Crealogix[1, 8]

Profitability has bottomed - one-off effects in the current fiscal year provide additional support

Application Software | 19 September 2022

Rating: Market Perform

Price NA: CHF 50.50
Bloomberg: CLXN SW TK-Symbol: CLXN
Market Capitalisation: CHF 70.4 mn Free Float: 43%
Sustainable Investment Universe: No

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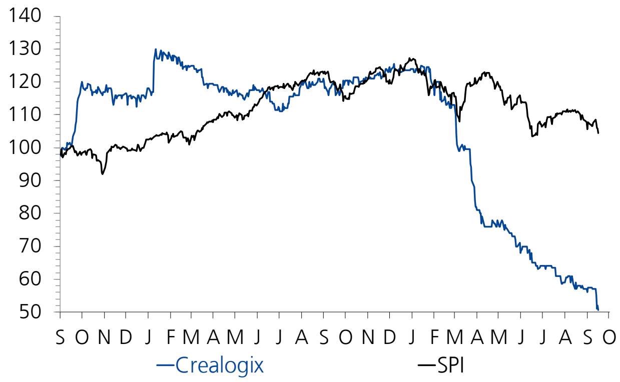


Key Figures

in CHF	2021/22	2022/23E	2023/24E		2021/22	2022/23E	2023/24E
EPS	–8.76	3.68	2.68	P/E	na	13.7x	18.9x
– Change	–1537.3%	–142.0%	–27.3%	EV/EBITDA	–13.6x	12.7x	15.0x
Dividend Yield	0.00%	0.00%	0.00%	EBIT Margin	–16.9%	0.80%	1.32%

Source: Zürcher Kantonalbank

Annual result not quite as expected

Crealogix was not able to maintain sales at the previous year's level in the 2021/22 financial year as at the end of June 2022 (–14.0%). The reasons for this were lower sales in the licensing business, possibly due to a postponed deal, lower hardware sales (QR code readers) and lower maintenance sales due to the streamlining of the product portfolio. In addition, service revenue was lower, as expected, because Crealogix sold business to partners in 2021. SaaS revenue decreased by 12% due to an unexpected drop in service subscription packages. Recurring revenues (SaaS, hosting and maintenance) increased only slightly to a share of over 51% (previous year 50%), in line with the strategy. The large order with seven development banks in the SaaS model (Software as a Service) again had a negative impact on the margin (development costs 31% of sales, previous year 22%). Due in part to the additional costs of around CHF 8.5 million for the development of the development bank portal, the adjusted EBITDA was negative at CHF –9.3 million.

Outlook foresees positive EBITDA again

The outlook expects a positive EBITDA (ZKB-E CHF 9.9 million) both in the first half of the year and for the whole fiscal year, thanks primarily to the elimination of costs in connection with the development of the promotional bank portal. In addition, the sale of the Swiss Learning Hub to a group of investors should support EBITDA with an estimated CHF 5 million. The equity ratio should thus rise above 25% again. Turnover, however, is likely to shrink again due to this one-off effect.

Transition to SaaS weighs on growth

Like other software houses, Crealogix is experiencing the trend from the one-time licensing model to SaaS (Software as a Service). High-margin revenues in the one-time licence model were partially lost with the growth of SaaS. Recurring revenue (especially SaaS) is climbing somewhat more modestly than planned, but should reach 60% of revenue in the medium term. Profitability should increase in the medium term after the full transition to SaaS.

Our DCF valuation based on normalised assumptions gives a value of CHF 73 for the share, which makes it undervalued. Due to the transition to SaaS and the current hesitancy of banks to make new investments, we expect the share to perform in line with the overall market on a twelve-month horizon. Our rating continues to be «Marketperform».

Investment case: Lowers entry hurdles to digital banking

- Product offering is adapted to the open banking megatrend with an open digital banking platform at its core.
- Growth drivers are existing banks that need to adapt their legacy systems to new client needs, regulatory requirements and pressure from fintechs/challenger banks in a rapidly digitising market. Crealogix's modular, customisable, single-platform solutions require lower maintenance and development costs and provide better content management and security.
- Crealogix is in the midst of a strategic transformation of its business model that promises to increase growth and profitability from a currently very low level.
- Undervaluation according to the DCF model, which forecasts an acceleration of growth from mid-2023.
- The transformation of the business model requires the abandonment of solutions that are not globally scalable. Some of these still have good cash flow and margin profiles.

Positive share price catalysts: Attractive growth after transformation of business model, margin developing towards the original target, good traction in relatively new markets (e.g. Thailand, Middle East), expansion of business relationships with other banks (development banks, savings banks, etc.) in Germany and Austria, reluctance among banks to make major new investments.

Negative share price catalysts: Delayed transformation to the new business model, persistently low profitability, weak euro (mainly translation), share price above conversion price of convertible bond, wave of consolidations among traditional banks.

Annual result 2021/22 in retrospect

The result for the 2021/22 financial year developed as follows:

Sales CHF 94.0 million (-14.0%, -12.5% in local currencies)

Thereof recurring revenue CHF 48.2 million (-12.2%)

Thereof SaaS / Hosting CHF 26.1 m (-12.4%)

Adj. EBITDA CHF -9.3 m (margin -9.8%, previous year 3.0%)

Adjusted net profit CHF -12.2 million (previous year CHF 0.8 million)

Adjusted free cash flow CHF -22.4 m (CHF -7.3 m)

In SaaS/Hosting, the growth momentum clearly weakened. In the first half of the year (+8.7%), growth was still achieved due to new orders and up-selling to existing customers, which turned into a clear minus in the second half of the year (-29.2%). In the business with SaaS service packages, a clear slump was recorded. Banks were reluctant to invest further in this area, probably because of the difficult environment. According to Crealogix, the willingness to sign new contracts was very low. The other SaaS business and hosting, on the other hand, developed steadily. The successful delivery of the Digital Hub with the funding configuration ("Crealogix Funding Portal") to 8 of the German development banks was no longer a main driver in the past half year. This is the largest customer programme in the history of Crealogix and comprises a SaaS contract over 10 years. 6 banks have now started operating the platform. With Baden-Württemberg's L-Bank, another development bank was recently acquired. It is the 9th of 17 German development banks to rely on the "Crealogix Funding Portal". Recurring revenue (SaaS/hosting and maintenance) rose to a share of 51% of revenue (previous year 50%), despite declining maintenance (-11.9%) and SaaS/hosting revenue (-12.4%). Maintenance revenue was impacted by the trend towards SaaS and the slimmed down product portfolio. Licensing revenue (-13.3%) declined for the same reasons. We believe it also suffered from the postponement of at least one contract into the current financial year. Banks are currently rather reluctant to sign new contracts. In addition, as in the first half of the year, discussions about the price in what is described as a highly competitive market are likely to have been a factor. Business with hardware for payment transactions was clearly negative (-43.1%). With the migration to QR codes for payment slips coming to an end in October, sales of corresponding QR code readers also fell.

