

IAR SYSTEMS

It is not Q2 that will set the tone

The Q2 results were soft and in our view do not reflect the investments the company has made in 2018–2019 to position it as the frontrunner in the embedded industry's hottest themes. Instead, we believe investors are ready to look for its new product launches, which should see a 2018–2021e EBIT CAGR of 24%. While we expect the long-term potential in the case to strengthen, we have lowered our fair value to SEK270–340 (270–370) on our 5% cut to our 2019–2021e EBIT.

Q2 review. Organic growth was -2% YOY (total growth: 4%), with an EBIT margin of 24%, setting up a 19% miss versus our Q2 forecasts. FCF remains hampered by elevated development costs related to new hires in Secure Thingz, which we expect to peak in 2019, as IAR Systems has undergone two of the most comprehensive product launches in its history earlier this year. On the positive side, its sales cycles indicate that we should see sales from its new product launches (embedded security and RISC-V) materialise in the coming quarters, albeit from a low base. We have cut our 2019–2021e EBIT by c5% on the back of the Q2 miss.

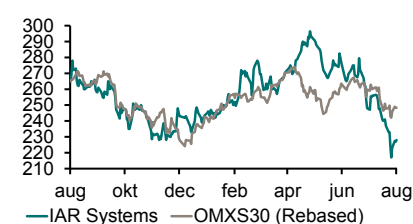
What caught our attention: 1) faster than anticipated RISC-V adoption amongst customers, as CEO Skarin commented that the new products have been well received (especially in China, today comprising 1% of group sales) and that customers have chosen to invest shortly after launch – setting the stage for accelerating growth in H2 2019; and 2) strategic sales now comprise c10–15% of sales, highlighting that larger OEMs (in some cases 100+ developers) are increasingly standardising on IAR's tools, offering bright prospects for the roll-out of the security products, in our view.

Fair value lowered to SEK270–340 (270–370). As we approach the inflection point for new product launches we believe that the building blocks are in place to take the IAR Systems case to the next level. Should we see signs of increased investor confidence in its security products and RISC-V, we expect a change in sentiment to drive the shares towards the higher end of our fair value range. Our estimates correspond to a 2020e P/E of 23x, and an EV/EBIT of 17x, which is a 30% discount to the peer group.

Year-end Dec	2015	2016	2017	2018	2019e	2020e	2021e
Revenue (SEKm)	312	328	345	385	440	555	645
EBITDA adj (SEKm)	98	113	127	140	165	235	292
EBIT adj (SEKm)	83	101	107	119	128	183	225
PTP (SEKm)	83	100	106	117	126	179	221
EPS rep (SEK)	5.02	6.18	6.33	6.67	7.01	9.87	12.14
EPS adj (SEK)	5.02	6.18	6.33	6.67	6.94	9.87	12.14
DPS (SEK)	5.00	7.00	5.00	4.99	5.00	5.50	5.50
Revenue growth (%)	21.9	5.4	5.1	11.7	14.1	26.2	16.2
EBITDA growth adj (%)	54.6	15.2	12.4	10.1	17.4	42.7	24.5
EPS growth adj (%)	50.2	23.0	2.6	5.3	4.1	42.3	23.0
EBITDA margin adj (%)	31.5	34.5	36.9	36.4	37.4	42.3	45.3
EV/Sales adj (x)	5.80	7.63	6.58	8.32	6.96	5.50	4.67
EV/EBITDA adj (x)	18.4	22.1	17.8	22.9	18.6	13.0	10.3
EV/EBIT adj (x)	21.7	24.9	21.1	27.0	23.8	16.7	13.4
P/E adj (x)	29.9	33.4	29.8	36.4	32.9	23.1	18.8
P/Book (x)	6.51	9.31	8.22	6.02	5.21	4.74	4.16
ROE (%)	21.9	27.3	28.1	21.6	16.7	21.5	23.6
ROCE (%)	28.5	34.9	33.6	26.1	20.2	24.5	27.4
Dividend yield (%)	3.3	3.4	2.6	2.1	2.2	2.4	2.4

Source: Company (historical figures), DNB Markets (estimates)

IARB versus OMXS30 (12m)



Source: Factset

SUMMARY

Share price (SEK)	228
Tickers	IARB SS, IARB.ST

CAPITAL STRUCTURE

No. of shares (m)	13.6
No. of shares fully dil. (m)	14.0
Market cap. (SEKm)	3,105
NIBD adj end-2019e (SEKm)	-46
Enterprise value adj (SEKm)	3,059
Net debt/EBITDA adj (x)	-0.28
Free float (%)	100

Source: Company, DNB Markets (estimates)

Note: Unless otherwise stated, the share prices in this note are the last closing price.

NEXT EVENT

Q3 2019	07/11/2019
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ESTIMATE CHANGES (SEK)

Year-end Dec	2019e	2020e	2021e
Sales (old)	460.0	566.7	657.1
Sales (new)	439.6	554.9	644.6
Change (%)	-4.4	-2.1	-1.9
EPS (old)	7.81	10.43	12.44
EPS (new)	6.94	9.87	12.14
Change (%)	-11.1	-5.4	-2.4

Source: DNB Markets,

This report has been commissioned and paid for by the company, and is deemed to constitute an acceptable minor non-monetary benefit as defined in MiFID II

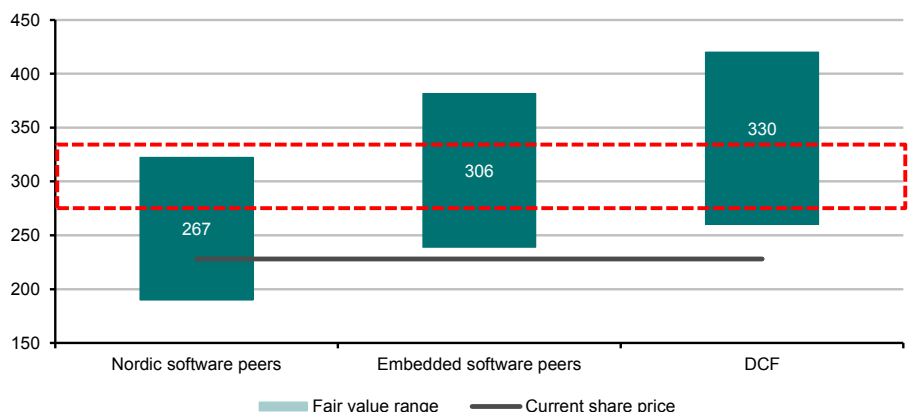
ANALYSTS

Joachim Gunell

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Overview

Valuation (SEK)



Source: DNB Markets

Downside risks to our fair value

- Failure to resurrect the growth story. If investors lose trust in IAR Systems' ability to resume growth, it could trigger share devaluation, as in 2017.
- Disappointing disclosures regarding key strategic partnerships in terms of when they will materialise and the fee structure. For instance, the Renesas Synergy agreement has yet to show itself in IAR Systems' sales. Thus, it would be negative if the Secure Thingz collaboration falls short of management expectations.
- IAR Systems is highly sensitive to a strengthening of the SEK (particularly against the USD, EUR, and JPY).

Source: DNB Markets

DNB Markets estimates

- We believe IAR 3.0 will mark the shift when the market starts to view it as the go-to tools partner for global names as they position their embedded systems ahead of the IoT. We would highlight the market opportunity within secure embedded systems.
- A broad consensus has yet to emerge on IAR Systems' investment case; however, we particularly like the group's market opportunity, operating profile, financial outlook, and valuation.
- We estimate that IAR Systems should generate a 2018–2021 EBIT CAGR of 24%, with the true potential expected beyond our forecast period.

Source: DNB Markets

Valuation methodology

- Blending our total peer group of Nordic software and embedded software peers with DCF suggests a fair value of SEK270–340 (270–370) in our 12-month perspective (methodology unchanged).
- Our estimates correspond to a 2020e P/E of 23x, an EV/EBIT of 17x, and an EV/sales of 6x.

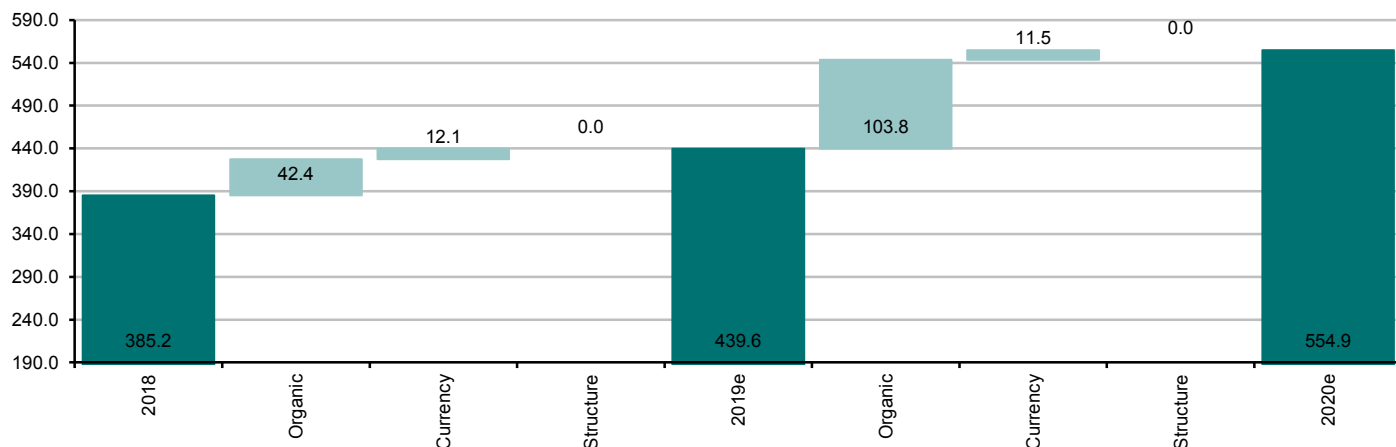
Source: DNB Markets

Upside risks to our fair value

- The company over-delivering on its financial targets (particularly for 10–15% in organic growth).
- If IAR Systems' new security offering gains faster penetration than we assume by leveraging on its head-start, we believe there is a potential for shareholder value creation beyond our fair value.
- Value-enhancing acquisitions to be integrated in its product offering or new strategic partnerships.
- Better cost control (as it has a reputation for tight cost control), implying higher margins.

