

123fahrschule SE

Technology - Germany



Buy (Initiation)

17.10.2023

EUR 8.70 (Initiation)

Make the right turn for your portfolio – Initiate with BUY

Founded in 2016, 123fahrschule quickly emerged to become the **largest and most digitized driving school chain in Germany**. Thanks to an aggressive bolt-on M&A strategy in a largely unconsolidated market, which allowed for strong top-line growth, the company built a portfolio of 60 driving school locations across 36 cities, where 118 FTE driving instructors are employed.

With its proprietary, self-developed software suite the company is **at the forefront of digitization in a largely outdated market** and should be considered the **only disruptive player in the industry**. In fact, 123fahrschule provides a **best-in-class e-learning solution as well as a full-stack IT platform**, which connects back-office, students and instructors. Considering the digitally affine customer group (avg. of 22.2 years), 123fahrschule is seen to enjoy a **preferred-choice status among potential students**.

On top of its superior digital set-up, **123fahrschule looks set to cope well with one of the industry's biggest problems** – lack of skilled workforce. The average driving instructor is 54 years old and thus approaching retirement, leading to a shrinking pool of driving instructors. However, **123fahrschule counteracts on this with its own driving instructor training centres** (4 across Germany), where more than 60 instructors completed training since late 2021. Against this backdrop, the company's access to instructors is secured, which should enable for **dynamic top-line growth going forward**.

Online theory lectures: The German government recently announced, that online theory lectures will be permanently re-introduced as of January 2025. 123fahrschule is expected to strongly benefit from this, as it allows for higher capacities and improved constructor utilization, thus supporting growth and margin expansion as no relevant costs are incurred.

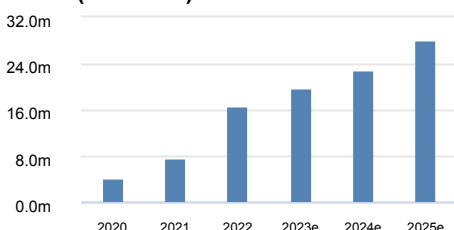
On the back of the fragmented market, the high quality and potential scale effects, 123fahrschule is seen to **grow sales at a CAGR '23-'26e of 20% to € 34.3m**. At the same time, the company is set to enjoy **significant economies of scale thanks to the highly digitized business model leading to an EBIT-DA increase to € 4.6m by 2026e** (vs € -2.7m in 2022).

Although we expect short-term share price pressure due to a backstop agreement with an investor, the shares appear undervalued in light of the company's promising prospects as well as an undemanding valuation of 0.6x EV/Sales 2023e. We hence **initiate with BUY and a € 8.70 PT** based on DCF.

Y/E 31.12 (EUR m)	2020	2021	2022	2023e	2024e	2025e
Sales	4.3	7.8	16.7	19.9	22.8	28.3
Sales growth	47.1%	81.8%	114.8%	19.6%	14.5%	24.0%
EBITDA	-2.2	-3.8	-2.7	-0.7	-0.0	2.2
Net debt (if net cash=0)	1.2	-2.5	3.8	3.2	3.6	2.9
FCF	1.8	-7.0	-2.8	-1.7	-0.4	0.8
Net Debt/EBITDA	-0.6	0.0	-1.4	-4.8	-98.2	1.3
EPS pro forma	-1.58	-1.85	-1.40	-0.76	-0.66	-0.24
EBITDA margin	-50.9%	-48.9%	-16.0%	-3.3%	-0.2%	7.6%
ROCE	-31.0%	-43.7%	-29.5%	-14.9%	-13.1%	-4.4%
EV/sales	1.2	0.6	0.7	0.6	0.6	0.4
EV/EBITDA	-2.4	-1.3	-4.6	-18.4	-343.2	5.5
PER	-1.7	-1.5	-1.9	-3.6	-4.1	-11.4
Adjusted FCF yield	-19.4%	-41.7%	-9.3%	-4.5%	-1.5%	10.5%

