

Update: Report Q3 2020 2020-11-17

Crunchfish: Offline for all

- New innovations enable digital offline payments across platforms
- Near-term uncertainty due to COVID-19
- We keep our valuation interval at SEK 25.30 40.10 per share

Analysts Alf Riple, CFA 073-840 4008 alf.riple@vhcorp.se Pascal Dettwiler 073-332 1473 pascal.dettwiler@vhcorp.se Stock ticker: **CFISH** Industry: Technology Listed on: Nasdag First North Latest stock price (SEK): 14,03 Market cap (MSEK): 409,4 Enterprise Value (MSEK): 385.9 Total number of shares (M): 28.35 - of which free float (M): 16,02 VHCF fair value per share 25.30 - 40.10 SEK Crunchfish AB Address: Stora Varvsgatan 6A 211 19 Malmö Webpage crunchfish.com CEO: Joachim Samuelsson Main owners (30 Sep 2020) Capital (%) Femari Invest AB 26.3 Midroc Invest AB 17,3 Paul Cronholm 3,9 Carlquist Holding AB 3,5 Coeli Fonder 3.3 Stock price history Crunchfish AB vs. OMXS30 Performance Price (Indexed to 10.13) 30 25 20 15 10 Feb Dec Apr Jun Aug Oct Crunchfish AB OMX Stockholm 30 Source: FactSet Prices -3m -12m -1m Change (%) 11,3 -11,5 40,2 52 w k range (Low/Hi) - SEK 6,99 / 26,86

Source: FactSet

There were no surprises in the financial results of Crunchfish' Q3 report last week. The most interesting was the summary of all the different projects the company has running. The projects are many and range from digital cash in Sweden to offline payments in India and onto gesture control. Not to mention an effort to fight food waste by helping grocery stores move expiring products faster.

We regard the company's involvement with the payment systems in India as their single most valuable business interest. There has been further progress on this since our last research update in August. There has been particular progress in the area of offline payments, which is important to us since that is what contributes the most to our valuation of the company. The urgency of establishing offline digital payment options for India has also been recognised by its central bank, the Reserve Bank of India. In August, it announced a <u>pilot scheme</u> running until March 31, 2021 under which payment providers are encouraged to launch technological innovations in the area of offline payment solutions.

Crunchfish announced two important steps forward during October. First, the company has developed and applied for patent on a software solution which integrates an offline wallet in a secure element which can be built into consumer payment apps. The offline wallet carries a certain amount of digital cash which the customer preloads while they are online. At the time of payment, the customer can draw on that amount to authorise and send their encrypted payment to the vendor using any kind of communication protocol available, e.g. QR scan, Bluetooth or NFC, irrespective of whether any of the parties has an internet connection at the time. The payment will clear whenever either party is online again. The customer may also refill their offline wallet when they are back online.

Table 1: Financial Overview

MSEK	2 018	2 019	2020e	2021e	2022e
Total revenues	13,8	21,1	22,9	60,3	164,6
Growth (%)	7,6%	52,7%	8,5%	163,2%	172,9%
EBITDA	(17,3)	(17,1)	(18,3)	9,5	110,7
EBITDA margin (%)	neg	neg	neg	13,7%	62,5%
EBT	(22,0)	(24,0)	(26,0)	1,0	101,6
Cash holdings	21,4	13,2	6,6	12,4	116,0
Total assets	46,6	42,9	42,5	53,5	163,0
Total equity	40,3	36,3	34,1	45,1	154,4
Solidity (%)	86,3%	84,5%	80,3%	84,3%	94,7%
P/E	neg	neg	neg	398,8	4,0
ROE	neg	neg	neg	2,3%	65,8%
EV/EBIT (x)	neg	neg	neg	358,6	3,8
EV/Sales (x)	27,9	18,3	16,8	6,4	2,3

Offline payments available on any infrastructure

The second innovation widens the application area of this solution to include any kind of payment infrastructure. Originally, it was thought that the offline payments would connect to and clear on the nationwide clearing service for instant payment apps, the UPI. The UPI has around 120 participating apps and logged 2 billion transactions during the month of October this year. But it is only one of several coexisting payment infrastructures. Payment cards use a second infrastructure and future implementations of *central bank digital currency* (CBDC) are going to use a third. By generalising the integration between the offline payment solution and the underlying payment infrastructure, Crunchfish is able to offer offline payments on any kind of infrastructure.