Source: DNB Markets

Sales bridge 2018–2020e (SEKm)



Source: DNB Markets (forecasts), company (historical data)

Q2 2019 takeaways

Q2 sales were SEK99m (7% below our estimate), showing organic growth of -2% YOY (decelerating from 4% in Q1 2019 versus our estimate of 5%), mainly driven by the challenge of balancing IAR Systems' resources between its new and old products and tougher comps. EBIT was SEK24m (19% below our forecast), corresponding to a 24% margin (down 0.8%-points YOY) as the workforce has increased by 20% YOY (mainly software developers in Cambridge).

Q2 report was on the weak side, but does not set the tone

Adjusting for capitalised development costs, the EBIT margin was 5%, which could seem concerning. This has been a drag on FCF conversion since Q2 2018, which was 40% versus the historical average of c100%. However, as the company has been in an investment phase in 2018–2019, in our view the capitalised development costs have peaked, which we believe investors are willing to overlook as long as the growth opportunity, especially in Secure Thingz, remains on track.

Results presentation takeaways

- **RISC-V ecosystem is growing faster than IAR Systems had expected.** Arm's dominant position for architecture for 32- and 64-bit processors is challenged as it is losing market share to RISC-V. IAR Systems' front-runner position into RISC-V as the only commercial development tool supplier and degree of flexibility given the industry's broadest support for processor architectures (re-usage of code) should become a key driver for customer migration into RISC-V.

- Its first licenses were sold the same week as announced in late Q2 2019.
- Early-adopting customers confirm its leading code performance against competition.
- China and Asia continue to be leading markets for RISC-V adoption.

Figure 1: Q2 2019 results versus expectations

Key highlights (SEKm, except per share data)	Q2 2019		Deviation (%)		Q2 2018		DNBe
	Actual	DNB	DNB	DNB	Actual	DNB	2019e
Sales	99.0	105.9	-7%	-6.9	95.6	439.6	
EBIT adjusted	23.8	29.4	-19%	-5.6	23.7	128.4	
Margin	24.0%	27.8%		-372bp	24.8%	29.2%	
One-offs	0.0	0.0		0.0	0.0	0.0	
EBIT	23.8	29.4	-19%	-5.6	23.7	128.4	
Margin	24.0%	27.8%		-372bp	24.8%	29.2%	
EPS	1.22	1.57	-22%	-0.4	1.43	6.94	
Growth YOY							
Sales growth	3.6%	10.8%		-721bp	10.1%	17.6%	
-of w hich organic	-2.3%	5.2%		-747bp	8.1%	11.0%	
-of w hich FX	5.9%	5.6%		26bp	2.1%	6.6%	
Divisions (SEKm)	Q2 2019				Q2 2018	DNBe	
		DNB			DNB	DNB	
Sales							
Legacy IAR Systems	96.8	103.7	-7%	-6.9	93.8	408.0	
Royalty-based revenue	1.5	1.4	5%	0.1	1.3	6.5	
Secure Thingz	0.7	0.7	-5%	0.0	0.5	25.1	
Group	99.0	105.9	-7%	-6.9	95.6	439.6	
EBIT adjusted							
Legacy IAR Systems + Secure Thin	22.3	28.0	-20%	-5.7	22.4	122.1	
Royalty-based revenue	1.5	1.4	5%	0.1	1.3	6.3	
Group	23.8	29.4	-19%	-5.6	23.7	128.4	
FX impact							
Sales	5.9%	5.6%		26bp	2.1%	6.6%	
EBIT	15.2%	18.0%		-284bp	7.8%	17.4%	

Source: Company (historical figures), DNB Markets (estimates)

Estimate revisions

Following the Q2 results, we have reduced our 2019–2021e adj. EBIT by c5%, mainly on: 1) somewhat slower ramp-up of embedded security sales in H2 2019, as IAR Systems will focus on capturing the higher than anticipated demand for RISC-V tools; 2) slower uptick of Renesas Synergy sales; and 3) higher assumptions for the amortisation of capitalised development costs. Based on these changes, we forecast that IAR Systems should generate a 2018–2021 EBIT CAGR of 24%, with the true potential expected beyond our forecast period.

5% cut to our 2019–2021e EBIT

Figure 2: Estimate changes

(SEKm, except per share data)	Old			New			Change		
	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e
Sales									
Legacy IAR Systems	418.0	451.0	480.0	408.0	442.9	471.4	-2%	-2%	-2%
Royalty-based revenue	7.9	15.7	29.1	6.5	11.8	26.2	-18%	-25%	-10%
Secure Thingz	34.1	100.0	148.0	25.1	100.3	147.1	-27%	0%	-1%
Group Total	460.0	566.7	657.1	439.6	554.9	644.6	-4%	-2%	-2%
EBIT adjusted									
Legacy IAR Systems + Secure Thingz	135.2	177.4	201.5	122.1	171.6	199.7	-10%	-3%	-1%
Royalty-based revenue	7.7	15.2	28.2	6.4	11.4	25.4	-17%	-25%	-10%
Group Total	142.9	192.6	229.6	128.4	183.0	225.0	-10%	-5%	-2%
EBIT adjusted margin									
Legacy IAR Systems + Secure Thingz	29.9%	32.2%	32.1%	28.2%	31.6%	32.3%	-172bp	-60bp	21bp
Royalty-based revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0bp	0bp	0bp
Group Total	31.1%	34.0%	34.9%	29.2%	33.0%	34.9%	-184bp	-101bp	-4bp
Organic growth									
Legacy IAR Systems	7.6%	6.5%	5.3%	5.7%	6.6%	5.3%	-181bp	10bp	-4bp
Royalty-based revenue	0.6%	1.6%	2.3%	0.2%	1.1%	2.5%	-34bp	-50bp	20bp
Secure Thingz	7.3%	13.5%	8.2%	5.0%	15.9%	8.1%	-223bp	241bp	-12bp
Group Total	15.4%	21.6%	15.7%	11.0%	23.6%	15.8%	-437bp	201bp	4bp
Group									
Sales	460.0	566.7	657.1	439.6	554.9	644.6	-4%	-2%	-2%
Sales growth	21.5%	22.8%	15.7%	17.6%	25.5%	15.8%	-385bp	270bp	4bp
Organic	15.4%	21.6%	15.7%	11.0%	23.6%	15.8%	-437bp	201bp	4bp
Structure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0bp	0bp	0bp
Currency	6.1%	1.2%	0.0%	6.6%	1.9%	0.0%	52bp	69bp	0bp
Gross profit	450.4	554.8	643.3	429.8	542.6	630.3	-5%	-2%	-2%
Margin	97.9%	97.9%	97.9%	97.8%	97.8%	97.8%	-12bp	-13bp	-13bp
EBIT adjusted	142.9	192.6	229.6	128.4	183.0	225.0	-10%	-5%	-2%
Margin	31.1%	34.0%	34.9%	29.2%	33.0%	34.9%	-184bp	-101bp	-4bp
Adjustments	0.0	0.0	0.0	0.0	0.0	0.0			
EBIT	142.9	192.6	229.6	128.4	183.0	225.0	-10%	-5%	-2%
Margin	31.1%	34.0%	34.9%	29.2%	33.0%	34.9%	-184bp	-101bp	-4bp
Net financial items	-1.7	-3.1	-3.6	-2.8	-3.5	-4.4			
Pretax profit	141.2	189.5	226.0	125.6	179.4	220.7	-11%	-5%	-2%
Tax	-34.3	-47.4	-56.5	-30.0	-44.9	-55.2	-12%	-5%	-2%
Tax rate	24.3%	25.0%	25.0%	23.9%	25.0%	25.0%	-37bp	0bp	0bp
Net profit	106.9	142.1	169.5	95.5	134.6	165.5	-11%	-5%	-2%
EPS adjusted	7.81	10.43	12.44	6.94	9.87	12.14	-11%	-5%	-2%
EPS	7.85	10.43	12.44	7.01	9.87	12.14	-11%	-5%	-2%
DPS	5.00	5.50	5.50	5.00	5.50	5.50	0%	0%	0%

Source: DNB Markets

22 August 2019

Figure 3: Quarterly estimates by division

(SEKm, except per share data)	Q1'17	Q2'17	Q3'17	Q4'17	Q1'18	Q2'18	Q3'18	Q4'18	Q1'19	Q2'19	Q3'19e	Q4'19e
Sales												
Legacy IAR Systems	83.5	85.4	82.9	86.4	87.6	93.8	95.5	97.8	98.0	96.8	103.5	109.1
Royalty-based revenue	2.9	1.4	1.3	1.2	1.3	1.3	1.4	1.5	1.4	1.5	1.5	2.1
Secure Thingz	0.0	0.0	0.0	0.0	0.0	0.5	1.0	3.5	0.4	0.7	2.6	21.9
Group Total	86.4	86.8	84.2	87.6	88.9	95.6	97.9	102.8	99.8	99.0	107.7	133.2
EBIT												
Legacy IAR Systems + Secure Thingz	23.3	24.4	27.3	25.6	28.2	22.4	29.9	29.6	28.0	22.3	28.6	43.0
Royalty-based revenue	2.9	1.4	1.3	1.2	1.3	1.3	1.4	1.5	1.4	1.5	1.5	2.1
Group Total	26.2	25.8	28.6	26.8	29.5	23.7	31.3	31.1	29.4	23.8	30.1	45.1
EBIT adjusted margin												
Legacy IAR Systems + Secure Thingz	27.9%	28.6%	32.9%	29.6%	32.2%	23.9%	31.3%	30.3%	28.6%	23.0%	27.6%	39.4%
Royalty-based revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Group Total	30.3%	29.7%	34.0%	30.6%	33.2%	24.8%	32.0%	30.3%	29.5%	24.0%	28.0%	33.9%
Organic growth												
Legacy IAR Systems	2.6%	0.6%	8.3%	8.4%	4.9%	7.9%	6.5%	9.6%	3.4%	-2.3%	2.9%	5.7%
Royalty-based revenue	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.5%
Secure Thingz	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%	0.0%	0.0%	1.5%	16.9%
Group Total	2.7%	0.6%	8.4%	8.5%	5.0%	8.1%	6.7%	10.0%	3.5%	-2.3%	4.5%	23.0%
Group												
Sales	86.4	86.8	84.2	87.6	88.9	95.6	97.9	102.8	99.8	99.0	107.7	133.2
Sales growth	7.3%	6.1%	3.8%	3.1%	2.9%	10.1%	16.3%	17.4%	12.3%	3.6%	10.0%	29.5%
Organic	2.7%	0.6%	8.4%	8.5%	5.0%	8.1%	6.7%	10.0%	3.5%	-2.3%	4.5%	23.0%
Structure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Currency	4.6%	5.5%	-4.6%	-5.4%	-2.1%	2.1%	9.6%	7.3%	8.8%	5.9%	5.5%	6.5%
Gross profit	84.0	85.2	82.3	85.0	86.1	93.7	95.8	100.6	97.7	96.5	105.3	130.3
Margin	97.2%	98.2%	97.7%	97.0%	96.9%	98.0%	97.9%	97.9%	97.9%	97.5%	97.9%	97.9%
EBIT adjusted	26.2	25.8	28.6	26.8	29.5	26.9	31.3	31.1	29.4	23.8	30.1	45.1
Margin	30.3%	29.7%	34.0%	30.6%	33.2%	28.1%	32.0%	30.3%	29.5%	24.0%	28.0%	33.9%
Adjustments	0.0	0.0	0.0	0.0	0.0	-3.2	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	26.2	25.8	28.6	26.8	29.5	23.7	31.3	31.1	29.4	23.8	30.1	45.1
Margin	30.3%	29.7%	34.0%	30.6%	33.2%	24.8%	32.0%	30.3%	29.5%	24.0%	28.0%	33.9%
Net financial items	-0.8	-0.1	-0.4	-0.4	-0.4	-1.7	-0.3	0.6	-0.2	-2.0	-0.4	-0.2
Pretax profit	25.4	25.7	28.2	26.4	29.1	22.0	31.0	31.7	29.2	21.8	29.7	44.9
Tax	-6.6	-4.5	-7.9	-6.7	-6.3	-5.8	-4.2	-9.9	-6.3	-5.1	-7.4	-11.2
Tax rate	26.0%	17.5%	28.0%	25.4%	21.6%	26.4%	13.5%	31.2%	21.6%	23.4%	25.0%	25.0%
Net profit	18.8	21.2	20.3	19.7	22.8	16.2	26.8	21.8	22.9	16.7	22.3	33.7
EPS adjusted	1.49	1.68	1.61	1.56	1.81	1.43	1.97	1.60	1.64	1.20	1.63	2.47
EPS	1.49	1.67	1.61	1.56	1.81	1.20	1.97	1.60	1.68	1.23	1.63	2.47
DPS	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00