Pay-in slip QR code reader "PayEye"

Source: Crealogix

The EBITDA margin (-12.8 percentage points to -9.8%) fell sharply due to higher development costs resulting from the Funding Portal for the German development banks and a new asset management solution. The "Funding Portal" for the development banks is Crealogix's digital hub, which is being developed with a configuration tailored to their business model. With the integrated digital funding portal, the entire funding loan process is digitalised, covering the entire life cycle, from application to administration to approval of the funding. Until now, complex manual processes were necessary, which must involve a multitude of actors. In addition, legal regulations and sets of rules have to be observed.

The streamlining of the product portfolio initiated two years ago and the organisational changes cushioned the negative impact on the margin to an even lower level. Personnel costs were reduced by 13% with the reorganisation. The number of full-time employees fell to 524 (previous year 631).

The net profit adjusted for goodwill amortisation was in the red. Crealogix amortises goodwill over 10 to 15 years, depending on the business unit, in accordance with the Swiss GAAP FER option. Goodwill amortisation amounted to CHF 4.7 million.

Balance sheet temporarily breaches covenants
With an equity ratio of 22.6% as at the balance sheet date of 30 June, the covenants from the 2024 convertible bond was breached in the short term. This stipulates an equity ratio of at least 25%. With the sale of the Swiss Digital Learning platform after the balance sheet date, the ratio has improved back above this limit. With a clearly improved net profit of CHF -16.9 million to -0.4 million, we expect an equity ratio of 26% at the end of the financial year 2023, while the net debt/adj. EBITDA is a comparatively low 1.9x (ZKB-E).

Financial outlook
Current year: The financial outlook for the current financial year 2022/23 has not been quantified at revenue and EBITDA level. Crealogix aims to achieve positive EBITDA in the first half of the 2022/23 financial year, without specifying a revenue target. This is likely to include income from the sale of the Digital Learning division, estimated at around CHF 5 million. For the financial year as a whole, Crealogix estimates that revenue will hardly increase on an organic basis. Including the loss of sales from the divestment of around CHF 9 million, we expect a reduction in sales of -7.5 % to CHF 86.9 million (slight organic growth). Crealogix explicitly expects a positive EBITDA margin for the financial year. We estimate EBITDA at CHF 9.9 million (margin 11.4%). The one-off income from the divestment in the first half of the year is estimated to contribute around 5.8 percentage points to the margin. The current first half of the year still includes 2 months of high costs in connection with the final development of the software for the development bank contract. Nevertheless, development costs are expected to fall from 31% last year to 20% of turnover.

Measures in favour of profitability overlaid by project costs
In the past financial year, Crealogix took various measures to increase anaemic profitability in the new financial year and beyond. These are:

- Price increases
- Staff reductions
- Cost reductions
- Nearshoring
- Shared internal services
- Sale of non-strategic business units

Although these measures will have almost full effect in the current business year, they will be overshadowed by additional costs of CHF 2 million for the development bank project.

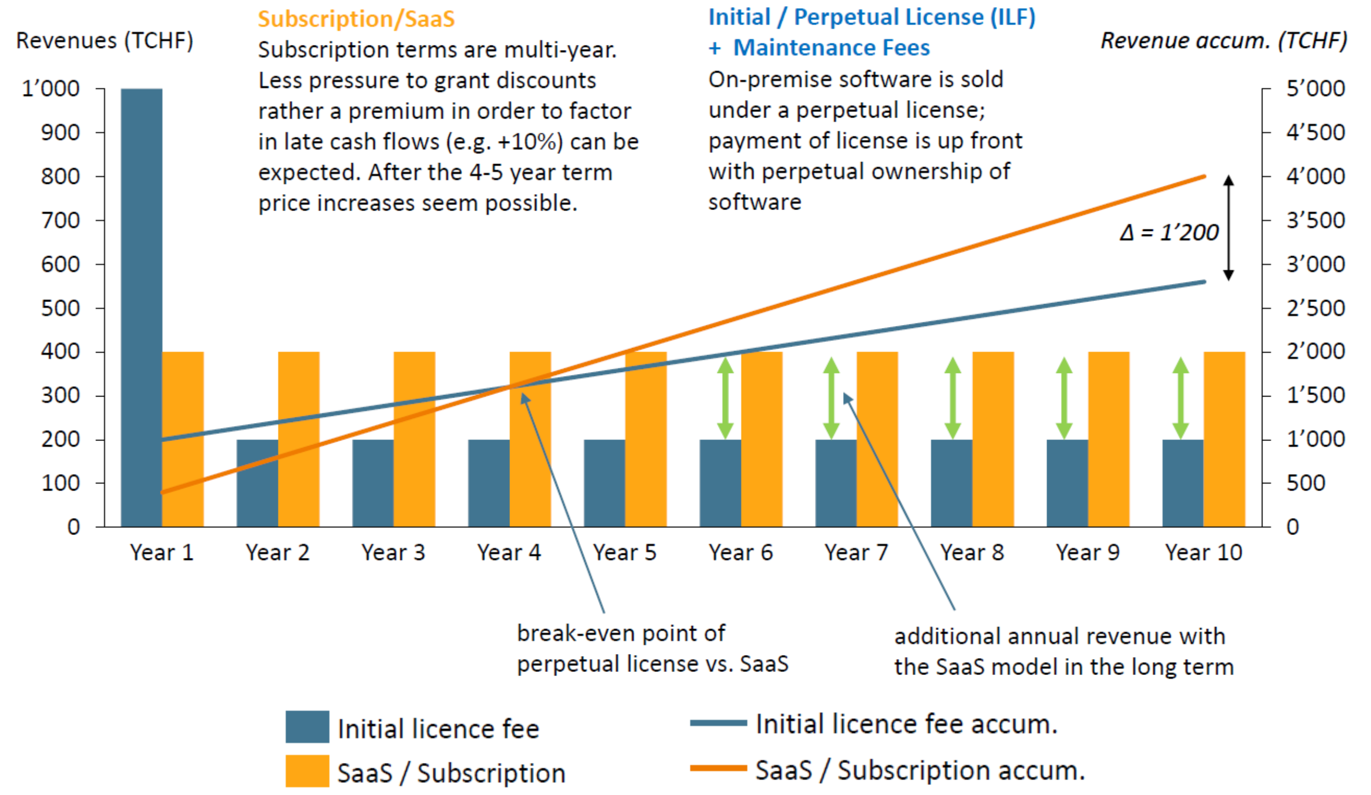
Medium-term outlook: The medium-term financial outlook previously assumed a target EBITDA margin of at least 10% and was indirectly confirmed verbally during the conference call. Crealogix has so far expressed confidence that this target is within reach in the current financial year. With the one-off income from the sale of the digital learning platform, this target is also realistic for us, but not yet on an organic basis. We do not expect a double-digit EBITDA margin until the year after next. The cost base will already be reduced in the current year because the development work in connection with the development bank contract should be completed in October. Crealogix will then have invested a total of around CHF 20 million in the development bank project. A significant amount (we estimate around CHF 15 million) was spent on external experts (freelancers) and suppliers, while the rest was covered by around 50 in-house developers. We therefore see a double-digit EBITDA margin as realistic in the medium term, provided growth returns on the topline. This is likely to be the case only in the following financial year 2023/24.

