

ESG insight



IAR SYSTEMS

To show durability during downturn

IAR's Q1 results clearly missed our forecasts, but we believe that the historical durability of design activity through downturns in order for its customers to remain competitive should provide relative resilience in 2020. We have reduced our 2020–2022e EBIT by 7%, and reiterate our SEK150–230 fair value, as IAR's growth prospects from RISC-V and security remain attractive in our view.

Q1 highlights. Organic sales growth was -11% YOY (we expected -11%), as customers delayed purchasing processes while working from home. Most marketing activities were also cancelled, with 7/12 of IAR's offices closed in Q1, pushing deals into Q2. An EBIT margin of 15.6% (down 14%-points YOY) set up EBIT of SEK14m (37% below our forecast), as opex grew 4% since the cost base is largely fixed. EBIT adjusted for capitalised development costs was SEK-9m (-9.4% margin), resulting in an FCF loss of SEK8m, as IAR is at the end of the heaviest investment period in its 30+ year history.

Takeaways from CEO call. Despite challenging markets, CEO Stefan Skarin's tone was relatively upbeat on business momentum in the first week's of Q2. We believe the EBIT margin should improve sequentially owing to lower opex on marketing and trade fair cancellations. Although IAR is not losing any business (no cancellations), it is seeing postponements, pushing sales into future quarters. The CEO also spoke of growing demand from Asia, laying good foundations for the opening of its three new offices in China, Taiwan and India, stressing that IAR's heavy investment rate should flatten in 2020, suggesting it is now down to execution to drive top-line growth.

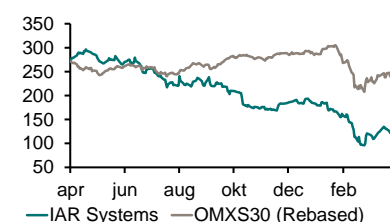
We have cut 2020–2022e EBIT by 7%, reflecting maintained demand for need-to-have development tools (e.g. IAR's legacy Workbench licences), but postponed adoption of new RISC-V tools and security products, given slower decision-making processes.

Fair value of SEK150–230 reiterated, corresponding to a 2021e EV/EBIT of 20x and P/E of 27x (a ~10% discount to its historical average). IAR is trading at a 2021e P/E of 17x, offering valuation support, but we also believe it needs to reignite organic growth through its product launches in IoT security and RISC-V to re-establish its investment credentials before the stock can realise its full revaluation potential.

Year-end Dec	2016	2017	2018	2019	2020e	2021e	2022e
Revenue (SEKm)	328	345	385	406	406	473	526
EBITDA adj (SEKm)	113	127	140	146	143	191	225
EBIT adj (SEKm)	101	107	119	108	92	129	157
PTP (SEKm)	100	106	117	107	91	127	154
EPS rep (SEK)	6.18	6.33	6.67	5.96	5.03	7.02	8.54
EPS adj (SEK)	6.18	6.33	6.67	5.96	5.04	7.02	8.54
DPS (SEK)	7.00	5.00	5.00	3.00	1.50	2.52	3.51
Revenue growth (%)	5.4	5.1	11.7	5.3	0.0	16.6	11.2
EBITDA growth adj (%)	15.2	12.4	10.1	4.1	-1.6	32.9	17.8
EPS growth adj (%)	23.0	2.6	5.3	-10.6	-15.5	39.4	21.8
EBITDA margin adj (%)	34.5	36.9	36.4	35.9	35.3	40.3	42.7
EV/Sales adj (x)	7.63	6.58	8.32	6.30	4.09	3.47	3.05
EV/EBITDA adj (x)	22.1	17.8	22.9	17.5	11.6	8.6	7.1
EV/EBIT adj (x)	24.9	21.1	27.0	23.6	18.0	12.7	10.2
P/E adj (x)	33.4	29.8	36.4	31.2	23.8	17.1	14.0
P/Book (x)	9.31	8.22	6.02	4.28	2.51	2.29	2.09
ROE (%)	27.3	28.1	21.6	14.2	11.0	14.0	15.6
ROCE (%)	34.9	33.6	26.1	17.7	12.3	15.1	17.1
Dividend yield (%)	3.4	2.6	2.1	1.6	1.3	2.1	2.9

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

IARB versus OMXS30 (12m)



Source: Factset

SUMMARY

Share price (SEK)	120
Tickers	IARB SS, IARb.ST

CAPITAL STRUCTURE

No. of shares (m)	13.6
No. of shares fully dil. (m)	13.7
Market cap. (SEKm)	1,636
NIBD adj end-2020e (SEKm)	24
Enterprise value adj (SEKm)	1,659
Net debt/EBITDA adj (x)	0.17
Free float (%)	100

Source: Company, DNB Markets (estimates)

NEXT EVENT

Q2 2020	19/08/2020
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ESTIMATE CHANGES (SEK)

Year-end Dec	2020e	2021e	2022e
Sales (old)	412.7	481.0	531.9
Sales (new)	405.7	472.9	525.7
Change (%)	-1.7	-1.7	-1.2
EPS (old)	5.79	7.31	8.79
EPS (new)	5.04	7.02	8.54
Change (%)	-13.1	-4.1	-2.8

Source: DNB Markets,

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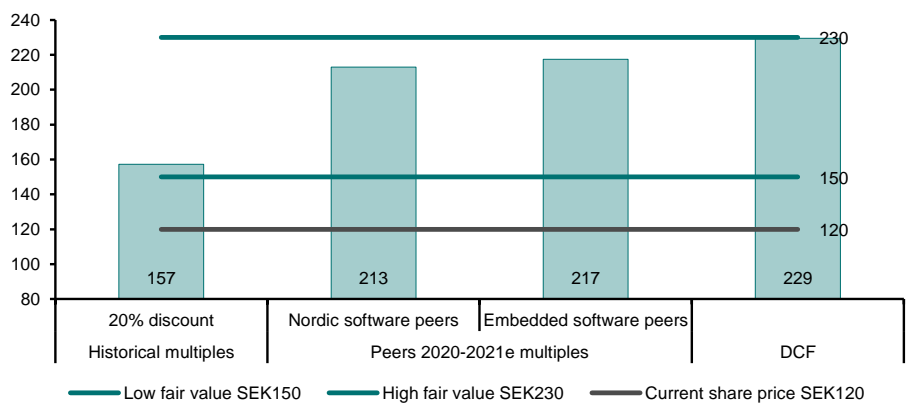
ANALYSTS

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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 a share devaluation, as in 2019.
- 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 appear in IAR Systems' sales. Thus, it would be negative if the Secure Thingz collaboration were to fall short of management's 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 4.0 will mark the point 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 and RISC-V.
- We expect the sales growth acceleration in late 2020/early 2021 to cement IAR Systems' central position in the embedded industry's key growth themes.
- We estimate that IAR Systems should generate a 2019–2022 EPS CAGR of 20%, with the true potential expected beyond our forecast period.

Source: DNB Markets

Valuation methodology

- Blending our peer group of Nordic software and embedded software peers with IAR's historical multiples and a DCF suggests a SEK150–230 fair value (methodology unchanged).
- Applying IAR's historical valuation (P/E 28x, EV/EBIT 21x) to our 2021 estimates suggests SEK200–240.
- Our estimates correspond to a 2021e P/E of 17x, an EV/EBIT of 13x, and an EV/sales of 3x, comprising a ~40% discount to its five-year average.

