

IAR SYSTEMS

Set for a strong Q4

We expect another strong quarterly report (due on 13 February at 13:30 CET), with little change in underlying demand since Q3, driving organic growth of 8% in Q4e and an EBIT margin of 30.4%. We believe 2019 should mark a pivotal year for IAR Systems, to leverage and maintain its head start in offering secure embedded systems. With largely unchanged earnings estimates, we reiterate our fair value of SEK280–350.

2019 set to be a pivotal year for IAR Systems. 2019 could potentially be a tipping point for IAR Systems with: 1) the commercial launch of 'Security from Inception'; 2) support for Amazon FreeRTOS; and 3) RISC-V partnerships set to hit the market. We believe that IAR Systems and Secure Thingz will increase investor confidence in its delivery capability in 2019, thus manifesting the growth opportunity in securing IP and device entity in the programming of processors. If it is able to leverage, defend, and maintain its leading position in this emerging market, we believe there is a potential for shareholder value creation beyond our fair value.

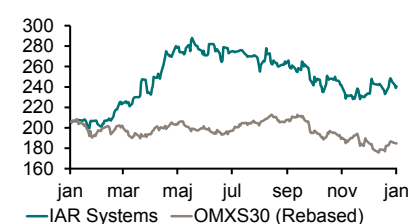
We look forward to another strong report. IAR Systems' Q4 looks set to have continued the strong trend established in Q2, with our forecasts suggesting 15% sales growth YOY (organic +8% and FX +7%), equating to sales of SEK101m and EBIT of SEK31m (EBIT growth of 14% YOY) and corresponding to a margin of 30.4% – down c20bp YOY. Market share gains and focus on large strategic customers are set to drive sales growth, but we forecast a slight margin contraction YOY due to continued hiring of software engineers driving an opex step-up (upSEK3m QOQ). We believe investors are willing to overlook this as long as the growth opportunity, particularly in Secure Thingz, remains on track. We expect a 2018 DPS of SEK5.00.

Fair value maintained at SEK280–350. We believe the market is currently ascribing too little value to IAR Systems' growth initiatives (Secure Thingz, RISC-V, and Amazon FreeRTOS). The lack of investor (and analyst) focus presents a particularly attractive long-term value opportunity in our view. Our estimates correspond to a 2019e P/E of 30x, an EV/EBIT of 22x, and an EV/sales of 7x.

Year-end Dec	2014	2015	2016	2017	2018e	2019e	2020e
Revenue (SEKm)	256	312	328	345	383	459	544
EBITDA adj (SEKm)	64	98	113	127	140	182	241
EBIT adj (SEKm)	53	83	101	107	118	150	200
PTP (SEKm)	54	83	100	106	112	148	196
EPS rep (SEK)	3.34	5.02	6.18	6.33	6.59	8.04	10.40
EPS adj (SEK)	3.34	5.02	6.18	6.33	6.76	8.04	10.40
DPS (SEK)	0.00	5.00	7.00	5.00	5.00	5.00	5.50
Revenue growth (%)	8.3	21.9	5.4	5.1	11.1	19.8	18.5
EBITDA growth adj (%)	25.7	54.6	15.2	12.4	9.7	30.7	32.3
EPS growth adj (%)	59.2	50.2	23.0	2.6	6.6	19.0	29.4
EBITDA margin adj (%)	24.9	31.5	34.5	36.9	36.4	39.7	44.4
EV/Sales adj (x)	3.42	5.80	7.63	6.58	8.57	7.07	5.90
EV/EBITDA adj (x)	13.8	18.4	22.1	17.8	23.5	17.8	13.3
EV/EBIT adj (x)	16.5	21.7	24.9	21.1	27.8	21.6	16.0
P/E adj (x)	22.4	29.9	33.4	29.8	36.0	29.9	23.1
P/Book (x)	3.27	6.51	9.31	8.22	5.87	5.41	4.87
ROE (%)	14.5	21.9	27.3	28.1	20.3	18.7	22.2
ROCE (%)	18.1	28.5	34.9	36.7	26.8	24.9	30.4
Dividend yield (%)	0.0	3.3	3.4	2.6	2.1	2.1	2.3

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

IARB versus OMXS30 (12m)



Source: Factset

SUMMARY

Share price (SEK)	241
Tickers	IARB SS, IARB.ST

CAPITAL STRUCTURE

No. of shares (m)	14.0
No. of shares fully dil. (m)	14.0
Market cap. (SEKm)	3,359
NIBD adj end-2018e (SEKm)	-108
Enterprise value adj (SEKm)	3,252
Net debt/EBITDA adj (x)	-0.77
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

Q4 2018	13/02/2019
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ESTIMATE CHANGES (SEK)

Year-end Dec	2018e	2019e	2020e
Sales (old)	393.7	465.3	542.5
Sales (new)	383.3	459.1	544.2
Change (%)	-2.6	-1.3	0.3
EPS (old)	6.57	7.90	10.35
EPS (new)	6.76	8.04	10.40
Change (%)	2.8	1.8	0.5

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

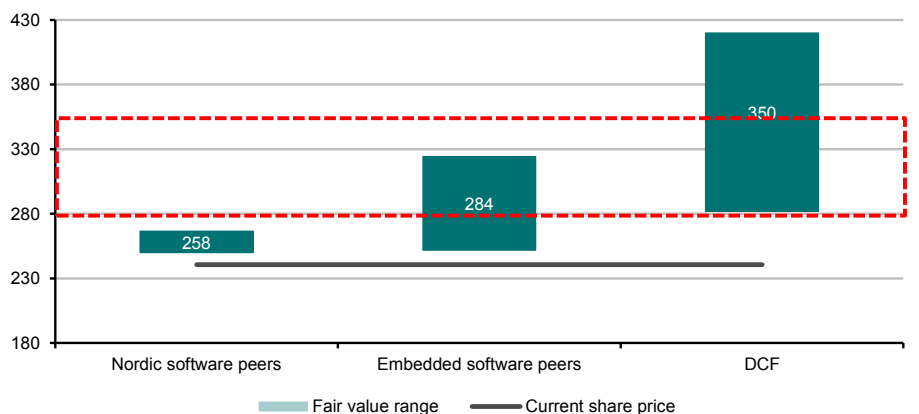
ANALYSTS

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 its ability to reinstate growth, it could trigger a devaluation of the shares, as in 2017.
- Disappointing disclosures regarding key strategic partnerships in terms of when they will materialise and 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 did not meet 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 be when the market stops seeing IAR Systems as a compiler supplier and instead starts to view it as the go-to tools partner for global players as they position their embedded systems ahead of the Internet of Things. We particularly 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.

Source: DNB Markets

Valuation methodology

- Blending our total peer group of Nordic software and embedded software peers with DCF suggests a fair value of SEK280–350 in our 12-month perspective (methodology unchanged.)
- Our estimates correspond to a 2019e P/E of 30x, an EV/EBIT of 22x, and an EV/sales of 7x.

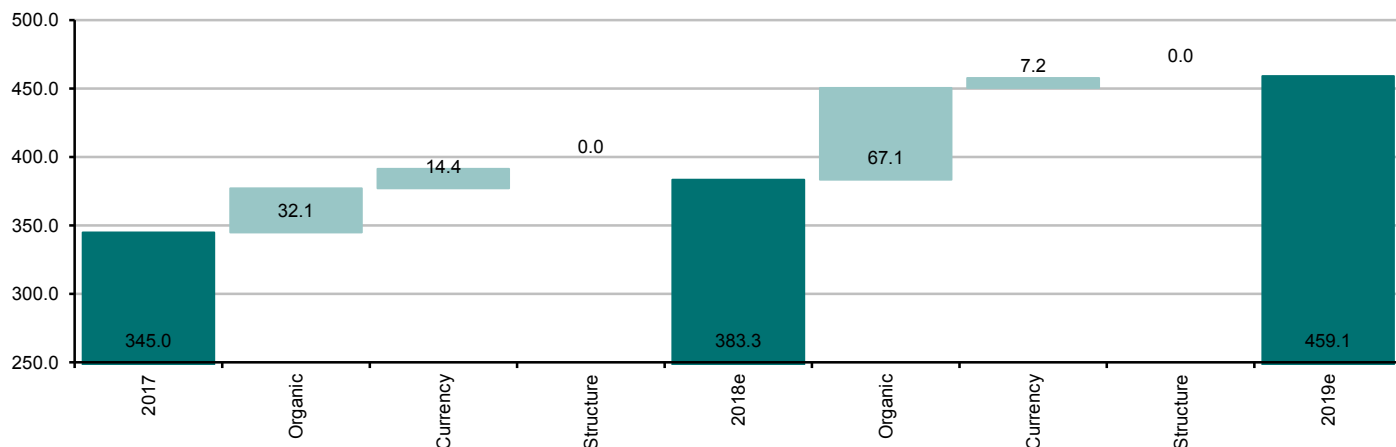
Source: DNB Markets

Upside risks to our fair value

- The company over-delivering on its financial targets (particularly for 10–15% in organic growth)
- IAR Systems' new security offering gaining faster penetration than we assume by leveraging on its head-start.
- Value-enhancing acquisitions to be integrated in its product offering or new strategic partnerships.