R&D spending will normalise to between 18% and 20% of sales. Crealogix has opened a new near-shore centre in Poland and will continue to expand its 60-strong workforce. It is unclear to what extent this capacity expansion will be absorbed by consolidation from other locations. In addition, there is a shortage of IT specialists and wages are on the rise (we estimate around 5% to 6%), which we have factored into our margin estimate. In addition, the financial targets had proved too ambitious in the past.

Recurring revenues increase more slowly
We still consider the target of a 60% share of recurring revenue (hosting & SaaS, maintenance) to be realistic, but we do not expect the target to be reached in the 2022/23 financial year as originally planned by Crealogix, but three years later. Reasons for this are partly the consolidation of the product portfolio, which weighs on maintenance revenues, the switch to the SaaS model and the slump in demand for packages with service subscription in the SaaS/hosting model. These are packages with, for example, fixed booked service days that a customer books recurrently for a number of years.

The mechanics of moving from the licensing to the SaaS model is one of the reasons industry-wide why revenue growth, profitability and FCF growth is currently being held back.

Comparison of revenue development in the licence model and SasS/subscriptions



Source: Crealogix

The *chart* shows an example of the typical turnover of a single contract. In reality, many contracts overlap at different points in time. In addition, it is assumed in the example that the contract is concluded at the beginning of the year. However, if it is concluded during the year, the turnover in the SaaS model is lower in the first year than in the following years.

On the positive side, the cash value of a contract over the term is at least as high as that of a one-time licence. The software industry even assumes that the cash value is higher overall. It is argued that due to the high one-off payment, higher discounts must be offered in the licence model. Moreover, price adjustments can be made during the term in the SaaS model, whereas in the licence model the price is fixed at the beginning. We assume that the present value of the SaaS model is actually at least at the level of the licence model. The revenue stream in the SaaS model is recurring and not erratic, which means less risk. A revenue stream with less risk has a slightly higher value than an erratic one.

Strategy implementation is already bearing fruit

Crealogix's vision is to be a leading SaaS provider of customer experience platforms ("Open Digital Engagement Platform") for open digital banking in selected markets. This includes recognition among customers as a first-class fintech partner. Crealogix focuses exclusively on the front end and the front office, i.e. the interface between customers and the bank, and not on the back office. The company is in a transformation phase - Crealogix calls the corresponding programme "Fitness Camp for the Pioneer". The goal is global market leadership, scalability of the business model and the transformation of the business model to SaaS and subscriptions. The medium-term financial goals so far have been to accelerate revenue growth and achieve double-digit profitability at the operational level, as well as a significantly higher share of recurring revenue.

The following strategy elements drive the transformation towards these goals:

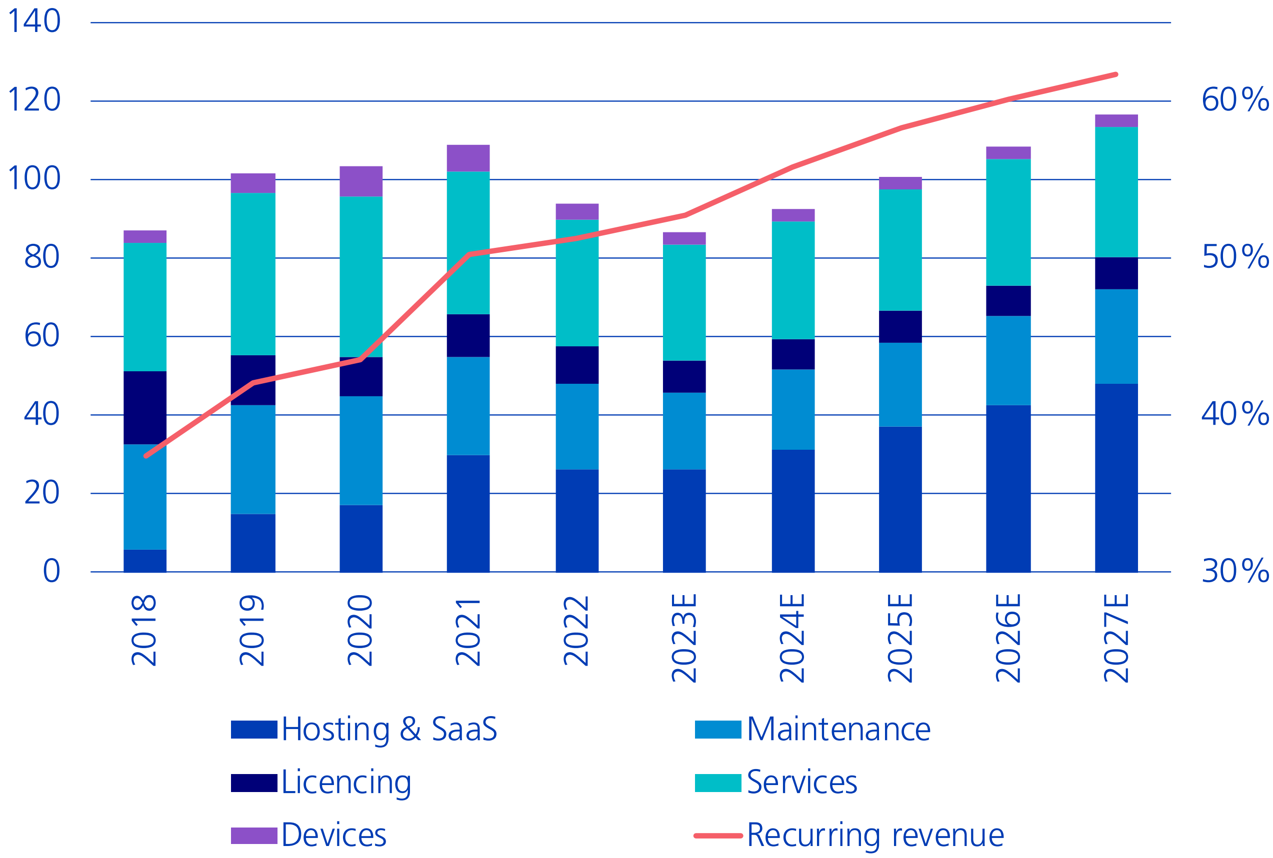
- **Improving customer access thanks to segment orientation.** The step towards becoming the leading digital customer experience platform will be taken by accelerating the market launch and focusing the sales units on three main market segments. Partners will be involved for geographic market expansion.
- **Focusing the offering** by streamlining and unifying the product offering on one platform, the Digital Hub. This ensures the global scalability of the product offering.
- **Changing the revenue model** towards sustainable, recurring revenue in the form of subscription/SaaS

In the past financial year, a number of milestones have already been achieved already and we believe the company is on track to implement the strategy elements. The digital customer experience on its open platform ("Open Digital Engagement Platform") has been aligned to the three customer segments of retail, wealth management and business customers. The platform can be deployed according to the client's strategy: Tier 1 and Tier 2 financial institutions use the Digital Hub's technology to build their own solutions, while mid-sized financial institutions can choose their desired ones from a menu of ready-made solutions.

The product offering is further focused on the digital hub and asset management. Some products that are not globally scalable, such as "Pay Maker", were discontinued or sold off. In the service business, the offering was also streamlined with the spin-off at the Coburg location in Germany. Here, employees were transferred to a new, external company in the last calendar year. For some non-strategic products, however, customers still did not seem ready for the transformation and entered into long-term contracts again until last year. Investments in non-global scalable products were nevertheless reduced to 10% of development expenditure last year (previous year 20%) and are expected to fall further.

The transition to a different revenue model with recurring revenues in the form of subscription/SaaS is on track. Crealogix came closer to the original medium-term target of a 60% share in the 51% in the past financial year, albeit more slowly than originally planned. The *chart* shows the development of the individual business areas and the share of recurring revenues.

Development of business segments and share of recurring revenue (CHF million)



Source: Zürcher Kantonalbank, Crealogix

SaaS/Hosting is expected to stabilise after the subdued development in the past financial year and grow again later. The share of the licensing business should gradually decrease.

On the client front, the most important milestones were the go-live of the new digital hybrid advisory solution for Thailand's largest bank, Bangkok Bank. The largest Saudi bank, SNB, received a new digital front-end solution and in the Middle East, a digital platform solution for lending directly in retail outlets was launched. In the UK, a new onboarding solution was sold. Bank Julius Baer went "live" with a new generation digital banking solution and Raiffeisen Südtirol with a wealth management solution. It is interesting to note here that Julius Baer is also planning to roll out in other locations in Asia and Europe. The orders won in June 2020 for seven development banks in Germany are already "live" partly only with basic functions. 2 new banks have been added in the meantime, which means that 9 of the 17 development banks are Crealogix customers. The recently acquired customer L-Bank is the second largest development bank in Germany. The development bank model could theoretically be scaled to around 250 financial institutions in all EU member states. In Germany alone, around 2,500 loans have been issued to companies and institutions, which results in further upselling potential for Crealogix in the digitalisation of the administration of these loans. The Crealogix platform is now so mature that L-Bank, for example, was able to go live in 3 months.

Overall, it showed that Crealogix is on track with key milestones of the strategy, even if the financial picture has not yet visibly benefited from it.

Market potential still interesting

We continue to consider the market potential and the position in the core business of customer experience platforms as attractive. The market is expected to grow at high single-digit rates, normalised by the business cycle, and we expect Crealogix, as a technology leader, to participate well in market growth in the medium term. The current low profitability is partly due to the shift to SaaS, but Crealogix is also investing in globally scalable new products while abandoning non-scalable ones. We expect Crealogix to move away from low profitability in the medium term.

