

Equity Research

Zwipe

Sector: Biometrics

The Trump Card Continues to Attract New Partners

Redeye raises the valuation of Zwipe on the back of faster market adoption and new card manufacturer partners that are attracted to Zwipe's trump card (Pay ONE). In total, Zwipe now has agreements with 21 of the 50 largest players.

Winning over more card manufacturers

The strong traction of new card manufacturer partnerships continues and confirms that Zwipe's offering and in-depth knowledge of the entire biometric card ecosystem is highly appreciated. In February, Zwipe, in one fell swoop, announced that it had signed partnerships with four, completely new, prominent card manufacturers. We find it very interesting that none of these four wanted to be mentioned by name, at this point. We have reason to believe that some of them have previously been working with competing solutions, but we cannot tell if it is related to second sourcing or fully switching. The combined annual payment card shipments from the four new customers are in the excess of 150 million (building on top of e.g. the card manufacturers signed in 2020 that we believe ship around 200 million payment cards per year). On average, we therefore believe these four players have an adequate size - nimble but large enough to have the muscles for relatively fast rollouts out of meaningful volumes. They are all targeting pilots before the end of 2021.

More data points on the strong market demand

In this update, we will also discuss e.g. some new surveys that confirm the strong demand, Samsung entering the market, and Zwipe's recent recruitments of three seasoned payment card market professionals. Samsung's entry is highly positive for the market for several reasons (see further below). Last, the fact that so many highly skilled payment card professionals want to work for Zwipe says something about how it is perceived in the industry.

We raise our base case to NOK 27

We raise our base case to NOK 27 (24) due to faster market adoption, new partnerships and higher ASP related to sensor sales. Our bear case is still NOK 6, but we boost our bull case to NOK 46 (35). Like previously, the bull case is based on faster market growth and a larger TAM.

KEY FINANCIALS (NOKm)	2019	2020	2021E	2022E	2023E	2024E
Net sales	2	2	14	175	446	825
EBITDA	-96	-57	-54	-3	56	133
EBIT	-96	-59	-58	-8	50	117
EPS (adj.)	-6.0	-1.8	-1.8	-0.2	1.5	3.6
EV/Sales	40.4	227.3	47.4	4.2	1.7	0.9
EV/EBITDA	-0.6	-8.2	-12.1	-253.5	13.9	5.7
EV/EBIT	-0.6	-7.9	-11.6	-89.2	15.4	6.5
P/E	-0.9	-10.0	-12.9	-88.8	14.2	6.1

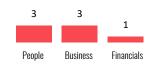
FAIR VALUE RANGE

BEAR	BASE	BULL	
6.0	27.0	46.0	

ZWIPE:SS VERSUS OMXS30



REDEYE RATING



KEY STATS

Ticker	ZWIPE:SS
Market	Merkur Mkt,
Share Price (NOK)	21.8
Market Cap (MNOK)	717
Net Debt 21E (MNOK)	-70
Free Float	75 %
Avg. daily volume ('000)	1

ANALYSTS

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Trump Card Continues to Attract New Partners

Zwipe's strategy of targeting small and mid-sized card manufacturers with a turnkey solution combined with expertise allows it to build a good, diversified business, as opposed to if it would only sell one component to a major player like Thales that will shop around for lowest possible prices. Thales, G&D and Idemia (we also include Goldpac in this category) live in a different world than the other players, in terms of capabilities. They typically have big inhouse R&D organizations, card personalization, their own inlay and silicon, etc. Furthermore, in comparison to the smaller card manufactures, the larger players have no major need for an aggregator like Zwipe to exert bargaining power towards to components suppliers. The small players, however, will have significantly lower individual card volumes than Zwipe's aggregated volumes. For them, it makes sense to team up with Zwipe to enjoy Zwipe's stronger bargaining power, instead of buying the different components on their own.

Tag Systems, a partner since 2019, has placed a small order for Zwipe. During the past years, Tag has had every chance go for other technologies instead. The expansion is therefore yet another confirmation of the value of Zwipe's offering. Tag (incl. its owner Austria Card Group) delivers 100 million payment cards annually in e.g. Europe and Middle East, but it is also expanding in US.