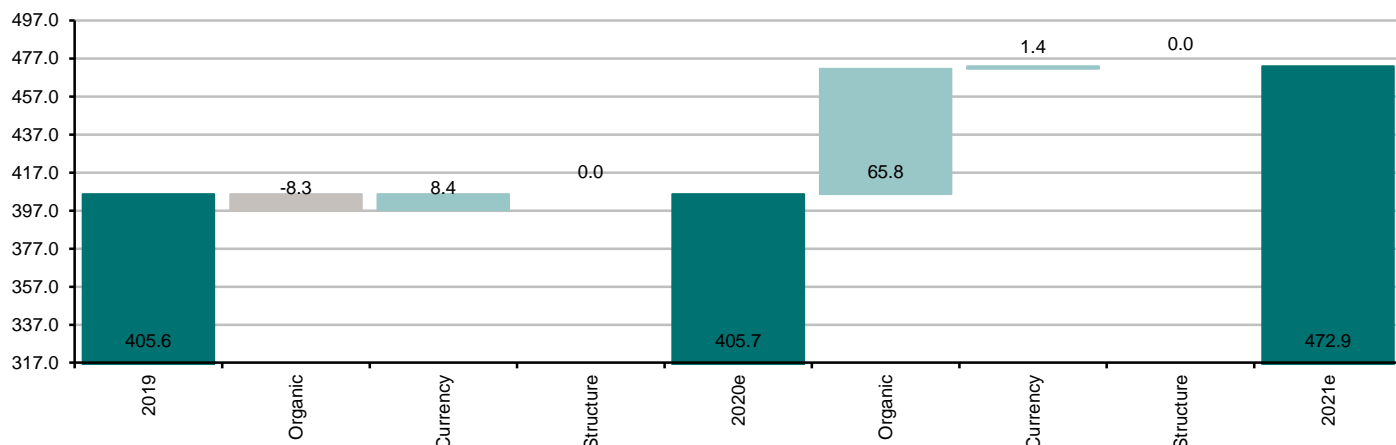
Source: DNB Markets

Upside risks to our fair value

- The company over-delivering on its financial targets (particularly 10–15% organic growth).
- If IAR Systems' new security offering gains faster penetration than we assume by leveraging on its head-start, we believe there is 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 2019–2021e (SEKm)



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

ESG overview

Sustainability assessment

	Positive	Negative
Conclusions	<ul style="list-style-type: none"> ■ IAR Systems’ software development tools are market-leading in terms of code quality, analysis, functional safety and security. Its software ensures that the code is in line with industry standards, thereby guaranteeing its reliability when applied. ■ Increased IoT security legislation drives demand for its products, as its OEM customers must comply with new security design requirements. 	<ul style="list-style-type: none"> ■ Data loss or security bugs in the software code could trigger regulatory scrutiny as well as legal costs and reputational damage, hampering its growth prospects. ■ IAR Systems’ competitiveness relies greatly on its ability to continuously innovate. For this, its highly skilled workforce is a key resource. Failure to attract and retain such professionals could lead to delays in innovation and a loss of market share.
Actions being taken by company	<ul style="list-style-type: none"> ■ Embedded programmers clearly need to protect their code from IP theft and illegal copying, as IoT security issues are becoming increasingly prevalent. Following the acquisition of Secure Thingz, IAR Systems’ tools are increasingly linked to sustainability as they help developers take control of security from inception in the IP throughout the lifecycle of a digital product. 	<ul style="list-style-type: none"> ■ IAR Systems’ development tools are the most used in the embedded industry, owing to its leading optimisation technology, comprehensive debugger quality and renowned technical support. This is confirmed by its loyal customer base. It has 46,000 OEM customers and 150,000 technology users, 95% of which are recurring customers, we believe.

Key ESG drivers

Short-term

- Today, fewer than 4% of new IoT devices have embedded security. ABI research forecasts that penetration will increase to 20% by 2022.
- IAR Systems’ security offering (C-Trust and Embedded Trust) ensures that its customers’ intellectual property is protected against IP theft, overproduction, piracy, and that software updates can be managed in a secure fashion. In other words, it creates a secure infrastructure and protects its customers’ digital products from sabotage programmes and data intrusion. Examples of customer use cases have included:
 - A leading vending machine provider, whose IP was stolen (stolen credit card and transaction details); a global white goods company, whose stolen IP led to twice as many products being manufactured; a leading door sensor provider, whose IP was stolen internally, which led to direct revenue loss, etc.
- To stay ahead of the competition, IAR Systems relies heavily on its employees in the development and innovation of new technologies.
- Following the integration of Secure Thingz, IAR Systems’ addressable market has expanded from application development into manufacturing and update management (the entire lifecycle of embedded systems). To keep pace with competition in a larger market, it needs to retain highly skilled software engineers, which could come at a higher cost than its traditional business.
- As an increasingly larger part of IAR Systems should revolve around Cambridge-based Secure Thingz, this could create some corporate cultural challenges versus the Uppsala-based legacy business.

Long-term

- Regulators will also play an active role in the long-term uptake of secure development tools. This is having an increasing impact on programmers’ designs, as applications need to remain secure across the entire lifecycle to comply with new legislation. We note legislation initiatives in Europe (UK government, ETSI, ENISA), the US (California IoT Security law, NIST evolving cyber security act), and government initiatives across Singapore, Japan, South Korea and China, etc.
- Considering its offering of software development tools to over 46,000 clients, as well as the sensitive nature of the data it handles, IAR Systems is exposed to possible hacking attempts and misappropriation of technological data.

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Q1 2020 results

Figure 1: Q1 results versus expectations

Key highlights (SEKm, except per share data)	Q1 2020		Deviation (%)		Q1 2019		DNBe 2020e
	Actual	DNB	DNB	DNB	Actual		
Sales	92.3	92.5	0%	0	99.8		405.7
Gross profit	88.3	90.6	-3%	-2	97.7		392.4
Margin	95.7%	97.9%			97.9%		96.7%
EBIT adjusted	14.4	23.0	-37%	-9	29.4		92.0
Margin	15.6%	24.9%	-9.3pp		29.5%		22.7%
One-offs	0.0	0.0			0.0		0.0
EBIT	14.4	23.0	-37%	-9	29.4		92.0
Margin	15.6%	24.9%	-9.3pp		29.5%		22.7%
EPS	0.81	1.25	-35%	0	1.64		5.04
Growth YOY							
Sales growth	-7.5%	-7.3%	-0.2pp		12.3%		0.0%
-of w hich organic	-11.1%	-11.3%	0.2pp		3.5%		-2.0%
-of w hich FX	3.6%	4.0%	-0.4pp		8.8%		2.1%
Divisions (SEKm)	Q1 2020				Q1 2019		2020e
	Actual	DNB			Actual		DNB
Sales							
Legacy IAR Systems	91.4	91.4	0%	0	98.0		394.5
Royalty-based revenue	0.0	0.0	n.a.	0	1.4		0.0
Secure Thingz	0.9	0.9	0%	0	0.4		11.2
Group	92.3	92.5	0%	0	99.8		405.7
EBIT adjusted							
Legacy IAR Systems + Secure Thin	14.4	14.4	0%	0	28.0		92.0
Royalty-based revenue	0.0	8.6	-100%	-9	1.4		0.0
Group	14.4	23.0	-37%	-9	29.4		92.0
FX impact							
Sales	3.6%	4.0%	-0.4pp		8.8%		2.1%
EBIT	6.8%	6.8%	0pp		14.6%		8.7%

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

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Estimate revisions

Figure 2: Estimate changes

(SEKm, except per share data)	Old			New			Change		
	2020e	2021e	2022e	2020e	2021e	2022e	2020e	2021e	2022e
Sales									
Legacy IAR Systems	398.1	434.0	454.1	394.5	443.8	469.5	-1%	2%	3%
Royalty-based revenue	0.0	0.0	0.0	0.0	0.0	0.0			
Secure Thingz	14.6	47.0	77.8	11.2	29.1	56.2	-23%	-38%	-28%
Group Total	412.7	481.0	531.9	405.7	472.9	525.7	-2%	-2%	-1%
EBIT adjusted									
Legacy IAR Systems + Secure Thingz	106.9	135.2	162.4	92.0	128.9	156.8	-14%	-5%	-3%
Royalty-based revenue	0.0	0.0	0.0	0.0	0.0	0.0			
Group Total	106.9	135.2	162.4	92.0	128.9	156.8	-14%	-5%	-3%
EBIT adjusted margin									
Legacy IAR Systems + Secure Thingz	25.9%	28.1%	30.5%	22.7%	27.3%	29.8%	-322bp	-86bp	-72bp
Royalty-based revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0bp	0bp	0bp
Group Total	25.9%	28.1%	30.5%	22.7%	27.3%	29.8%	-322bp	-86bp	-72bp
Organic growth components									
Legacy IAR Systems	-3.4%	8.4%	4.4%	-2.9%	11.9%	5.5%	52bp	352bp	116bp
Royalty-based revenue	-1.5%	0.0%	0.0%	-1.5%	0.0%	0.0%	0bp	0bp	0bp
Secure Thingz	3.1%	7.6%	6.2%	2.3%	4.3%	5.6%	-77bp	-326bp	-58bp
Group Total	-1.8%	16.0%	10.6%	-2.0%	16.2%	11.2%	-25bp	26bp	59bp
Group									
Sales	412.7	481.0	531.9	405.7	472.9	525.7	-2%	-2%	-1%
Sales growth	1.7%	16.6%	10.6%	0.0%	16.6%	11.2%	-172bp	1bp	59bp
Organic	-1.8%	16.0%	10.6%	-2.0%	16.2%	11.2%	-25bp	26bp	59bp
Structure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0bp	0bp	0bp
Currency	3.5%	0.6%	0.0%	2.1%	0.3%	0.0%	-146bp	-25bp	0bp
Gross profit	401.5	468.1	517.5	392.4	459.9	511.2	-2%	-2%	-1%
Margin	97.3%	97.3%	97.3%	96.7%	97.2%	97.2%	-57bp	-6bp	-5bp
EBIT adjusted	106.9	135.2	162.4	92.0	128.9	156.8	-14%	-5%	-3%
Margin	25.9%	28.1%	30.5%	22.7%	27.3%	29.8%	-322bp	-86bp	-72bp
Adjustments	0.0	0.0	0.0	0.0	0.0	0.0			
EBIT	106.9	135.2	162.4	92.0	128.9	156.8	-14%	-5%	-3%
Margin	25.9%	28.1%	30.5%	22.7%	27.3%	29.8%	-322bp	-86bp	-72bp
Net financial items	-1.9	-2.3	-2.6	-1.5	-2.1	-2.4			
Pretax profit	105.0	132.9	159.8	90.5	126.7	154.3	-14%	-5%	-3%
Tax	-26.0	-33.2	-39.9	-21.9	-31.1	-37.9	-16%	-6%	-5%
Tax rate	24.8%	25.0%	25.0%	24.2%	24.5%	24.5%	-62bp	-46bp	-46bp
Net profit	79.0	99.7	119.8	68.7	95.6	116.5	-13%	-4%	-3%
EPS adjusted	5.79	7.31	8.79	5.04	7.02	8.54	-13%	-4%	-3%
EPS	5.79	7.31	8.79	5.03	7.02	8.54	-13%	-4%	-3%
DPS	3.00	2.90	3.66	1.50	2.52	3.51	-50%	-13%	-4%