Source: DNB Markets (forecasts), company (historical data)

Figure 4: Peer group (%)

	Sales growth			GM*	EBIT margin			EBIT growth			EPS growth			2018–2021e CAGR		
	2019e	2020e	2021e	2018	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e	Sales	EBIT	EPS
IAR Systems (DNBe)	14.1	26.2	16.2	97.7	29.2	33.0	34.9	8.1	42.5	23.0	5.2	40.8	23.0	18.7	23.7	22.2
IAR Systems versus total peer group	-4.8	12.9	3.9	27.5	4.5	7.4	7.8	-15.3	12.3	2.2	-20.0	4.5	3.0	3.9	-0.4	-3.9
Nordic software peers																
HMS Networks	16.8	13.8	13.8	61.1	18.5	17.4	19.7	9.8	29.6	22.2	16.1	28.3	23.5	14.8	20.2	22.5
SimCorp	14.0	8.4	9.7	58.1	27.0	27.5	27.9	16.3	9.8	14.8	17.4	11.2	15.7	10.7	13.6	14.7
F-Secure	15.9	7.9	9.2	79.4	4.0	3.3	6.9	-6.5	129.0	50.5	8.6	228.6	47.8	11.0	47.7	74.1
INVISIO Communications	21.7	22.4	19.2	58.9	18.0	23.5	27.1	59.2	40.9	30.1	65.6	39.8	29.8	21.1	42.9	44.3
Fortnox	36.1	23.3	18.4	n.a.	27.6	32.2	34.7	58.8	32.9	25.2	61.2	32.2	24.9	25.7	38.3	38.6
Vitec Software	19.6	4.6	3.1	n.a.	13.2	14.5	14.9	31.3	8.0	5.8	16.1	7.7	7.6	8.9	14.5	10.4
Average of the above	20.7	13.4	12.3	64.4	18.0	19.7	21.9	28.2	41.7	24.8	30.8	58.0	24.9	15.4	29.5	34.1
DNBe versus peer group	-6.6	12.8	3.9	33.3	11.2	13.2	13.0	-20.1	0.8	-1.8	-25.6	-17.1	-1.9	3.4	-5.8	-11.9
Embedded software peers																
Cadence Design Systems	8.9	6.8	6.4	87.8	30.2	31.7	31.6	14.0	6.4	7.4	15.3	6.6	6.8	7.4	9.2	9.5
ANSYS	14.2	9.8	8.5	86.3	47.4	44.6	44.9	7.4	10.5	9.1	4.1	8.7	8.8	10.8	9.0	7.1
Xilinx	12.0	12.3	12.4	70.0	31.4	28.4	30.0	1.3	18.4	15.6	6.9	14.1	11.0	12.2	11.5	10.6
Altium	33.5	22.1	21.7	44.4	30.3	33.0	35.7	45.0	32.2	27.7	51.6	15.2	23.4	25.6	34.7	29.2
Red Hat	15.6	15.5		85.3	23.7	24.7	24.5	20.8	14.5		14.5	7.2				
Average of the above	16.8	13.3	12.3	74.8	32.6	32.5	33.3	17.7	16.4	15.0	18.5	10.4	12.5	14.0	16.1	14.1
DNBe vs. peer group	-2.7	13.0	3.9	22.9	-3.4	0.5	1.6	-9.6	26.1	8.0	-13.2	30.5	10.5	4.7	7.6	8.0
Average of total peer group	18.9	13.3	12.3	70.1	24.7	25.5	27.1	23.4	30.2	20.8	25.2	36.3	19.9	14.8	24.2	26.1
Median of total peer group	15.9	12.3	11.1	70.0	27.0	27.5	27.9	16.3	18.4	18.9	16.1	14.1	19.6	11.6	17.4	18.6

Source: Factset (as of 17:30 CET on 21 August 2019)

Note: (GM = gross margin)

Figure 5: Peer group (x/%)

	M Cap	P/E (x)			EV/EBITDA (x)			EV/EBIT (x)			FCF yield	RoE	Div. yield	Performance (%)		
	(SEKbn)	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2019e	2019e	-1M	-3M	-12M
IAR Systems (DNBe)	3.1	32.3	22.9	18.6	18.5	13.0	10.4	23.7	16.6	13.5	0.5%	16.0%	2.2%	-8.1	-21.8	-14.1
Premium (+) / discount (-)		-31%	-32%	-33%	-27%	-38%	-40%	-29%	-33%	-34%						
Nordic software peers																
HMS Networks	7.2	36.5	28.4	23.0	21.7	17.1	13.9	27.3	20.6	16.4	2.8%	20.4%	1.2%	-5.5	-10.3	8.9
SimCorp	35.1	35.2	31.7	27.4	24.8	22.3	19.5	26.9	24.2	20.8	2.1%	42.7%	1.4%	-3.4	0.2	11.1
F-Secure	4.4	110.1	33.5	22.7	13.7	13.1	9.2	58.3	24.9	16.2	2.4%	5.2%	0.1%	1.0	5.3	-21.6
INVISIO Communications	3.2	40.2	28.7	22.1	29.1	19.4	14.8	30.2	21.1	15.9	3.1%	21.3%	1.4%	2.4	-0.4	18.2
Fortnox	7.9	61.6	46.6	37.3	40.3	30.8	24.6	46.7	34.5	26.9	1.4%	51.4%	0.4%	3.1	10.8	69.9
Vitec Software	3.9	34.7	32.3	30.0	13.6	13.5	12.8	27.2	24.6	22.6	-4.4%	16.3%	0.9%	5.5	25.8	60.7
Average of the above		53.1	33.5	27.1	23.9	19.4	15.8	36.1	25.0	19.8	1.2%	26.2%	0.9%	0.5	5.2	24.5
Premium (+) / discount (-)		-39%	-32%	-31%	-23%	-33%	-34%	-34%	-33%	-32%						
Embedded software peers																
Cadence Design Systems	188.4	32.4	30.4	28.5	24.1	22.6	18.4	25.9	23.6	21.0	3.3%	36.9%	0.0%	-4.1	8.2	55.1
ANSYS	175.8	34.9	32.1	29.5	25.5	22.4	19.9	26.2	22.9	20.1	2.6%	17.4%	0.0%	4.4	17.6	25.9
Altium	257.6	28.6	25.1	22.6	23.4	19.3	17.9	25.8	21.3	18.2	4.1%	30.6%	1.2%	-13.6	4.9	49.0
Xilinx	30.6	52.3	42.4	35.5	37.4	29.4	23.9	40.8	31.6	25.6	2.7%	29.9%	1.4%	-0.5	15.4	66.2
Red Hat	3.1	44.4	41.4								3.5%			1.1	34.0	
Average of the above		38.5	34.3	29.0	27.6	23.4	20.0	29.7	24.9	21.2	3.2%	28.7%	0.7%	-3.5	9.5	46.1
Premium (+) / discount (-)		-16%	-33%	-36%	-33%	-45%	-48%	-20%	-33%	-36%						
Average of total peer group		46.5	33.9	27.9	25.4	21.0	17.5	33.5	24.9	20.4	2.1%	27.2%	0.8%	-1.1	7.2	34.3
Median of total peer group		36.5	32.1	27.9	24.4	20.9	18.1	27.2	23.9	20.5	2.7%	25.6%	1.1%	0.3	5.3	34.0