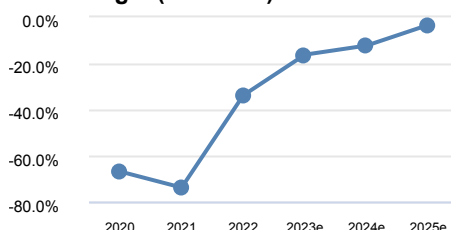
Source: Company data, NuWays, Close price as of 16.10.2023

Sales (2020-25e)



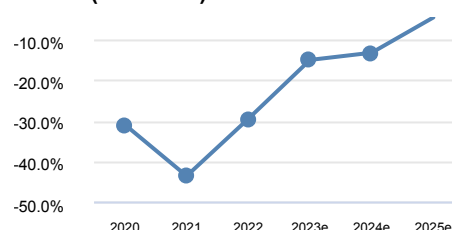
Source: NuWays Research

EBIT margin (2020-25e)



Source: NuWays Research

ROCE (2020-25e)



Source: NuWays Research

Company description

With more than 60 locations, 123fahrschule is the largest player in the German driving school industry. With its proprietary software suite, the company is disrupting a largely analogue industry by offering students a superior experience.



Market data

Share price (in €)	2.72
Market cap (in € m)	9.0
Number of shares (in m pcs)	3.3
Enterprise value (in € m)	12.2
Ø trading volume (6 months)	950

Identifier

Bloomberg	123F GR
Reuters	123F.DE
WKN	A2P4HL
ISIN	DE000A2P4HL9

Key shareholders

venturecapital.de	13.9%
KlickVentures	9.9%
Delphi	9.3%
Media Ventures	7.1%
BLSW	5.6%
Free Float	54.1%

Estimates changes

	2023e	2024e	2025e
Sales	0.0	0.0	0.0
EBIT	0.0	0.0	0.0
EPS	0.0	0.0	0.0

Comment on changes

Guidance

Table of Contents

123Fahrschule SE in a nutshell	3
Competitive Quality	5
Business Quality	11
Growth	13
Valuation	18
Theme	19
Company Background	21
Investment Risks	24
Financials	25
Disclosures	28
Contacts	30

















123Fahrschule SE in a nutshell

- **Largest driving school chain in Germany**
- **Catering the entire value chain** from customer acquisition to conduction of exams
- **Digital business model as USP** as most peers still run their driving schools in an analogue fashion

123fahrschule is the **largest driving school chain in Germany**. After the company started out operating exclusively with self-founded driving schools following its foundation in 2016, an aggressive bolt-on M&A strategy, which was initiated in 2019, helped to lift the portfolio to now **60 locations in 36 cities, where a total of 118 FTE driving instructors are employed**. As 123fahrschule is a training company the total number of instructors is in fact even higher (169), as it also includes driving instructors during their apprenticeship. The company is represented nationwide at top locations (Berlin, Hamburg, Cologne, Leipzig, Munich, Ruhr-Area) with the aim of providing **best-in-class training** for private and business customers.

Hereby, **123fahrschule covers the entire value chain from customer acquisition over the theoretical and practical lessons until the conduction of all necessary exams**. After the company had initially focused on driver's license classes A (motorcycle) and B (car), since H2'21 the portfolio has been increasingly supplemented by training centers for professional drivers (e.g., truck and bus drivers), where the company serves, among others, clients like **Deutsche Post and the Labor Office**. Overall, the product portfolio comprises almost every driving license in Germany.

Product portfolio of 123fahrschule

AM		✓	C		✓
A1		✓	CE		✓
A2		✓	D1		✓
A		✓	D1E		✓
B		✓	D		✓
BE		✓	DE		✓
C1		✓	T		✓
C1E		✓	L		✓

Source: NuWays Research, BMDV, Company data





Compared to the majority of its peers, which are mostly small businesses with 2.4 employed instructors on average, **123fahrschule is at the forefront of digitization** as it provides a proprietary, self-developed software and e-learning platform. Hence, many G&A processes are automated, allowing for improved operational efficiency, utilization rates and scale advantages. Moreover, the company's approach offers numerous advantages for the digitally affine customer group (avg. age: 22.2 years) like digital driving lessons booking, payment processes as well as lessened practice time thanks to **optimization and individualization of learning paths based on smart learning algorithms**. 123fahrschule should therefore enjoy a **preferred-choice status among students**.