Source: DNB Markets

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Figure 3: Quarterly estimates by division

(SEKm, except per share data)	Q1'18	Q2'18	Q3'18	Q4'18	Q1'19	Q2'19	Q3'19	Q4'19	Q1'20	Q2'20e	Q3'20e	Q4'20e
Sales												
Legacy IAR Systems	87.6	93.8	95.5	97.8	98.0	96.8	98.1	105.1	91.4	86.2	100.2	116.7
Royalty-based revenue	1.3	1.3	1.4	1.5	1.4	1.5	1.6	1.4	0.0	0.0	0.0	0.0
Secure Thingz	0.0	0.5	1.0	3.5	0.4	0.7	0.3	0.3	0.9	0.7	3.2	6.4
Group Total	88.9	95.6	97.9	102.8	99.8	99.0	100.0	106.8	92.3	86.8	103.4	123.2
EBIT												
Legacy IAR Systems + Secure Thingz	28.2	22.4	29.9	29.6	28.0	22.3	26.5	25.7	14.4	17.1	24.1	36.4
Royalty-based revenue	1.3	1.3	1.4	1.5	1.4	1.5	1.6	1.4	0.0	0.0	0.0	0.0
Group Total	29.5	23.7	31.3	31.1	29.4	23.8	28.1	27.1	14.4	17.1	24.1	36.4
EBIT adjusted margin												
Legacy IAR Systems + Secure Thingz	32.2%	23.9%	31.3%	30.3%	28.6%	23.0%	27.0%	24.5%	15.8%	19.8%	24.1%	31.2%
Royalty-based revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Group Total	33.2%	24.8%	32.0%	30.3%	29.5%	24.0%	28.1%	25.4%	15.6%	19.7%	23.3%	29.6%
Organic growth												
Legacy IAR Systems	4.9%	7.9%	6.5%	9.6%	3.4%	-2.3%	-2.7%	-1.2%	-11.0%	-14.7%	0.0%	8.9%
Royalty-based revenue	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	-1.5%	-1.6%	-1.3%
Secure Thingz	0.0%	0.0%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	2.9%	5.6%
Group Total	5.0%	8.1%	6.7%	10.0%	3.5%	-2.3%	-2.8%	-1.3%	-11.1%	-16.3%	1.3%	13.2%
Group												
Sales	88.9	95.6	97.9	102.8	99.8	99.0	100.0	106.8	92.3	86.8	103.4	123.2
Sales growth	2.9%	10.1%	16.3%	17.4%	12.3%	3.6%	2.1%	3.9%	-7.5%	-12.3%	3.4%	15.3%
Organic	5.0%	8.1%	6.7%	10.0%	3.5%	-2.3%	-2.8%	-1.3%	-11.1%	-16.3%	1.3%	13.2%
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	-2.1%	2.1%	9.6%	7.3%	8.8%	5.9%	4.9%	5.2%	3.6%	4.0%	2.2%	2.2%
Gross profit	86.1	93.7	95.8	100.6	97.7	96.5	97.5	103.1	88.3	84.6	100.7	118.8
Margin	96.9%	98.0%	97.9%	97.9%	97.9%	97.5%	97.5%	96.5%	95.7%	97.4%	97.4%	96.4%
EBIT adjusted	29.5	26.9	31.3	31.1	29.4	23.8	28.1	27.1	14.4	17.1	24.1	36.4
Margin	33.2%	28.1%	32.0%	30.3%	29.5%	24.0%	28.1%	25.4%	15.6%	19.7%	23.3%	29.6%
Adjustments	0.0	-3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	29.5	23.7	31.3	31.1	29.4	23.8	28.1	27.1	14.4	17.1	24.1	36.4
Margin	33.2%	24.8%	32.0%	30.3%	29.5%	24.0%	28.1%	25.4%	15.6%	19.7%	23.3%	29.6%
Net financial items	-0.4	-1.7	-0.3	0.6	-0.2	-2.0	0.7	0.1	-0.1	-1.2	-0.1	0.0
Pretax profit	29.1	22.0	31.0	31.7	29.2	21.8	28.8	27.2	14.3	15.9	24.0	36.4
Tax	-6.3	-5.8	-4.2	-9.9	-6.3	-5.1	-7.2	-7.2	-3.2	-3.9	-5.9	-8.9
Tax rate	21.6%	26.4%	13.5%	31.2%	21.6%	23.4%	25.0%	26.5%	22.4%	24.3%	24.5%	24.5%
Net profit	22.8	16.2	26.8	21.8	22.9	16.7	21.6	20.0	11.1	12.0	18.1	27.4
EPS adjusted	1.81	1.43	1.97	1.60	1.64	1.20	1.58	1.46	0.81	0.88	1.33	2.01
EPS	1.81	1.20	1.97	1.60	1.68	1.23	1.58	1.47	0.81	0.88	1.33	2.01
DPS	0.00	5.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	1.50

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

Figure 4: IAR Systems valuation versus listed peers

	Mkt. cap. (SEKbn)	P/E (x)			EV/EBIT (x)			EV/Sales (x)			Div. yield (%)		ROE (%)		EBIT margin		CAGR 2019-2021e (%)		
		2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2021e	2019e	2020e	2019e	2020e	2019e	2020e	Sales	EBIT	EPS
IAR Systems (DNBe)	1.6	23.8	17.1	14.0	18.0	12.7	10.2	4.1	3.5	3.0	1.3	2.1	11	13	22.7	27.3	8	9	9
<i>Premium/discount</i>		-47%	-54%	-54%	-52%	-57%	-57%	-59%	-59%	-59%									
IAR Systems (Cons.)	1.6	21.9	16.9	14.4	16.6	12.7	10.6	4.0	3.4	3.1	2.5	2.9	13	15	24.0	26.7	9	8	10
<i>Premium/discount</i>		-52%	-55%	-52%	-55%	-57%	-55%	-60%	-60%	-57%									
Nordic software peers																			
QT Group	6.0		45.1	31.9		31.8	22.0	7.7	6.2	5.1	0.1	0.6	29	41	11.0	18.6	26		
Admicom	3.9	48.6	36.0	27.6	41.5	27.7		15.1	12.2	9.8	1.4	1.8	34	36	36.5	43.7	35	39	39
Fortnox	12.8	68.1	53.0	41.7	51.3	39.4	30.8	18.1	14.2	11.5	0.4	0.5	53	45	34.4	34.5	31	35	34
HMS Networks	8.1	49.6	36.9	29.5	36.7	27.1	21.6	5.9	5.1	4.6	1.0	1.1			15.9	18.2	4	6	7
INVISIO Communications	5.0	40.8	31.2	24.7	31.0	23.6	18.5	8.2	6.2	5.4	1.2	1.7	30	33	26.3	26.1	25	36	27
Lime Technologies	2.7	51.8	38.4	31.9	43.1	31.5	26.3	8.1	7.0	6.1	0.9	1.2	59	57	18.6	21.7	16	29	23
SimCorp	36.1	38.6	29.1	25.7	30.6	22.5	21.0	7.5	6.6	6.0	1.1	1.3	33	39	24.1	28.8	7	8	7
Vitec Software	6.0	33.7	28.1	24.7	38.6	30.2	25.9	5.0	4.6	4.0	0.8	1.0	15	18	13.0	15.3	9	15	14
Embedded software peers																			
Cadence Design Systems	225.2	33.2	30.5	28.8	29.2	25.2	21.4	8.8	8.2	7.8			27	23	29.5	30.9	8	7	11
ANSYS	223.6	42.7	37.4	33.8	34.8	29.0	23.6	13.8	12.4	11.2	0.0	0.0	15	15	38.6	40.4	10	4	6
Xilinx	220.2	26.7	29.4	24.5	27.1	29.5	22.6	6.7	7.1	6.4	1.7	1.7	30	28	26.0	24.9	-1	-13	-10
Altium	28.2	63.4	50.7	38.4	46.6	36.7	27.7	15.0	12.6	10.3	1.4	1.7	25	30	32.1	34.2	13	14	3
Average	64.8	45.2	37.1	30.3	37.3	29.5	23.8	10.0	8.5	7.3	0.9	1.1	32	33	25.5	28.1	15	16	14
Median	10.4	42.7	36.4	29.2	36.7	29.3	22.6	8.2	7.1	6.2	1.0	1.2	30	33	26.1	27.4	11	14	11