A way for card companies to remain relevant This could be of vital importance to card companies such as Visa, American Express and Mastercard. Today, card transactions rely on online terminals for verifying payments. When the customer inserts or swipes a card, the terminal sends a query to an online server to verify that the transaction is permissible. Breakdowns in connectivity will therefore make payments impossible. Under increasing competitive pressure from instant payment services, the benefit of offering offline payments could help the card companies stay relevant in a fast-changing payment landscape. In October, Crunchfish revealed that partner discussions with the card infrastructure industry had been initiated.

Blippit live at Stockholm store In Sweden, the rollout of Blippit has been delayed by the corona pandemic, as we have discussed in previous updates. Now however, customers can finally try to "blip" their way out of a grocery store in Stockholm where a Blippit terminal has been connected to a self-checkout desk. Crunchfish informs us that the merchant is happy about the installation, which in our opinion could get the ball rolling with more installations in its wake. The ease with which customers can start using Blippit is a major selling point. Almost every smartphone user in Sweden has the instant payment app Swish installed, and that is all a shopper needs to start paying for their goods on a Blippit terminal. Exactly when Crunchfish will start to see revenues from Blippit is still unclear, but a fair guess is that 2021 will see important progress in this regard. Separately, it is worth noting that Crunchfish recently logged a production order for 500 Blippit terminals. The order is said to be intended mainly for one leading supplier of checkout terminals for installation during 2021.

Another development with relevance for Sweden, although long-term, is that Crunchfish is involved in discussions with policy makers and the central bank about the future of CBDC in this country. The central bank has already for some time been investigating the framework for adopting what it calls the "e-Krona". A prime requirement for a digital replacement for cash is that it should work even when no internet connection is available. Crunchfish has come a long way already in addressing this, and it is no surprise that it has been called upon to host a series of webinars with policy makers on the issue. More could happen in this space although it would probably take years to implement.

Crunchfish combats food waste

Finally, we note with interest that Crunchfish has patented a solution for combatting food waste. It is a system for pricing different packets of the same food item differently depending on their expiry dates. Customers usually pick the packets with the longest time to expiry, leaving older products on the shelf until they expire, at which point they will be thrown out. This causes totally avoidable food waste. Crunchfish' system enables individual pricing of goods based on their sell-by dates, which would be recognised at the cash register when their QR-codes are scanned. A shopper could get the same information by scanning the QR codes with their mobile. Knowing that a slightly older pack is cheaper than a brand new, shoppers would be incentivised to pick products with a *long enough* expiry date, in effect creating a first-in-first-out cycle on the shelves. That could make a considerable contribution to reducing food waste.

Turning to the financials, the Q3 figures were almost exactly as we had expected. The only notable deviation from our estimates were in Other operating expenses, which came in

almost SEK 2 million below our estimates. This difference explains why Net profit, Cash holdings and Total Equity all came in stronger than our estimates, cf. Table 2 below.

Table 2: Estimates vs actual, Q3 2020

kSEK	Q3 '19	Q3 '20e	Q3 '20 act	Diff
Net revenues	2 600	4 082	2 970	-1 112
Capitalised development cost	1 032	1 629	2 685	1 056
Other revenues	482	397	462	65
Total revenue	4 114	6 108	6 118	9
Personnel costs	(3 669)	(5 116)	(5 172)	-56
Other expenses	(4 998)	(6 211)	(4 240)	1 971
Profit from affilated companies	(393)	(780)	(822)	-42
EBITDA	(4 946)	(5 999)	(4 116)	1 883
Amortisation and Depreciation	(1 767)	(1 965)	(1 929)	36
EBIT	(6 713)	(7 963)	(6 044)	1 919
Other financial items, net	88	(14)	(34)	-20
EBT	(6 625)	(7 977)	(6 078)	1 899
Net Profit	(6 625)	(7 977)	(6 078)	1 899
Cash and Equivalents	19 464	13 661	15 889	2 228
Total Equity	40 501	38 811	40 645	1 833

Source: Västra Hamnen Corporate Finance

Modest estimate changes

Our guess is that the lower costs are related to reduced travelling and sales activities due to the pandemic. We have consequently lowered our cost estimates slightly for the coming quarters. Otherwise we see little reason to make any major forecast revisions at this point. The recent flareup of the second wave of COVID-19, not least in India, has persuaded us to push the acceleration of revenues a little bit forward compared with our previous scenario. We therefore lower our revenue forecasts somewhat, mainly for 2021, with regards to both Swedish and Indian revenues. However, combined with the lower cost estimates, the impact is too little to change our overall assessment of fair value of the company.