In addition to its driving license portfolio, 123fahrschule expanded its offering by the acquisition of the driving instructors training company FahrerWerk GmbH in December 2021. Today, the company has the potential to offer training for up to almost 200 future driving instructors per year at full capacity at four locations throughout Germany (Berlin, Düsseldorf, Recklinghausen, Wesel). Mind you, that the business segment is just gaining traction, hence full capacity will likely not be reached in the next 3-4 years. While the **driving instructor training centers already provide a positive EBITDA contribution** (€ 0.3m in H1), their main purpose lies in the organ-

123fahrschule SE

Full note / Initiation - 17.10.2023

ic development of the driving instructor pool. This marks a crucial **competitive advantage** in an industry, where the average driving instructor is 54 years old and 37% are above the age of 60, thus approaching retirement. Until today, a total of 62 driving instructors have successfully completed the training. We estimate that about 50% of graduates join 123fahrschule after their training, which is set to ensure steady organic growth rates and replace retiring instructors.

123fahrschule SE				
Segments	Private customers	Professional driver education & education vouchers	Driving instructor training	Group
				
Description	Driving lessons for private customers in Germany	Training of professional drivers and customers whose vocational training and further training is supported by the employment agency with education vouchers.	Training for driving instructors	
Sites	60	10	4	
Regional distribution				
Competitors	Mostly smaller, local driving schools + only a few trans-regional players like Fahrschule Rettig (25+ locations)			
Market Position	123fahrschule is the largest player in the highly fragmented German driving school market (c. 10,000 overall locations)			
Sales '22	13.5	1.0	2.2	16.7
Sales share	81%	6%	13%	100%
EBITDA margin '22				-16.0%
Sales '23e	16.1	1.5	2.3	19.9
EBITDA margin '23e				-3.3%

Source: NuWays Research

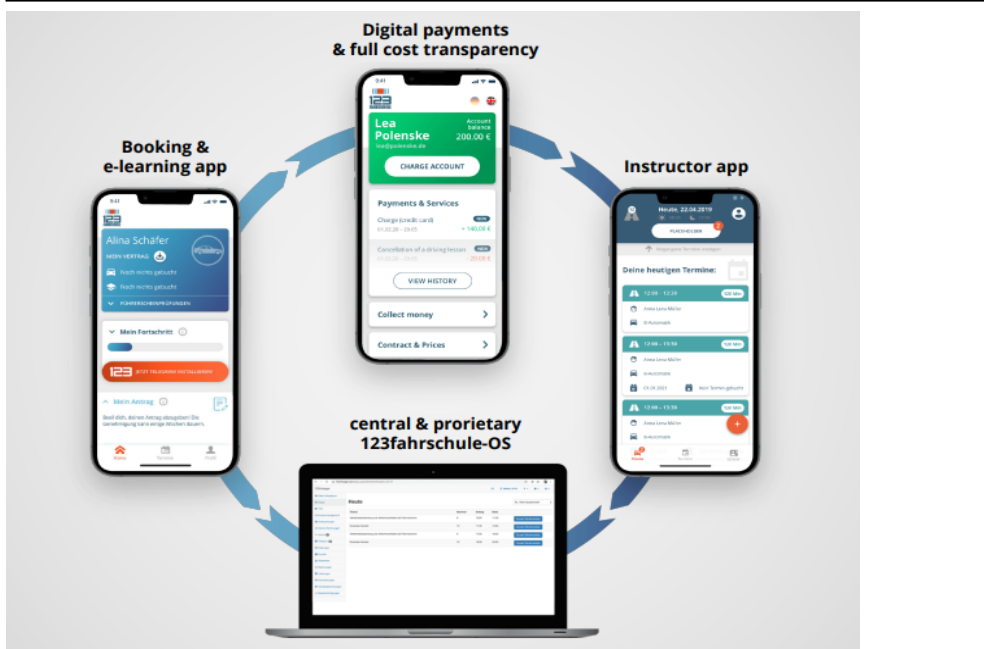
Competitive Quality

- **Digitization as major competitive edge** allowing for superior efficiency and scale effects
- **Instructor training centres to fuel organic growth** while peers are facing labour shortage
- **Highly experienced management team**

Digital edge provides multiple competitive advantages

Although Covid has accelerated digital efforts among driving schools in Germany, most market participants still only exhibit a minimum level of digitization, that barely goes beyond old-school learning apps. On the contrary, **123fahrschule as an early-mover is sitting on the digital forefront**, having developed its own proprietary software ecosystem including **best-in-class e-learning solutions and a full-stack operating system**, connecting students, instructors, and back-office. This hands the company several competitive advantages ultimately leading to higher economies of scale.