Zwipe had hoped to see more announced pilots by now, but Zwipe is engaging with more than 250 banks and over 40 of the world's major 50 smart card manufacturers, which has resulted in 21 announced agreements thus far. Potential partners are characterized in a seven-stage process, with several new ones being in the stage before pilot.

Additional seasoned card payment professionals join the team

Zwipe has strengthened its team considerably:

John Goodale - Chief Sales Officer

Goodale brings 18 years of experience from TSYS – one of the world's largest payment processors. At TSYS, Goodale served as Senior Vice President Sales and Business Development, and Group Executive, Business Expansion. This should have given him a deep understanding of the value chain etc. TSYS was acquired by Global Payments for USD 22 bn in 2019. The year before, it had sales of USD 4 bn and an operating margin of 20% - a pretty good performance since inception 35 years earlier. In 2003, the year after Goodale joined, TSYS sales were only USD 256m.

Andy Saines - VP Key Accounts

Saines joins Zwipe from major card player G&D where he was UK Sales Director of Secure Transactions for five years. Prior to that, Saines worked 18 years in sales for Entrust Datacard, whereof e.g. five years as Sales Director EMEA and three years as General Manager UK. Entrust Datacard provides solutions for trusted identities and secure card transactions. It has been addressing the card market all the way since inception in 1969. Similar to Goodale, we expect Saines to bring a ton of industry experience. At Zwipe, Saines will deepen relations and business with strategic accounts.

Anders Bigseth, VP Marketing and Communications.

Bigseth has held senior communication positions in the industry at e.g. DNB and Teller (formerly Visa Norway).

The fact that these three, and other seasoned card market professionals before them, want to work for Zwipe says something about how it is perceived in the industry.

Looking at previous recruitments, the bank engagement from the channels team established with Bishwajit Choudhary in 2020 has significantly increased the insights in the ecosystem, as well as raised market awareness. We are positive towards these measures that has gotten the company closer to the end customers, where the decisions are made.

Increased interest from consumers & banks

We assume the willingness to pay in the industry has become significantly stronger during the last few quarters. Prior to the pandemic, we believe the desired card cost was more around USD 5 for several banks, but this is changing, in part due to the hygiene benefits. However, we also think that there is a larger awareness around the other calculated benefits. These benefits, popularized by Idex's calculation example that were included in our last update, show that e.g. a monthly USD 2 fee per card for 1 million cards yields about USD 24m in annual revenues. This implies a payback period of close to a year for a competing card, or well below six months for a Zwipe card.

The consumer demand for biometric cards has been mentioned before, but here is a quick recap of Zwipe's surveys. Three of four people want a biometric card and four of five are concerned about touching pin pads. Half would pay a monthly fee of USD 5 or more to get biometric card, and/or switch banks to get a biometric card. The same results were recently largely obtained in UK, where more than 50% wanted a more secure card without transaction limits and over 50% would pay at least GBP 1-5 or more per month for a biometric card. Also, 83% was worried about catching Covid-19 from the terminals. Surveys from other players get similar results. A survey by Fingerprint Cards e.g. shows that the majority is willing to switch banks to get their hands on a biometric card, which is related to the caps of normal EMV cards and therefore hygiene issues.

Banks are also becoming increasingly interested. Surveys indicate that over 70% of the banks want to pursue biometric cards, although they need to pilot the solution first. BNP Paribas has reiterated that it plans to offer its biometric cards to all customers in H2'21. Moreover, Rocker is doing a pilot with FPC and Idemia for the previous card generation (not the one with Idemia & Zwipe). We see no issue here. Pilots test the concept and customer reception for the general idea. As long as the sensor is certified and works, any sensor should do just fine for this purpose. We assume the commercial roll-out will be on the more cost-efficient Pay ONE. Rocker could then e.g. choose to buy a card from Idemia or one from someone of Idemia's competitors that work with Zwipe. There are no restrictions for Zwipe's customers in selling to Idemia's customers. If Rocker in the end would choose an Idemia card in the commercial roll-out, we believe there could be a potential for Zwipe to sell other solutions to Rocker, e.g. enrollment.