Share undervalued - but still few catalysts

DCF valuation

We consider the discounted cash flow valuation to be the most meaningful. It is complemented by a peer valuation and a valuation based on recurring revenues. The intrinsic DCF value per share is based on the following normalised assumptions:

Assumptions for the DCF valuation

Turnover growth 2022/23 to 2026/27*	+4.5%
Turnover growth 2026/27 to 2035/36*	+7.7%
EBITA margin 2022/23 to 2026/27	10.7%
EBITA margin 2026/27 to 2035/36	11.9%
Adjusted EBITDA margin 2026/27 to 2036/3710	.7%
ROIC incl. goodwill 2022/23 to 2036/378	.2%
Discount rate (WACC)	8.4%
Beta	1.17
DCF valuation per share	**CHF 73**
Deviation from share price 16 September 2022	+44%

* Average annual growth (CAGR) Source: Zürcher Kantonalbank

We increased our risk-free interest rate from 1.5% to 2.5% due to tighter monetary policies, bringing the WACC to 8.4%, roughly in line with ROIC, including goodwill.

The assumptions compare with the following average values of the last 10 years:

- Sales growth (CAGR) +7.4%
- EBITA margin –1.6%
- Adjusted EBITDA margin 1.5%
- ROIC including goodwill –4.8%

We therefore assume in our valuation that business will continue to grow in the future, with higher margins and increased returns on capital employed. The estimate of sales growth could also turn out to be too conservative, as we explicitly do not include any future acquisitions in our estimates.

Valuation based on recurring revenues

Recurring revenues for software companies account for the majority of the valuation. Recurring revenues are revenues for maintenance, SaaS and subscriptions. Comparing the company value to the recurring revenues of some of the leading providers in their categories in the software sector, the following picture emerges:

Comparison to market leaders in their categories

	EV/Recurring revenue	EV/*EBITDA
Microsoft	18.5x	17.8x
Oracle	8.6x	19.1x
SAP	5.1x	18.3x
Temenos	8.6x	17.6x
Crealogix	**2.8x**	**15.0x**

*last 12 months (TTM), *Crealogix 2023/24E Source: Bloomberg 16.09.2022 Intraday, ZKB

On a recurring revenue basis, the Crealogix share appears deeply valued. Despite comparatively low profitability at EV/EBITDA level, this ratio is below that of the market leaders.

Evaluation by means of peer group

The peer group for the valuation consists of a selection of international peer companies as well as the Swiss peers Temenos and Avaloq (acquired by NEC, valued at acquisition price).

International Peers

We select the international peers from providers of core banking software and related implementation services such as **Infosys** (owner of the second largest direct competitor EdgeVerve), **Oracle Financial Services and Sopra Steria** (owner of Sopra Banking Software). We also count IT service providers such as the US-based **Fiserv** and India's **Tata Consultancy Services as** part of the peer group. Both offer customer experience platforms for banks. We include the smaller Polish **Asseco as** well as the fintech house **Intellect Design Arena** from India, **GFT Technologies** and **First Derivatives.** For valuation purposes, we do not include Q2 Holdings - actually the largest direct competitor, but not even profitable at the EBITDA level. nCino is also not profitable at this level and therefore not suitable for comparison. Backbase, Finastra (Mysis), Technisys, CR2 and ieDigital belong to the peer group but are privately held.

Swiss peers

The only peer for Crealogix among listed companies in Switzerland is the banking software provider Temenos. Avaloq would be a second company, but was sold to NEC. We have analysed Avaloq's takeover multiples separately below. NEC, on the other hand, is not a peer for the peer group. This should therefore be seen more as a supplement to the international peer group for DCF valuation and ratios.

Avaloq

Japanese IT services provider NEC bought 100% of the shares of Avaloq, a privately held competitor of Temenos that is mainly active in core banking software with in Switzerland (around 60% of sales), in October 2020. Based on 2019 numbers, NEC paid 3.4x EV/revenue or 21.1x EV/EBITDA for the market leader in Switzerland. In contrast to Crealogix, Avaloq is mainly active in back-end applications.

Based on Avaloq's published 2019 figures, the picture is as follows:

Multiples relative to Avaloq purchase price

	Avaloq	Crealogix	Premium/ (discount)
EV/revenue	3.4x	1.5x	– 56%
EV/recurring revenue	4.8x	2.7x	– 44%
EV/EBITDA	21.1x	15.0x*	– 28%

Basis: 2019 financials for Avaloq, Crealogix 2022/23E *23/24

Sources: ZKB, companies

Crealogix's discount to Avaloq on a turnover basis is worth mentioning. Typically, listed target companies have to pay turnover premiums in the double-digit percentage range compared to the share price. On an EV/EBITDA basis, Crealogix's multiple is also lower because its margins are comparatively low - despite Avaloq's business process outsourcing ("BPO") business for banks. This is typically a business with lower profitability than the product business. At Avaloq, the BPO business accounted for around 20% to 25% of Avaloq's revenues. Even when adjusted for this, the valuation of Crealogix on an EV/BITDA basis remains lower than Avaloq's acquisition multiple.

Temenos

Temenos is a leading global provider of core banking software for retail and wholesale banking. Temenos is increasingly focusing on the development and maintenance of its software products through various partner companies for project services. The consultancy specialises in the banking industry, and the company sees itself as a product manufacturer rather than an IT service provider. Temenos has its roots in back-end applications and has only expanded the front-end in recent years, mainly through acquisitions. With the acquisition of Kony (EV/sales 5x), Temenos has positioned itself as the third-largest provider, according to our estimates.

Peer-based evaluation methodology

For the peer valuation, we use P/E and EV/EBITDA for the financial years 2023 and 2024 of the respective peer group. In addition, we use the figures for Crealogix adjusted for special effects, which we have estimated. The resulting enterprise values are offset against our estimated net debt at the end of the 2022/23 financial year to calculate the value of equity. We divide this by the expected diluted number of shares outstanding.

Evaluation by means of the extended international peer group including Swiss peers.