123fahrschule's digital ecosystem



Source: Company data

First and foremost, the digital setup enables for **significant efficiency gains** as most administrative processes like receivables and payroll accounting, booking of lessons and customer service are **standardised and automated**. On this basis, **123fahrschule can realise cost savings and strong synergy effects between the different locations**.

Moreover, this level of **digitization provides a strong USP for potential students**. Although there are other e-learning apps on the market (Vogel Verlag or Degener Verlag) which some competitors apply, there is no comparable all-encompassing offering like the one provided by 123fahrschule, where the functions go far beyond those of a pure learning app. Instead, the 123fahrschule app provides a place to find all relevant documents, bills, and e-learning materials including a full live overview of costs and learning progress. On top, it includes further options like driving lessons booking (theory & practical lessons), exam simulation in different languages as well as the submission of necessary documents for the driver's license, such as vision test results, first aid course certificates or passport photos. This marks a huge difference compared to "traditional" driving schools which mostly still rely on paper- and letter-based processes. Hence, the digital offering is well per-

123fahrschule SE

Full note / Initiation - 17.10.2023

ceived by students and should make 123fahrschule the driving school of choice. Moreover, the company's app achieves very good ratings in the review sections of the most important platforms:



Bewertungen ★ 4,6
Insgesamt 1.280



Bewertungen und Rezensionen
4,7 von 5
1.229 Bewertungen



4,7 ★
929 Rezensionen ⓘ

Source: NuWays Research, Trustpilot, AppStore, Google Play

Importantly, with a state-of-the-art digital set-up already in place, **123fahrschule is in pole position regarding the permanent recognition of online theory, which will become effective on 1st January 2025**, as communicated by Germany's Federal Ministry for Digital Affairs and Transport in June 2023. In fact, online theory was already allowed in terms of a provisional permission during the pandemic but was abandoned again after the discontinuation of Covid measures despite positive impacts on students spatial and temporal flexibility and no negative implication on learning processes. Although many peers as well invested into hard- and software in order to provide online lectures during the lockdowns, the **efforts of the predominantly smaller players can hardly keep up with 123fahrschule's superior digital infrastructure**, thanks to economies of scale in the development and maintenance of software and infrastructure. This also gets visible in customer recognition, in our view.

The fact that online teaching is now being introduced on a permanent basis is due not least to intensive lobbying by 123fahrschule, as they conducted, among other measures, a study together with University of Saarland (Prof. Roland Brünken) to provide clear evidence, that online lessons achieve at least the same learning effect as on-premise lessons.

For 123fahrschule, the relaunch of online lectures will have significant positive implications for the margin as it enables the company to reduce the number of facilities and centralize all offerings. The goal of this is to have only one centrally located branch in each city (<1m inhabitants), where the necessary face-to-face lectures (eNuW: 2 out of 14 modules) will be obtained.

The online lectures will be structured at the level of the twelve driving school operating companies. Each of those should offer four online lectures for up to 50 students each per day (eNuW: 35 students per lecture on average). This is seen to result in several positive effects: **(1)** Significant cost cutting opportunities regarding rental and premises as well as personnel. **(2)** An increased number of student registrations thanks to a higher theory lecture capacity. **(3)** Freed up time resource for driving instructors to be used for additional practical driving lessons (€ 63 gross on average per lesson; eNuW: 1.1 additional lessons per instructor in current-state scenario). **(4)** A significantly widened catchment area as students do not have to compromise their time to travel to the school's premises for each theory lecture. Given 123fahrschule's superior digital set-up, the company should henceforth be able to increase pressure on all local players with less digital expertise. The aggressive use of SEO and SEA is also likely to come into play here to help onboarding new students.