Source: DNB Markets

Sales bridge 2017–2019e (SEKm)



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

Q4 preview

IAR Systems' Q4 looks set to have continued the strong trend established in Q2, with our forecasts suggesting 15% sales growth YOY (organic +8% and FX +7%), equating to sales of SEK101m and EBIT of SEK31m (EBIT growth of 14% YOY) and corresponding to a margin of 30.4% – down c20bp YOY. Market share gains and focus on large strategic customers are set to drive sales growth, but we forecast a slight margin contraction YOY due to continued hiring of software engineers driving an opex step-up (upSEK3m QOQ). We believe investors are willing to overlook this as long as the growth opportunity, particularly in Secure Thingz, remains on track. We expect a 2018 DPS of SEK5.00.

Figure 1: DNB Markets Q4 2018 expectations

Key highlights (SEKm, except per share data)	Q4 2018		Deviation	Deviation,	Q4 2017	DNBe
	Actual	DNB	DNB	DNB	Actual	2018e
Sales		100.9			87.6	383.3
EBIT adjusted		30.7			26.8	118.4
Margin		30.4%			30.6%	30.9%
One-offs		0.0			0.0	0.0
EBIT		30.7			26.8	115.2
Margin		30.4%			30.6%	30.0%
EPS		1.61			1.56	6.76
Growth YOY						
Sales growth		15.2%			3.1%	13.5%
-of w hich organic		8.1%			8.5%	9.3%
-of w hich FX		7.1%			-5.4%	4.2%
Divisions (SEKm)		Q4 2018			Q4 2017	DNBe
		DNB			DNB	DNB
Sales						
Legacy IAR Systems		98.1			86.4	375.0
Royalty-based revenue		1.6			1.2	5.6
Secure Thingz		1.3			0.0	2.7
Group		100.9			87.6	383.3
EBIT adjusted						
Legacy IAR Systems + Secure Thingz		29.1			25.6	112.9
Royalty-based revenue		1.6			1.2	5.5
Group		30.7			26.8	118.4
FX impact						
Sales		7.1%			-5.4%	4.2%
EBIT		18.5%			-13.1%	11.5%

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

16 January 2019

Estimate revisions

Our 2018–2020 estimates are relatively unchanged and now forecast that IAR Systems should generate a 2017–2020 EBIT CAGR of 22%, with the true potential beyond our forecast period.

Figure 2: Estimate changes

(SEKm, except per share data)	Old			New			Change		
	2018e	2019e	2020e	2018e	2019e	2020e	2018e	2019e	2020e
Sales									
Legacy IAR Systems	382.6	416.7	446.9	375.0	410.5	443.6	-2%	-1%	-1%
Royalty-based revenue	5.7	17.0	27.0	5.6	16.5	26.5	-2%	-3%	-2%
Secure Thingz	5.5	31.7	68.7	2.7	32.1	74.2	-50%	1%	8%
Group Total	393.7	465.3	542.5	383.3	459.1	544.2	-3%	-1%	0%
EBIT adjusted									
Legacy IAR Systems + Secure Thingz	116.0	135.9	176.3	112.9	134.2	174.3	-3%	-1%	-1%
Royalty-based revenue	5.4	16.2	25.9	5.5	16.0	25.8	1%	-1%	0%
Group Total	121.4	152.1	202.2	118.4	150.3	200.1	-2%	-1%	-1%
EBIT adjusted margin									
Legacy IAR Systems + Secure Thingz	29.9%	30.3%	34.2%	29.9%	30.3%	33.7%	0bp	2bp	-52bp
Royalty-based revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0bp	0bp	0bp
Group Total	30.8%	32.7%	37.3%	30.9%	32.7%	36.8%	5bp	4bp	-50bp
Organic growth									
Legacy IAR Systems	8.8%	7.3%	6.8%	8.9%	7.5%	7.2%	13bp	25bp	45bp
Royalty-based revenue	-0.4%	2.7%	2.1%	-0.4%	2.7%	2.1%	1bp	0bp	-1bp
Secure Thingz	1.5%	6.3%	7.7%	0.8%	7.3%	8.8%	-74bp	96bp	106bp
Group Total	9.9%	16.3%	16.6%	9.3%	17.5%	18.1%	-60bp	121bp	154bp
Group									
Sales	393.7	465.3	542.5	383.3	459.1	544.2	-3%	-1%	0%
Sales growth	14.1%	18.2%	16.6%	13.5%	19.4%	18.2%	-64bp	120bp	160bp
Organic	9.9%	16.3%	16.6%	9.3%	17.5%	18.1%	-60bp	121bp	154bp
Structure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0bp	0bp	0bp
Currency	4.2%	1.9%	0.0%	4.2%	1.9%	0.1%	-4bp	-5bp	7bp
Gross profit	383.8	453.6	528.9	373.5	447.4	530.2	-3%	-1%	0%
Margin	97.5%	97.5%	97.5%	97.4%	97.4%	97.4%	-6bp	-6bp	-6bp
EBIT adjusted	121.4	152.1	202.2	118.4	150.3	200.1	-2%	-1%	-1%
Margin	30.8%	32.7%	37.3%	30.9%	32.7%	36.8%	5bp	4bp	-50bp
Adjustments	-3.2	0.0	0.0	-3.2	0.0	0.0			
EBIT	118.2	152.1	202.2	115.2	150.3	200.1	-3%	-1%	-1%
Margin	30.0%	32.7%	37.3%	30.0%	32.7%	36.8%	2bp	4bp	-50bp
Net financial items	-2.8	-2.5	-3.7	-2.8	-2.5	-3.7			
Pretax profit	118.6	149.6	198.5	112.4	147.8	196.4	-5%	-1%	-1%
Tax	-22.9	-34.0	-49.5	-24.2	-35.5	-51.1	6%	4%	3%
Tax rate	19.3%	22.7%	24.9%	21.5%	24.0%	26.0%	221bp	130bp	110bp
Net profit	95.8	115.6	149.0	88.2	112.3	145.3	-8%	-3%	-2%
EPS adjusted	6.57	7.90	10.35	6.76	8.04	10.40	3%	2%	1%
EPS	6.35	7.90	10.35	6.59	8.04	10.40	4%	2%	1%
DPS	5.00	5.50	6.00	5.00	5.00	5.50	0%	-9%	-8%