Samsung enters the game

It was recently reported that Samsung will enter the biometric smart card market. Samsung's own in-house secure element solution makes it the second largest secure element player, and a competitor to NXP, STM, Infineon and Zwipe/Idemia. However, it is also a potential supplier of fingerprint sensors. Thus, similar to many other players in the industry, Samsung is both a potential partner and competitor. The Samsung news is positive for the market and all of its participants, as the competitive dynamics speeds up the market. A major tech giant like Samsung committing resources to this space also verifies the potential of the market. Last, it is worth noting Samsung's strong position in mobile payments. Apparently, mobile is not enough for Samsung that follows Apple and many other players in wanting to have its

own cards. Given its knowledge of biometrics, it was only logical that Samsung then wanted to go for biometric cards.

More ecosystem partnerships

Zwipe continues to strengthen the position in the ecosystem around the card manufacturers. It announced a partnership with the technology solutions provider Veritech. Veritech is the market leader in Kuwait when it comes to card personalization. It should therefore not come as a surprise that Veritech is a supplier to eight of the region's big banks that Zwipe also targets. Veritech e.g. works with the largest banks on the Kuwait market of 4.5 million cards per year.

Zwipe was also selected by Swedish/Norwegian fintech player Vopy that provides a portfolio of embedded financial services for telecom and financial institutions. We note that Vopy said the decision to go for Zwipe Pay ONE was a natural one. Vopy is the most outspoken of the partners we have seen thus far. It targets 100 000 cards this year and 500 000 in 2022, backed by a strong interest from its partners. These are aggressive targets, coming from a pre-revenue start-up. To us, Vopy looks like a potential disruptor, but we cannot at the moment tell if its 500 000-card target is reasonable. The idea is to be an enabler for large corporations with customer bases and strong KYC, e.g. telecom operators. With Vopy's solution, these players can offer neo-bank services in a quick and seamless way, through APIs.

Financial estimates

We have raised our market assumptions from faster market adoption due to the stronger demand, which we think is an effect of the pandemic. We now expect a market of 390 million cards in 2025 (see the table below).

	2021	2022	2023	2024	2025
Total EMV payment cards shipped (bn. units)	4.3	4.5	4.8	5.1	5.4
Relevant market of total cards shipped	25%	25%	25%	25%	25%
Zwipe relevant market volumes (mil.)	1091	1155	1222	1292	1367
Penetration in relevant market	0%	2%	6%	13%	29%
Biometric smart cards (mil. units)	2.2	21	71	168	390
BSC share of total cards	0%	0%	1%	3%	7%

Source: Redeye Research, The Nilson Report, Other various industry sources

The new partnerships have a positive sales effect, as we expect higher market shares for Zwipe on the existing partners, as opposed to future partners that have not yet been signed. We expect initial average market shares of 14% for Zwipe, quickly dropping from 2024. Most importantly, we expect the majority of Zwipe's customers to order fingerprint sensors via Zwipe during the coming years, which we think means a higher ASP but lower blended gross margin for Zwipe. We expect high ASPs of USD 5 and above during 2021-2023, when market volumes are still relatively small (71m in 2023). These tweaks in our assumptions lead to the following changes:

Forecast adjustments				
(NOKm)	•	2021	2022	2023
Sales	Old	18	77	248
	New	14	175	446
% change		-24%	129%	79%
EBIT	Old	-57	-35	23
	New	-58	-8	50
% change		2%	-77%	123%
Profit before tax	Old	-57	-35	23
	New	-58	-8	51
% change		2%	-77%	123%
Earnings per share (NOK)	Old	-1.74	-1.07	0.69
	New	-1.77	-0.25	1.54
% change		2%	-77%	123%

Source: Redeye Research

The order to Idex of 300 000 sensors has not started shipping yet. We believe it will happen in H2'21, meaning all of our 2020 sales are related to H2. The fact that a minor player like Vopy explicitly targets 100 000 cards in Q4'21 makes the 300 000-unit order seem relatively reasonable.