Thanks to its market leading position, **123fahrschule is among only a few players to be able to realize those advantages**. As most driving schools are operating only one branch (91.5% of driving schools generate < € 500k revenue), it appears redundant for these peers whether lectures take place on-premise or online.

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Full note / Initiation - 17.10.2023

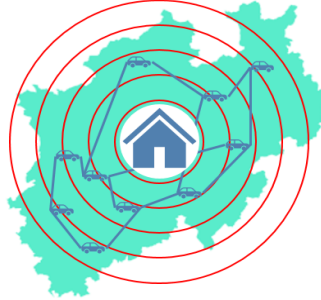
Digital approach vs pure on-premise structure

Offline

1x branch per operating area
1x FTE per operating area
Small catchment area
2-5 theory lectures per week
14 visits on premise for students

Online

1x branch per city
1x employee for several locations
4 online lectures of 35 students per day
Large catchment area



Source: NuWays Research, Company data

With this, 123fahrschule looks set to improve its best-in-class education process even further, as it offers the smoothest way for students to gain their driving license.

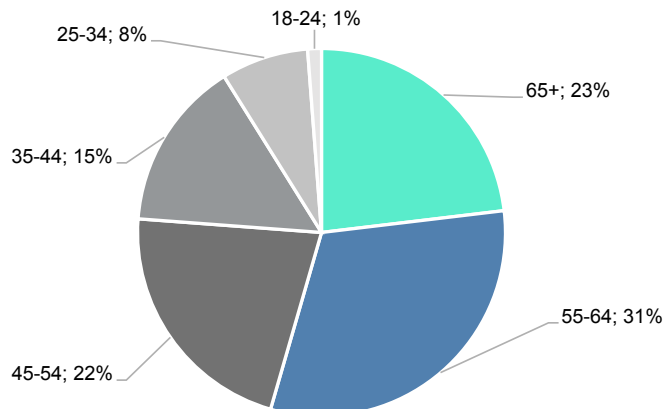
Miles ahead of the competition

At the moment, there is no direct competitor in the market who runs a comparable business approach regarding both, (1) digital set-up and expertise as well as (2) market dominance. Although there are other larger driving schools like Fahrschule Rettig from Cologne running a multi-branch business, they significantly trail 123fahrschule in terms of regional coverage, let alone digitization. While the company is ready to further scale up and trim the business on profitability, possible competitors would have to go through the whole process of developing a comparable digital set-up as well as reaching a sufficient level of market consolidation, which took 123fahrschule roughly six years to accomplish. Moreover, a market entry of international competition appears highly unlikely as the legal situation in Germany significantly differs compared to other EU member states. Against this backdrop, **the company is enabled for strong economies of scale in terms of operational efficiency, cost optimization as well as effective marketing measures, especially regarding SEO and SEA.** Hence, 123fahrschule looks set to remain the undisputed market dominator and even expand this position thanks to its superior business model.

Driving instructor shortage? No issue for 123!

There is a shortage of skilled workers in almost all industries in Germany. This is no different in the driving school industry, which suffers greatly from not being able to find suitable personnel. The shortage of driving instructors meant that potential learner drivers in 2022 often had to reckon with longer training periods. The fact that the shortage of skilled workers is particularly pronounced in the driving school sector is primarily due to the age structure of driving instructors. With 54%, the majority of driving instructors is above the age of 55, while only 24% are below the age of 45. Consequently, a great number of skilled workforce is approaching retirement.

