



# ERIK PENSER BANK

Penser Access | Electronic Equipment, Instruments & Components | Norway | 10 November 2023

## Zwipe

### Demand for Access remains high

#### High likelihood some of the 50 ongoing discussions will drive momentum going into 2024...

The penetration of biometric payment cards is still taking its time, but we believe the market is nearing the tipping point. Zwipe's 20 or so partnerships have resulted in around 50 negotiations with potential users. Interest in Europe among neo-banks and fintechs remains high and one larger Nordic bank has taken the next step in its pilot scheme, adding Zwipe's mobile certification application to its online banking. We anticipate an acceleration in revenues for Pay in the coming quarters.

#### ...and demand for Access remains elevated

Interest in biometric access cards is still high, as they have been seen to help companies become compliant with EU directive NIS2. Among those testing solutions are one of the three largest cloud operators in the world, Berkshire Hathaway Energy Group, and Brazil's Prosegur. Their tests and ongoing discussions suggest demand for Zwipe's solutions. We thus also expect an acceleration in sales in this area in the coming quarters.

#### Cost savings will bolster cash flows

During Q3, cash flows were NOK -9m per month. As the full effect of the cost savings will kick in during Q4, we believe the negative cash flows will narrow to NOK 5–6m each month. The cash position was NOK 48m as of the end of Q3. How long this will last depends on how quickly the ongoing testing and discussions can be converted into orders and sales. We keep our 2024–2025 estimates largely unchanged, which means our fair value is also intact.

Estimate changes				Forecast (NOK m)				Valuation and risk		
	23e	24e	25e		2022	2023e	2024e	2025e	Fair value	NOK10,7 – 10,9
Total revenue	N.m.	0,0%	0,0%	Total revenue	4	8	157	429	Share price	NOK0,9
EBIT, adj.	N.m.	0,0%	0,0%	Revenue growth	55%	94%	>100%	>100%	Risk level	High
EPS, adj.	N.m.	0,0%	-0,0%	EBITDA, adj.	-96	-88	2	126	<div style="background-color: #004a99; color: white; padding: 5px; text-align: center;">12-mth share price development</div>	
Coming events				EBIT, adj.	-98	-89	0	125		
				EPS, adj.	-2,6	-1,5	0,0	1,6		
Q4 - report	22 February 2024			EPS growth, adj.	N.m.	N.m.	N.m.	>100%		
Q1 - report	25 April 2024			BV/share	1,5	1,1	1,1	2,8		
Company details (NOKm)				Dividend per share	0,0	0,0	0,0	0,0		
				EBIT margin	Neg.	Neg.	0,3%	29,1%		
Number of shares	58m			ROE, adj.	Neg.	Neg.	0,5%	84,1%		
Market capitalisation	53			ROCE, adj.	Neg.	Neg.	0,5%	93,3%		
Net debt	-48			EV/Sales	30,6x	0,6x	0,0x	0,0x		
EV	5			EV/EBITDA	Neg.	-0,1x	2,8x	0,0x		
Free float	51%			EV/EBIT	Neg.	-0,1x	11,9x	0,0x		
Daily trading volume, average	40k			P/E, adj.	-1,7x	-0,6x	165,2x	0,6x		
Bloomberg Ticker	ZWIPE NO EQUITY			P/BV	3,1x	0,8x	0,8x	0,3x		
Analyst				FCF yield	-64%	-157%	-75%	85%	Conflicts of interest	
				Net debt / EBITDA	0,5x	0,8x	-15,4x	-0,6x		
Markus Almerud								Yes		No
markus.almerud@penser.se								Market maker	✓	
								Certified adviser		✓
								Transactions, 12 mth	✓	

## Investment case

**Ready for the next step:** Having finalised the technological development of Zwipe Pay and received certification from Visa and Mastercard, Zwipe is ready for commercialisation. Its solution is now one of the few biometric platforms available that is certified by both Visa and Mastercard. During 2022, it established Zwipe Access as its own product line. Thanks to the completed raising of capital at the beginning of 2023, the company is ready to accelerate the commercialisation of both product lines.