Investment Case

Benefits from strong IP & game-changing deal with Idemia

Zwipe has recently partnered with the world's second largest card manufacturer, Idemia – a clear indication of its competitiveness. This improves the ability to manufacture biometric smart cards ("BSCs") cost efficiently, in turn imperative to the success of BSCs. The partnership targets a reduction of card costs by over 50%, implying potential cost leadership. We view Idemia and Zwipe's IP as strong cards up Zwipe's sleeve. Zwipe has been granted wide patent protection for how terminals identify a biometric card, a prerequisite for processing biometric contactless payments.

Advantages of biometrics too great for the market not to take off

BSCs have been "just around the corner" for many years, but nothing has materialized as of yet. We believe, however, the cheaper card stemming from the Idemia/Zwipe solution can facilitate commercial volumes from 2022. Contactless BSCs combine state of the art security and the highest convenience, i.e. there is no need for a cap (using PIN codes), meaning faster retail checkout. This should render more transactions and revenue for the issuing banks. Thus, BSCs are simply too good not to happen. However, we are cautious about market projections claiming a +50% penetration, as banks have been reluctant to pay a high premium compared to the price of a standard contactless card of USD 2-4, although this might have changed for some banks due to Covid-19. We expect the initial relevant market to be limited to 25% of the 4 bn payment cards shipped a year, and based primarily on premium cards that account for the highest transaction volumes.

Commercial orders to drive the stock

Commercial orders can drive the stock towards our base case of NOK 27. Our bear case is based on failed market traction and a fire sale of the IP at NOK 6 per share. In bull case, we see a major upside to NOK 46 based on higher BSC penetration. The wide fair value range illustrates the uncertainty of Zwipe's market.

Valuation

Bear Case 6.0 NOK

In our bear case we see the market scaling at a very slow pace - too slow for Zwipe to cover its costs. In this scenario, we believe larger players like NXP can survive as they have more economic muscles behind them and can wait for the market to really take-off. Zwipe does not have strong institutional ownership and another rights issue could prove hard, especially if the stock market in general is experiencing a significant downturn. Also, it is yet uncertain how the large change in the organization and new collaboration with Idemia will pan out. We, therefore, assume that Zwipe will not be able to continue in its current shape and instead tries to monetize its strong IP portfolio, especially its wait time extension patent, and possibly also in postplacement, outside Europe. As Zwipe has spent around NOK 300m this far, we believe a reasonable value of the IP is half of these investments. This corresponds to NOK ~150m that we Zwipe possibly could receive in a fire sale of its strong IP portfolio. Moreover, we assume there is value of at least NOK 50m in e.g. the expertise and knowhow, meaning a bear case of NOK 6 per share

Base Case 27.0 NOK

Our valuation scenarios are based on years 2021-2030 and the payment cards. All scenarios use a required rate of return of 12% and a terminal growth of 2%. We estimate a relevant payment card market of 25% of the total annual shipments, growing by CAGR 7% from ~900 million cards to 1.3 billion cards. We expect the biometric smart card (BSC) penetration to ramp to 64%, corresponding to 98% CAGR and 1 bn BSCs in 2030, equal to a BSC penetration of 16%. We expect annual three-digit volume growth until 2026. As for Zwipe's market share, we expect it to begin at 14%, average 9% during the period and drop to 7% by 2020. We expect existing partners to account for about 75% of the volumes, meaning about 25% of the volumes come from other smaller players. We exclude Idemia, Thales, G&D, Hengbao and Goldpac. For the sake of simplicity we expect the card players to maintain their respective market shares of today. All in all, this implies volumes for Zwipe reaching ~70 million in 2030, following a ~90% CAGR. We expect the ASP to start at about USD 7 (including sensors), dropping to ASP 2, averaging USD 2 over the whole period, since the higher volumes are delivered in the end of the period, when ASP is lower. Our ASP and volume assumptions above means a sales CAGR of ~60% and payment BSC sales reaching about NOK 1.2 bn in 2030. On top of that we expect other sales (access cards, wearables etc.) to be about NOK 100m in 2030, but these kind of revenues are a minor part over the whole period, as our case, as mentioned above, is based on the payment cards. We expect the gross margin to start at slightly above 30% (incl lower margins for sensors) and then we assume it will come down to ~20% due to competitive dynamics. We assume the average gross margin over the whole period will be 21%. We expect OPEX to grow by CAGR 7%, averaging about 8% of sales from 2026. The following leads to EBIT