Age structure of German driving instructors



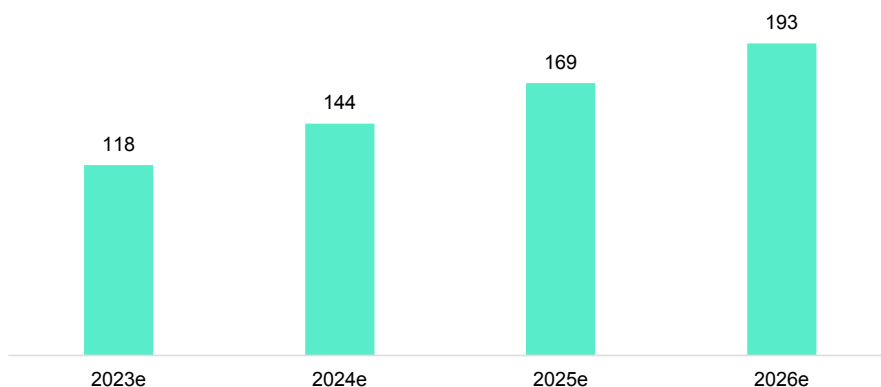
Source: NuWays Research, MOVING

The problem for market participants is likely to become even more acute in the coming years, as can already be seen in the vacancy rates, which have risen by 67% since 2017 vs +37% for all professions in Germany.

In order to counteract this, 123fahrschule has begun to establish its own portfolio of driving instructor training centers with the acquisition of FahrerWerk GmbH (€ 600k + performance-related components) in December 2021. The company currently operates four training centers throughout Germany in Berlin, Erkrath (Düsseldorf), Recklinghausen and Wesel. So far, 60 driving instructors graduated from the training centers, of which 30 started their driving instructor careers at 123fahrschule afterwards. On this basis, the company looks set to increase its access to instructors going forward, while the overall industry is seen to face significant problems from a shortage of skilled workers.

According to our estimates, which also include a 10% annual churn rate, **123fahrschule will be able to organically increase their driving instructor's workforce by more than 60% until 2026e.** In light of a capacity potential of up to 200 per year, our estimates could even serve as conservative.

Development of driving instructor FTE at 123



Source: NuWays Research

Given the appealing unit economics, this puts significant growth as well as profitability potential on the table for the company as shown in the following graphic. Mind you, that the displayed data reflect the current state and do not include potential in-

flation related increases on the sales or costs side.

Unit economics of driving instructors

Driving lessons per instructor p.a.	1,656	Hourly wage per instructor	21.00 €
Avg. price (net) per driving lesson	53 €	Total average annual salary per instructor	65,074 €
Sales from practical lessons	87,671 €	Annual cost per car per FTE driving instructor	25,780 €
Student sign ups p.a. per instructor	77	Total costs per driving instructor	90,854 €
Sign up fee incl. Theory education	361 €		
Total sign up fees per instructor	27,718 €		
# of students ex dropouts per instructor	59		
Price (net) theoretical exam (1.3 takes per student)	46 €		
Total theory exam sales per instructor	3,554 €		
Price (net) per practical exam (1.4 takes per student)	209 €		
Total practical exam sales per instructor	17,325 €		
Total sales per instructor	136,267 €		

Driving instructors unit economics 45,414 €

Source: NuWays Research, Company data

The market consolidator – proven M&A track record

After the company initially started out by founding its own driving schools, growth was fueled by an intensive M&A strategy starting in 2019. Since then, the company build an impressive track record, acquiring a total of 26 companies, covering an additional 37 locations across 22 German cities. The company hereby impresses with incredible efficiency in terms of integration, which takes on average only a couple of months. In this time, the acquired driving school gets fully rebranded and onboarded onto the 123fahrschule digital ecosystem.

The company encounters favourable conditions in this regard, due to the highly fragmented driving school market and high average age of driving school owners, which is similar to the average age of driving instructors. Hence, most owners are on the verge of retirement and thus willing to sell their business. Paired with the lack of possible successors as well as financial difficulties during the pandemic, this hands 123fahrschule **substantial bargaining power when it comes to takeover negotiations**. As a result, 123fahrschule acquired its targets for an average 0.3x EV/sales, allowing for **strong multiple-arbitrage as well as ROIs of around 3 years**. After a typical slowdown in growth in Y1, caused by the integration process, most targets achieve double digit margins already in Y2.