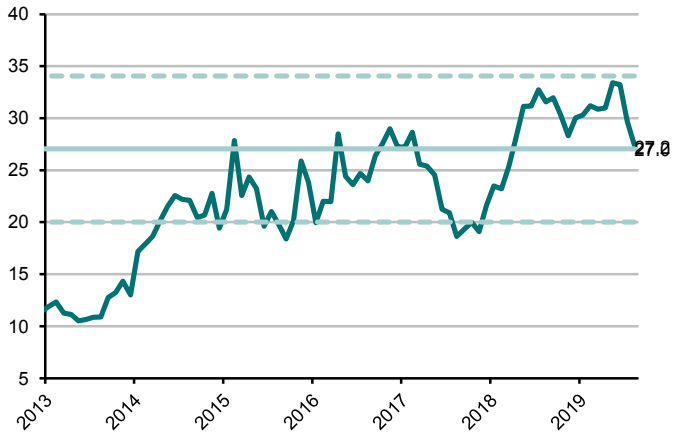
Source: Factset

Note: Share prices correct as of 17:30 CET on 21 August 2019

22 August 2019

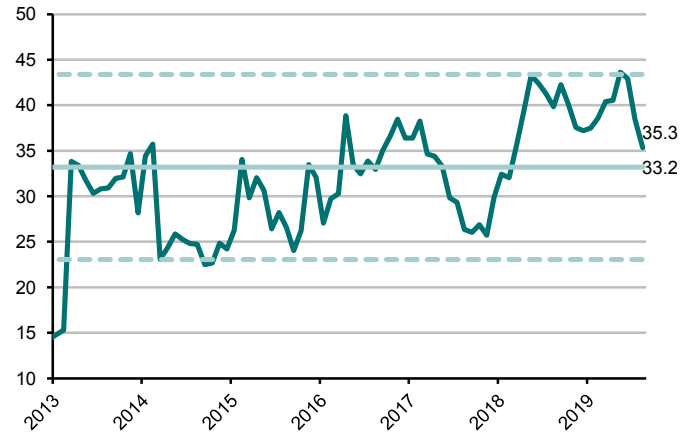
Valuation

Figure 6: IAR Systems EV/EBIT LTM



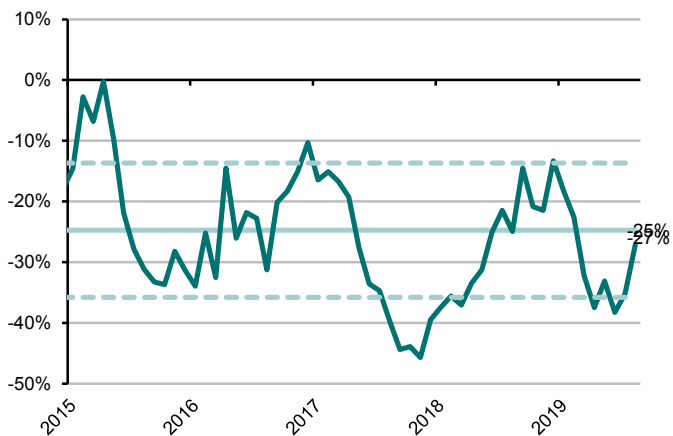
Source: Factset (underlying data), DNB Markets (further calculations)

Figure 7: IAR Systems P/E LTM



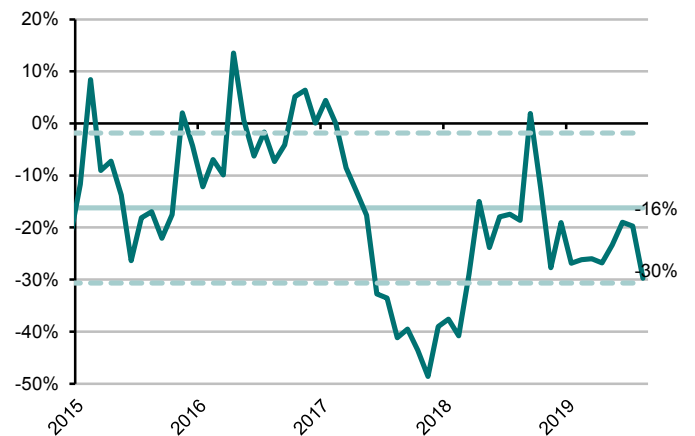
Source: Factset (underlying data), DNB Markets (further calculations)

Figure 8: Premium/discount EV/EBIT LTM IAR Systems to Nordic software peers



Source: Factset (underlying data), DNB Markets (further calculations)

Figure 9: Premium/discount EV/EBIT LTM IAR Systems to embedded software peers



Source: Factset (underlying data), DNB Markets (further calculations)

Summary of positives

World-leading provider of software development tools and services

Sweden-based IAR Systems is a world-leading provider of software tools and services for embedded systems (a chip containing embedded software) that enable the development of digital products for 46,000+ customers in end-markets, underpinned by growing demand for digital technology. We believe IAR Systems has a resilient business model selling flexible right-to-use licences to access its wholly owned software tool-chain (the IAR Embedded Workbench), which enables close customer relationships, high customer retention, and consistent revenue streams complemented by a royalty-based agreement with world-leading processor vendor Renesas Electronics. The March 2018 acquisition of Secure Thingz (the leading provider of advanced security solutions that help customers to take control of digital products from day one) has made IAR Systems the frontrunner ahead of the paradigm shift associated with security solutions for embedded systems in the Internet of Things (IoT).

Embedded resilience in a sticky business

We consider IAR Systems' key competitive advantage to be its proprietary technology platform, the IAR Embedded Workbench, which holds a ~50% global market share, as: 1) it is a unique line-up of a complete tool-chain for product developers; 2) being independent, IAR Systems supports a wide range of design architecture, meaning customers can choose the programming environment and tools according to their own needs, regardless of processor or project, which avoids locking customers in to one technical platform; 3) superior quality as its commercial customers cannot compromise on tools' code performance, reliability, user-friendliness, or time-to-market using inferior technologies such as open-source alternatives; 4) it is now a leading participant in embedded systems security, and should be able to leverage its head-start and unique technology to maximise the market potential; and 5) a scaled-up management team with the ability to execute the growth potential in the business, in our view.

IAR 3.0

IAR Systems has gone through various phases since 2010, having: 1) streamlined the business towards proprietary software, creating a more specialised company; and 2) shifted its project-based business model to scalable licence sales, which has substantially improved margins. In our view, it is now heading into its third phase: the growth story. We believe that IAR 3.0 (our interpretation of IAR Systems' next phase) marks the shift from being a supplier of a compiler to becoming the go-to software tool partner for global names such as Amazon and Renesas Electronics as they position their embedded systems ahead of the Internet of Things (IoT).

Growing addressable market with the spread of digital technology

The spread of digital technology is driving the market for embedded systems. Thus, the market has numerous underlying drivers that all indicate a continuation of the solid industry growth of the past decade. Global Market Insights estimates a 7% market CAGR until 2023e, and we believe the factors that should affect growth for IAR Systems are likely to be: 1) continued increase in the number (and complexity) of embedded systems driven by IoT; 2) demand for reliable and advanced software tools that offer faster time-to-market and a complete development platform; 3) the automotive opportunity as cars become mobile computing platforms; 4) market consolidation and participants becoming too dominant; and 5) untapped potential in security solutions for embedded systems.

Security for embedded systems could mark a paradigm shift for IAR Systems

Following the acquisition of Secure Thingz, IAR Systems is now the frontrunner in offering secure embedded systems. We believe IAR Systems identified Secure Thingz as a takeover candidate before the market had valued its demand growth opportunity. The security market for embedded systems is in its inception phase but we expect it to grow rapidly through 2022e as the share of secure new embedded products is set to grow from 4% today to almost 20% by 2022e, according to ABI Research. There are no real competitors in this market yet, and if IAR Systems were to capture considerable market share, we believe it could be a paradigm shift for the company.

Its software tools and services enable the development of digital products...

...in end-markets underpinned by growing demand for digital technology

IAR Systems owns the market for software development tools with c50% global market share

Key competitive strengths:

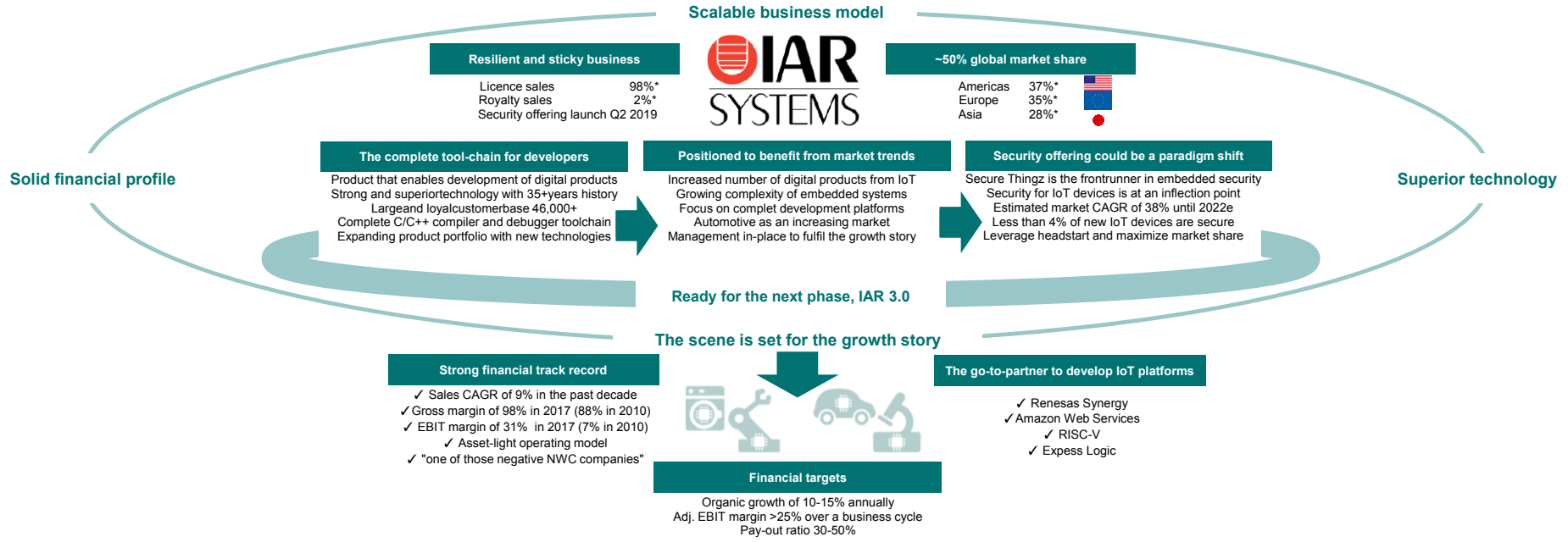
- 1) unique and complete tool-chain
- 2) independence
- 3) high-quality products
- 4) frontrunner in security solutions
- 5) management's ability to achieve its long-term potential

Setting the scene for the growth story

Numerous market drivers indicate a continuation of the solid industry growth

Untapped potential in security offering with an addressable market opportunity of USD3bn, highlights that if IAR Systems is able to land-grab just a minor market share, it could have a swing factor on its valuation

Figure 10: IAR Systems' in one picture



Source: Company (underlying data), DNB Markets (compilation)

We forecast 2018–2021 sales and EBIT CAGR of 19% and 24%, respectively

We forecast a 2018–2021 sales CAGR of 19% and EBIT CAGR of 24% based on a strong market outlook underpinned by: 1) an increase in the number (and complexity) of embedded systems; 2) growing demand for reliable and advanced software tools that offer faster time-to-market and complete development platforms; 3) the automotive opportunity, as cars become mobile computing platforms; and 4) royalties from Renesas Electronics. Moreover, we see additional prospects and untapped potential in security solutions for embedded systems.