Source: DNB Markets

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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	Q4'18e	Q1'19e	Q2'19e	Q3'19e	Q4'19e
Sales												
Legacy IAR Systems	83.5	85.4	82.9	86.4	87.6	93.8	95.5	98.1	99.8	102.7	103.2	104.9
Royalty-based revenue	2.9	1.4	1.3	1.2	1.3	1.3	1.4	1.6	3.4	4.1	4.0	5.1
Secure Thingz	0.0	0.0	0.0	0.0	0.0	0.5	1.0	1.3	1.7	5.5	9.3	15.6
Group Total	86.4	86.8	84.2	87.6	88.9	95.6	97.9	100.9	104.9	112.3	116.4	125.6
EBIT adjusted												
Legacy IAR Systems + Secure Thingz	23.3	24.4	27.3	25.6	28.2	25.6	29.9	29.1	28.7	31.4	32.2	41.5
Royalty-based revenue	2.9	1.4	1.3	1.2	1.3	1.3	1.4	1.6	3.4	4.1	4.0	5.1
Group Total	26.2	25.8	28.6	26.8	29.5	26.9	31.3	30.7	32.1	35.5	36.2	46.5
EBIT adjusted margin												
Legacy IAR Systems + Secure Thingz	27.9%	28.6%	32.9%	29.6%	32.2%	27.3%	31.3%	29.7%	28.7%	30.6%	31.2%	39.6%
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%	28.1%	32.0%	30.4%	30.6%	31.6%	31.1%	37.1%
Organic growth												
Legacy IAR Systems	2.6%	0.6%	8.3%	8.4%	4.9%	7.9%	6.5%	6.4%	7.4%	7.8%	7.8%	7.7%
Royalty-based revenue	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.3%	2.1%	2.8%	2.7%	3.3%
Secure Thingz	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	1.4%	1.8%	5.2%	8.5%	13.5%
Group Total	2.7%	0.6%	8.4%	8.5%	5.0%	8.1%	6.7%	8.1%	11.3%	15.9%	18.9%	24.6%
Group												
Sales	86.4	86.8	84.2	87.6	88.9	95.6	97.9	100.9	104.9	112.3	116.4	125.6
Sales growth	7.3%	6.1%	3.8%	3.1%	2.9%	10.1%	16.3%	15.2%	17.9%	17.4%	18.9%	24.4%
Organic	2.7%	0.6%	8.4%	8.5%	5.0%	8.1%	6.7%	8.1%	11.3%	15.9%	18.9%	24.6%
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%	7.1%	6.7%	1.6%	0.0%	-0.2%
Gross profit	84.0	85.2	82.3	85.0	86.1	93.7	95.8	97.9	101.6	110.0	113.9	121.8
Margin	97.2%	98.2%	97.7%	97.0%	96.9%	98.0%	97.9%	97.0%	96.9%	98.0%	97.9%	97.0%
EBIT adjusted	26.2	25.8	28.6	26.8	29.5	26.9	31.3	30.7	32.1	35.5	36.2	46.5
Margin	30.3%	29.7%	34.0%	30.6%	33.2%	28.1%	32.0%	30.4%	30.6%	31.6%	31.1%	37.1%
Adjustments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	26.2	25.8	28.6	26.8	29.5	26.9	31.3	30.7	32.1	35.5	36.2	46.5
Margin	30.3%	29.7%	34.0%	30.6%	33.2%	28.1%	32.0%	30.4%	30.6%	31.6%	31.1%	37.1%
Net financial items	-0.8	-0.1	-0.4	-0.4	-0.4	-1.7	-0.3	-0.4	-0.6	-0.9	-0.4	-0.6
Pretax profit	25.4	25.7	28.2	26.4	29.1	22.0	31.0	30.3	31.5	34.6	35.8	45.9
Tax	-6.6	-4.5	-7.9	-6.7	-6.3	-5.8	-4.2	-7.9	-7.6	-8.3	-8.6	-11.0
Tax rate	26.0%	17.5%	28.0%	25.4%	21.6%	26.4%	13.5%	26.0%	24.0%	24.0%	24.0%	24.0%
Net profit	18.8	21.2	20.3	19.7	22.8	16.2	26.8	22.4	23.9	26.3	27.2	34.9
EPS adjusted	1.49	1.68	1.61	1.56	1.81	1.43	1.92	1.61	1.71	1.88	1.95	2.50
EPS	1.49	1.67	1.61	1.56	1.81	1.20	1.97	1.61	1.71	1.88	1.95	2.50
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			2017–2020e CAGR		
	2018e	2019e	2020e	2017	2018e	2019e	2020e	2018e	2019e	2020e	2018e	2019e	2020e	Sales	EBIT	EPS
IAR Systems (DNBe)	13.5	19.4	18.2	97.5	30.9	32.7	36.8	10.2	26.9	33.2	10.3	27.3	29.4	16.4	23.1	22.0
IAR Systems vs. total peer group	-3.2	3.8	5.0	25.6	7.0	8.6	11.1	-5.4	-3.2	8.9	-9.0	-7.2	4.4	1.4	1.8	-0.1
Nordic software peers																
HMS Networks	14.8	19.4	14.0	61.0	17.9	17.4	19.2	11.3	31.8	21.5	8.9	39.3	22.6	16.0	21.2	22.9
SimCorp	10.4	10.1	8.0	61.4	25.9	26.3	27.5	12.3	15.1	8.5	13.9	16.3	9.9	9.5	11.9	13.3
F-Secure	12.1	15.0	8.1	96.1	6.5	3.5	5.4	-39.5	75.7	66.0	-65.3	113.6	77.6	11.7	20.9	9.6
INVISIO Communications	-1.1	29.1	26.0	55.3	22.6	17.0	23.4	-25.7	77.2	46.3	-24.7	80.9	46.0	17.2	24.4	25.8
Fortnox	38.1	28.1	22.8	n.a.	21.9	26.9	30.5	69.5	45.2	34.9	69.2	45.5	38.1	29.5	49.2	50.4
Vitec Software	17.1	5.5	2.3	n.a.	12.5	13.8	15.0	29.0	14.5	6.3	21.9	12.0	8.1	8.1	16.2	13.8
Average of the above	15.2	17.8	13.5	68.4	17.9	17.5	20.2	9.5	43.3	30.6	4.0	51.3	33.7	15.3	24.0	22.6
DNBe vs. peer group	-1.8	1.6	4.7	29.1	13.0	15.2	16.6	0.8	-16.3	2.5	6.3	-23.9	-4.3	1.1	-0.9	-0.6
Embedded software peers																
Cadence Design Systems	9.0	6.8	7.5	87.8	27.5	29.9	29.9	18.3	7.1	10.0	30.3	7.4	9.9	7.8	11.7	15.4
ANSYS	13.7	9.6	9.5	86.3	46.4	45.2	44.2	10.7	7.4	12.2	32.5	6.1	10.4	10.9	10.1	15.8
Xilinx	17.2	8.6	9.0	70.0	29.4	30.9	30.8	23.5	8.1	14.4	63.4	8.4	12.4	11.6	15.2	25.8
Altium	36.7	25.0	22.9	44.4	28.3	30.3	32.0	46.7	31.9	30.1	43.9	36.4	23.3	28.1	36.0	34.3
Red Hat	15.5	14.9	14.6	85.3	23.9	23.9	24.5	15.3	18.1	16.1	17.7	13.7	16.2	15.0	16.5	15.9
Average of the above	18.4	13.0	12.7	74.8	31.1	32.0	32.3	22.9	14.5	16.6	37.6	14.4	14.5	14.7	17.9	21.4
DNBe vs. peer group	-5.0	6.4	5.5	22.8	-0.2	0.7	4.5	-12.7	12.4	16.6	-27.3	12.9	14.9	1.7	5.2	0.6
Average of total peer group	16.7	15.6	13.2	72.0	23.9	24.1	25.7	15.6	30.2	24.2	19.2	34.5	25.0	15.0	21.2	22.1
Median of total peer group	14.8	14.9	9.5	70.0	23.9	26.3	27.5	15.3	18.1	16.1	21.9	16.3	16.2	11.7	16.5	15.9

Source: Factset (16 January 2019)
Note (GM = gross margin)

Figure 5: Peer group (x/%)

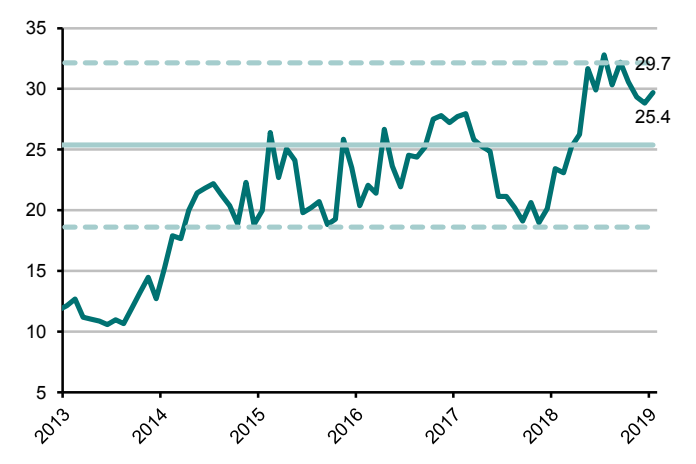
	M Cap (SEKbn)	P/E (x)			EV/EBITDA (x)			EV/EBIT (x)			FCF Yield 2018e	RoE 2018e	Div. yield 2018e	Performance (%)		
		2018e	2019e	2020e	2018e	2019e	2020e	2018e	2019e	2020e				-1M	-3M	-12M
IAR Systems (DNBe)	3.2	36.8	28.9	22.4	22.9	17.5	13.2	27.7	21.3	16.0	-3.3%	30.4%	2.1%	3.0	-0.4	17.9
Premium (+) / discount (-)		-17%	-9%	-12%	-14%	-13%	-18%	-14%	-11%	-15%						
Nordic software peers																
HMS Networks	5.6	36.0	25.9	21.1	20.6	16.0	13.2	25.0	18.6	14.9	1.0%	19.2%	1.5%	-10.9	-18.5	-9.0
SimCorp	27.1	34.3	29.5	26.8	25.3	22.0	20.1	26.4	22.8	20.9	2.1%	52.2%	1.4%	2.5	-2.7	33.2
F-Secure	4.1	104.8	49.1	27.6	38.7	20.5	13.0	61.4	35.1	20.8	-15.1%	5.6%	1.6%	9.5	-8.6	-38.5
INVISIO Communications	2.6	54.7	30.3	20.7	37.2	20.2	13.5	39.9	22.2	14.8	0.7%	15.9%	1.5%	-13.0	-1.0	-29.4
Fortnox	4.3	56.2	38.6	28.0	33.3	23.5	17.4	41.1	27.6	19.8	1.8%	46.7%	0.6%	0.4	0.4	61.1
Vitec Software	2.3	24.1	21.5	19.9	10.4	9.2	8.6	21.6	18.2	16.6	-1.1%	20.3%	1.5%	-2.2	2.6	-8.5
Average of the above		51.7	32.5	24.0	27.6	18.6	14.3	35.9	24.1	18.0	-1.8%	26.7%	1.3%	-2.3	-4.6	1.5
Premium (+) / discount (-)		-29%	-11%	-7%	-17%	-6%	-8%	-23%	-12%	-11%						
Embedded software peers																
Cadence Design Systems	115.0	24.8	23.1	21.0	18.7	17.0	13.5	19.8	17.7	15.2	3.8%	39.8%	0.0%	4.7	14.9	0.4
ANSYS	117.7	29.5	27.8	25.2	20.6	18.7	16.2	21.3	19.3	16.8	3.3%	18.1%	0.0%	4.5	0.0	1.5
Altium	207.5	28.0	25.8	23.0	21.7	19.7	16.9	23.6	21.4	18.5	3.7%	31.3%	1.6%	2.6	20.6	22.0
Xilinx	20.0	44.2	35.8	29.0	35.5	27.4	21.6	39.1	29.9	23.4	2.3%	44.7%	1.7%	8.7	7.5	67.4
Red Hat	279.4	50.0	44.0	37.9	32.3	27.3	23.4	36.3	29.9	24.3	3.2%	40.2%	0.0%	-0.5	42.1	39.4
Average of the above		35.3	31.3	27.2	25.8	22.0	18.3	28.0	23.6	19.6	3.3%	34.8%	0.6%	4.0	17.0	26.2
Premium (+) / discount (-)		4%	-8%	-18%	-11%	-20%	-28%	-1%	-10%	-19%						
Average of total peer group		44.2	31.9	25.5	26.8	20.1	16.1	32.3	23.9	18.7	0.5%	30.4%	1.0%	0.6	5.2	12.7
Median of total peer group		36.0	29.5	25.2	25.3	20.2	16.2	26.4	22.2	18.5	2.1%	31.3%	1.5%	2.5	0.4	1.5