**Increasing demands for security make the future bright for biometric access cards:** Access control will tighten in line with generally increasing security requirements, and a greater proportion of biometrics is a natural next step. Biometric access cards are competitive with other technologies, as they do not require infrastructure upgrades in most cases and as personal information is stored locally on the card, minimising the need for database management. We see mid-double-digit growth in access cards in the coming decade and believe Zwipe can take a sizeable share of the market as the penetration of biometrics increases.

**Enormous potential for biometric payment cards, but with higher risk:** We believe biometric payment cards will develop in line with what has been seen with contactless cards and that they will achieve mass market of one billion cards a year in the early 2030s. The card manufacturing market is extremely consolidated and, given this is the only platform certified by both Visa and Mastercard, we believe Zwipe can become the dominant supplier to tier 2 and 3 players. The potential is huge, but uncertainty persists, and the risk of whether the technology will succeed or not is high.

## Company profile

Zwipe develops biometric authentication solutions for card payments, access control, and other security and identification applications. The company has two product lines, Zwipe Pay and Zwipe Access, both of which are built on the same tech platform. Zwipe has an agreement with card producer Idemia to develop the next-generation payment card and holds exclusive distribution rights to the technology.

The solution comprises a number of pre-certified components with an ISO contact plate module that contains a biometric security element with applets from Visa and Mastercard for the biometric authentication, a fingerprint sensor from IDEX, and a passive input, such as an antenna.

Within Pay, Zwipe's ready-made solution can act as an R&D partner, primarily for tier 2 and tier 3 card manufacturers. Tier 1 players conduct their own R&D and usually do not need such a solution as they buy the components and assemble them into finished cards themselves. In its Access business, Zwipe produces the cards built on the same solution as in Pay but with other applets. Initially, Access intends to focus on airports and data centres before broadening into other verticals over time. At the same time, the interest coming from other verticals with high security requirements (such as prisons, hospitals, and larger corporations) already seems high.

## Valuation

We value Zwipe Pay and Zwipe Access separately, as they have different risk profiles. We believe the pipeline in Access has developed better recently, but its end-customers are companies, while the end-customers for Pay are consumers, and we see the probability of the technology taking off as lower in Access than in Pay.

As we expect Pay to reach mass market in the early 2030s – in line with the development of contactless cards – we apply a target multiple for 2031 sales (we use P/S as the technology has not yet achieved commercial breakthrough) and discount that by 25%. We then probability-adjust the valuation with the likelihood that biometric payment cards reach mass market – 40%. To make Access comparable with Pay, we use the same time horizon and also P/S as the multiple since commercial success still lies in the future. As we see its risk of success as lower, we discount the value by 15% but also probability-adjust it by 40%. Our fair value is NOK 10.7–10.9.

## Brief overview of the quarter

### Likely that a share of the some 50 ongoing discussions will bring in revenues

The penetration of biometric cards is taking longer than expected, but although the timing is uncertain, we believe the market is nearing the tipping point. Zwipe now has more than 20 partnerships in APAC, Europe, North and South America, and the Middle East. These partners are also in discussions with in excess of 50 potential targets.

During the quarter, Zwipe signed its first order with a Japanese card manufacturer for demo equipment to show the functionality to its customers. It also received orders for demo equipment from card manufacturers in Indonesia, Taiwan, and India. Although these orders are small, the company hopes they will prompt an acceleration in the region. Several negotiations regarding pilot schemes and soft launches are ongoing in the APAC region.

In Europe, a number of neo-banks and fintechs are showing interest in biometric payment cards, and it is likely that these will be at the forefront of developments in the region. For example, there are some ten discussions ongoing with British fintechs. During Q4, the company will focus on French fintechs. A large Nordic bank has entered the final phase of a pilot scheme, adding Zwipe's mobile certification application to its online banking. We believe this will be rolled out in early 2024.