Crealogix: Peergroup	Mkt. Cap. CHF mn	EBITDA-Margin 2023E	ROE 2023E	P/E 2023E	P/E 2024E	EV/EBITDA 2023E	EV/EBITDA 2024E	P/B 2023E
ASSECO POLAND SA	1'256	14.5%	6.7%	12.6x	12.8x	4.4x	4.2x	0.9x
GFT TECHNOLOGIES SE	820	11.1%	24.5%	19.6x	16.0x	11.2x	9.5x	4.4x
INFOSYS LTD	71'307	24.0%	30.7%	24.1x	20.8x	16.5x	14.4x	7.2x
INTELLECT DESIGN ARENA LTD	923	23.7%	18.2%	19.5x	15.1x	13.0x	10.3x	3.5x
FD TECHNOLOGIES PLC	479	12.6%	4.0%	36.3x	26.3x	12.3x	10.1x	0.0x
FISERV INC	64'107	42.3%	13.0%	16.0x	14.0x	12.3x	11.1x	2.0x
FIDELITY NATIONAL INFO SERV	49'558	44.2%	9.1%	11.9x	10.7x	10.5x	9.7x	1.1x
ORACLE FINANCIAL SERVICES	3'192	47.5%	29.0%	12.5x	11.2x	7.7x	7.0x	3.6x
SOPRA STERIA GROUP	2'778	11.5%	15.2%	10.3x	9.3x	6.4x	6.0x	1.6x
TATA CONSULTANCY SVCS LTD	134'878	26.6%	44.0%	26.4x	23.4x	18.4x	16.4x	11.1x
TEMENOS AG - REG	5'590	45.8%	44.0%	19.3x	17.9x	13.9x	12.6x	8.4x
Mittelwert	30'444	27.6%	21.7%	19.0x	16.1x	11.5x	10.1x	4.0x
Median	3'192	24.0%	18.2%	19.3x	15.1x	12.3x	10.1x	3.5x
Crealogix	CHF 0.07 Mrd	11.4%	-1.7%	13.7x	18.9x	12.7x	15.0x	3.0x
Crealogix vs. Median		-12.6%	-19.9%	-29%	25%	4%	49%	-14%
Crealogix vs. Mean		-16.2%	-23.4%	-28%	17%	11%	49%	-24%

Sources: Bloomberg 16 September 2022 intraday, Zürcher Kantonalbank

Conclusion Rating
We have increased the risk-free interest rate in our DCF valuation models from 1.5% to 2.5%. Based on our normalised assumptions, we calculate a fair value per share of CHF 73 using the DCF model. The share is trading clearly below this. In our view, this is due to the increasingly difficult banking environment and the latest earnings report, with a temporarily lower equity ratio. In our medium-term assumptions for the valuation we assume a clearly better profitability after the change of the business from the licence model to SaaS. The valuation is thus clearly dependent on increasing profitability.

Compared to most peers, Crealogix is valued low on the basis of sales multiples, but rather above average on the basis of profitability ratios. This is due to the comparatively low current profitability. If the profitability targets according to the medium-term outlook are achieved, the premium will decrease in comparison. Based on recurring revenues, Crealogix is valued low compared to category leaders, as expected. Overall, we consider the valuation of our DCF analysis to be the most meaningful.

Risks, evaluation and conclusion
The most important risks for the company and our investment case lie in the transformation of the business model to SaaS and the discontinuation of certain products with consequences above all for licence sales and profitability. In addition, Crealogix is dependent on the banks' investments in IT, which are sensitive to the economy and currently rather restrained. Long sales cycles, increased competition and rapid technology change are additional challenges.

We consider the shares undervalued with our assumptions. Overall, we consider the risk/return profile to be balanced.

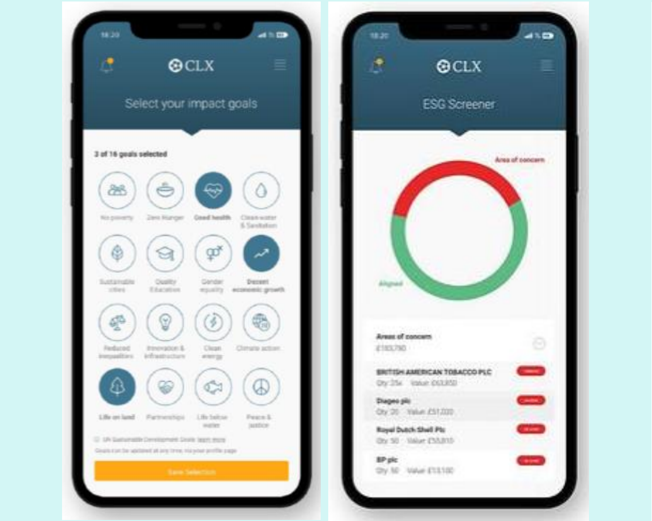
Our rating for the share remains «Marketperform». Accordingly, we expect a total return for the share over a time horizon of 12 months that is roughly the same as for the overall market (SPI).

Sustainability and ESG criteria

Solutions for sustainable investing

Sustainability and ESG criteria are increasingly becoming part of the investment process in the financial industry. This trend has been accelerated in Europe due to several developments, including recent regulation (MiFID II). Under this regulation, clients must have the opportunity to express their preferences on ESG issues, and asset management firms must demonstrate that these preferences have been taken into account in the same way as other suitability criteria. Crealogix offers a system for digital asset services that allows asset management firms and investment companies to offer their clients new ways to integrate ESG and impact criteria as part of a user-friendly digital investment service.

Figure 1: UN sustainability development goals and ESG screener



Source: Crealogix

Environmental factors

Crealogix is unremarkable regarding environmental factors. As a software developer, its effect on climate warming is minimal. Thanks to seamless processes, for example, a lot of paper and IT hardware resources are saved. The use of data centres and the cloud should have only a minor negative impact on this result. As a member of the ICT and online industry organisation Swico, Crealogix is subject to the Code of Conduct for the Swiss ICT Industry. Swico Recycling organises the professional disposal and recycling of ITC hardware in Switzerland.

Social criteria

Nothing about Crealogix stands out regarding social criteria. The Swico Code of Conduct requires the software company to adhere to certain standards, which are continuously being enhanced.

The **Swico standards for sustainability** concern

- integrity (fair and ethical business conduct by employees and fair and ethical financial incentives);
- dealing with clients (client acquisition, sponsoring events, etc.);
- dealing with service providers (sustainability requirements or working conditions);
- the treatment of employees (well-being, diversity, promotion of young talent); and
- public and social responsibility (being a fair "corporate citizen").