This should be driven by an 7% organic sales CAGR for its legacy licensing business (99% of 2018 sales) as the aforementioned market drivers should translate into more processors and lines of code, driving demand for software development tools and possibly programmers (user keys) for IAR Systems, as well as a full user-friendly total solution enabling customers to re-use large amounts of code. In addition, increased penetration from existing and new technologies in the IAR Embedded Workbench should drive add-on sales.

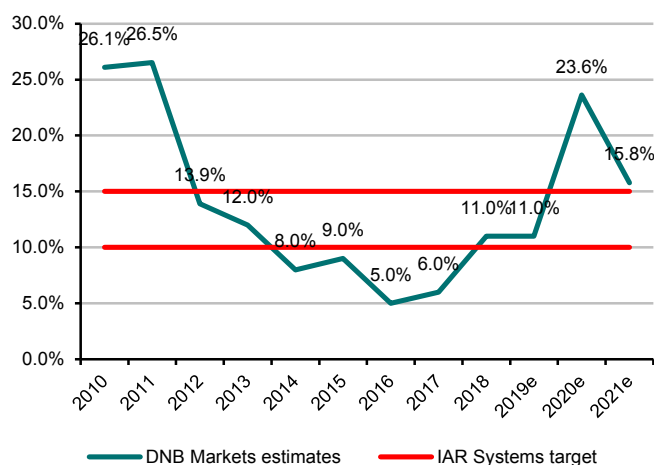
We estimate that revenues stemming from the royalty-based agreement with Renesas Electronics (1%) should contribute 2% organic sales CAGR for IAR Systems until 2021. However, as the dynamics of this agreement have not been disclosed, we take a conservative approach for estimating the revenue impact.

We forecast a 2018–2021 EBIT CAGR of 24%, implying a margin gain from 30% in 2018 to 35% in 2021e, driven by: 1) solid organic volume growth; and 2) ample operational leverage (hurt in 2018 by the integration of Secure Thingz) in 2019–2021e as we believe IAR Systems should continue to benefit from economies of scale due to its large fixed cost base.

Market drivers should create more processors and lines of code, driving demand for software development tools, and a user-friendly total solution enabling customers to re-use code

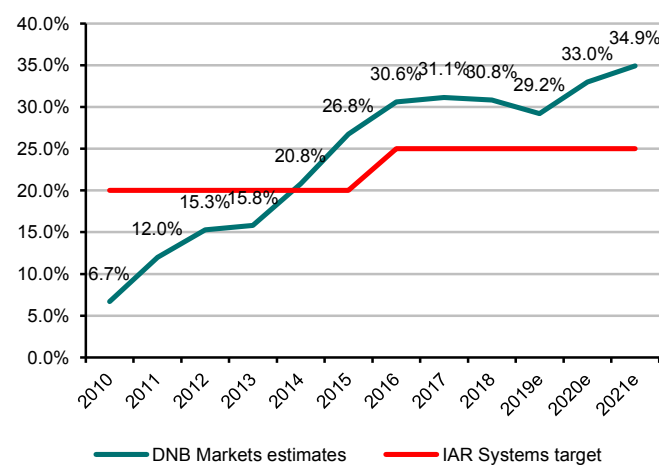
We expect Secure Thingz to contribute to group sales with 11% organic growth CAGR in 2018–2021

Figure 11: Organic sales growth (2010–2021e)



Source: DNB Markets (forecasts), company (historical data)

Figure 12: Adj. EBIT margin



Source: DNB Markets (forecasts), company (historical data)

Financial targets

IAR Systems has three financial targets: 1) average organic growth of 10–15% annually; 2) an adj. EBIT margin in excess of 25% over a business cycle; and 3) a dividend payout of 30–50% of annual net income. Our estimates are above IAR Systems’ throughout our forecast period.

Figure 13: IAR Systems’ financial targets – reported and DNB Markets’ estimates

	Reported fiscal years					IAR target	DNB Markets’ estimates		
	2014	2015	2016	2017	2018		2019e	2020e	2021e
Organic growth	8.0%	9.0%	5.0%	6.0%	11.0%	10-15%	11.0%	23.6%	15.8%
EBIT margin	20.8%	26.8%	30.6%	31.1%	30.8%	>25%	29.2%	33.0%	34.9%
Pay-out ratio	149.3%	99.7%	113.3%	79.0%	74.9%	30-50%	71%	56%	45%

Source: DNB Markets (forecasts), company (historical data and targets)

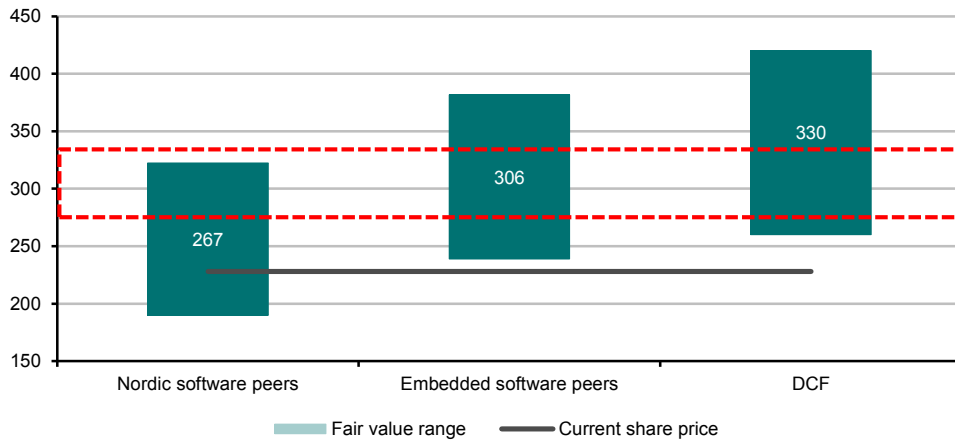
We calculate a fair value of SEK270–340/share

Based on our group of Nordic software peers, embedded software peers, and our DCF model, we calculate a fair value of SEK270–340/share. We believe the market has been valuing IAR

Fair value of SEK270–340/share suggests potential upside of 20–50%

Systems relative to Nordic Software peers, whereas in our view embedded software peers better reflect its operating environment, business model, and growth prospects. On the current share price, our estimates suggest a 23x 2020e P/E, 17x EV/EBIT, and 6x EV/sales, while our fair value suggests share price potential upside of 20–50%.

Figure 14: Valuation summary (SEK/share)



Source: DNB Markets

Summary of negatives

The key risks that could affect our fair value are: 1) IAR Systems' inability to resurrect the growth story, e.g. if it failed to capture the underlying market growth, or if there was prolonged market consolidation (causing market uncertainty) or delays in key strategic initiatives; 2) market entry from large and well-resourced participants that, until now, have overlooked the potential in software tools for embedded systems; and 3) FX headwinds, as the company is fairly sensitive to fluctuations in the SEK as it does not hedge its currency flows (with >98% of sales from markets outside Sweden but 57% of its cost base in SEK).

- **Failure to resurrect the growth story.** Having reported average local currency growth of 20% in 2010–2013, 9% in 2014–2015, and 7% in 2016–2018, we believe the key risk to the valuation is a failure to resurrect the organic growth story. While we have identified numerous market drivers that should fuel organic growth in our forecast period, an inability to capture these trends, delays in when the factors materialise, or disappointing disclosures regarding the new strategic alliances in royalty fees, licensing structures, etc. could raise questions about the operations and thus the valuation.
- **FX headwinds.** With >98% of sales from markets outside Sweden, while the vast majority of the fixed cost base is denominated in SEK (we estimate ~58%), IAR Systems is fairly sensitive to fluctuations to the SEK. If the SEK were to strengthen by 10% against its most important currencies (USD, EUR, JPY) as well as the GBP and KRW in 2018, we estimate a ~10% FX headwind on sales and a ~30% headwind on 2019 EBIT.
- **Intensified competitive landscape.** While the company holds leading positions across most processor types, it still faces a highly competitive environment, particularly from the independent supplier Green Hills Software and Arm's development tool Kiel. If the competitiveness were to intensify or market growth rates were to abate, there could be pressure on the pricing of software licences (from those not giving it away free) in efforts to recapture growth or gain market share. While we believe the commercial viability of open source names is a limited risk for IAR Systems' offering today, any success for these alternatives could result in reduced licensing revenues for IAR Systems.
- **Continued market consolidation.** The ongoing consolidation trend among processor vendors could last longer than IAR Systems expects. If this continues to create market uncertainty and disrupt IAR Systems' partner network, it could hamper its growth prospects. Moreover, if the acquisitions of embedded software companies continue, it could cap IAR Systems' ability to integrate new technologies to its product offering. If it fails to acquire new technologies or create strategic alliances to integrate into IAR Systems' offering, this could impede its ability to address new market trends that should contribute to growth.
- **Large company entering the market.** While we believe the barriers to entry are considerable, we also believe the attractiveness of this market has been somewhat overlooked by industry giants as they have often acquired development tools companies and given away the products 'free' to reduce costs. As many competitors in the semiconductor industry (particularly processor vendors) but especially global giants such as Google and Amazon are well resourced, it could pose a threat if they were to consider increasing their presence in software development tools.
- **Limited supply of qualified personnel.** In an industry characterised by rapid technological development, it is vital for IAR Systems to continually improve its product offering through innovation. A need for its technology and products to be market-leading means it has to retain qualified employees, particularly in the technological aspects of product development. Failure to respond quickly to technological developments through qualified personnel could hurt its operations.
- **Worsening economic conditions.** A deteriorating global economy would probably cause a downturn in the cyclical semiconductor industry and customers' end-markets, which could affect the number of new microprocessors, and consequently demand for software development tools that programme the chips.