### Elevated activity in Access

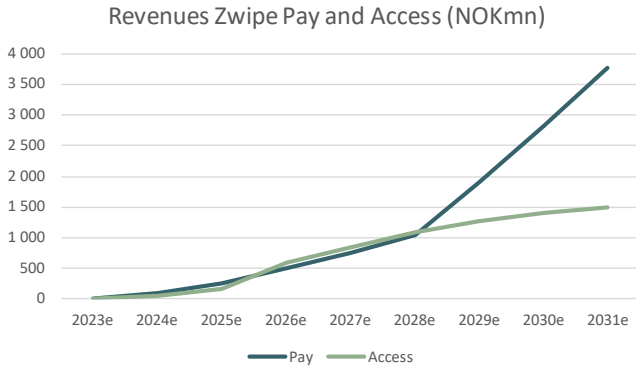
Activity in Access remains high. During the quarter, Zwipe delivered demo equipment to more than ten well-known global partners that have data centres, healthcare facilities, airports, government authorities, and critical infrastructure as customers. Moreover, biometric access cards have been shown to help companies become compliant with EU directive NIS2, which came into force during 2023. Further cybersecurity rules will apply from October 2024.

Various development was seen in the quarter, including:

- MC Dean, an integrator for mission-critical organisations, is testing Zwipe's biometric access cards for one of the three largest cloud and data centre suppliers.
- Berkshire Hathaway Energy Group, one of the US's largest electricity groups, is also testing Zwipe's biometric access cards.
- The pilot scheme at Richmond airport has progressed, with the final report and recommendation to other airports due to be published during Q4.
- In South America, Brazil's Prosegur has tested access cards extensively.
- In Sweden, AWT, a high-quality security company, has received a small order for cards for a global top 100 tech firm's headquarters.

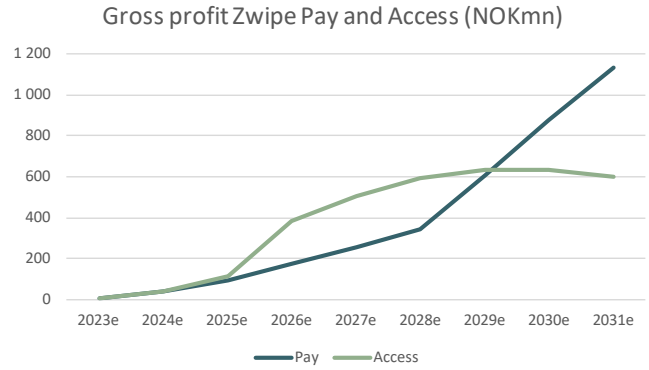
# Valuation

Diagram 1: We believe both areas will contribute the same to revenues until the end of the decade...



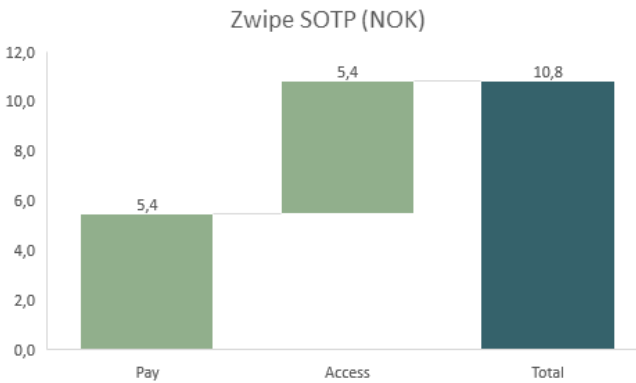
Source: EPB

Diagram 2: ...but that Access will contribute the majority of profits during our forecast period



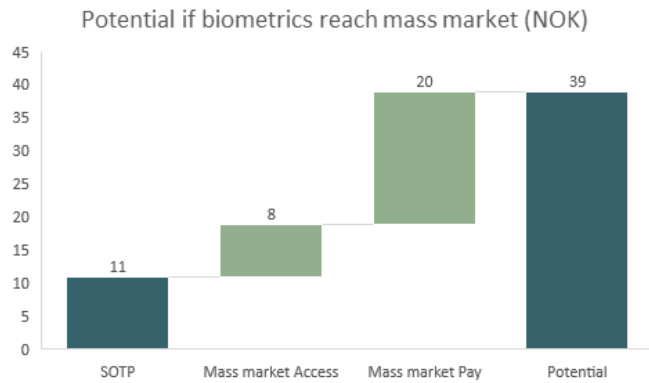
Source: EPB

Diagram 3: We value Zwipe at almost NOK 11 per share in our SOTP...