Source: Bloomberg (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 with 150,000+ users 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 inception) 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 ~40% 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 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).

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) RISC-V adoption; 5) market consolidation and participants becoming too dominant; and 6) untapped potential in security solutions for embedded systems.

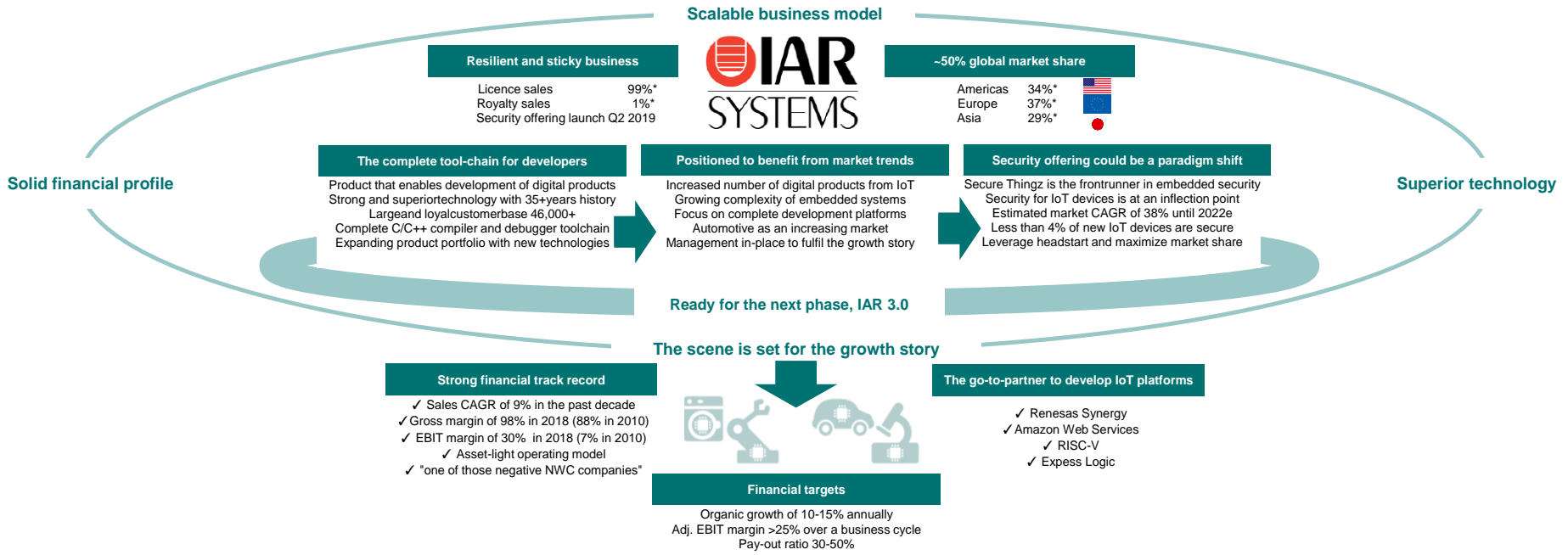
Numerous market drivers indicate a continuation of the solid industry growth

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

Having acquired Secure Thingz in Q2 2018, we believe IAR Systems is now the frontrunner in offering secure embedded systems. Theft of IP (code), cloning, counterfeiting etc. has made security issues the number one barrier for IoT adoption. The security market for embedded systems is in its inception phase but we expect it to grow rapidly through 2022 driven by 1) securing IP is a business imperative and 2) increasingly stringent security legislation. Thus, the share of secure new embedded products is set to grow from 4% today to almost 20% by 2022e, according to ABI Research. In Q2 2019, IAR Systems launched its security offering (C-Trust and Embedded Trust), which ensures that its customers' intellectual property is protected against IP theft, overproduction, piracy, and that software updates can be managed in a secure fashion.

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

Figure 5: IAR Systems at a glance



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

We forecast 2019–2022 sales and EBIT CAGRs of 9% and 13%, respectively

We forecast a 2019–2022 sales CAGR and untapped potential in security solutions for embedded systems of 9% and an EBIT CAGR of 13%, 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) rapid RISC-V adoption.

This should be driven by a 5% organic sales CAGR for its legacy licensing business (98% 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. The large growth opportunities for its legacy business are:

- 1 Growing RISC-V adoption, as its tools launched in May 2019 have been well received by customers (especially in China, which accounts for 1% of group sales), setting the stage for accelerating organic growth.
- 2 Strategic customer sales now represent c10–15% of sales, highlighting that larger OEMs (in some cases 100+ developers) are increasingly standardising on IAR Systems’ tools.
- 3 In addition, increased penetration from existing and new technologies in the IAR Embedded Workbench should drive add-on sales.

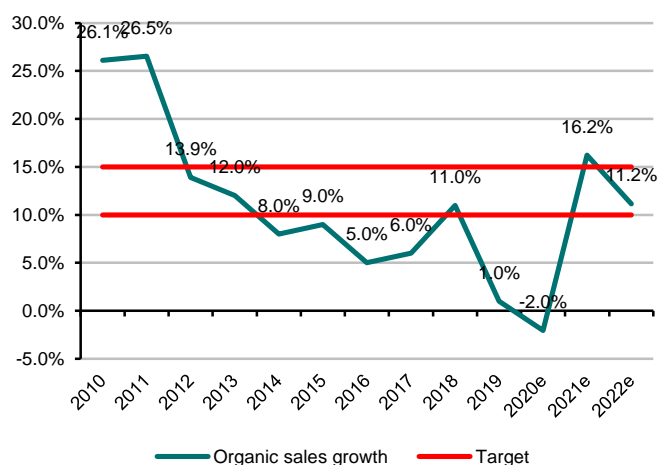
IAR Systems’ security offering lends the greatest growth potential, in our view, as IAR Systems has a solid track record of offering new products to existing customers. In a simplified scenario, we believe its existing customer base could represent a >SEK10bn revenue pool for its security offering. This should provide a long runway for future growth, but in the short term we expect: 1) security legislation to play an active role in the update of secure development tools; and 2) the company to focus on larger customer accounts. Furthermore, discussions with its customers and partners at Embedded World 2019 cemented our view of IAR Systems’ value proposition.

We forecast a 2019–2022 EBIT CAGR of 13%, implying a margin gain from 27% in 2019 to 30% in 2022e, driven by: 1) solid organic volume growth; and 2) ample operational leverage (hurt in 2018–2019 by the integration of Secure Thingz) in 2020–2022e, 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

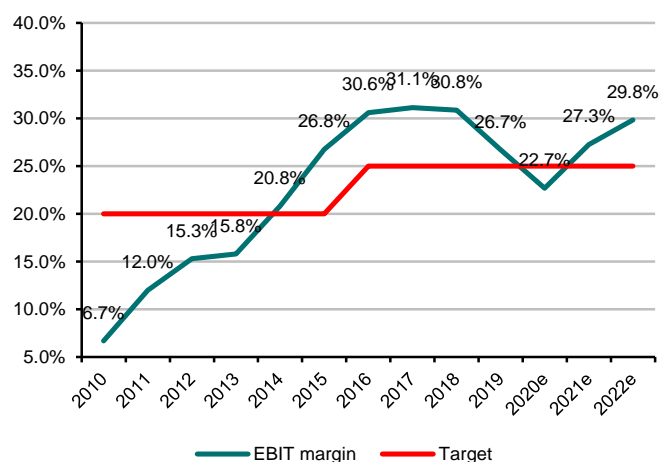
We expect Secure Thingz to contribute to group sales with 4% organic growth CAGR in 2019–2022

Figure 6: Organic sales growth (2010–2022e)



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

Figure 7: Adj. EBIT margin (2010–2022e)



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.