Until now large well-resourced competitors have overlooked the potential in software tools for embedded systems

IAR Systems is sensitive to fluctuations in the SEK

Growth prospects could be hampered by further consolidation

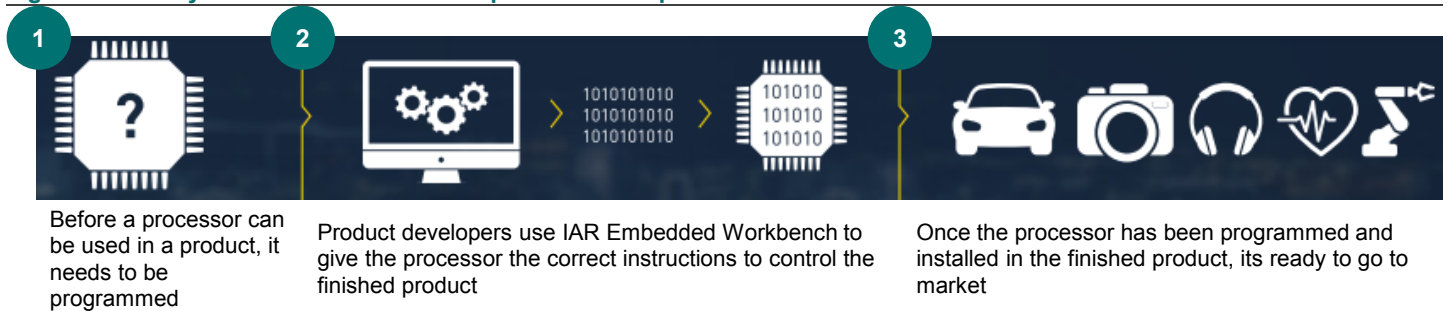
Retaining talented employees is key

Business overview

Dating back to 1983, IAR Systems is an independent provider of software for the programming of microprocessors in embedded systems (the control function in digital products). Its leading software – the IAR Embedded Workbench – facilitates, quality-assures, and improves the time-to-market of programming instructions in processors so they can fulfil their function in the embedded system for developers of smart products. The customer base of 150,000+ programmers (users) is found mainly in end-markets underpinned by growing demand for digital technology and embedded systems, such as industrial automation, medical technology, telecommunication, consumer electronics, and the automotive industry.

World-leading provider of software for programming processors in embedded systems, which enable the development of digital products

Figure 15: IAR Systems' role in customers' product development



Source: Company

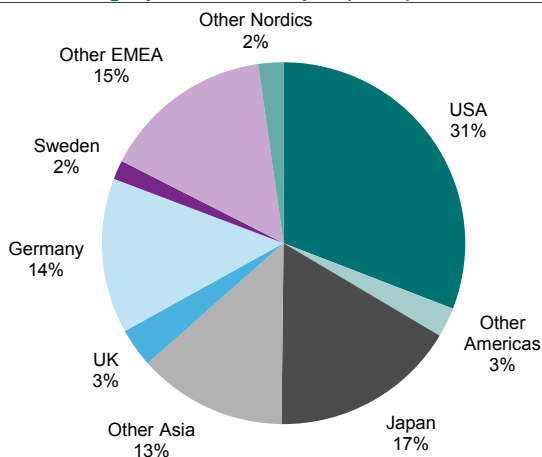
Headquartered in Uppsala (Sweden), the company holds a leading global market share of ~50% with 95%+ of sales stemming from markets outside the Nordics and a market presence in 50+ countries and headcount of 215. With a history of adapting to meet customer demand, IAR Systems' business model is primarily licence-based, where customers pay for a flexible right-to-use licence to access the IAR Embedded Workbench®, giving it attractive and steady revenue streams (~30% recurring revenues). Also, to position itself more towards the Internet of Things (IoT), the company complemented its licence-based model in 2016 with an exclusive royalty-based agreement with world-leading process vendor Renesas Electronics.

50% global market share with 98% licence-based revenues, which are flexible for customers and leverage the number of programmers using its licence...

- **Licence-based revenue (99% of 2018 sales)** based on the number of licence users (perpetual software keys) of the IAR Embedded Workbench sold when a developer programmes a product. The traditional licence costs cSEK30,000 (upfront) while the customer can add a support and updates for an annual cost of 20% of the licence price.
- **Royalty-based revenue (1%)** based on the number of microprocessors produced in Renesas Synergy series. Unlike the licence-based model, IAR Systems receives revenue throughout the entire production period.

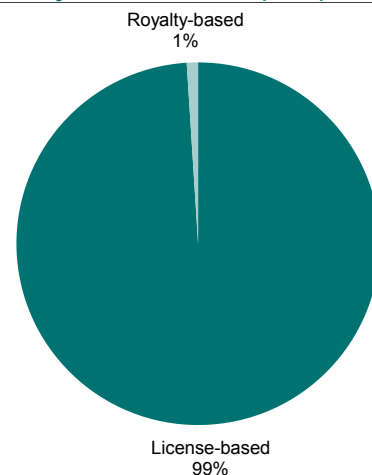
...complemented by royalty-based revenue that leverages the number of chips used in customers' production, which falls straight through to EBIT

Figure 16: Geographical sales split (2018)



Source: Company

Figure 17: Sales by business model (2018)



Source: Company

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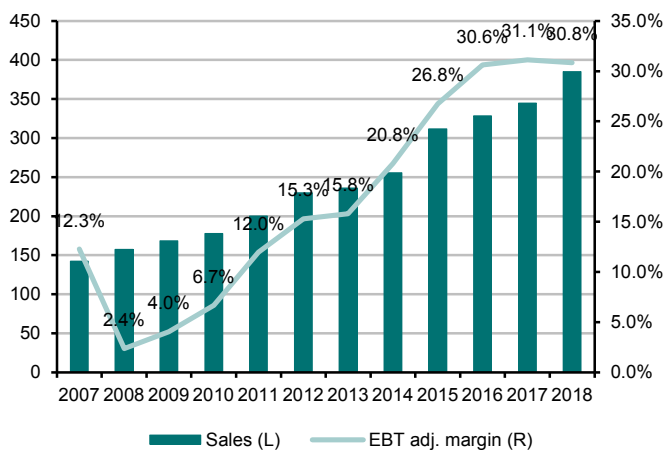
IAR Systems was acquired by IT conglomerate Nocom in 2005. However, by 2010 Nocom (known as Intoi by then) wanted to focus more on proprietary software and create a more specialised company, so it kept only IAR Systems and took on that name.

With 2018 net sales of SEK385m, IAR Systems is 3x larger than the company acquired in 2005. While generating a sales CAGR of 9% over the past 10 years, it was able to significantly boost its underlying profitability from an adj. EBIT margin of 12.3% in 2007 to 30.8% in 2018, which we attribute to: 1) the scalability of its high gross-margin standardised software; 2) more focus on proprietary products; and 3) increased cost efficiency (given the large fixed cost base where personnel costs compose 44% of sales).

From an IT conglomerate to a streamlined proprietary software provider...

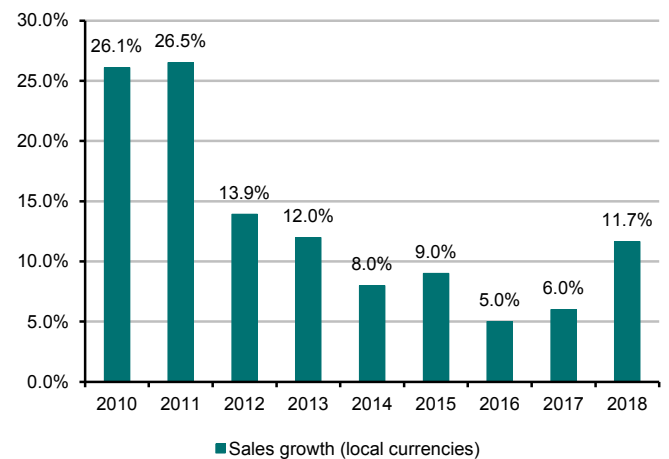
...with profitable growth, sales CAGR of 9% and adj. EBIT CAGR of 40% in the past 10 years

Figure 18: IAR Systems – sales (SEKm) and adj. EBIT margin



Source: Company

Figure 19: IAR Systems – sales growth local currencies



Source: Company

IAR Systems' key competitive advantage in our view is its flagship product, the IAR Embedded Workbench, which is a complete tool-chain for customers. Being independent, the software supports 12,000+ processors for embedded systems from the major process vendors with 8-, 16-, and 32-bit architecture, meaning customers can choose the programming environment and tools according to their own needs regardless of processor or project, which avoids locking customers in to one technical platform. Moreover, it can re-use 70–80% of previously developed code instead of rewriting it (saving time and resources).

Key competitive advantage: cutting-edge wholly owned technology that maximises customer benefits offering a complete solution...

Over the past few years, IAR Systems has expanded its product portfolio and now offers several adjacent products integrated in the IAR Embedded Workbench to optimise the code programming, for instance C-STAT and C-RUN (static and dynamic analysis that quality-assures and strengthens the reliability of the programming), Embedded Trust (security development environment for IoT solutions) and C-Trust (delivering secure, encrypted code) through its acquisition of Secure Thingz, as well as support for Amazon FreeRTOS (IoT Microcontroller Operating System). In addition to driving add-on sales, this has – combined with a comprehensive support organisation – translated into impressive customer retention (95% recurring customers) and strengthened IAR Systems' competitiveness.