Potential capital injection

We should mention finally that the company's cash holdings stood at SEK 15.9 million at the end of Q3. The free cash flow for the quarter was a negative SEK 7.5 million, so on the same trajectory, cash would run out around the middle of H1 2021. In order to keep cash balances positive in our scenario, we have pencilled in a capital injection of SEK 10 million in Q1 2021. The uncertainty about this estimate is of course substantial. Whether, how much, and when the company will raise cash will depend crucially on how fast revenues start flowing and how aggressively the company decides to push for expansion.

We keep our valuation range unchanged

In conclusion, we keep the major estimates of our valuation model intact and maintain for now our valuation interval of SEK 25.30 – 40.10 per share.

kSEK	2018	2019	2020e	2021e	2022e	2023e	2024e	2025
Net revenues	3 510	14 565	11 695	48 489	152 274	218 783	308 732	399 989
Capitalised development cost	6 769	4 623	9 076	9 844	10 174	10 495	10 678	10 852
Other revenues	3 548	1 928	2 143	1 981	2 144	2 321	2 512	2 720
Total revenues	13 827	21 115	22 914	60 315	164 593	231 600	321 922	413 560
Cost of goods sold	-	(91)	(17)	(1 650)	(3 850)	(4 400)	(5 500)	(1 100
Personnel costs	(14 784)	(15 496)	(20 519)	(23 932)	(26 165)	(28 606)	(32 856)	(38 823
Other external costs	(14 637)	(20 714)	(17 148)	(22 762)	(27 473)	(30 036)	(34 499)	(40 764
Other operating expenses	(1 554)	(379)	(802)	(3 736)	(4 291)	(4 691)	(5 388)	(6 367
Profit from affiliated companie	(180)	(1 527)	(2 726)	1 280	7 889	16 320	22 505	25 269
EBITDA .	(17 328)	(17 092)	(18 299)	9 515	110 703	180 186	266 184	351 776
Amortisation & depreciation	(4 748)	(6 936)	(7 622)	(8 439)	(9 008)	(9 483)	(9 886)	(10 204
EBIT	(22 077)	(24 028)	(25 920)	1 076	101 695	170 703	256 299	341 572
Financial items, net	50	27	(75)	(49)	(49)	(49)	(49)	(49
EBT	(22 027)	(24 001)	(25 995)	1 027	101 645	170 653	256 249	341 523
Taxes	-		-	-	-	(22 051)	(54 837)	(73 086
Net profit	(22 027)	(24 001)	(25 995)	1 027	101 645	148 602	201 412	268 437
Earnings per share (SEK)	(1,30)	(0,97)	(0,94)	0,03	3,39	4,93	6,69	8,91
Growth (%)								
Net revenues	9,6%	315,0%	-19,7%	314,6%	214,0%	43,7%	41,1%	29,6%
EBITDA	na	na	na	na	1148,5%	59,4%	48,7%	34,09
EBIT	na	na	na	na	na	64,6%	51,4%	35,39
Net profit	na	na	na	na	9800,3%	46,2%	35,5%	33,39
% of revenues (%)								
EBITDA margin	neg	neg	neg	13,7%	62,5%	70,8%	75,7%	79,09
EBIT margin	neg	neg	neg	neg	57,0%	66,7%	72,6%	76,5%
∃BT margin	neg	neg	neg	1,7%	61,8%	73,7%	79,6%	82,69
Profit margin	neg	neg	neg	1,7%	61,8%	64,2%	62,6%	64,99
Personnel costs	421,2%	106,4%	175,5%	49,4%	17,2%	13,1%	10,6%	9,79
Total OPEX	882,5%	251,2%	328,9%	104,0%	38,0%	28,9%	23,6%	21,59
Profitability (%)								
ROE	neg	neg	neg	2,3%	65,8%	49,0%	39,9%	34,79
ROIC	neg	neg	neg	neg	187,9%	281,5%	388,0%	492,99
ROCE	neg	neg	neg	neg	47.6%	40.0%	36,4%	32,19