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Figure 8: IAR Systems' financial targets – reported and DNB Markets' estimates

	Reported fiscal years					IAR target	DNB Markets' estimates		
	2015	2016	2017	2018	2019		2020e	2021e	2022e
Organic growth	9.0%	5.0%	6.0%	11.0%	1.0%	10-15%	-2.0%	16.2%	11.2%
EBIT margin	26.8%	30.6%	31.1%	30.8%	26.7%	>25%	22.7%	27.3%	29.8%
Payout ratio	99.7%	113.3%	79.0%	74.9%	83.9%	30-50%	30%	36%	41%

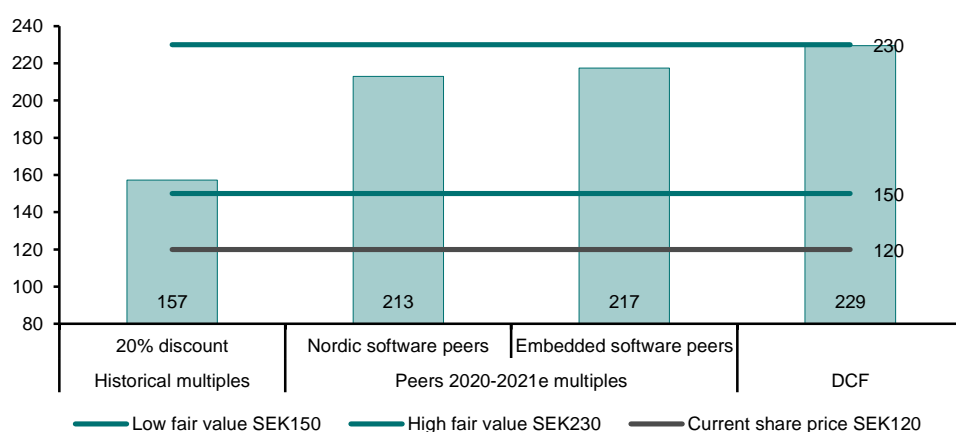
Source: DNB Markets (forecasts), company (historical data and targets)

We calculate a fair value of SEK150–230/share

Based on IAR Systems' historical valuation multiples (P/E 29x, EV/EBIT 21x), our group of Nordic software peers, embedded software peers, and our DCF model, we calculate a fair value of SEK150–230/share. On the current share price, our estimates suggest a 2021 P/E of 17x, EV/EBIT of 13x, and EV/sales of 3x, while our fair value suggests share price potential upside of 20–90%.

Fair value of SEK150–230/share suggests potential upside of 20–90%

Figure 9: 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 by 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 >99% of sales from markets outside Sweden but 50% 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 2016–2019, 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.** Although >99% of sales are from markets outside Sweden, the majority of the fixed cost base is denominated in SEK (we estimate ~50%); hence the company is fairly sensitive to fluctuations in this currency. If the SEK were to strengthen by 10% against its most important currencies (USD, EUR, JPY) as well as the GBP and KRW in 2019, we estimate a ~10% FX headwind on sales and a ~30% headwind on 2020 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 into 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 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-tool 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 well-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

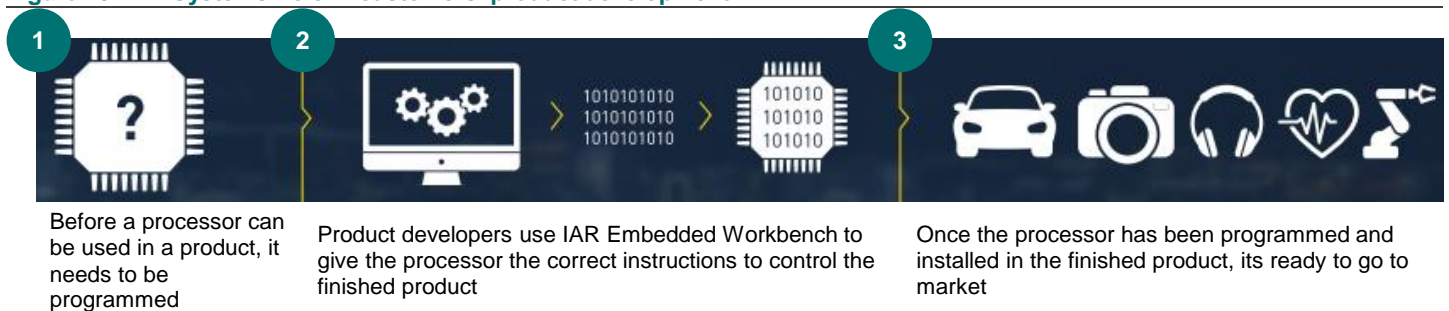
Retaining talented employees is key

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. The customer base of 46,000+ OEM customers and 150,000+ technology users is found mainly in end-markets underpinned by growing demand for digital technology and embedded systems, such as industrial automation, medical technology, telecommunications, 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 10: IAR Systems' role in customers' product development



Source: Company

Headquartered in Uppsala (Sweden), the company holds a leading global market share of ~40% with 95%+ of sales stemming from markets outside the Nordics and a headcount of 219. 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 (~35% recurring revenues). In addition to this, IAR Systems has undergone two of the most comprehensive product launches in its history in 2019. With the launch of its security offering (C-Trust and Embedded Trust) as well as for RISC-V tools introducing a subscription-based model, we believe the building blocks are in place take the case to the next level:

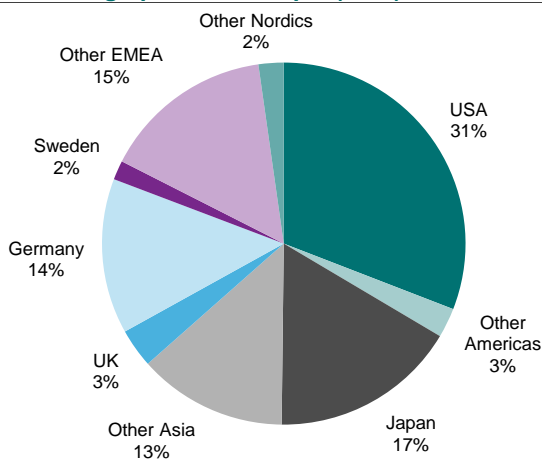
50% global market share with 98% licence-based revenues, which are flexible for customers and leverage the number of programmers using its licence...

- **IAR Embedded Workbench (99% of 2019 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 support and updates for an annual cost of 20% of the licence price.
- **Secure Thingz (0%)**. C-Trust at ~SEK30,000/seat as a perpetual licence targeting IAR's 150,000 users, Embedded Trust at ~SEK150,000/seat as an annual subscription licence targeting the security experts at IAR Systems' 46,000 OEM customers.

...In 2019, IAR Systems via its RISC-V tools and Embedded Trust also introduced a subscription model...

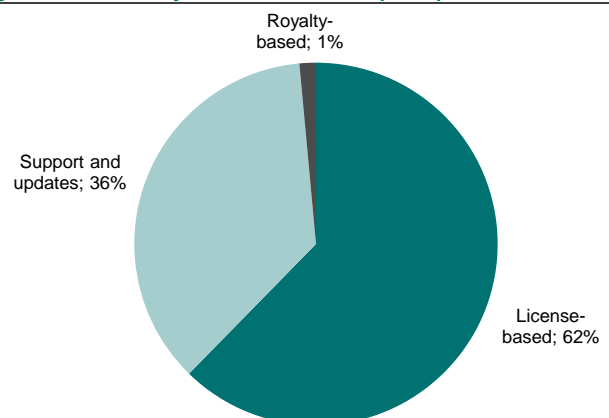
... complemented by royalty-based revenue that leverages the number of chips used in customers' production, which falls straight through to EBIT

Figure 11: Geographical sales split (2018)



Source: Company

Figure 12: Sales by business model (2019)



Source: Company

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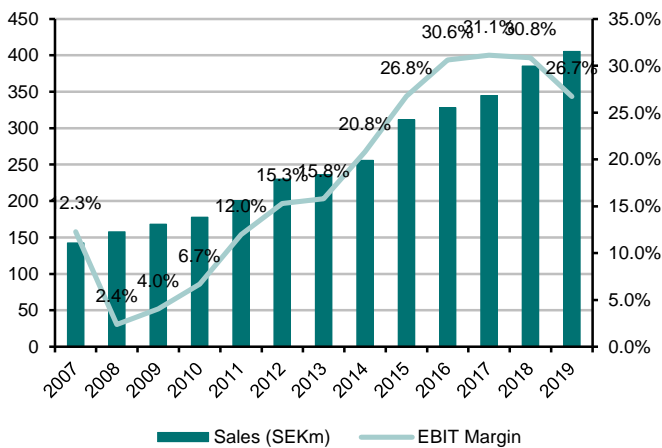
IAR Systems was acquired by IT conglomerate Nocom in 2005. However, by 2010 Nocom (known as Intoi by then) wanted to focus on proprietary software and create a more specialised company, so it kept only IAR Systems and took on that name.