Corporate governance

Crealogix has a strongly anchored corporate culture based on entrepreneurial thinking and action, personal responsibility, respect and social responsibility.

The company has a modern share structure and articles of association. The free float, in contrast, is below average at 45%.

One aspect about the corporate governance that stands out is the Nomination and Compensation committee of the Board of Directors, which consists of two members of the Board of Directors. A conflict of interest exists to some extent in this regard because the committee also includes Bruno Richle, the Chairman of the Board of Directors and main shareholder. The committee proposes the compensation of the Chairman of the Board of Directors, among other things. The compensation model is clear and transparent with a strong correlation between pay and performance.

Slight, almost negligible conflicts of interest are apparent regarding the purchase of third-party services. The law firm Wenger & Vieli AG, where one member of the Crealogix Board of Directors (Dr Christoph Schmid) is employed, has provided legal advice to Crealogix in the past. Other services (development consulting) have been provided by Hixon AG in relation to the business. This company is owned by Ralph Mogicato, another member of the Board of Directors. These are small amounts, however.

Three out of five Board members are independent. In our view, the Board of Directors is highly competent and very experienced. One member of the Board of Directors (Dr Richard Dratva) is also a member of Management.

Crealogix complies with the principles and rules set out in the Swiss Code of Best Practice for Corporate Governance issued by economiesuisse and the SIX Corporate Governance Directive (DCG).

Conclusion on sustainability

Crealogix does not report explicitly on sustainability, but it does adhere to certain sustainability criteria. Overall, Crealogix has no meaningful issues in relation to sustainability criteria. One positive aspect is the range of solutions its offers, which promotes easier access to and selection of sustainable financial products in the value chain of the financial industry.

Company description

The Crealogix Group is a leading Swiss fintech company and one of the global market leaders in digital banking. Crealogix develops and implements innovative fintech solutions for the financial institutions of tomorrow. Banks, asset managers and other financial institutions use Crealogix's digital solutions to adapt to changing client needs in the area of digital transformation and to compete in a dynamic market. Founded in 1996, the group employs 524 people worldwide.

Investment case

- Focus on globally scalable offerings should favour profitability and growth after a transformation phase
- Helps banks upgrade their legacy systems with modular, customisable single-platform solutions. Benefits include lower maintenance and development costs, better content management and security.
- Change of business model requires the abandonment of non-globally scalable solutions. Some of these have good cash flow and margin profiles.
- Sustained high growth of target end markets coupled with market share gains, but from mid-2023 at the earliest.
- Undervaluation according to DCF model, which foresees growth acceleration from mid-2023 onwards

SWOT analysis

Strengths

- One of the world's leading providers of open digital front-end applications
- Strong market position in home market Switzerland and Germany
- Focused exclusively on the digital front-end. Technology works with all delivery models (licences, SaaS, subscriptions).
- Open for connection to all back-end solutions (Avaloq, T24 Transact, Finnova and many more), databases (IBM, Oracle) or cloud (IBM Cloud, Azure, AWS, Google) thanks to open interfaces (APIs).

Weaknesses

- Underrepresented in the largest banking software market, the USA.
- Limited participation rights for minority shareholders at the AGM due to the founders' almost 50% stake and their shareholders' agreement.
- Low operating profitability in recent years

Opportunities

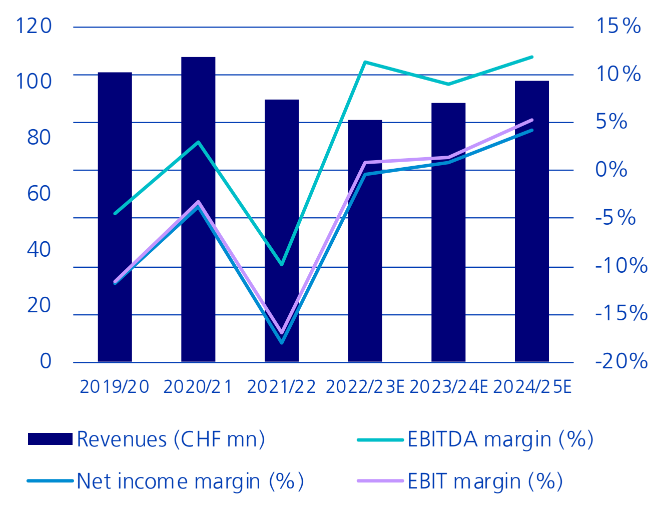
- External banking software for open front-end applications is a structural growth market
- Increasing demand for mobile banking with seamless integration of social media, non-bank or competitor services.
- Increasing regulation and digitalisation of the financial sector

Risks

- IT spending at banks
- Stronger competition from core banking software vendors, fintech or free payment apps.
- Dependence of data centres on external partners for SaaS solutions.
- Falling EUR/CHF exchange rate (translation).
- Accelerated consolidation of the banking sector due to the crisis.