Source: EPB

Diagram 4: ...with potential upside to more than NOK 30 if both technologies achieve mass market



Source: EPB

Table 1: Sensitivity analysis of Zwipe Pay (NOK per share)

	Discount rate						
	10,0%	12,5%	15,0%	17,5%	20,0%	22,5%	25,0%
40%	14,2	12,0	10,2	8,7	7,4	6,4	5,5
50%	17,8	15,0	12,8	10,9	9,3	7,9	6,8
60%	21,4	18,1	15,3	13,0	11,1	9,5	8,2
70%	24,9	21,1	17,9	15,2	13,0	11,1	9,6
80%	28,5	24,1	20,4	17,4	14,8	12,7	10,9
90%	32,1	27,1	23,0	19,5	16,7	14,3	12,3
100%	35,6	30,1	25,5	21,7	18,5	15,9	13,7

Source: EPB

Table 2: Sensitivity analysis of Zwipe Access (NOK per share)

	Discount rate						
	10,0%	12,5%	15,0%	17,5%	20,0%	22,5%	25,0%
Probability that mass market is							
40%	7,5	6,4	5,4	4,6	3,9	3,4	2,9
50%	9,4	7,9	6,7	5,7	4,9	4,2	3,6
60%	11,3	9,5	8,1	6,9	5,9	5,0	4,3
70%	13,2	11,1	9,4	8,0	6,9	5,9	5,0
80%	15,0	12,7	10,8	9,2	7,8	6,7	5,8
90%	16,9	14,3	12,1	10,3	8,8	7,5	6,5
100%	18,8	15,9	13,5	11,5	9,8	8,4	7,2

Source: EPB

Table 3: DCF – key assumptions and conclusions

Valuation output		WACC assumptions		Terminal value assumptions	
Sum of PV of FCF (explicit period)	886	Risk-free nominal rate	2,5%	Long-term growth rate	3,0%
PV of terminal value (perpetuity formula)	375	Risk premium	5,5%	Long-term EBIT margin	15,0%
<b>Enterprise value</b>	<b>1 262</b>	Small cap premium	2,0%	Depreciation (% of sales)	0,5%
Latest net debt	-48	Extra risk premium	0,2	Capex (% of sales)	0,5%
Minority interests & other	0	<b>WACC</b>	<b>25,0%</b>	Working cap. (% of sales)	19,2%
<b>Equity value</b>	<b>1 310</b>			Tax rate	22%
No. of shares outstanding (millions)	58				
<b>Equity value per share</b>	<b>22</b>				

Source: EPB

Table 4: DCF sensitivity analysis

	Long-term growth rate					Long-term EBIT margin					
	2,0%	2,5%	3,0%	3,5%	4,0%	10,0%	12,5%	15,0%	17,5%	20,0%	
15,0%	53	54	55	56	57	15,0%	44	49	55	60	65
20,0%	33	33	33	34	34	20,0%	28	31	33	36	38
<b>WACC 25,0%</b>	22	22	22	23	23	<b>WACC 25,0%</b>	20	21	22	24	25
30,0%	16	16	16	16	16	30,0%	14	15	16	17	18
35,0%	12	12	12	12	12	35,0%	11	12	12	12	13