Source: Factset
Note: Share prices correct as of 17.30.00 CET on 16 January 2019

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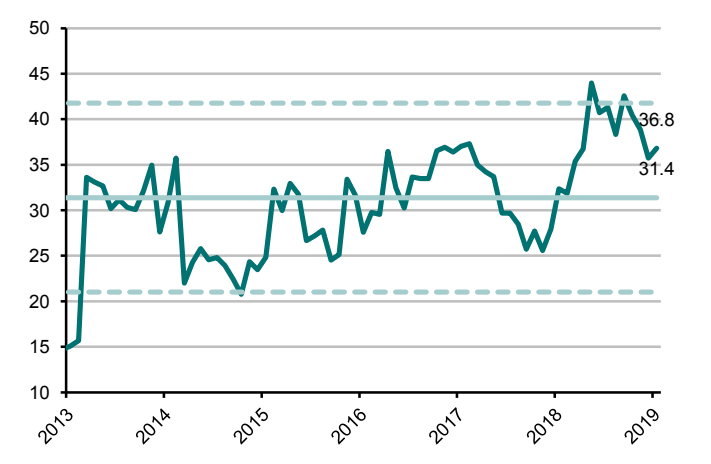
Valuation

Figure 6: IAR Systems EV/EBIT LTM



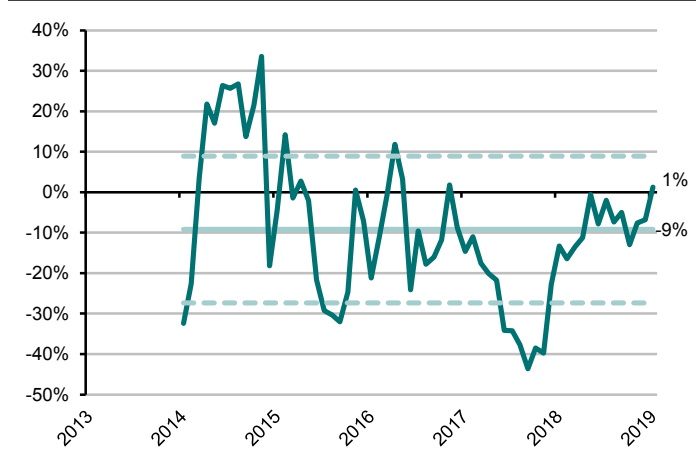
Source: Factset (underlying data), DNB Markets (further calculations)

Figure 7: IAR Systems P/E LTM



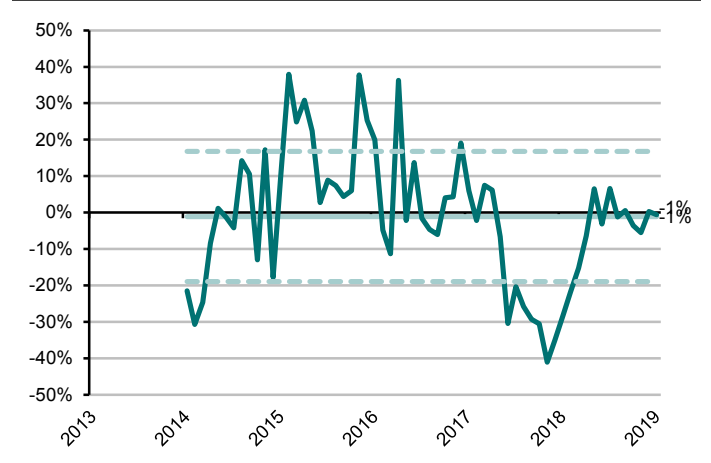
Source: Factset (underlying data), DNB Markets (further calculations)

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)

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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).

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

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

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 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

IAR 3.0

IAR Systems has gone through various phases since 2010, having: 1) streamlined itself 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).

Setting the scene for the growth story

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.

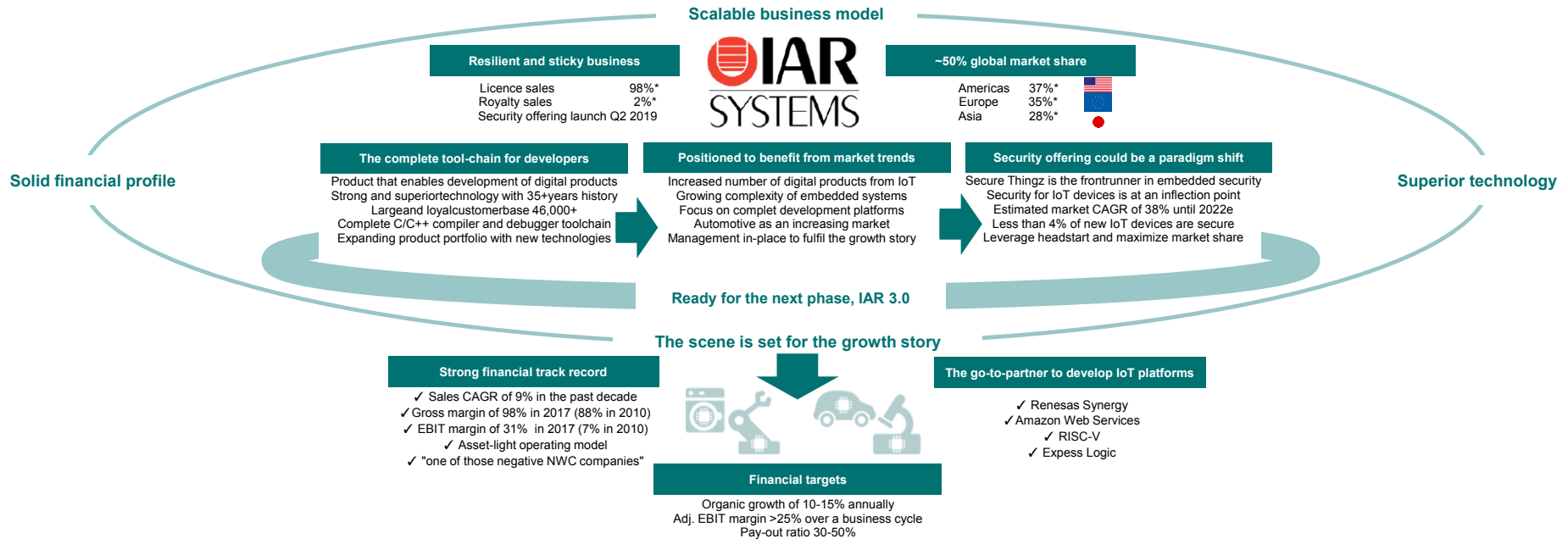
Numerous market drivers indicate a continuation of the solid industry growth

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. However, to be prudent, we have included minimal sales from its security offering in our estimates, preferring to see sales materialise.