...which, combined with complementary integrated products and comprehensive support means a loyal customer base (95% recurring customers)

Figure 20: IAR Embedded Workbench® sold to >46,000 customer organisations

IDE Tools	Build Tools	C-SPY Debugger
<ul style="list-style-type: none"> - Editor - Project manager - Library Tools 	<ul style="list-style-type: none"> - IAR C/C++ Compiler - Assembler - Linker 	<ul style="list-style-type: none"> - Simulator driver - Hardware debugging - Power debugging - RTOS plugins

Source: Company (information), DNB Markets (graph structuring)

22 August 2019

Forecast changes – P&L

(SEKm)	New			Old			Change		
	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e
Revenues	440	555	645	460	567	657	-20	-12	-12
Cost of sales	-10	-12	-14	-10	-12	-14	0	0	-1
Gross profit	430	543	630	450	555	643	-21	-12	-13
Operating expenses	-265	-308	-338	-270	-310	-344	4	2	5
EBITDA	165	235	292	181	245	300	-16	-10	-8
EBITDA adj	165	235	292	181	245	300	-16	-10	-8
EBITDA margin (%)	37.4	42.3	45.3	39.3	43.2	45.6	-1.8	-0.9	-0.3
Depreciation	-4	-5	-7	-8	-12	-20	5	7	13
Amortisation	-33	-46	-60	-29	-40	-50	-3	-7	-10
EBIT	128	183	225	143	193	230	-14	-10	-5
EBIT adj	128	183	225	143	193	230	-14	-10	-5
Net financial items	-3	-4	-4	-2	-3	-4	-1	0	-1
PBT	126	179	221	141	189	226	-16	-10	-5
Taxes	-30	-45	-55	-34	-47	-56	4	3	1
Minorities	0	0	0	0	0	0	0	0	0
Net profit	96	135	165	107	142	169	-11	-8	-4
Adjustments to net profit	0	0	0	0	0	0	0	0	0
Net profit adj	96	135	165	107	142	169	-11	-8	-4
<i>Per share data (SEK)</i>									
EPS	7.01	9.87	12.14	7.85	10.43	12.44	-0.83	-0.56	-0.30
EPS adj	6.94	9.87	12.14	7.81	10.43	12.44	-0.87	-0.56	-0.30
DPS ordinary	5.00	5.50	5.50	5.00	5.50	5.50	0.00	0.00	0.00
DPS	5.00	5.50	5.50	5.00	5.50	5.50	0.00	0.00	0.00
<i>Other key metrics (%)</i>									
Revenue growth	14.1	26.2	16.2	19.4	23.2	16.0	-5.3	3.1	0.2
EBIT adj growth	8.1	42.5	23.0	20.2	34.8	19.3	-12.2	7.7	3.7
EPS adj growth	4.1	42.3	23.0	17.1	33.6	19.3	-13.0	8.6	3.7
Avg. number of shares (m)	14	14	14	14	14	14	0	0	0
Capex	-79	-92	-97	-76	-95	-104	-3	3	7
OpFCF	85	143	195	104	150	195	-19	-7	-1
Working capital	50	70	130	69	94	155	-19	-24	-24
NIBD adj	-46	-56	-100	-45	-66	-105	-2	10	5

Source: DNB Markets

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Quarterly numbers

(SEKm)	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019e	Q2 2019e	Q3 2019e	Q4 2019e	Q1 2020e
Revenues	84	88	89	96	98	103	100	99	108	133	134
Cost of sales	-2	-3	-3	-2	-2	-2	-2	-3	-2	-3	-3
Gross profit	82	85	86	94	96	101	98	97	105	130	131
Operating expenses	-49	-53	-51	-64	-58	-63	-59	-64	-67	-76	-73
EBITDA	34	32	35	30	38	38	38	33	39	54	58
Depreciation	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Amortisation	-5	-5	-5	-6	-6	-6	-9	-8	-8	-8	-13
EBIT	29	27	30	24	31	31	29	24	30	45	44
Net financial items	0	0	0	-2	0	1	0	-2	0	0	-1
PBT	28	26	29	22	31	32	29	22	30	45	43
Taxes	-8	-7	-6	-6	-4	-10	-6	-5	-7	-11	-11
Minorities	0	0	0	0	0	0	0	0	0	0	0
Net profit	20	20	23	16	27	22	23	17	22	34	33
Adjustments to net profit	0	0	0	-2	0	0	0	0	0	0	0
Net profit adj	20	20	23	14	27	22	23	17	22	34	33
Dividend paid	0	0	0	-68	0	0	0	-68	0	0	0
Avg. number of shares (m)	13	13	13	14	14	14	14	14	14	14	14
<i>Per share data (SEK)</i>											
EPS	1.61	1.56	1.81	1.20	1.97	1.60	1.68	1.23	1.63	2.47	2.39
EPS adj	1.61	1.56	1.81	1.43	1.97	1.60	1.64	1.20	1.63	2.47	2.39
DPS ordinary	0.00	0.00	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
DPS	0.00	0.00	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
<i>Growth and margins (%)</i>											
Revenues, QOQ growth	-3.0	4.0	1.5	7.5	2.4	5.0	-2.9	-0.8	8.7	23.7	0.7
Revenues, YOY growth	3.8	3.1	2.9	10.1	16.3	17.4	12.3	3.6	10.0	29.5	34.4
EPS adj, YOY growth	-6.9	-2.0	21.3	-15.1	22.5	2.6	-9.2	-16.1	-17.0	54.3	45.9
Gross margin	97.7	97.0	96.9	98.0	97.9	97.9	97.9	97.5	97.9	97.9	97.9
EBITDA adj margin	40.1	36.4	39.0	31.4	38.6	36.6	38.5	33.2	36.0	40.9	43.5
Depreciation/revenues	-0.7	-0.7	-0.6	-0.6	-0.7	-0.8	-0.5	-1.0	-0.8	-0.9	-0.8
EBIT adj margin	34.0	30.6	33.2	28.1	32.0	30.3	29.5	24.0	28.0	33.9	33.0
Net profit margin	24.1	22.5	25.6	16.9	27.4	21.2	22.9	16.9	20.7	25.3	24.3

Source: Company (historical figures), DNB Markets (estimates)

Adjustments to quarterly numbers

(SEKm)	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019e	Q2 2019e	Q3 2019e	Q4 2019e	Q1 2020e
EBITDA	34	32	35	30	38	38	38	33	39	54	58
EBITDA adj	34	32	35	30	38	38	38	33	39	54	58
EBIT	29	27	30	24	31	31	29	24	30	45	44
Other EBIT adjustments	0	0	0	-3	0	0	0	0	0	0	0
EBIT adj	29	27	30	27	31	31	29	24	30	45	44
Net profit	20	20	23	16	27	22	23	17	22	34	33
Other EBIT adjustments	0	0	0	-3	0	0	0	0	0	0	0
Tax adjustments	0	0	0	0	0	0	0	0	0	0	0
Other adjustments	0	0	0	0	0	0	0	0	0	0	0
Net profit adj	20	20	23	14	27	22	23	17	22	34	33

Source: Company (historical figures), DNB Markets (estimates)

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Quarterly numbers by segment and assumptions

(SEKm)	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019e	Q2 2019e	Q3 2019e	Q4 2019e	Q1 2020e
Assumptions											
Revenue org. % YOY	8.38	8.47	4.98	8.06	6.65	10.05	3.49	-2.30	4.46	23.05	29.58
Structure impact % YOY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Currency impact % YOY	-4.56	-5.41	-2.08	2.07	9.62	7.31	8.77	5.86	5.50	6.48	4.81

Source: Company (historical figures), DNB Markets (estimates)

Annual P&L

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e	
Revenues	230	236	256	312	328	345	385	440	555	645	
Cost of sales	-23	-15	-13	-10	-12	-9	-9	-10	-12	-14	
Gross profit	207	222	243	301	316	337	376	430	543	630	
Operating expenses	-165	-171	-179	-203	-203	-209	-236	-265	-308	-338	
EBITDA	42	51	64	98	113	127	140	165	235	292	
Depreciation	-2	-2	-2	-3	-3	-2	-3	-4	-5	-7	
Amortisation	-4	-7	-8	-12	-14	-17	-22	-33	-46	-60	
EBIT	35	41	53	83	97	107	116	128	183	225	
Net financial items	0	0	0	0	0	-2	-2	-3	-4	-4	
PBT	35	37	54	83	100	106	117	126	179	221	
Taxes	-22	-12	-11	-20	-22	-26	-26	-30	-45	-55	
Effective tax rate (%)	63	31	21	24	22	24	22	24	25	25	
Minorities	0	0	0	0	0	0	0	0	0	0	
Net profit	13	26	42	63	78	80	91	96	135	165	
Adjustments to net profit	0	3	0	0	-3	0	-2	0	0	0	
Net profit adj	13	29	42	63	75	80	88	96	135	165	
Dividend paid	-11	-23	0	-63	-88	-63	-68	-68	-75	-75	
Avg. number of shares	11	12	13	13	13	13	14	14	14	14	
<i>Per share data (SEK)</i>											
EPS	1.14	2.10	3.34	5.02	6.18	6.33	6.67	7.01	9.87	12.14	
EPS adj	1.14	2.10	3.34	5.02	6.18	6.33	6.67	6.94	9.87	12.14	
DPS ordinary	0.98	1.85	0.00	5.00	7.00	5.00	4.99	5.00	5.50	5.50	
DPS	0.98	1.85	0.00	5.00	7.00	5.00	4.99	5.00	5.50	5.50	
<i>Growth and margins (%)</i>											
Revenue growth	14.8	2.7	8.3	21.9	5.4	5.1	11.7	14.1	26.2	16.2	
EPS adj growth	-53.2	83.4	59.2	50.2	23.0	2.6	5.3	4.1	42.3	23.0	
Gross margin	89.9	93.9	95.0	96.7	96.3	97.5	97.7	97.8	97.8	97.8	
EBITDA margin	18.2	21.4	24.9	31.5	34.5	36.9	36.4	37.4	42.3	45.3	
EBITDA adj margin	18.2	21.4	24.9	31.5	34.5	36.9	36.4	37.4	42.3	45.3	
Depreciation/revenues	-1.0	-0.9	-0.9	-0.8	-0.8	-0.7	-0.7	-0.8	-1.0	-1.1	
EBIT margin	15.3	17.5	20.8	26.8	29.4	31.1	30.0	29.2	33.0	34.9	
EBIT adj margin	15.3	15.8	20.8	26.8	30.6	31.1	30.8	29.2	33.0	34.9	
PBT margin	15.3	15.8	21.0	26.7	30.5	30.6	30.4	28.6	32.3	34.2	
Net profit margin	5.6	11.0	16.5	20.3	23.8	23.2	23.6	21.7	24.3	25.7	

Source: Company (historical figures), DNB Markets (estimates)

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Adjustments to annual P&L

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
EBITDA	42	51	64	98	113	127	140	165	235	292
EBITDA adj	42	51	64	98	113	127	140	165	235	292
EBIT	35	41	53	83	97	107	116	128	183	225
Other EBIT adjustments	0	4	0	0	-4	0	-3	0	0	0
EBIT adj	35	37	53	83	101	107	119	128	183	225
Net profit	13	26	42	63	78	80	91	96	135	165
Other EBIT adjustments	0	4	0	0	-4	0	-3	0	0	0
Tax adjustments	0	0	0	0	0	0	0	0	0	0
Other adjustments	0	0	0	0	0	0	0	0	0	0
Net profit adj	13	29	42	63	75	80	88	96	135	165
<i>Per share data (SEK)</i>										
EPS	1.14	2.10	3.34	5.02	6.18	6.33	6.67	7.01	9.87	12.14
Recommended adjustment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.08	0.00	0.00
EPS adj	1.14	2.10	3.34	5.02	6.18	6.33	6.67	6.94	9.87	12.14

Source: Company (historical figures), DNB Markets (estimates)