Source: EPB

## Income statement

	2021	2022	2023e	2024e	2025e	2026e
<b>Net sales</b>	<b>2</b>	<b>3</b>	<b>7</b>	<b>156</b>	<b>429</b>	<b>1 078</b>
Other operating income	1	1	1	1	1	1
<b>Total revenue</b>	<b>3</b>	<b>4</b>	<b>8</b>	<b>157</b>	<b>429</b>	<b>1 079</b>
Cost of goods sold	-1	-2	-4	-86	-228	-525
<b>Gross profit</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>71</b>	<b>201</b>	<b>554</b>
Other Operating Expenses	-83	-98	-91	-69	-75	-85
<b>EBITDA</b>	<b>-75</b>	<b>-102</b>	<b>-88</b>	<b>2</b>	<b>126</b>	<b>469</b>
Items affecting comparability	7	-6	0	0	0	0
<b>EBITDA, adjusted</b>	<b>-82</b>	<b>-96</b>	<b>-88</b>	<b>2</b>	<b>126</b>	<b>469</b>
Depreciation	-8	-2	-1	-1	-1	-1
<b>EBITA, adjusted</b>	<b>-90</b>	<b>-98</b>	<b>-89</b>	<b>0</b>	<b>125</b>	<b>467</b>
<b>EBIT</b>	<b>-83</b>	<b>-104</b>	<b>-89</b>	<b>0</b>	<b>125</b>	<b>467</b>
<b>EBIT, adjusted</b>	<b>-90</b>	<b>-98</b>	<b>-89</b>	<b>0</b>	<b>125</b>	<b>467</b>
Net Financial Items	0	0	0	0	-2	0
<b>Profit before tax</b>	<b>-83</b>	<b>-104</b>	<b>-89</b>	<b>0</b>	<b>123</b>	<b>467</b>
<b>Profit before tax, adjusted</b>	<b>-90</b>	<b>-98</b>	<b>-89</b>	<b>0</b>	<b>123</b>	<b>467</b>
Taxes	0	-1	0	0	-27	-103
<b>Net income</b>	<b>-83</b>	<b>-105</b>	<b>-89</b>	<b>0</b>	<b>96</b>	<b>364</b>
<b>Net income, adjusted</b>	<b>-91</b>	<b>-99</b>	<b>-89</b>	<b>0</b>	<b>96</b>	<b>364</b>
<i>Sales Growth</i>	-	55%	94%	>100%	>100%	>100%
<i>Gross Margin</i>	91,1%	52,5%	51,4%	45,4%	46,9%	51,3%
<i>EBIT Margin, Adjusted</i>	Neg.	Neg.	Neg.	0,3%	29,1%	43,3%
<i>EPS, Adjusted</i>	-2,66	-2,64	-1,52	0,01	1,64	6,24
<i>EPS Growth, Adjusted</i>	-	N.m.	N.m.	N.m.	>100%	>100%

Source: Zwipe, EPB

## Cash flow statement

	2021	2022	2023e	2024e	2025e	2026e
EBIT	-83	-104	-89	0	125	467
Other Cash flow Items	12	5	1	1	-28	-101
Changes in working capital	-6	-9	5	-40	-51	-121
<b>Cash flow from operating activities</b>	<b>-77</b>	<b>-108</b>	<b>-82</b>	<b>-38</b>	<b>47</b>	<b>244</b>
Investments in Fixed Assets	-2	-1	-1	-1	-1	-1
<b>Cash Flow From Investments</b>	<b>-2</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>	<b>-1</b>
<b>Free cash flow</b>	<b>-78</b>	<b>-110</b>	<b>-84</b>	<b>-40</b>	<b>45</b>	<b>243</b>
New share issue / repurchase	105	5	100	0	0	0
Change in liabilities	0	0	0	40	-40	0
<b>Cash flow from financing</b>	<b>105</b>	<b>5</b>	<b>100</b>	<b>40</b>	<b>-40</b>	<b>0</b>
<b>Cash flow</b>	<b>27</b>	<b>-104</b>	<b>16</b>	<b>0</b>	<b>6</b>	<b>243</b>
<b>Net debt</b>	<b>-152</b>	<b>-50</b>	<b>-67</b>	<b>-27</b>	<b>-72</b>	<b>-315</b>

Source: Zwipe, EPB

## Balance sheet

	2021	2022	2023e	2024e	2025e	2026e
<b>ASSETS</b>						
Tangible fixed assets	3	3	3	3	3	3
<b>Total fixed assets</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
Inventories	2	10	3	23	39	75
Accounts receivable	0	2	1	31	86	216
Other current assets	5	1	1	1	1	1
Cash and cash equivalents	152	50	67	67	72	315
<b>Total current assets</b>	<b>160</b>	<b>64</b>	<b>72</b>	<b>123</b>	<b>198</b>	<b>608</b>
<b>TOTAL ASSETS</b>	<b>163</b>	<b>68</b>	<b>76</b>	<b>126</b>	<b>201</b>	<b>611</b>
<b>EQUITY AND LIABILITIES</b>						
Equity	149	55	66	66	162	526
<b>Total equity</b>	<b>149</b>	<b>55</b>	<b>66</b>	<b>66</b>	<b>162</b>	<b>526</b>
Long-term interest-bearing liabilities	0	0	0	40	0	0
<b>Total long-term liabilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>
Accounts payable	1	3	0	11	30	75
Other current liabilities	14	10	10	10	10	10
<b>Total current liabilities</b>	<b>15</b>	<b>13</b>	<b>10</b>	<b>21</b>	<b>40</b>	<b>85</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>163</b>	<b>68</b>	<b>76</b>	<b>126</b>	<b>201</b>	<b>611</b>