Untapped potential in security offering

Figure 10: IAR Systems' in one picture



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

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We forecast 2017–2020e sales and EBIT CAGRs of 16% and 22%

We forecast a 2017–2020 sales CAGR of 16.4% and EBIT CAGR of 22.0% 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 8.4% organic sales CAGR for its legacy licensing business (98% of 2017 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.

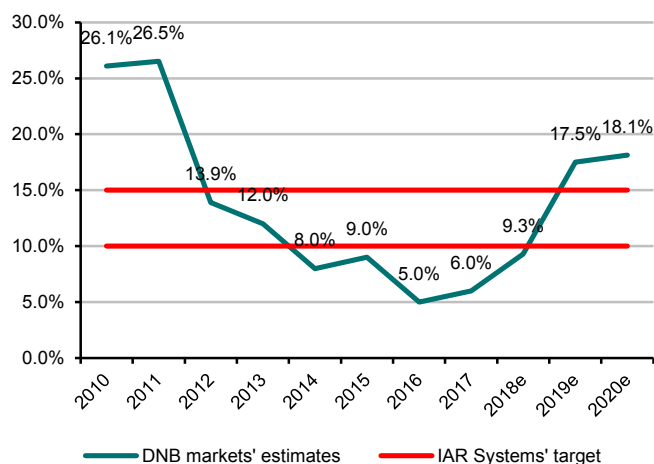
We estimate that revenues stemming from the royalty-based agreement with Renesas Electronics (2%) should contribute to a 1.8% organic sales CAGR for IAR Systems until 2020e. However, as the dynamics of this agreement have not been disclosed, we take a conservative approach for estimating the revenue impact.

We forecast a 2017–2020e EBIT CAGR of 23.5%, implying a margin gain from 31.1% in 2017 to 36.8% in 2020e, driven by: 1) solid organic volume growth; and 2) operational leverage averaging c70% (hurt in 2018 by the integration of Secure Thingz) in 2019–2020e 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

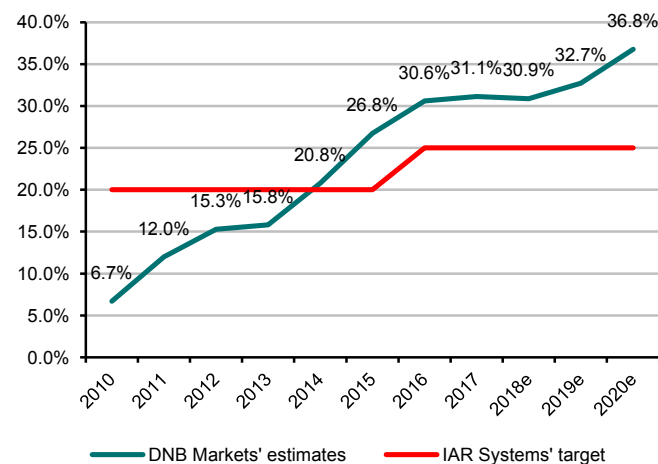
We expect Secure Thingz to contribute to group sales with 6.5% organic growth CAGR in 2017–2020e

Figure 11: Organic sales growth (2010-2020e)



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 for organic growth remain below the target for 2018e, but on profitability and the dividend policy, we are above IAR Systems throughout our forecast period.

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

	Reported fiscal years					IAR target	DNB Markets' estimates		
	2013	2014	2015	2016	2017		2018e	2019e	2020e
Organic growth	12.0%	8.0%	9.0%	5.0%	6.0%	10-15%	9.3%	17.5%	18.1%
EBIT margin	15.8%	20.8%	26.8%	30.6%	31.1%	>25%	30.0%	32.7%	36.8%
Pay-out ratio	88.0%	149.3%	99.7%	113.3%	79.0%	30-50%	77%	62%	53%

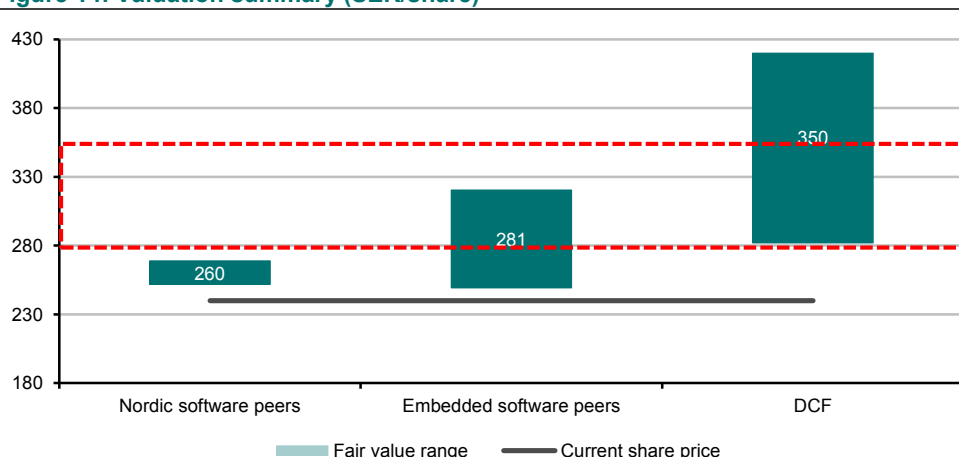
Source: DNB Markets (forecasts), company (historical data and targets)

We calculate a fair value of SEK280–350

Based on our group of Nordic software peers (6), embedded software peers (5), and our DCF model, we calculate a fair value of SEK280–350. We believe the market has been valuing IAR 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 30x 2019e P/E, 22x EV/EBIT, and 7x EV/sales, while our fair value suggests share price potential of 15–45%.

Fair value of SEK280–350 suggests potential of 15–45%

Figure 14: Valuation summary (SEK/share)



Source: DNB Markets

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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 58% of its cost base in SEK).

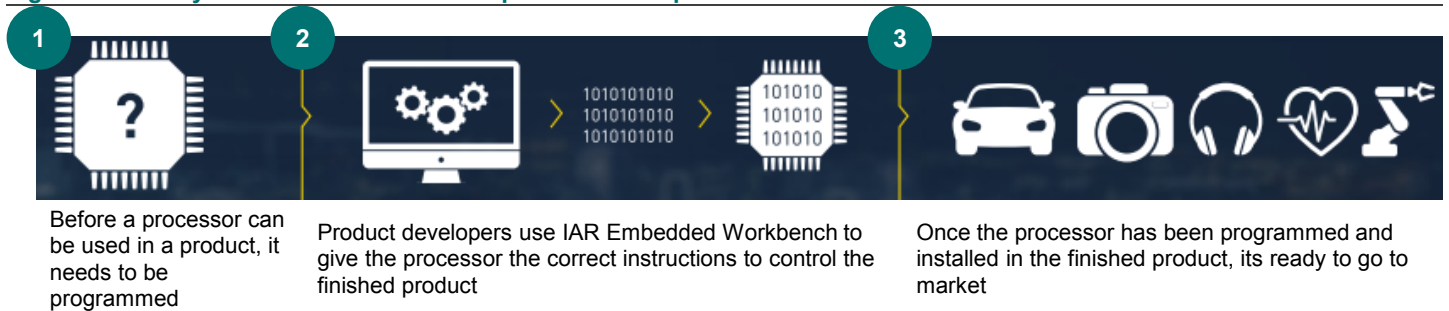
- **Failure to resurrect the growth story.** Having reported average local currency growth of 20% in 2010–2013, 9% in 2014–2015, and 6% in 2016–2017, we believe the key risk to the valuation is a failure to resurrect the organic growth story. While we have identified numerous market drivers that should 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 2018 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 of 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 constantly 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 program the chips.

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

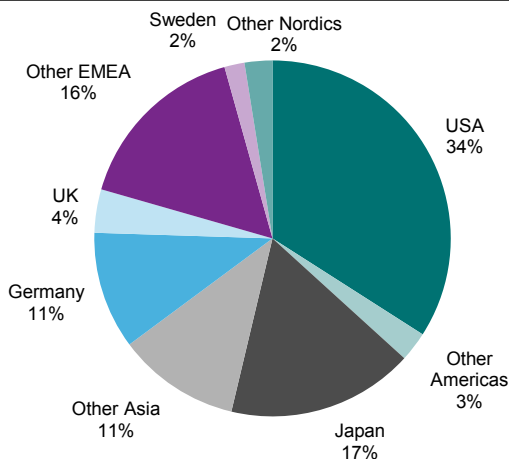
Headquartered in Uppsala (Sweden), the company holds a leading global market share of ~50% with 95%+ of sales stemming from markets outside the Nordics and a market presence in 50+ countries and head count of 163. With a history of adapting to meet customer demand, IAR Systems' business model is primarily 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...