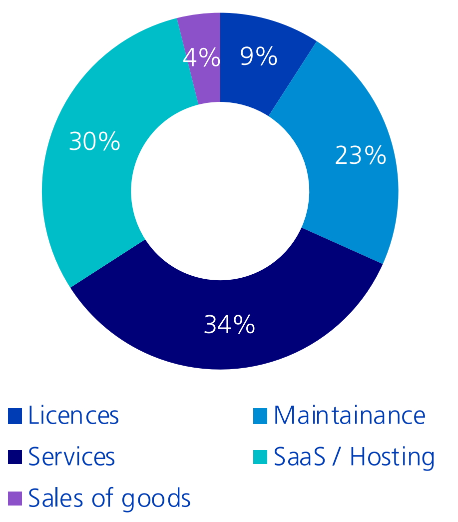
Source: Zürcher Kantonalbank

Revenues and margin trend



Sources: Zürcher Kantonalbank, Crealogix

Breakdown of revenues 2022/23E



Sources: Crealogix, Zürcher Kantonalb

Financial Data

Crealogix (in CHF mn)	2019/20	2020/21	2021/22	2022/23E	2023/24E	2024/25E
Income Statement						
Net sales	104	109	94.0	86.9	92.7	101
– change in %	1.7%	5.4%	–14.0%	–7.5%	6.6%	8.6%
SaaS & hosting	*17.0*	*29.9*	*26.1*	*26.3*	*31.4*	*37.2*
– change in %	*15.4%*	*75.6%*	*–12.4%*	*0.4%*	*19.5%*	*18.5%*
Licences	*9.6*	*10.8*	*9.3*	*7.9*	*7.7*	*7.9*
– change in %	*–23.5%*	*12.7%*	*–13.3%*	*–15.1%*	*–2.5%*	*2.0%*
Maintenance	*28.1*	*25.1*	*22.1*	*19.6*	*20.4*	*21.5*
– change in %	*0.2%*	*–10.9%*	*–11.9%*	*–11.1%*	*3.8%*	*5.5%*
Service	*41.0*	*36.3*	*32.3*	*29.7*	*30.0*	*30.9*
Sale of devices	*7.9*	*7.2*	*4.1*	*3.4*	*3.2*	*3.2*
Cost of goods and services	–25.6	–36.5	–37.5	–23.3	–22.9	–23.8
Operating costs	–82.6	–69.5	–65.8	–53.7	–61.4	–65.0
EBITDA	–4.6	3.3	–9.3	9.9	8.4	11.9
– as % of sales	–4.4%	3.0%	–9.8%	11.4%	9.1%	11.8%
Restructuring charge, e.o. cost	7.0	0.0	0.0	0.0	0.0	0.0
EBITDA adjusted	2.4	3.3	–9.3	9.9	8.4	11.9
– as % of sales	2.3%	3.0%	–9.8%	11.4%	9.1%	11.8%
Depreciation	–1.4	–1.1	–1.0	–1.5	–1.5	–1.3
EBITA	–6.0	2.2	–10.3	8.4	6.9	10.6
– as % of sales	–5.8%	2.0%	–10.9%	9.7%	7.4%	10.5%
Amortization of intangibles	–1.1	–0.8	–0.9	–2.2	–2.7	–2.5
EBIT adjusted	–0.1	1.4	–11.2	6.2	4.2	8.1
– as % of sales	–0.1%	1.3%	–11.9%	7.1%	4.6%	8.0%
Amortization of goodwill	–4.9	–4.9	–4.7	–5.5	–3.0	–2.7
EBIT	–12.0	–3.5	–15.9	0.7	1.2	5.4
– as % of sales	–11.6%	–3.2%	–16.9%	0.8%	1.3%	5.3%
Net financial result	–0.9	–0.3	–0.1	–1.1	–0.3	0.0
Taxes	0.4	0.0	–0.9	0.0	–0.2	–1.2
Net profit	–12.1	–4.1	–16.9	–0.4	0.7	4.3
Net profit adjusted	–0.2	0.8	–12.2	5.1	3.7	7.0
– as % of sales	–0.2%	0.8%	–13.0%	5.9%	4.0%	7.0%
Cash flow statement						
EBITDA	–4.6	3.3	–9.3	9.9	8.4	11.9
Investment in net working capital	13.1	–2.1	–1.4	–0.8	–1.0	–0.8
Other operating income/costs	–0.2	3.4	0.0	0.0	0.0	0.0
Interest and taxes	–1.9	–1.2	–0.2	–1.0	–0.5	–1.1
Cash flow from operations	6.4	3.4	–10.9	8.1	6.9	10.0
Capex	–1.5	9.4	7.0	2.8	3.2	3.3
Operating free cash flow	7.9	–6.0	–17.9	5.3	3.8	6.7
Other cash flows	2.1	2.5	–6.8	–0.4	0.3	0.4
Free cash flow	10.0	–3.5	–24.7	5.0	4.0	7.1
Acquisitions / divestments	2.1	–1.8	3.3	0.1	–0.1	–0.2
Dividend / changes in equity	–0.9	–3.2	0.2	1.5	0.0	0.0
Change in net debt	11.2	–8.5	–21.2	6.6	3.9	6.9
Balance sheet						
Total assets	115	116	98.5	90.3	92.2	98.2
Shareholders equity	45.7	44.1	22.3	23.5	24.2	28.3
– equity ratio	39.9%	38.0%	22.6%	26.0%	26.2%	28.9%
Goodwill	43.9	40.8	32.6	27.0	24.0	21.3
– as % of equity	0.96%	93%	146%	115%	99%	75%
Net debt (+) / net cash (–)	–5.1	1.9	25.3	18.9	14.8	7.7
Gearing	–0.11	0.04	1.13	0.80	0.61	0.27
Profitability ratios						
ROE	–21.8%	–8.7%	–51.3%	–1.7%	3.1%	16.6%
ROIC incl. Goodwill	–7.3%	1.4%	–10.8%	8.2%	6.3%	8.7%
Valuation						
Enterprise value/EBITDA			–13.6x	12.7x	15.0x	10.6x
Enterprise value/sales			1.3x	1.5x	1.4x	1.3x
Price/sales			0.7x	0.8x	0.8x	0.7x
Price/book			3.2x	3.0x	2.9x	2.5x
P/E diluted			nm	nm	95.4x	16.3x
P/E diluted & adj.			nm	13.7x	18.9x	10.1x
Per share data (in CHF)						
EPS diluted)	–8.75	–2.92	–12.2	–0.27	0.53	3.10
EPS adj. diluted)	–0.15	0.61	–8.76	3.68	2.68	5.02
Equity	35.5	31.6	15.9	16.7	17.2	20.2
Cash flow from operations	6.18	2.26	–11.28	6.57	5.33	7.94

Capital structure	Par Value	No. of Shares	Market Cap.	Free Float	TK Symbol	Swiss Sec. No.
Registered shares	CHF 8.00	1.4 mn	CHF 0.07 bn	43.1%	CLXN	1 111 570

Source: Zürcher Kantonalbank

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Recommendation	Company in the Swiss Research Universe	% distribution	Clients with IB services
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Underperform	7	4.07%	57.14%

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