash provided by operating activities [1]	-0.4	2.2	3.6	15.2	8.3	13.9	19.1
Investments in intangible assets	-1.2	-1.2	-1.2	-0.3	-0.3	-2.4	-2.4
Investments in property, plant and equipment	-1.1	-1.1	-1.1	-7.9	-7.9	-7.9	-7.9
Payments for acquisitions	0.0	-16.8	0.0	0.0	0.0	0.0	0.0
Financial investments	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	0.3	0.0	-2.6	-1.1	0.0	0.0	0.0
Net cash provided by investing activities [2]	-1.6	-18.6	-5.0	-9.3	-8.2	-10.2	-10.2
Change in financial liabilities	-1.2	13.6	0.1	17.5	0.0	0.0	0.0
Dividends paid	-0.5	0.0	0.0	0.0	0.0	-1.0	-1.0
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	-1.0	-2.2	1.6	0.0	0.0	0.0
Net cash provided by financing activities [3]	-1.6	12.6	-2.1	19.1	0.0	-1.0	-1.0
Change in liquid funds [1]+[2]+[3]	-3.6	-3.9	-3.5	25.1	0.1	2.7	7.9
Effects of exchange-rate changes on cash	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Cash and cash equivalent at end of period	10.2	6.4	2.8	27.9	30.6	33.3	41.2

Financial Ratios

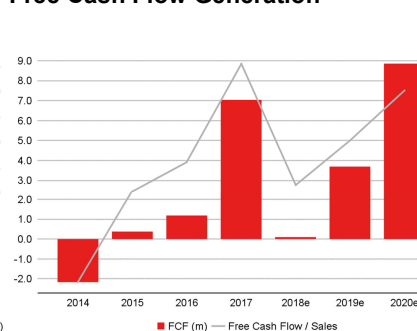
	2014	2015	2016	2017	2018e	2019e	2020e
Cash Flow							
FCF	-2.2	0.4	1.2	7.0	0.1	3.7	8.9
Free Cash Flow / Sales	-6.2 %	-0.3 %	1.5 %	7.8 %	0.1 %	2.9 %	6.1 %
Free Cash Flow Potential	1.2	2.1	7.2	8.3	12.5	17.1	22.8
Free Cash Flow / Net Profit	147.0 %	13.3 %	42.0 %	180.8 %	1.3 %	33.4 %	55.9 %
Interest Received / Avg. Cash	1.3 %	2.5 %	2.2 %	0.7 %	0.7 %	0.6 %	0.5 %
Interest Paid / Avg. Debt	7.4 %	4.1 %	4.3 %	3.3 %	0.9 %	0.9 %	0.9 %
Management of Funds							
Investment ratio	5.3 %	3.8 %	3.1 %	9.0 %	7.5 %	8.1 %	7.0 %
Maint. Capex / Sales	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Capex / Dep	77.6 %	68.6 %	61.4 %	215.8 %	158.6 %	171.8 %	149.4 %
Avg. Working Capital / Sales	23.0 %	13.1 %	16.1 %	18.1 %	16.4 %	17.1 %	17.2 %
Trade Debtors / Trade Creditors	562.7 %	600.2 %	819.6 %	964.6 %	977.3 %	953.8 %	950.0 %
Inventory Turnover	4.4 x	5.0 x	6.4 x	8.6 x	6.7 x	6.9 x	6.9 x
Receivables collection period (days)	75	73	85	71	71	72	72
Payables payment period (days)	116	93	105	79	70	72	72
Cash conversion cycle (Days)	-52	-182	-48	-65	-33	-33	-30

CAPEX and Cash Flow

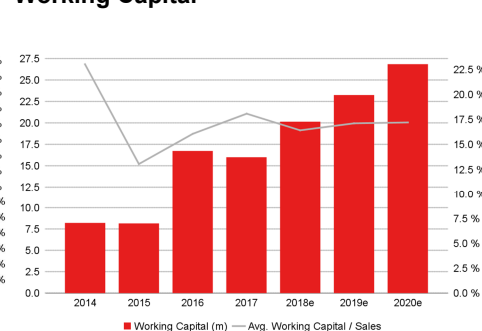
in EUR m



Free Cash Flow Generation



Working Capital



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

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-B-	Buy:	The price of the analysed financial instrument is expected to rise over the next 12 months.
-H-	Hold:	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
-S-	Sell:	The price of the analysed financial instrument is expected to fall over the next 12 months.
“-“	Rating suspended:	The available information currently does not permit an evaluation of the company.

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Rating	Number of stocks	% of Universe
Buy	113	55
Hold	89	43
Sell	4	2
Rating suspended	0	0
Total	206	100

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING ...

... taking into account only those companies which were provided with major investment services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	32	68
Hold	15	32
Sell	0	0
Rating suspended	0	0
Total	47	100

PRICE AND RATING HISTORY GK SOFTWARE AS OF 27.08.2018


Markings in the chart show rating changes by Warburg Research GmbH in the last 12 months. Every marking details the date and closing price on the day of the rating change.

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