Source: Zwipe, EPB

## Growth and margins

	2021	2022	2023e	2024e	2025e	2026e
Revenue growth	-	55%	94%	>100%	>100%	>100%
EBITDA growth, adjusted	-	N.m.	N.m.	N.m.	>100%	>100%
EBIT growth, adjusted	-	N.m.	N.m.	N.m.	>100%	>100%
EPS growth, adjusted	-	N.m.	N.m.	N.m.	>100%	>100%
Gross margin	91,1%	52,5%	51,4%	45,4%	46,9%	51,3%
EBITDA margin	Neg.	Neg.	Neg.	1,1%	29,4%	43,4%
EBITDA margin, adjusted	Neg.	Neg.	Neg.	1,1%	29,4%	43,4%
EBIT margin	Neg.	Neg.	Neg.	0,3%	29,1%	43,3%
EBIT margin, adjusted	Neg.	Neg.	Neg.	0,3%	29,1%	43,3%
Profit margin, adjusted	Neg.	Neg.	Neg.	0,2%	22,3%	33,8%

Source: Zwipe, EPB

## Return

	2021	2022	2023e	2024e	2025e	2026e
ROE, adjusted	Neg.	Neg.	Neg.	0%	84%	>100%
ROCE, adjusted	Neg.	Neg.	Neg.	0%	93%	>100%
ROIC, adjusted	Neg.	Neg.	Neg.	2%	>100%	>100%

Source: Zwipe, EPB

## Capital efficiency

	2021	2022	2023e	2024e	2025e	2026e
Inventory / total revenue	96%	>100%	37%	15%	9%	7%
Accounts receivable / total revenue	3%	58%	18%	20%	20%	20%
Accounts payable / COGS	100%	>100%	12%	13%	13%	14%
Total short-term liabilities / total cost	19%	12%	11%	13%	13%	14%
Working capital / total revenue	-298%	20%	-60%	23%	20%	19%
Capital turnover rate	0,0x	0,1x	0,1x	1,5x	2,7x	2,1x

Source: Zwipe, EPB

## Financial position

	2021	2022	2023e	2024e	2025e	2026e
Net debt	-152	-50	-67	-27	-72	-315
Equity ratio	91%	81%	87%	52%	80%	86%
Net debt / equity	-1,0x	-0,9x	-1,0x	-0,4x	-0,4x	-0,6x
Net debt / EBITDA	2,0x	0,5x	0,8x	-15,4x	-0,6x	-0,7x

Source: Zwipe, EPB

## Per share data

	2021	2022	2023e	2024e	2025e	2026e
EPS	-2,45	-2,80	-1,52	0,01	1,64	6,24
EPS, adjusted	-2,66	-2,64	-1,52	0,01	1,64	6,24
FCF per share	-2,31	-2,93	-1,43	-0,68	0,77	4,16
Dividend per share	0,00	0,00	0,00	0,00	0,00	0,00
Book value per share	4,37	1,46	1,12	1,13	2,77	9,01
Number of shares, m	34,0	37,4	58,4	58,4	58,4	58,4
Number of shares after dilution, average	34,0	37,4	58,4	58,4	58,4	58,4