Bull Case 46.0 NOK

The differing parameter in our optimistic scenario, compared to base case, is that we increase the market penetration and adjust Zwipe's volumes accordingly. With a BSC market penetration of 30% of all payment cards sold globally, instead of 15% as in the base case, we derive a fair value of NOK 46. The large discrepancy from our base case shows the massive innate potential for Zwipe if biometric cards can gain a larger market share. We assume the higher BSC penetration results in sales growing to about NOK 2.1 billion. We believe this equals volumes of about 130 million BSCs. We assume similar cost levels as in base case. Consequently, we assume average EBIT margins of 12%. Our long-term EBIT margin is 10%

margins of on average 12% over the period. We assume a long-term EBIT margin of 10%.

Catalysts

Pilots

The most important catalyst during the next 12 months, in our view, is card pilots, from existing and new partnerships. We also see potential wearables pilots.

IMPACT						
Downs	ide	Up	side	Time Frame		
Significance	Likelihood	Significance	Likelihood			
Minor	Unlikely	Major	Highly likely	Mid		

Increased hygiene focus

The important hygiene aspects of contactless biometric cards have been highlighted to a large extent by the Coronavirus as people are becoming reluctant to touch the terminals. We see a chance that this could prove to be a game changer for Zwipe in the long term.

IMPACT					
Downs	ide	Upsi	de	Time Frame	
Significance	Likelihood	Significance	Likelihood		
Minor	Possible	Major	Possible	Long	

First commercial order for the Idemia/Zwipe-solution.

Pilots are one thing, but a larger commercial order from the Idemia collaboration will prove that there is a substantial value in Zwipe's offering. We think this happens in H2 21, at the earliest.

IMPACT					
Downs	ide	Up	side	Time Frame	
Significance	Likelihood	Significance	Likelihood		
Minor	Unlikely	Major	Highly likely	Long	

Summary Redeye Rating

The rating consists of three valuation keys, each constituting an overall assessment of several factors that are rated on a scale of 0 to 1 points. The maximum score for a valuation key is 5 points.

People: 3

We arrive at an average people rating (3/5) where the most positive aspect is the skill set and experience in the board and management team, following recent additions. The short history as a listed company and minor insider shareholdings weigh on the downside, although there are incentives from stock options. There is not much historical data when it comes to capital allocation skills and communication. According to our rating model, compensation is reasonable.

Business: 3

Biometric smart cards have been considered around the corner for several years, yet the market does not exist today. However, we expect it to quickly emerge as soon as costs come down to adequate levels, given the strong advantages of biometric payment cards. Considering the 4 billion payment cards that are shipped each year, even a moderate penetration implies significant growth opportunities. Zwipe's business model is scalable when volumes ramp. The expertise of Zwipe is also validated by partnerships with large players like e.g., Idemia, which compensates for its tiny size (pre-revenue etc.). The payment industry is slow moving, which creates a barrier to entry, but it is hard to identify how sustainable the competitive advantages are at this early point in time. However, competition is positive in this stage, as it will help starting the market.

Financials: 1

Following raising NOK 96m in a directed share issue and a NOK 15m repair issue, Zwipe has a strong financial position. Zwipe is essentially pre-revenue and unprofitable, which weighs on the financials rating, but the scalable business model means Zwipe can quickly scale when sales ramp up, and consequently reach break even.