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

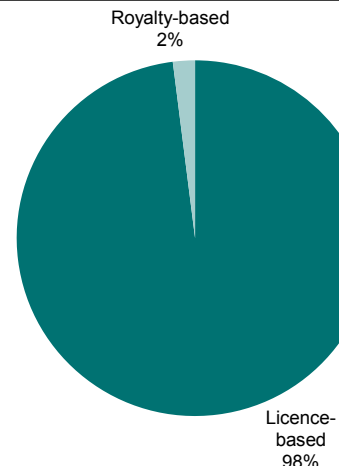
- **Licence-based revenue (98% of 2017 sales)** based entirely on the number of licence users (perpetual software keys) of the IAR Embedded Workbench sold when a developer programs a product. The licence cost is ~SEK30,000 (upfront) while the customer can add a support and update agreement for an annual cost of 20% of the licence price.
- **Royalty-based revenue (2%)** 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.

Figure 16: Geographical sales split (2017)



Source: Company

Figure 17: Sales by business model (2017)



Source: Company

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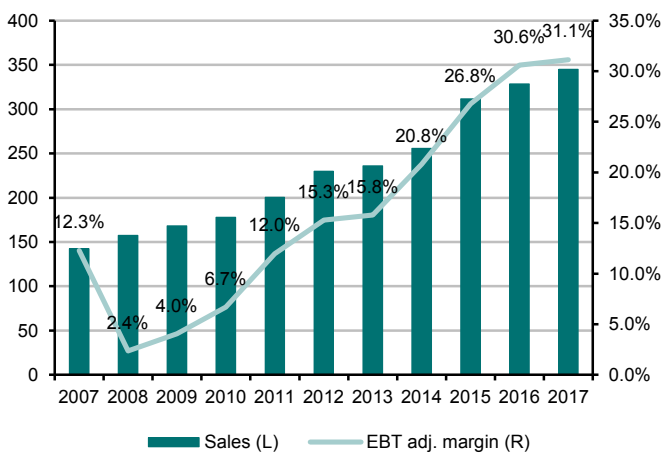
IAR Systems was acquired by IT conglomerate Nocom in 2005. However, by 2010 Nocom (known as Intoi by then) wanted to focus more on proprietary software and create a more specialised company, so it kept only IAR Systems and took on that name.

With 2017 net sales of SEK345m, IAR Systems is 2.7x larger than the company acquired in 2005. While generating a sales CAGR of 9.2% 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 31.1% in 2017, 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 46% of sales).

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

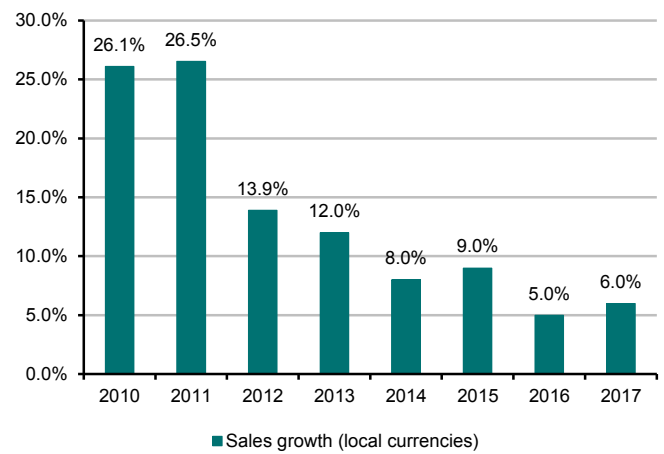
...with profitable growth, sales CAGR of 9% and adj. EBIT CAGR of 20% in the past 10 years

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



Source: Company

Figure 19: IAR Systems – sales growth local currencies



Source: Company

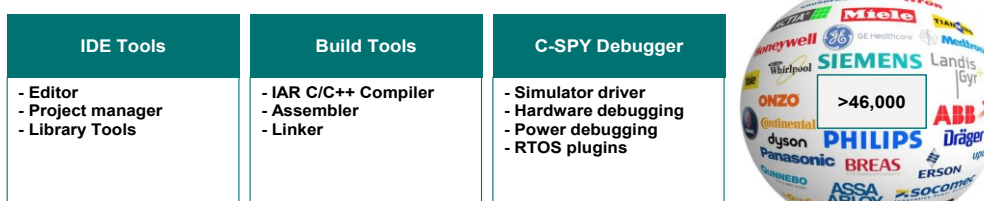
IAR Systems' key competitive advantage in our view is its flagship product, the IAR Embedded Workbench, which is a complete tool-chain for customers. Being independent, the software supports 12,000+ processors for embedded systems from the major process vendors with 8-, 16-, and 32-bit architecture, 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) 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. The customer base is very broad as none of the 46,000+ customer organisations accounts for more than 3% of group sales.

...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



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

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Forecast changes – P&L

(SEKm)	New			Old			Change		
	2018e	2019e	2020e	2018e	2019e	2020e	2018e	2019e	2020e
Revenues	383	459	544	394	465	543	-10	-6	2
Cost of sales	-10	-12	-14	-10	-12	-14	0	0	0
Gross profit	374	447	530	384	454	529	-10	-6	1
Operating expenses	-234	-265	-289	-241	-270	-286	7	5	-3
EBITDA	140	182	241	143	184	243	-3	-2	-1
EBITDA adj	140	182	241	143	184	243	-3	-2	-1
EBITDA margin (%)	36.4	39.7	44.4	36.3	39.6	44.7	0.1	0.2	-0.4
Depreciation	-2	-3	-4	-3	-3	-3	0	0	0
Amortisation	-22	-29	-38	-22	-29	-37	0	0	-1
EBIT	115	150	200	118	152	202	-3	-2	-2
EBIT adj	118	150	200	121	152	202	-3	-2	-2
Net financial items	-3	-2	-4	-3	-2	-4	0	0	0
PBT	112	148	196	119	150	199	-6	-2	-2
Taxes	-24	-35	-51	-23	-34	-50	-1	-2	-2
Minorities	0	0	0	0	0	0	0	0	0
Net profit	88	112	145	96	116	149	-8	-3	-4
Adjustments to net profit	-2	0	0	-2	0	0	0	0	0
Net profit adj	86	112	145	93	116	149	-8	-3	-4
<i>Per share data (SEK)</i>									
EPS	6.59	8.04	10.40	6.35	7.90	10.35	0.23	0.14	0.05
EPS adj	6.76	8.04	10.40	6.57	7.90	10.35	0.18	0.14	0.05
DPS ordinary	5.00	5.00	5.50	5.00	5.50	6.00	0.00	-0.50	-0.50
DPS	5.00	5.00	5.50	5.00	5.50	6.00	0.00	-0.50	-0.50
<i>Other key metrics (%)</i>									
Revenue growth	11.1	19.8	18.5	14.1	18.2	16.6	-3.0	1.6	1.9
EBIT adj growth	10.2	26.9	33.2	13.1	25.3	32.9	-2.8	1.7	0.2
EPS adj growth	6.6	19.0	29.4	3.8	20.2	31.0	2.9	-1.2	-1.6
Avg. number of shares (m)	14	14	14	14	14	14	0	0	0
Capex	-38	-52	-67	-38	-52	-65	0	0	-1
OpFCF	101	131	175	104	132	177	-3	-2	-3
Working capital	83	105	149	79	92	126	4	13	22
NIBD adj	-108	-115	-150	-103	-104	-128	-5	-10	-22

Source: DNB Markets

Forecast changes – By segment and assumptions

(SEKm)	New			Old			Change		
	2018e	2019e	2020e	2018e	2019e	2020e	2018e	2019e	2020e
Assumptions									
Revenue org. % YOY	9.30	17.51	18.14	9.91	16.31	16.59	-0.61	1.21	1.54
Structure impact % YOY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Currency impact % YOY	4.16	1.88	0.07	4.20	1.90	0.00	-0.04	-0.02	0.07