Source: Zwipe, EPB

## Valuation

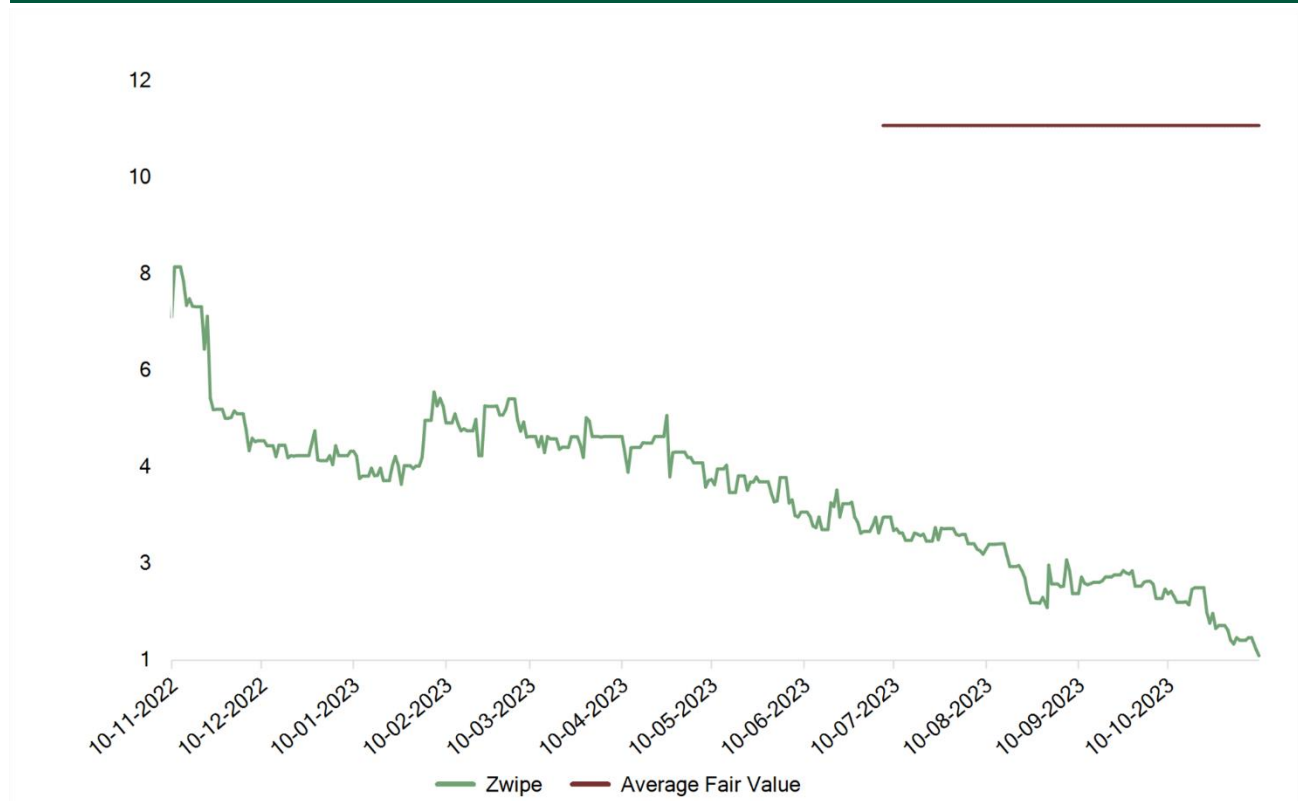
	2021	2022	2023e	2024e	2025e	2026e
P/E, adjusted	Neg.	Neg.	Neg.	165,2x	0,6x	0,1x
P/BV	6,2x	3,1x	0,8x	0,8x	0,3x	0,1x
P/FCF	Neg.	Neg.	Neg.	Neg.	1,2x	0,2x
FCF-yield	Neg.	Neg.	Neg.	Neg.	85%	>100%
Dividend yield	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Payout ratio, adjusted	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
EV/Sales	332,0x	30,6x	0,6x	0,0x	0,0x	0,0x
EV/EBITDA, adjusted	Neg.	Neg.	-0,1x	2,8x	0,0x	0,0x
EV/EBIT, adjusted	Neg.	Neg.	-0,1x	11,9x	0,0x	0,0x
EV	844	120	5	5	5	5
Share price, year end	26,9	4,6	0,9	0,9	0,9	0,9

Source: Zwipe, EPB



## Share price and average fair value

### Zwipe (ZWIPE NO EQUITY)



Source: EPB, IDC

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