Cash flow

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
Net profit	13	26	42	63	78	80	91	96	135	165
Depreciation and amortisation	7	9	10	15	17	20	25	36	52	67
Cash flow from operations (CFO)	38	41	70	99	114	124	93	113	177	216
Capital expenditure	-22	-21	-32	-19	-19	-19	-47	-79	-92	-97
Acquisitions/Investments	0	0	0	0	0	0	-171	0	0	0
Divestments	0	0	0	1	0	0	0	0	0	0
Cash flow from investing (CFI)	-18	-19	-32	-18	-19	-38	-218	-98	-92	-97
Free cash flow (FCF)	20	22	39	80	95	86	-125	16	85	119
Net change in debt	0	0	0	0	0	0	0	30	0	0
Dividends paid	-11	-23	0	-63	-88	-63	-68	-68	-75	-75
Share issue (repurchase)	0	22	-53	0	0	0	172	0	0	0
Other	12	12	0	0	0	0	4	-5	0	0
Cash flow from financing (CFF)	1	12	-53	-64	-88	-63	108	-43	-75	-75
Total cash flow (CFO+CFI+CFF)	21	33	-15	17	7	23	-17	-27	10	44
<i>FCFF calculation</i>										
Free cash flow	20	22	39	80	95	86	-125	16	85	119
Less: tax shields/other	0	0	0	0	0	0	0	0	0	0
Less: acquisitions	0	0	0	0	0	0	171	0	0	0
Less: divestments	0	0	0	-1	0	0	0	0	0	0
Growth (%)										
CFO	10.1	6.3	72.7	40.4	15.7	8.5	-25.3	22.5	55.8	22.2
CFI	30.1	-5.5	-66.0	42.3	-3.3	-98.9	-478.5	55.0	6.5	-6.1
FCF	127.0	6.9	78.7	108.3	18.5	-9.4	-244.7	112.4	448.4	39.5
CFF	-92.2	1866.7	-550.8	-19.5	-39.0	28.5	270.4	-139.8	-74.7	0.0
FCFF	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm

Source: Company (historical figures), DNB Markets (estimates)

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Balance sheet

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
Assets	324	370	375	399	396	410	722	826	887	980
Inventories	4	3	4	5	6	5	7	8	9	11
Trade receivables	29	34	39	44	48	51	63	78	88	105
Other receivables	14	15	11	20	19	12	38	52	52	52
Current financial assets	3	1	0	0	0	0	0	0	0	0
Cash and cash equivalents	49	82	71	89	99	120	106	81	91	135
Current assets	98	135	124	158	172	187	214	219	241	303
Property, plant and equipment	6	6	8	7	6	6	9	6	3	-1
Other intangible assets	152	164	186	192	197	194	484	581	623	657
Deferred tax assets	62	59	51	37	16	3	13	18	18	18
Non-current financial assets	5	5	6	5	5	20	2	2	2	2
Non-current assets	226	235	251	241	224	223	508	607	647	677
Total assets	324	370	375	399	396	410	722	826	887	980
Equity and liabilities	324	370	375	399	396	410	722	826	887	980
Total equity	254	295	289	291	280	290	550	596	656	746
Trade payables	6	6	5	5	5	6	7	7	8	11
Other payables and accruals	53	54	65	84	92	31	131	66	66	66
Short-term debt	1	1	1	1	1	1	2	9	9	9
Total current liabilities	61	61	71	90	99	102	140	169	171	173
Long-term debt	1	1	2	1	2	2	1	25	25	25
Deferred tax liabilities	9	13	15	17	15	14	30	34	34	34
Other non-current liabilities	0	0	0	1	1	2	2	2	2	2
Total non-current liabilities	10	14	16	18	18	17	32	61	61	61
Total liabilities	70	75	87	108	116	120	172	230	232	234
Total equity and liabilities	324	370	375	399	396	410	722	826	887	980
<i>Key metrics</i>										
Net interest bearing debt	-47	-79	-68	-88	-97	-117	-103	-46	-56	-100

Source: Company (historical figures), DNB Markets (estimates)

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Valuation ratios

(SEKm)	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
<i>Enterprise value</i>										
Share price (SEK)		39.77	74.75	150.00	206.00	189.00	243.00	228.00	228.00	228.00
Number of shares (m)	11.36	12.34	12.63	12.63	12.63	12.63	13.62	13.63	13.63	13.63
Market capitalisation		491	944	1,895	2,602	2,387	3,310	3,108	3,108	3,108
Net interest bearing debt	-47	-79	-68	-88	-97	-117	-103	-46	-56	-100
Adjustments to NIBD	0	0	0	0	0	0	0	0	0	0
Net interest bearing debt adj	-47	-79	-68	-88	-97	-117	-103	-46	-56	-100
EV		411	876	1,807	2,505	2,270	3,206	3,061	3,051	3,007
EV adj		411	876	1,807	2,505	2,270	3,206	3,061	3,051	3,007
<i>Valuation</i>										
EPS	1.14	2.10	3.34	5.02	6.18	6.33	6.67	7.01	9.87	12.14
EPS adj	1.14	2.10	3.34	5.02	6.18	6.33	6.67	6.94	9.87	12.14
DPS ordinary	0.98	1.85	0.00	5.00	7.00	5.00	4.99	5.00	5.50	5.50
DPS	0.98	1.85	0.00	5.00	7.00	5.00	4.99	5.00	5.50	5.50
P/E		18.9	22.4	29.9	33.4	29.8	36.4	32.5	23.1	18.8
P/E adj		18.9	22.4	29.9	33.4	29.8	36.4	32.9	23.1	18.8
P/B		1.66	3.27	6.51	9.31	8.22	6.02	5.21	4.74	4.16
Average ROE	5.3%	9.4%	14.5%	21.9%	27.3%	28.1%	21.6%	16.7%	21.5%	23.6%
Earnings yield adj		5.3%	4.5%	3.3%	3.0%	3.4%	2.7%	3.0%	4.3%	5.3%
Dividend yield		4.6%	0.0%	3.3%	3.4%	2.6%	2.1%	2.2%	2.4%	2.4%
Free cash flow yield		4.4%	4.1%	4.2%	3.7%	3.6%	-3.8%	0.5%	2.7%	3.8%
EV/SALES		1.74	3.42	5.80	7.63	6.58	8.32	6.96	5.50	4.67
EV/SALES adj		1.74	3.42	5.80	7.63	6.58	8.32	6.96	5.50	4.67
EV/EBITDA		8.1	13.8	18.4	22.1	17.8	22.9	18.6	13.0	10.3
EV/EBITDA adj		8.1	13.8	18.4	22.1	17.8	22.9	18.6	13.0	10.3
EV/EBIT		10.0	16.5	21.7	26.0	21.1	27.7	23.8	16.7	13.4
EV/EBIT adj		11.0	16.5	21.7	24.9	21.1	27.0	23.8	16.7	13.4
EV/capital employed		1.4	3.0	6.2	8.9	6.4	5.8	4.3	3.9	3.5
EV/NOPLAT		13.5	22.2	29.3	35.1	28.6	37.5	32.2	22.5	18.1
EV/OpFCF (taxed)		20.8	50.1	31.6	36.6	28.3	51.4	59.1	31.9	22.0

Source: Company (historical figures), DNB Markets (estimates)

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Key accounting ratios

	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e
<i>Profitability (%)</i>										
ROA	4.1	7.5	11.3	16.4	19.6	19.9	16.0	12.3	15.7	17.7
ROCE	14.0	13.4	18.1	28.5	34.9	33.6	26.1	20.2	24.5	27.4
ROCE after tax	10.4	9.9	13.4	21.1	25.8	24.8	19.3	15.0	18.1	20.2
<i>Return on invested capital (%)</i>										
Net PPE/revenues	2.7	2.6	3.1	2.1	1.9	1.8	2.3	1.3	0.6	-0.1
Working capital/revenues	16.4	31.2	20.9	22.0	22.4	24.6	19.3	11.4	12.6	20.2
<i>Cash flow ratios (%)</i>										
FCF/revenues	8.8	9.1	15.1	25.8	29.0	25.0	-32.4	3.5	15.3	18.4
FCF/market capitalisation		4.4	4.1	4.2	3.7	3.6	-3.8	0.5	2.7	3.8
CFO/revenues	16.6	17.2	27.5	31.7	34.8	35.9	24.0	25.8	31.8	33.5
CFO/market capitalisation		8.3	7.4	5.2	4.4	5.2	2.8	3.7	5.7	6.9
CFO/capex	171.0	192.9	217.6	508.8	614.0	652.1	197.9	143.0	192.9	222.1
CFO/current liabilities	63.3	66.8	99.4	110.2	115.8	121.1	66.2	67.0	103.5	124.9
Cash conversion ratio	155.4	83.4	91.5	126.8	122.2	107.9	-137.6	16.2	63.2	71.7
Capex/revenues	9.7	8.9	12.6	6.2	5.7	5.5	12.1	18.0	16.5	15.1
Capex/depreciation	973.9	959.1	1404.3	776.0	744.0	791.7	1800.0	2230.9	1687.9	1389.9
OpFCF margin	8.4	12.5	12.2	25.3	28.8	31.4	24.2	19.4	25.8	30.2
Total payout ratio	85.4	88.0	0.0	99.7	113.3	79.0	74.9	71.2	55.7	45.3
<i>Leverage and solvency (x)</i>										
Net debt/EBITDA	-1.12	-1.57	-1.08	-0.89	-0.85	-0.92	-0.74	-0.28	-0.24	-0.34
Total debt/total capital (BV)	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.04	0.04	0.04
LTD / (LTD + equity (MV))		0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
<i>Cash conversion cycle</i>										
Inventory turnover days	61.1	83.1	104.7	180.7	167.5	223.3	267.7	314.5	274.1	283.2
Receivables turnover days	67.7	75.3	70.9	74.5	74.7	66.2	96.1	107.8	92.1	88.9
Credit period	95.6	143.5	147.1	170.1	158.6	244.8	296.1	260.7	249.9	269.1
Cash conversion cycle	33.3	14.8	28.5	85.1	83.7	44.8	67.7	161.6	116.3	103.1

Source: Company (historical figures), DNB Markets (estimates)

22 August 2019

Important Information

Company: IAR Systems
 Coverage by Analyst: Joachim Gunell
 Date: 21/08/2019

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	Buy	Hold	Sell	No_rec	Total
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% of total	55%	27%	13%	5%	
DNB Markets client	28%	9%	2%	2%	101

22 August 2019

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