DCF VALUATION

INCOME STATEMENT	2019	2020	2021E	2022E	2023
Net sales	2	2	14	175	446
Total operating costs	-98	-59	-70	-178	-390
EBITDA	-96	-57	-56	-3	56
Depreciation	0	-1	-1	-1	-
Amortization	0	-1	-1	-5	-4
Impairment charges	0	0	0	0	(
EBIT	-96	-59	-58	-8	50
Share in profits	0	0	0	0	(
Net financial items	0	0	0	0	(
Exchange rate dif.	0	0	0	0	(
Pre-tax profit	-96	-59	-58	-8	5
Tax	0	0	0	0	(
Net earnings	-96	-59	-58	-8	5
BALANCE SHEET	2019	2020	2021E	2022E	2023E
Assets					
Current assets	00	100	CO	0	
Cash in banks	23	125	63	0	170
Receivables	7	1	18	123	178
Inventories	3	0	14	88	156
Other current assets	0	0	0	0	207
Current assets	34	127	95	210	334
Fixed assets	_		_	_	
Tangible assets	3	3	3	5	18
Associated comp.	0	0	0	0	(
nvestments	0	0	0	0	(
Goodwill	0	0	0	0	(
Cap. exp. for dev.	0	0	0	0	(
O intangible rights	7	7	10	11	36
O non-current assets	0	0	0	0	(
Total fixed assets	10	10	13	16	50
Deferred tax assets	0	0	0	0	(
Total (assets)	44	137	109	226	388
Liabilities					
Current liabilities					
Short-term debt	0	0	0	0	(
Accounts payable	30	14	44	158	223
O current liabilities	0	0	0	0	(
Current liabilities	30	14	44	158	223
Long-term debt	0	1	0	12	58
O long-term liabilities	0	0	0	0	(
Convertibles	0	0	0	0	(
Total Liabilities	30	15	44	169	281
Deferred tax liab	0	0	0	0	
Provisions	0	0	0	0	Ì
Shareholders' equity	13	123	64	56	10
Minority interest (BS)	0	0	0	0	(
Minority & equity	13	123	64	56	10
Total liab & SE	44	137	109	226	388
FREE CASH FLOW	2019	2020	2021E	2022E	20231
Net sales	2019	2020	14	175	446
Total operating costs	-98	-59	-70	-178	-390
Depreciations total	-90	-29	-70	-176	-59l
EBIT	-96	-59	-58	-8	50
Taxes on EBIT	-96	-59	-58 0	-8 0) (
NOPLAT	-96	-59	-58	-8	
	-96	-59 2	-58 2	-8 5	50
Depreciation Gross cash flow	-96	-57	-56	-3	
					50
Change in WC	-8	-8	0	-65	-59
Gross CAPEX Free cash flow	-1 -105	-2 -67	-5 -61	-8 -75	-4; -4(
CAPITAL STRUCTURE	2019	2020	2021E	2022E	20231
Equity ratio	31%	89%	59%	25%	289
Debt/equity ratio	0%	1%	0%	21%	54%
Net debt	-23	-124	-63	12	58
Capital employed	-10	-2	1	68	165
	0.0	0.0	0.1	0.8	1.7
Capital turnover rate	0.0				
Capital turnover rate	2019	2020	2021E	2022E	2023E
		2020 36%	2021E 569%	2022E 1,169%	2023 E