With 2019 net sales of SEK406m, 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 underlying profitability from an adj. EBIT margin of 12.3% in 2007 to 26.7% in 2019, 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 represent 46% of sales).

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

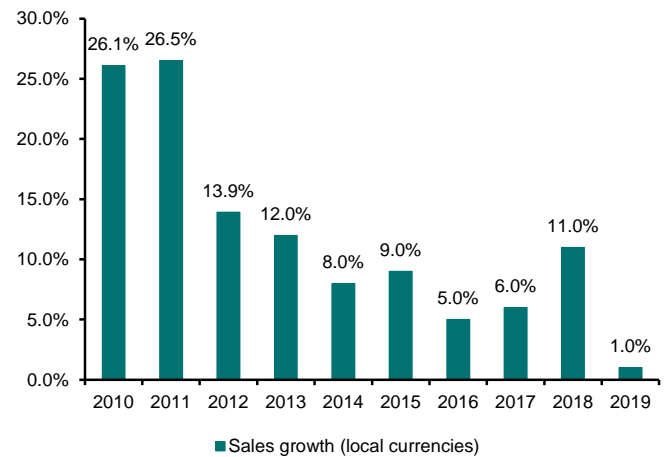
...with profitable growth, sales CAGR of 9% and adj. EBIT CAGR of 32% in the past 10 years

Figure 13: IAR Systems – sales (SEKm) and adj. EBIT margin



Source: Company

Figure 14: 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 14,000+ 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 into 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 RISC-V, positioning IAR Systems in two of the embedded industry's hottest themes. 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 15: IAR Embedded Workbench ® sold to >46,000 customer organisations

IDE Tools	Build Tools	C-SPY Debugger	C-Trust	Embedded Trust
<ul style="list-style-type: none"> - Editor - Project manager - Library Tools 	<ul style="list-style-type: none"> - IAR C/C++ Compiler - Assembler - Linker - RISC-V support 	<ul style="list-style-type: none"> - Simulator driver - Hardware debugging - Power debugging - RTOS plugins 	<ul style="list-style-type: none"> - Adds security to IAR Embedded Workbench - Delivery of secure and encrypted code - Inhibits unauthorized manufacturing 	<ul style="list-style-type: none"> - Security development environment - Identity and certificate management - Secure Boot Manager - Secure deployment and manufacturing mastering



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

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Forecast changes – P&L

(SEKm)	New			Old			Change		
	2020e	2021e	2022e	2020e	2021e	2022e	2020e	2021e	2022e
Revenues	406	473	526	413	481	532	-7	-8	-6
Cost of sales	-13	-13	-14	-11	-13	-14	-2	0	0
Gross profit	392	460	511	401	468	517	-9	-8	-6
Operating expenses	-249	-269	-287	-251	-277	-295	2	8	8
EBITDA	143	191	225	151	191	223	-7	0	2
EBITDA adj	143	191	225	151	191	223	-7	0	2
EBITDA margin (%)	35.3	40.3	42.7	36.5	39.7	41.9	-1.2	0.6	0.8
Depreciation	-4	-5	-6	-3	-4	-5	0	0	-1
Amortisation	-48	-57	-62	-40	-51	-55	-7	-6	-7
EBIT	92	129	157	107	135	162	-15	-6	-6
EBIT adj	92	129	157	107	135	162	-15	-6	-6
Net financial items	-1	-2	-2	-2	-2	-3	0	0	0
PBT	91	127	154	105	133	160	-14	-6	-5
Taxes	-22	-31	-38	-26	-33	-40	4	2	2
Minorities	0	0	0	0	0	0	0	0	0
Net profit	69	96	116	79	100	120	-10	-4	-3
Adjustments to net profit	0	0	0	0	0	0	0	0	0
Net profit adj	69	96	116	79	100	120	-10	-4	-3
<i>Per share data (SEK)</i>									
EPS	5.03	7.02	8.54	5.79	7.31	8.79	-0.76	-0.30	-0.25
EPS adj	5.04	7.02	8.54	5.79	7.31	8.79	-0.76	-0.30	-0.25
DPS ordinary	1.50	2.52	3.51	3.00	2.90	3.66	-1.50	-0.38	-0.15
DPS	1.50	2.52	3.51	3.00	2.90	3.66	-1.50	-0.38	-0.15
<i>Other key metrics (%)</i>									
Revenue growth	0.0	16.6	11.2	1.7	16.6	10.6	-1.7	0.0	0.6
EBIT adj growth	-15.1	40.1	21.6	-1.4	26.5	20.1	-13.7	13.6	1.5
EPS adj growth	-15.5	39.4	21.8	-2.8	26.3	20.2	-12.7	13.1	1.6
Avg. number of shares (m)	14	14	14	14	14	14	0	0	0
Capex	-96	-100	-89	-87	-89	-77	-9	-11	-11
OpFCF	47	90	136	64	102	146	-16	-11	-10
Working capital	23	45	93	17	43	96	6	2	-3
NIBD adj	24	7	-32	27	7	-38	-3	1	7

Source: DNB Markets

Forecast changes – By segment and assumptions

(SEKm)	New			Old			Change		
	2020e	2021e	2022e	2020e	2021e	2022e	2020e	2021e	2022e
Assumptions									
Revenue org. % YOY	-2.04	16.22	11.16	-1.79	15.97	10.57	-0.25	0.26	0.59
Structure impact % YOY	0.00	0.00	0.00		0.00	0.00		0.00	0.00
Currency impact % YOY	2.95	0.34	0.00	3.53	0.59	0.00	-0.58	-0.25	0.00

Source: DNB Markets

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Quarterly numbers

(SEKm)	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020e	Q3 2020e	Q4 2020e	Q1 2021e	Q2 2021e
Revenues	103	100	99	100	107	92	87	103	123	111	103
Cost of sales	-2	-2	-3	-3	-4	-4	-2	-3	-4	-3	-2
Gross profit	101	98	97	98	103	88	85	101	119	108	101
Operating expenses	-63	-59	-64	-60	-66	-62	-57	-64	-67	-65	-63
EBITDA	38	38	33	38	37	27	28	37	52	43	37
Depreciation	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Amortisation	-6	-9	-8	-9	-9	-12	-10	-12	-14	-14	-11
EBIT	31	29	24	28	27	14	17	24	36	28	25
Net financial items	1	0	-2	1	0	0	-1	0	0	0	-2
PBT	32	29	22	29	27	14	16	24	36	28	23
Taxes	-10	-6	-5	-7	-7	-3	-4	-6	-9	-7	-6
Minorities	0	0	0	0	0	0	0	0	0	0	0
Net profit	22	23	17	22	20	11	12	18	27	21	17
Adjustments to net profit	0	0	0	0	0	0	0	0	0	0	0
Net profit adj	22	23	17	22	20	11	12	18	27	21	17
Dividend paid	0	0	-68	0	0	0	0	0	-20	0	-34
Avg. number of shares (m)	14	14	14	14	14	14	14	14	14	14	14
<i>Per share data (SEK)</i>											
EPS	1.60	1.68	1.23	1.58	1.47	0.81	0.88	1.33	2.01	1.54	1.26
EPS adj	1.60	1.64	1.20	1.58	1.46	0.81	0.88	1.33	2.01	1.54	1.26
DPS ordinary	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	2.52
DPS	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	2.52
<i>Growth and margins (%)</i>											
Revenues, QOQ growth	5.0	-2.9	-0.8	1.0	6.8	-13.6	-5.9	19.1	19.1	-9.7	-7.3
Revenues, YOY growth	17.4	12.3	3.6	2.1	3.9	-7.5	-12.3	3.4	15.3	20.5	18.7
EPS adj, YOY growth	2.6	-9.2	-16.1	-19.8	-8.5	-50.4	-26.2	-16.0	37.5	89.6	43.2
Gross margin	97.9	97.9	97.5	97.5	96.5	95.7	97.4	97.4	96.4	97.2	97.6
EBITDA adj margin	36.6	38.5	33.2	37.5	34.6	28.8	32.1	35.8	42.1	38.4	36.3
Depreciation/revenues	-0.8	-0.5	-1.0	-0.7	-0.8	-0.8	-1.1	-0.8	-1.0	-0.8	-1.2
EBIT adj margin	30.3	29.5	24.0	28.1	25.4	15.6	19.7	23.3	29.6	25.4	24.0
Net profit margin	21.2	22.9	16.9	21.6	18.7	12.0	13.8	17.5	22.3	18.9	16.7