Balance Sheet - Annual Data	3							
kSEK	2018	2019	2020e	2021e	2022e	2023e	2024e	2025
Inventories	-	-	-	181	362	362	542	-
Account receivable	356	2 424	1 723	5 186	9 046	11 752	14 635	18 350
Receivables fr affiliated comp	1 118	841	1 800	1 720	2 201	2 493	3 036	2 430
Prepaid costs & accrued inco	1 089	1 066	1 478	1 632	1 709	1 770	1 853	1 943
Other receivables	475	361	771	914	966	1 014	1 063	1 115
Cash and cash equivalents	21 362	13 181	6 593	12 366	116 049	260 794	457 954	723 326
Total current assets	24 400	17 872	12 365	21 999	130 333	278 185	479 083	747 163
Tangible assets	522	1 606	1 290	1 052	859	701	573	468
Intangible assets	20 402	18 052	19 851	21 496	22 858	24 029	24 951	25 706
Long-term receivables	373	-	5	5	5	5	5	5
Affiliated companies	945	5 418	8 971	8 971	8 971	8 971	8 971	8 971
Total fixed assets	22 242	25 076	30 118	31 525	32 693	33 706	34 500	35 150
Total assets	46 642	42 949	42 482	53 524	163 026	311 891	513 583	782 313
Accounts payable	2 280	984	2 517	2 163	2 171	2 177	2 185	2 194
Accrued cost & prepaid incon	3 177	4 023	3 992	4 232	4 397	4 606	4 829	5 063
Other liabilities	917	843	1 251	1 379	1 440	1 488	1 537	1 586
Total current liabilities	6 373	5 850	7 759	7 774	8 008	8 271	8 551	8 844
Total non-current liabilities	-	789	618	618	618	618	618	618
Total equity	40 269	36 310	34 104	45 131	154 399	303 002	504 414	772 851
Total equity and liabilities	46 642	42 949	42 482	53 523	163 025	311 891	513 582	782 312
Source: Västra Hamnen Corpora	ate Finance							
Cash flow statement								
kSEK	2018	2019	2020e	2021e	2022e	2023e	2024e	20256
Operating activities	(16 868)	(15 211)	(16 374)	9 466	110 653	158 086	211 297	278 641
Changes in working capital	369	(2 090)	` 826 [´]	(3 847)	(4 418)	(2 844)	(3 458)	(2 415
Investing activities	(6 823)	(11 597)	(14 620)	(9 846)	(10 176)	(10 497)	(10 680)	(10 854
Financing activities	23 356	20 743	23 623	10 000	7 623			
Cash flow for the period	34	(8 156)	(6 545)	5 773	103 683	144 745	197 160	265 372
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Beginning cash balance

Ending cash balance

Adjustments

kSEK	Q1 2020	Q2 2020	Q3 2020	Q4 2020e	Q1 2021e	Q2 2021e	Q3 2021e	Q4 2021e
Net revenues	1 948	2 330	2 970	4 446	6 684	9 934	14 015	17 857
Capitalised development cost	1 380	2 955	2 685	2 055	2 337	2 583	2 488	2 437
Other revenues	820	390	462	471	481	490	500	510
Total revenues	4 148	5 675	6 118	6 972	9 502	13 007	17 002	20 804
Cost of goods sold	(17)	-	-	-	(275)	(275)	(550)	(550)
Personnel costs	(4 506)	(5 498)	(5 172)	(5 343)	(5 784)	(5 915)	(6 048)	(6 185)
Other external costs	(3 950)	(4 417)	(4 240)	(4 541)	(5 148)	(5 501)	(5 867)	(6 246)
Other operating expenses	-	(11)	-	(791)	(875)	(913)	(953)	(994)
Profit from affiliated companie	(478)	(646)	(822)	(780)	44	142	394	700
EBITDA	(4 803)	(4 898)	(4 116)	(4 483)	(2 536)	546	3 978	7 528
Amortisation & depreciation	(1 805)	(1 843)	(1 929)	(2 045)	(2 050)	(2 082)	(2 135)	(2 173)
EBIT	(6 608)	(6 740)	(6 044)	(6 528)	(4 586)	(1 536)	1 843	5 355
Financial items, net	117	(146)	(34)	(12)	(12)	(12)	(12)	(12)
EBT	(6 491)	(6 886)	(6 078)	(6 540)	(4 598)	(1 548)	1 831	5 343
Taxes	-	-	-	-	-	-	-	-
Net profit	(6 491)	(6 886)	(6 078)	(6 540)	(4 598)	(1 548)	1 831	5 343
Earnings per share (SEK)	(0,25)	(0,24)	(0,21)	(0,23)	(0,16)	(0,05)	0,06	0,18
Y-o-Y Growth (%)								
Net revenues	(51,0%)	(5,5%)	14,2%	(19,5%)	243,1%	326,2%	371,8%	301,6%
EBITDA	na	na	na	na	na	na	na	na
EBIT	na	na	na	na	na	na	na	na
Net profit	na	na	na	na	na	na	na	na
% of revenues (%)								
EBITDA margin	neg	neg	neg	neg	neg	3,1%	21,1%	32,8%
EBIT margin	neg	neg	neg	neg	neg	neg	neg	neg
EBT margin	neg	neg	neg	neg	neg	neg	neg	neg
Profit margin	neg	neg	neg	neg	neg	neg	neg	neg
Personnel costs	231,3%	235,9%	174,1%	120,2%	86,5%	59,5%	43,2%	34,6%
Total OPEX	434,1%	426,0%	316,8%	240,1%	176,6%	124,1%	91,8%	75,2%
Profitability (%)								
ROE	neg	neg	neg	neg	neg	neg	4,6%	11,8%
DOIO	_	neg	neg	neg	neg	neg	3,5%	10,9%
ROIC	neg	HEG	neu	HEU	neu	neu	3,370	10,570