Source: DNB Markets

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Quarterly numbers

(SEKm)	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018e	Q1 2019e	Q2 2019e	Q3 2019e	Q4 2019e
Revenues	87	84	88	89	96	98	101	105	112	116	126
Cost of sales	-2	-2	-3	-3	-2	-2	-3	-3	-2	-2	-4
Gross profit	85	82	85	86	94	96	98	102	110	114	122
Operating expenses	-54	-49	-53	-51	-64	-58	-61	-63	-66	-69	-67
EBITDA	31	34	32	35	30	38	37	39	44	45	55
Depreciation	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Amortisation	-5	-5	-5	-5	-6	-6	-6	-6	-7	-8	-8
EBIT	26	29	27	30	24	31	31	32	35	36	47
Net financial items	0	0	0	0	-2	0	0	-1	-1	0	-1
PBT	26	28	26	29	22	31	30	31	35	36	46
Taxes	-5	-8	-7	-6	-6	-4	-8	-8	-8	-9	-11
Minorities	0	0	0	0	0	0	0	0	0	0	0
Net profit	21	20	20	23	16	27	22	24	26	27	35
Adjustments to net profit	0	0	0	0	-2	0	0	0	0	0	0
Net profit adj	21	20	20	23	14	27	22	24	26	27	35
Dividend paid	-63	0	0	0	-68	0	0	0	-70	0	0
Avg. number of shares (m)	13	13	13	13	14	14	14	14	14	14	14
<i>Per share data (SEK)</i>											
EPS	1.67	1.61	1.56	1.81	1.20	1.97	1.61	1.71	1.88	1.95	2.50
EPS adj	1.68	1.61	1.56	1.81	1.43	1.92	1.61	1.71	1.88	1.95	2.50
DPS ordinary	5.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00
DPS	5.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00
<i>Growth and margins (%)</i>											
Revenues, QOQ growth	0.5	-3.0	4.0	1.5	7.5	2.4	3.1	3.9	7.1	3.7	7.8
Revenues, YOY growth	6.1	3.8	3.1	2.9	10.1	16.3	15.2	17.9	17.4	18.9	24.4
EPS adj, YOY growth	25.4	-6.9	-2.0	21.3	-15.1	19.4	3.0	-5.1	32.0	1.5	55.6
Gross margin	98.2	97.7	97.0	96.9	98.0	97.9	97.0	96.9	98.0	97.9	97.0
EBITDA adj margin	35.6	40.1	36.4	39.0	31.4	38.6	36.7	37.0	38.9	38.4	44.0
Depreciation/revenues	-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.7	-0.6	-0.6	-0.7	-0.7
EBIT adj margin	29.7	34.0	30.6	33.2	28.1	32.0	30.4	30.6	31.6	31.1	37.1
Net profit margin	24.4	24.1	22.5	25.6	16.9	27.4	22.2	22.8	23.4	23.4	27.8

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

Adjustments to quarterly numbers

(SEKm)	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018e	Q1 2019e	Q2 2019e	Q3 2019e	Q4 2019e
EBITDA	31	34	32	35	30	38	37	39	44	45	55
EBITDA adj	31	34	32	35	30	38	37	39	44	45	55
EBIT	26	29	27	30	24	31	31	32	35	36	47
Other EBIT adjustments	0	0	0	0	-3	0	0	0	0	0	0
EBIT adj	26	29	27	30	27	31	31	32	35	36	47
Net profit	21	20	20	23	16	27	22	24	26	27	35
Other EBIT adjustments	0	0	0	0	-3	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	21	20	20	23	14	27	22	24	26	27	35

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

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Quarterly numbers by segment and assumptions

(SEKm)	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018e	Q1 2019e	Q2 2019e	Q3 2019e	Q4 2019e
Assumptions											
Revenue org. % YOY	0.61	8.38	8.47	4.98	8.06	6.65	8.09	11.29	15.87	18.93	24.58
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	5.50	-4.56	-5.41	-2.08	2.07	9.62	7.14	6.66	1.56	0.01	-0.19

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

Annual P&L

(SEKm)	2011	2012	2013	2014	2015	2016	2017	2018e	2019e	2020e
Revenues	200	230	236	256	312	328	345	383	459	544
Cost of sales	-19	-23	-15	-13	-10	-12	-9	-10	-12	-14
Gross profit	181	207	222	243	301	316	337	374	447	530
Operating expenses	-152	-165	-171	-179	-203	-203	-209	-234	-265	-289
EBITDA	29	42	51	64	98	113	127	140	182	241
Depreciation	-2	-2	-2	-2	-3	-3	-2	-2	-3	-4
Amortisation	-4	-4	-7	-8	-12	-14	-17	-22	-29	-38
EBIT	24	35	41	53	83	97	107	115	150	200
Net financial items	0	0	0	0	0	0	-2	-3	-2	-4
PBT	24	35	37	54	83	100	106	112	148	196
Taxes	3	-22	-12	-11	-20	-22	-26	-24	-35	-51
Effective tax rate (%)	-12	63	31	21	24	22	24	22	24	26
Minorities	0	0	0	0	0	0	0	0	0	0
Net profit	27	13	26	42	63	78	80	88	112	145
Adjustments to net profit	0	0	3	0	0	-3	0	-2	0	0
Net profit adj	27	13	29	42	63	75	80	86	112	145
Dividend paid	0	-11	-23	0	-63	-88	-63	-68	-70	-77
Avg. number of shares	11	11	12	13	13	13	13	14	14	14
<i>Per share data (SEK)</i>										
EPS	2.44	1.14	2.10	3.34	5.02	6.18	6.33	6.59	8.04	10.40
EPS adj	2.44	1.14	2.10	3.34	5.02	6.18	6.33	6.76	8.04	10.40
DPS ordinary	0.00	0.98	1.85	0.00	5.00	7.00	5.00	5.00	5.00	5.50
DPS	0.00	0.98	1.85	0.00	5.00	7.00	5.00	5.00	5.00	5.50
<i>Growth and margins (%)</i>										
Revenue growth	12.6	14.8	2.7	8.3	21.9	5.4	5.1	11.1	19.8	18.5
EPS adj growth	126.9	-53.2	83.4	59.2	50.2	23.0	2.6	6.6	19.0	29.4
Gross margin	90.5	89.9	93.9	95.0	96.7	96.3	97.5	97.4	97.4	97.4
EBITDA margin	14.7	18.2	21.4	24.9	31.5	34.5	36.9	36.4	39.7	44.4
EBITDA adj margin	14.7	18.2	21.4	24.9	31.5	34.5	36.9	36.4	39.7	44.4
Depreciation/revenues	-0.8	-1.0	-0.9	-0.9	-0.8	-0.8	-0.7	-0.7	-0.7	-0.7
EBIT margin	12.0	15.3	17.5	20.8	26.8	29.4	31.1	30.0	32.7	36.8
EBIT adj margin	12.0	15.3	15.8	20.8	26.8	30.6	31.1	30.9	32.7	36.8
PBT margin	12.0	15.3	15.8	21.0	26.7	30.5	30.6	29.3	32.2	36.1
Net profit margin	13.5	5.6	11.0	16.5	20.3	23.8	23.2	23.0	24.5	26.7

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

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Adjustments to annual P&L

(SEKm)	2011	2012	2013	2014	2015	2016	2017	2018e	2019e	2020e
EBITDA	29	42	51	64	98	113	127	140	182	241
EBITDA adj	29	42	51	64	98	113	127	140	182	241
EBIT	24	35	41	53	83	97	107	115	150	200
Other EBIT adjustments	0	0	4	0	0	-4	0	-3	0	0
EBIT adj	24	35	37	53	83	101	107	118	150	200
Net profit	27	13	26	42	63	78	80	88	112	145
Other EBIT adjustments	0	0	4	0	0	-4	0	-3	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	27	13	29	42	63	75	80	86	112	145
<i>Per share data (SEK)</i>										
EPS	2.44	1.14	2.10	3.34	5.02	6.18	6.33	6.59	8.04	10.40
Recommended adjustment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00
EPS adj	2.44	1.14	2.10	3.34	5.02	6.18	6.33	6.76	8.04	10.40