	NIDW FOR MANAGE OF			
12.0 %				-149
	NPV FCF (2022-20	28)		486
	NPV FCF (2029-)			413
	Non-operating asset	ts		125
				-1
	Fair value estimate l	MNOK		874
115 0 0/	Enir value a par al-	uro NOV		07
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		2021E	2022E	2023
			-13%	62%
				439
				749
				139
				119
	-2800%	-422%		119
2019	2020	2021E		2023E
				1.54
				1.54
				0.00
				1.69
15.95	32.91	32.91	32.91	32.9
2019	2020	2021E	2022E	2023
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				-45.8 %
				119.0 %
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			Mäster Samuelsg	Redeye Al atan 42, 10t
	115.9 % 34.9 % 2019 0% -3605% 508% -6329% -6329% 2019 -6.02 -6.02 0.00 -1.46 15.95 2019 61.3 -0.9 55.7 40.4 -0.6 -0.6 6.3	NPV FCF (2022-20 NPV FCF (2029-) Non-operating asset Interest-bearing det Fair value e stimate I 115.9 % Fair value e. per sha 34.9 % Share price, NOK 2019 2020 0% -87% -3605% -86% 508% 602% -6329% -2782% -6329% -2866% 2019 2020 -6.02 -1.80 -6.02 -1.80 -6.02 -1.80 -5.02 -1.80 -6.02 -1.80 -1.46 -3.78 15.95 32.91 2019 2020 61.3 468.7 -0.9 -10.0 -0.9 -10.0 55.7 287.6 40.4 227.3 -0.6 -8.2 -0.6 -7.9 6.3 4.8 GROW 15.1 % Net sales 20.8 % Operating 435.7 % EPS, just 20.7 % Equity	NPV FCF (2022-2028) NPV FCF (2029-) Non-operating assets Interest-bearing debt Fair value estimate MNOK 115.9 % Fair value e. per share, NOK 34.9 % Share price, NOK 2019	NPV FCF (2022-2028) NPV FCF (2029-) Non-operating assets Interest-bearing debt Fair value estimate MNOK 115.9

CASH FLOW, MNOK

Redeye Rating and Background Definitions

Company Quality

Company Quality is based on a set of quality checks across three categories; PEOPLE, BUSINESS, FINANCE. These are the building blocks that enable a company to deliver sustained operational outperformance and attractive long-term earnings growth.

Each category is grouped into multiple sub-categories assessed by five checks. These are based on widely accepted and tested investment criteria and used by demonstrably successful investors and investment firms. Each sub-category may also include a complementary check that provides additional information to assist with investment decision-making.

If a check is successful, it is assigned a score of one point; the total successful checks are added to give a score for each sub-category. The overall score for a category is the average of all sub-category scores, based on a scale that ranges from 0 to 5 rounded up to the nearest whole number. The overall score for each category is then used to generate the size of the bar in the Company Quality graphic.

People

At the end of the day, people drive profits. Not numbers. Understanding the motivations of people behind a business is a significant part of understanding the long-term drive of the company. It all comes down to doing business with people you trust, or at least avoiding dealing with people of questionable character.

The People rating is based on quantitative scores in seven categories:

Passion, Execution, Capital Allocation, Communication, Compensation, Ownership, and Board.

Business

If you don't understand the competitive environment and don't have a clear sense of how the business will engage customers, create value and consistently deliver that value at a profit, you won't succeed as an investor. Knowing the business model inside out will provide you some level of certainty and reduce the risk when you buy a stock. The Business rating is based on quantitative scores grouped into five sub-categories:

• Business Scalability, Market Structure, Value Proposition, Economic Moat, and Operational Risks.

Financials

Investing is part art, part science. Financial ratios make up most of the science. Ratios are used to evaluate the financial soundness of a business. Also, these ratios are key factors that will impact a company's financial performance and valuation. However, you only need a few to determine whether a company is financially strong or weak.

The Financial rating is based on quantitative scores that are grouped into five separate categories:

• Earnings Power, Profit Margin, Growth Rate, Financial Health, and Earnings Quality.

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Disclaimer

Important information

Redeye AB ("Redeye" or "the Company") is a specialist financial advisory boutique that focuses on small and mid-cap growth companies in the Nordic region. We focus on the technology and life science sectors. We provide services within Corporate Broking, Corporate Finance, equity research and investor relations. Our strengths are our award-winning research department, experienced advisers, a unique investor network, and the powerful distribution channel redeye.se. Redeye was founded in 1999 and since 2007 has been subject to the supervision of the Swedish Financial Supervisory Authority.

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Redeye Rating (2021-03-08)

Rating	People	Business	Financials
5p	22	17	3
3p - 4p	96	79	38
0p - 2p	6	28	83
Company N	124	124	124

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Westman owns shares in the company : No

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