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kSEK	Q1 2020	Q2 2020	Q3 2020	Q4 2020e	Q1 2021e	Q2 2021e	Q3 2021e	Q4 2021e
Inventories	-	-	-	-	90	90	181	181
Account receivable	3 260	366	491	1 723	2 988	3 623	4 268	5 186
Receivables fr affiliated comp	853	1 317	900	1 800	1 248	1 304	1 608	1 720
Prepaid costs & accrued inco	1 803	1 337	933	1 478	1 526	1 450	1 482	1 632
Other receivables	557	1 108	855	771	864	945	902	914
Cash and cash equivalents	5 715	23 501	15 889	6 593	10 426	7 955	8 466	12 366
Total current assets	12 188	27 630	19 070	12 365	17 144	15 368	16 907	21 999
Tangible assets	1 506	1 453	1 357	1 290	1 226	1 165	1 107	1 052
Intangible assets	17 729	18 922	19 774	19 851	20 203	20 766	21 177	21 496
Long-term receivables	-	-	5	5	5	5	5	5
Affiliated companies	5 940	6 293	7 471	8 971	8 971	8 971	8 971	8 971
Total fixed assets	25 174	26 668	28 608	30 118	30 406	30 908	31 261	31 525
Total assets	37 362	54 298	47 678	42 482	47 549	46 276	48 168	53 524
Accounts payable	2 711	1 570	1 150	2 517	2 229	2 218	2 222	2 163
Accrued cost & prepaid incon	3 190	4 005	3 704	3 992	3 909	4 098	4 122	4 232
Other liabilities	909	1 259	1 561	1 251	1 287	1 384	1 417	1 379
Total current liabilities	6 810	6 835	6 414	7 759	7 425	7 699	7 761	7 774
Total non-current liabilities	733	676	618	618	618	618	618	618
Total equity	29 819	46 788	40 645	34 104	39 506	37 958	39 788	45 131
Total equity and liabilities	37 362	54 298	47 677	42 482	47 548	46 275	48 167	53 523

Cash flow statement

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kSEK	Q1 2020	Q2 2020	Q3 2020	Q4 2020e	Q1 2021e	Q2 2021e	Q3 2021e	Q4 2021e
Operating activities	(4 331)	(4 246)	(3 302)	(4 495)	(2 549)	534	3 966	7 516
Changes in working capital	(820)	2 367	526	(1 246)	(1 281)	(421)	(966)	(1 179)
Investing activities	(2 381)	(3 995)	(4 690)	(3 555)	(2 337)	(2 584)	(2 488)	(2 437)
Financing activities	(55)	23 800	(121)	-	10 000	-	-	-
Cash flow for the period	(7 587)	17 925	(7 588)	(9 296)	3 833	(2 471)	511	3 900
Beginning cash balance	13 181	5 715	23 501	15 889	6 593	10 426	7 955	8 466
Adjustments	121	(139)	(24)	-	-	-	-	-
Ending cash balance	5 715	23 501	15 889	6 593	10 426	7 955	8 466	12 366

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