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

Cash flow

(SEKm)	2011	2012	2013	2014	2015	2016	2017	2018e	2019e	2020e
Net profit	27	13	26	42	63	78	80	88	112	145
Depreciation and amortisation	5	7	9	10	15	17	20	24	32	41
Cash flow from operations (CFO)	35	38	41	70	99	114	124	100	129	178
Capital expenditure	-11	-22	-21	-32	-19	-19	-19	-38	-52	-67
Acquisitions/Investments	-15	0	0	0	0	0	0	0	0	0
Divestments	0	0	0	0	1	0	0	0	0	0
Cash flow from investing (CFI)	-26	-18	-19	-32	-18	-19	-38	-208	-52	-67
Free cash flow (FCF)	9	20	22	39	80	95	86	-108	77	112
Net change in debt	7	0	0	0	0	0	0	0	0	0
Dividends paid	0	-11	-23	0	-63	-88	-63	-68	-70	-77
Share issue (repurchase)	0	0	22	-53	0	0	0	175	0	0
Other	1	12	12	0	0	0	0	2	0	0
Cash flow from financing (CFF)	8	1	12	-53	-64	-88	-63	110	-70	-77
Total cash flow (CFO+CFI+CFF)	17	21	33	-15	17	7	23	1	7	35
<i>FCFF calculation</i>										
Free cash flow	9	20	22	39	80	95	86	-108	77	112
Less: tax shields/other	0	0	0	0	0	0	0	0	0	0
Less: acquisitions	15	0	0	0	0	0	0	0	0	0
Less: divestments	0	0	0	0	-1	0	0	0	0	0
Growth (%)										
CFO	152.2	10.1	6.3	72.7	40.4	15.7	8.5	-19.0	28.6	38.3
CFI	-105.6	30.1	-5.5	-66.0	42.3	-3.3	-98.9	-454.2	75.1	-28.3
FCF	641.7	127.0	6.9	78.7	108.3	18.5	-9.4	-225.2	171.3	44.9
CFF	348.4	-92.2	1866.7	-550.8	-19.5	-39.0	28.5	273.3	-163.8	-10.0
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)	2011	2012	2013	2014	2015	2016	2017	2018e	2019e	2020e
Assets	309	324	370	375	399	396	410	746	788	858
Inventories	5	4	3	4	5	6	5	6	8	9
Trade receivables	32	29	34	39	44	48	51	58	72	81
Other receivables	11	14	15	11	20	19	12	47	47	47
Current financial assets	7	3	1	0	0	0	0	0	0	0
Cash and cash equivalents	30	49	82	71	89	99	120	111	118	153
Current assets	85	98	135	124	158	172	187	222	245	290
Property, plant and equipment	6	6	6	8	7	6	6	10	16	25
Other intangible assets	139	152	164	186	192	197	194	503	516	532
Deferred tax assets	74	62	59	51	37	16	3	10	10	10
Non-current financial assets	6	5	5	6	5	5	20	2	2	2
Non-current assets	224	226	235	251	241	224	223	524	544	569
Total assets	309	324	370	375	399	396	410	746	788	858
Equity and liabilities	309	324	370	375	399	396	410	746	788	858
Total equity	241	254	295	289	291	280	290	579	621	690
Trade payables	11	6	6	5	5	5	6	8	8	10
Other payables and accruals	52	53	54	65	84	92	96	129	129	129
Short-term debt	1	1	1	1	1	1	1	1	1	1
Total current liabilities	63	61	61	71	90	99	102	139	139	141
Long-term debt	2	1	1	2	1	2	2	2	2	2
Deferred tax liabilities	4	9	13	15	17	15	14	25	25	25
Other non-current liabilities	0	0	0	0	1	1	2	2	2	2
Total non-current liabilities	5	10	14	16	18	18	17	28	28	28
Total liabilities	68	70	75	87	108	116	120	167	167	169
Total equity and liabilities	309	324	370	375	399	396	410	746	788	858
<i>Key metrics</i>										
Net interest bearing debt	-28	-47	-79	-68	-88	-97	-117	-108	-115	-150

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

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Valuation ratios

(SEKm)	2011	2012	2013	2014	2015	2016	2017	2018e	2019e	2020e
<i>Enterprise value</i>										
Share price (SEK)			39.77	74.75	150.00	206.00	189.00	243.00	240.50	240.50
Number of shares (m)	11.05	11.36	12.34	12.63	12.63	12.63	12.63	13.97	13.97	13.97
Market capitalisation			491	944	1,895	2,602	2,387	3,394	3,359	3,359
Net interest bearing debt	-28	-47	-79	-68	-88	-97	-117	-108	-115	-150
Adjustments to NIBD	0	0	0	0	0	0	0	0	0	0
Net interest bearing debt adj	-28	-47	-79	-68	-88	-97	-117	-108	-115	-150
EV			411	876	1,807	2,505	2,270	3,287	3,244	3,210
EV adj			411	876	1,807	2,505	2,270	3,287	3,244	3,210
<i>Valuation</i>										
EPS	2.44	1.14	2.10	3.34	5.02	6.18	6.33	6.59	8.04	10.40
EPS adj	2.44	1.14	2.10	3.34	5.02	6.18	6.33	6.76	8.04	10.40
DPS ordinary	0.00	0.98	1.85	0.00	5.00	7.00	5.00	5.00	5.00	5.50
DPS	0.00	0.98	1.85	0.00	5.00	7.00	5.00	5.00	5.00	5.50
P/E			18.9	22.4	29.9	33.4	29.8	36.9	29.9	23.1
P/E adj			18.9	22.4	29.9	33.4	29.8	36.0	29.9	23.1
P/B			1.66	3.27	6.51	9.31	8.22	5.87	5.41	4.87
Average ROE	6.4%	5.3%	9.4%	14.5%	21.9%	27.3%	28.1%	20.3%	18.7%	22.2%
Earnings yield adj			5.3%	4.5%	3.3%	3.0%	3.4%	2.8%	3.3%	4.3%
Dividend yield			4.6%	0.0%	3.3%	3.4%	2.6%	2.1%	2.1%	2.3%
Free cash flow yield			4.4%	4.1%	4.2%	3.7%	3.6%	-3.2%	2.3%	3.3%
EV/SALES			1.74	3.42	5.80	7.63	6.58	8.57	7.07	5.90
EV/SALES adj			1.74	3.42	5.80	7.63	6.58	8.57	7.07	5.90
EV/EBITDA			8.1	13.8	18.4	22.1	17.8	23.5	17.8	13.3
EV/EBITDA adj			8.1	13.8	18.4	22.1	17.8	23.5	17.8	13.3
EV/EBIT			10.0	16.5	21.7	26.0	21.1	28.5	21.6	16.0
EV/EBIT adj			11.0	16.5	21.7	24.9	21.1	27.8	21.6	16.0
EV/capital employed			1.4	3.0	6.2	8.9	7.5	5.7	5.2	4.6
EV/NOPLAT			13.5	22.2	29.3	35.1	28.6	38.6	29.2	21.7
EV/OpFCF (taxed)			20.8	50.1	31.6	36.6	28.3	46.7	35.5	26.1

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

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Key accounting ratios

	2011	2012	2013	2014	2015	2016	2017	2018e	2019e	2020e
<i>Profitability (%)</i>										
ROA	5.1	4.1	7.5	11.3	16.4	19.6	19.9	15.3	14.6	17.7
ROCE	5.2	14.0	13.4	18.1	28.5	34.9	36.7	26.8	24.9	30.4
ROCE after tax	3.8	10.4	9.9	13.4	21.1	25.8	27.2	19.8	18.4	22.5
<i>Return on invested capital (%)</i>										
Net PPE/revenues	2.9	2.7	2.6	3.1	2.1	1.9	1.8	2.6	3.6	4.6
Working capital/revenues	10.9	16.4	31.2	20.9	22.0	22.4	24.6	21.5	22.9	27.3
<i>Cash flow ratios (%)</i>										
FCF/revenues	4.4	8.8	9.1	15.1	25.8	29.0	25.0	-28.2	16.8	20.5
FCF/market capitalisation			4.4	4.1	4.2	3.7	3.6	-3.2	2.3	3.3
CFO/revenues	17.4	16.6	17.2	27.5	31.7	34.8	35.9	26.2	28.1	32.8
CFO/market capitalisation			8.3	7.4	5.2	4.4	5.2	3.0	3.8	5.3
CFO/capex	316.4	171.0	192.9	217.6	508.8	614.0	652.1	261.3	248.7	268.0
CFO/current liabilities	55.4	63.3	66.8	99.4	110.2	115.8	121.1	72.1	92.6	126.5
Cash conversion ratio	33.0	155.4	83.4	91.5	126.8	122.2	107.9	-122.5	68.7	76.9
Capex/revenues	5.5	9.7	8.9	12.6	6.2	5.7	5.5	10.0	11.3	12.2
Capex/depreciation	647.1	973.9	959.1	1404.3	776.0	744.0	791.7	1539.3	1727.4	1868.2
OpFCF margin	9.2	8.4	12.5	12.2	25.3	28.8	31.4	26.4	28.4	32.1
Total payout ratio	0.0	85.4	88.0	0.0	99.7	113.3	79.0	75.9	62.2	52.9
<i>Leverage and solvency (x)</i>										
Net debt/EBITDA	-0.94	-1.12	-1.57	-1.08	-0.89	-0.85	-0.92	-0.77	-0.63	-0.62
Total debt/total capital (BV)	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00
LTD / (LTD + equity (MV))			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Cash conversion cycle</i>										
Inventory turnover days	88.4	61.1	83.1	104.7	180.7	167.5	223.3	241.3	246.1	229.8
Receivables turnover days	79.2	67.7	75.3	70.9	74.5	74.7	66.2	99.7	94.5	85.9
Credit period	205.6	95.6	143.5	147.1	170.1	158.6	244.8	311.9	262.8	265.3
Cash conversion cycle	-38.0	33.3	14.8	28.5	85.1	83.7	44.8	29.0	77.8	50.4

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

16 January 2019

Important Information

Company: IAR Systems
 Coverage by Analyst: Joachim Gunell
 Date: 16/01/2019

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	Buy	Hold	Sell	No rec	Total
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% of total	60%	28%	8%	3%	
DNB Markets client	25%	8%	2%	1%	86

16 January 2019

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