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

Adjustments to quarterly numbers

(SEKm)	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020e	Q3 2020e	Q4 2020e	Q1 2021e	Q2 2021e
EBITDA	38	38	33	38	37	27	28	37	52	43	37
EBITDA adj	38	38	33	38	37	27	28	37	52	43	37
EBIT	31	29	24	28	27	14	17	24	36	28	25
Other EBIT adjustments	0	0	0	0	0	0	0	0	0	0	0
EBIT adj	31	29	24	28	27	14	17	24	36	28	25
Net profit	22	23	17	22	20	11	12	18	27	21	17
Other EBIT adjustments	0	0	0	0	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	22	23	17	22	20	11	12	18	27	21	17

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

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Quarterly numbers by segment and assumptions

(SEKm)	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020e	Q3 2020e	Q4 2020e	Q1 2021e	Q2 2021e
Assumptions											
Revenue org. % YOY	10.05	3.49	-2.30	-2.76	-1.26	-11.12	-16.25	1.26	13.16	18.57	19.12
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	7.31	8.77	5.86	4.90	5.16	3.61	3.97	2.15	2.16	1.88	-0.40

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

Annual P&L

(SEKm)	2013	2014	2015	2016	2017	2018	2019	2020e	2021e	2022e	
Revenues	236	256	312	328	345	385	406	406	473	526	
Cost of sales	-15	-13	-10	-12	-9	-9	-11	-13	-13	-14	
Gross profit	222	243	301	316	337	376	395	392	460	511	
Operating expenses	-171	-179	-203	-203	-209	-236	-249	-249	-269	-287	
EBITDA	51	64	98	113	127	140	146	143	191	225	
Depreciation	-2	-2	-3	-3	-2	-3	-3	-4	-5	-6	
Amortisation	-7	-8	-12	-14	-17	-22	-34	-48	-57	-62	
EBIT	41	53	83	97	107	116	108	92	129	157	
Net financial items	0	0	0	0	-2	-2	-1	-1	-2	-2	
PBT	37	54	83	100	106	117	107	91	127	154	
Taxes	-12	-11	-20	-22	-26	-26	-26	-22	-31	-38	
Effective tax rate (%)	31	21	24	22	24	22	24	24	25	25	
Minorities	0	0	0	0	0	0	0	0	0	0	
Net profit	26	42	63	78	80	91	81	69	96	116	
Adjustments to net profit	3	0	0	-3	0	-2	0	0	0	0	
Net profit adj	29	42	63	75	80	88	81	69	96	116	
Dividend paid	-23	0	-63	-88	-63	-68	-68	-20	-34	-48	
Avg. number of shares	12	13	13	13	13	14	14	14	14	14	
<i>Per share data (SEK)</i>											
EPS	2.10	3.34	5.02	6.18	6.33	6.67	5.96	5.03	7.02	8.54	
EPS adj	2.10	3.34	5.02	6.18	6.33	6.67	5.96	5.04	7.02	8.54	
DPS ordinary	1.85	0.00	5.00	7.00	5.00	5.00	3.00	1.50	2.52	3.51	
DPS	1.85	0.00	5.00	7.00	5.00	5.00	3.00	1.50	2.52	3.51	
<i>Growth and margins (%)</i>											
Revenue growth	2.7	8.3	21.9	5.4	5.1	11.7	5.3	0.0	16.6	11.2	
EPS adj growth	83.4	59.2	50.2	23.0	2.6	5.3	-10.6	-15.5	39.4	21.8	
Gross margin	93.9	95.0	96.7	96.3	97.5	97.7	97.3	96.7	97.2	97.2	
EBITDA margin	21.4	24.9	31.5	34.5	36.9	36.4	35.9	35.3	40.3	42.7	
EBITDA adj margin	21.4	24.9	31.5	34.5	36.9	36.4	35.9	35.3	40.3	42.7	
Depreciation/revenues	-0.9	-0.9	-0.8	-0.8	-0.7	-0.7	-0.8	-0.9	-1.0	-1.1	
EBIT margin	17.5	20.8	26.8	29.4	31.1	30.0	26.7	22.7	27.3	29.8	
EBIT adj margin	15.8	20.8	26.8	30.6	31.1	30.8	26.7	22.7	27.3	29.8	
PBT margin	15.8	21.0	26.7	30.5	30.6	30.4	26.4	22.3	26.8	29.4	
Net profit margin	11.0	16.5	20.3	23.8	23.2	23.6	20.0	16.9	20.2	22.2	

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

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Adjustments to annual P&L

(SEKm)	2013	2014	2015	2016	2017	2018	2019	2020e	2021e	2022e
EBITDA	51	64	98	113	127	140	146	143	191	225
EBITDA adj	51	64	98	113	127	140	146	143	191	225
EBIT	41	53	83	97	107	116	108	92	129	157
Other EBIT adjustments	4	0	0	-4	0	-3	0	0	0	0
EBIT adj	37	53	83	101	107	119	108	92	129	157
Net profit	26	42	63	78	80	91	81	69	96	116
Other EBIT adjustments	4	0	0	-4	0	-3	0	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	29	42	63	75	80	88	81	69	96	116
<i>Per share data (SEK)</i>										
EPS	2.10	3.34	5.02	6.18	6.33	6.67	5.96	5.03	7.02	8.54
Recommended adjustment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EPS adj	2.10	3.34	5.02	6.18	6.33	6.67	5.96	5.04	7.02	8.54

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

Cash flow

(SEKm)	2013	2014	2015	2016	2017	2018	2019	2020e	2021e	2022e
Net profit	26	42	63	78	80	91	81	69	96	116
Depreciation and amortisation	9	10	15	17	20	25	37	51	62	68
Cash flow from operations (CFO)	41	70	99	114	124	93	106	109	151	175
Capital expenditure	-21	-32	-19	-19	-19	-47	-84	-96	-100	-89
Acquisitions/Investments	0	0	0	0	0	-171	-19	0	0	0
Divestments	0	0	1	0	0	0	0	0	0	0
Cash flow from investing (CFI)	-19	-32	-18	-19	-38	-218	-102	-96	-100	-89
Free cash flow (FCF)	22	39	80	95	86	-125	4	13	51	87
Net change in debt	0	0	0	0	0	0	30	5	0	0
Dividends paid	-23	0	-63	-88	-63	-68	-68	-20	-34	-48
Share issue (repurchase)	22	-53	0	0	0	172	0	0	0	0
Other	12	0	0	0	0	4	-14	-4	0	0
Cash flow from financing (CFF)	12	-53	-64	-88	-63	108	-52	-19	-34	-48
Total cash flow (CFO+CFI+CFF)	33	-15	17	7	23	-17	-49	-7	17	39
<i>FCFF calculation</i>										
Free cash flow	22	39	80	95	86	-125	4	13	51	87
Less: tax shields/other	0	0	0	0	0	0	0	0	0	0
Less: acquisitions	0	0	0	0	0	171	19	0	0	0
Less: divestments	0	0	-1	0	0	0	0	0	0	0
Growth (%)										
CFO	6.3	72.7	40.4	15.7	8.5	-25.3	14.1	3.0	38.8	16.1
CFI	-5.5	-66.0	42.3	-3.3	-98.9	-478.5	53.0	6.0	-4.4	11.6
FCF	6.9	78.7	108.3	18.5	-9.4	-244.7	102.8	265.8	297.0	70.6
CFF	1866.7	-550.8	-19.5	-39.0	28.5	270.4	-148.3	62.8	-77.4	-39.4
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)	2013	2014	2015	2016	2017	2018	2019	2020e	2021e	2022e
Assets	370	375	399	396	410	722	825	892	953	1,024
Inventories	3	4	5	6	5	7	7	8	9	10
Trade receivables	34	39	44	48	51	63	67	73	78	88
Other receivables	15	11	20	19	12	38	52	56	56	56
Current financial assets	1	0	0	0	0	0	0	0	0	0
Cash and cash equivalents	82	71	89	99	120	106	61	58	74	113
Current assets	135	124	158	172	187	214	186	195	218	268
Property, plant and equipment	6	8	7	6	6	9	64	8	7	5
Other intangible assets	164	186	192	197	194	484	568	679	718	741
Deferred tax assets	59	51	37	16	3	13	5	8	8	8
Non-current financial assets	5	6	5	5	20	2	2	3	3	3
Non-current assets	235	251	241	224	223	508	639	697	735	756
Total assets	370	375	399	396	410	722	825	892	953	1,024
Equity and liabilities	370	375	399	396	410	722	825	892	953	1,024
Total equity	295	289	291	280	290	550	592	652	714	782
Trade payables	6	5	5	5	6	7	9	13	12	15
Other payables and accruals	54	65	84	92	31	131	117	28	28	28
Short-term debt	1	1	1	1	1	2	38	43	43	43
Total current liabilities	61	71	90	99	102	140	164	173	172	175
Long-term debt	1	2	1	2	2	1	41	39	39	39
Deferred tax liabilities	13	15	17	15	14	30	27	28	28	28
Other non-current liabilities	0	0	1	1	2	2	1	1	1	1
Total non-current liabilities	14	16	18	18	17	32	69	67	67	67
Total liabilities	75	87	108	116	120	172	233	240	239	242
Total equity and liabilities	370	375	399	396	410	722	825	892	953	1,024
<i>Key metrics</i>										
Net interest bearing debt	-79	-68	-88	-97	-117	-103	18	24	7	-32

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

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Valuation ratios

(SEKm)	2013	2014	2015	2016	2017	2018	2019	2020e	2021e	2022e
<i>Enterprise value</i>										
Share price (SEK)	39.77	74.75	150.00	206.00	189.00	243.00	186.00	120.00	120.00	120.00
Number of shares (m)	12.34	12.63	12.63	12.63	12.63	13.62	13.63	13.63	13.63	13.63
Market capitalisation	491	944	1,895	2,602	2,387	3,310	2,535	1,636	1,636	1,636
Net interest bearing debt	-79	-68	-88	-97	-117	-103	18	24	7	-32
Adjustments to NIBD	0	0	0	0	0	0	0	0	0	0
Net interest bearing debt adj	-79	-68	-88	-97	-117	-103	18	24	7	-32
EV	411	876	1,807	2,505	2,270	3,206	2,554	1,659	1,643	1,604
EV adj	411	876	1,807	2,505	2,270	3,206	2,554	1,659	1,643	1,604
<i>Valuation</i>										
EPS	2.10	3.34	5.02	6.18	6.33	6.67	5.96	5.03	7.02	8.54
EPS adj	2.10	3.34	5.02	6.18	6.33	6.67	5.96	5.04	7.02	8.54
DPS ordinary	1.85	0.00	5.00	7.00	5.00	5.00	3.00	1.50	2.52	3.51
DPS	1.85	0.00	5.00	7.00	5.00	5.00	3.00	1.50	2.52	3.51
P/E	18.9	22.4	29.9	33.4	29.8	36.4	31.2	23.8	17.1	14.0
P/E adj	18.9	22.4	29.9	33.4	29.8	36.4	31.2	23.8	17.1	14.0
P/B	1.66	3.27	6.51	9.31	8.22	6.02	4.28	2.51	2.29	2.09
Average ROE	9.4%	14.5%	21.9%	27.3%	28.1%	21.6%	14.2%	11.0%	14.0%	15.6%
Earnings yield adj	5.3%	4.5%	3.3%	3.0%	3.4%	2.7%	3.2%	4.2%	5.8%	7.1%
Dividend yield	4.6%	0.0%	3.3%	3.4%	2.6%	2.1%	1.6%	1.3%	2.1%	2.9%
Free cash flow yield	4.4%	4.1%	4.2%	3.7%	3.6%	-3.8%	0.1%	0.8%	3.1%	5.3%
EV/SALES	1.74	3.42	5.80	7.63	6.58	8.32	6.30	4.09	3.47	3.05
EV/SALES adj	1.74	3.42	5.80	7.63	6.58	8.32	6.30	4.09	3.47	3.05
EV/EBITDA	8.1	13.8	18.4	22.1	17.8	22.9	17.5	11.6	8.6	7.1
EV/EBITDA adj	8.1	13.8	18.4	22.1	17.8	22.9	17.5	11.6	8.6	7.1
EV/EBIT	10.0	16.5	21.7	26.0	21.1	27.7	23.6	18.0	12.7	10.2
EV/EBIT adj	11.0	16.5	21.7	24.9	21.1	27.0	23.6	18.0	12.7	10.2
EV/capital employed	1.4	3.0	6.2	8.9	6.4	5.8	3.8	2.0	1.9	1.7
EV/NOPLAT	13.5	22.2	29.3	35.1	28.6	37.5	31.8	24.4	17.2	13.8
EV/OpFCF (taxed)	20.8	50.1	31.6	36.6	28.3	51.4	75.1	70.8	28.9	16.9

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

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Key accounting ratios

	2013	2014	2015	2016	2017	2018	2019	2020e	2021e	2022e
<i>Profitability (%)</i>										
ROA	7.5	11.3	16.4	19.6	19.9	16.0	10.5	8.0	10.4	11.8
ROCE	13.4	18.1	28.5	34.9	33.6	26.1	17.7	12.3	15.1	17.1
ROCE after tax	9.9	13.4	21.1	25.8	24.8	19.3	13.1	9.1	11.2	12.6
<i>Return on invested capital (%)</i>										
Net PPE/revenues	2.6	3.1	2.1	1.9	1.8	2.3	15.7	1.8	1.5	0.9
Working capital/revenues	31.2	20.9	22.0	22.4	24.6	19.3	5.4	5.6	9.6	17.7
<i>Cash flow ratios (%)</i>										
FCF/revenues	9.1	15.1	25.8	29.0	25.0	-32.4	0.9	3.2	10.7	16.5
FCF/market capitalisation	4.4	4.1	4.2	3.7	3.6	-3.8	0.1	0.8	3.1	5.3
CFO/revenues	17.2	27.5	31.7	34.8	35.9	24.0	26.1	26.8	31.9	33.4
CFO/market capitalisation	8.3	7.4	5.2	4.4	5.2	2.8	4.2	6.7	9.2	10.7
CFO/capex	192.9	217.6	508.8	614.0	652.1	197.9	126.4	113.3	150.7	197.9
CFO/current liabilities	66.8	99.4	110.2	115.8	121.1	66.2	64.4	63.0	87.7	100.5
Cash conversion ratio	83.4	91.5	126.8	122.2	107.9	-137.6	4.3	18.6	53.2	74.5
Capex/revenues	8.9	12.6	6.2	5.7	5.5	12.1	20.6	23.7	21.2	16.9
Capex/depreciation	959.1	1404.3	776.0	744.0	791.7	1800.0	2696.8	2642.0	2131.4	1535.9
OpFCF margin	12.5	12.2	25.3	28.8	31.4	24.2	15.3	11.7	19.1	25.8
Total payout ratio	88.0	0.0	99.6	113.3	78.9	75.0	50.4	29.8	35.9	41.1
<i>Leverage and solvency (x)</i>										
Net debt/EBITDA	-1.57	-1.08	-0.89	-0.85	-0.92	-0.74	0.13	0.17	0.04	-0.14
Total debt/total capital (BV)	0.01	0.01	0.00	0.01	0.01	0.00	0.10	0.09	0.09	0.08
LTD / (LTD + equity (MV))	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02
<i>Cash conversion cycle</i>										
Inventory turnover days	83.1	104.7	180.7	167.5	223.3	267.7	223.1	207.9	243.7	246.5
Receivables turnover days	75.3	70.9	74.5	74.7	66.2	96.1	106.8	116.8	103.9	100.3
Credit period	143.5	147.1	170.1	158.6	244.8	296.1	310.9	348.1	347.7	368.4
Cash conversion cycle	14.8	28.5	85.1	83.7	44.8	67.7	18.9	-23.5	-0.1	-21.6

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

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Important Information

Company: IAR Systems
 Coverage by Analyst: Joachim Gunell
 Date: 29/04/2020

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	Buy	Hold	Sell	No_rec	Total
Number	141	70	22	23	256
% of total	55%	27%	9%	9%	
DNB Markets client	23%	11%	3%	4%	105

29 April 2020

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