123fahrschule's M&A track record

Companies acquired since 2019	26
Additional locations	37
Avg. Acquisition price (€m)	0.15
Avg. FY revenues potential (€m)	0.45
Avg. EV/sales	0.3x
Total cost of acquisition	0.18

Exemplary ROI calculation:

Time since acquisition	1	2	3	4	5
Organic growth	-4%	8%	5%	4%	2%
Revenue (€m)	0.44	0.47	0.49	0.51	0.52
EBITDA margin	7%	15%	16%	17%	17%
EBITDA (€m)	0.03	0.07	0.08	0.09	0.09
Cumulated CF (€m)	-0.15	-0.08	0.00	0.08	0.17

Source: NuWays Research, Company data

123fahrschule SE

Full note / Initiation - 17.10.2023

While the company is seen to prioritize profitability measures over inorganic growth in the coming quarters, management intends to reaccelerate the M&A machine in 2025/26e and possibly some strategic acquisitions already in 2024e to increase the regional footprint. Here, especially the Rhine-Main region (e.g. Frankfurt), Bavaria and Baden-Württemberg are in the focus of management.

Overall, 123fahrschule is seen to be **excellently positioned for a further acquisition offensive - based on the extensive experience gained in recent years as well as the general market dynamics**. In fact, as the company is targeting companies with > € 250k annual sales, there are almost 2,700 potential M&A targets in the German market. Taking into account the communicated € 10m investment horizon and the marketable multiples, this would imply up to € 31m inorganic growth potential until 2026e.

Sales distribution of German driving schools			
Sales	# of companies	share	sales share
< € 0.25m	7,615	74.1%	36.2%
€ 0.25-1m	2,430	23.7%	44.2%
€ 1-2m	175	1.7%	9.8%
> € 2m	53	0.5%	9.8%
Total	10,273	100.0%	100.0%

Source: NuWays Research, MOVING

However, further funding would be necessary to execute the communicated targets. Hence, we do not include this in our model, which also implies a certain **upside to our estimates**.

Experienced management team

123fahrschule is led by a team of highly experienced individuals. Especially **CEO Boris Polenske** provides extensive experience in leading listed companies to stock market success. For example, as CEO and founder of KlickTel he led the company to its IPO and eventually a public takeover.

In recent years, Mr. Polenske gathered a high-profile executive team around him with vast experience in IT, marketing as well as industry specific knowledge. **Ahmed Baziou**, Manager of FahrerWerk and Head of Operations at 123fahrschule, led a successful Dusseldorf based driving school himself before he joined the company in 2019 after it had taken over his driving school. **Jan Hoffmann** joined the company in 2018, after he successfully launched an app that digitizes climbing gym management. At 123fahrschule, he is responsible for data analytics, business planning as well as IR. The executive team is completed by **Stefan Brings**, who acts as Head of Finance for 123fahrschule. After a successful corporate career at Nissan, Mr Brings also highly contributes to the business planning process.

Business Quality

- Increasing returns as scalable business model bears fruit
- FCF to reach € 1.2m by 2026e compared to negative € 2.8m in 2022e

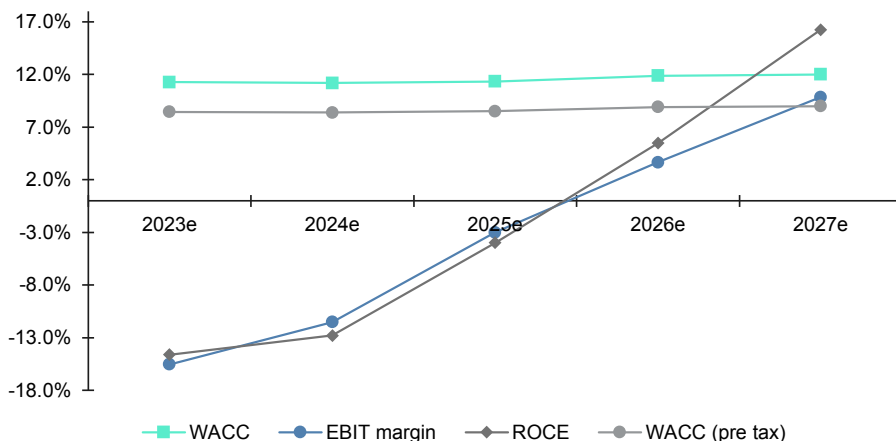
Business quality to strive on scale effects

123fahrschule's **business quality looks set to thrive on the back of strong organic top-line growth as well as scale effects**. Going forward, ROCE (EBIT/avg. capital employed) is seen to reach a strong level of 16.3% by 2026e (vs -14.6% in 2023e). This should predominantly be driven by an **improving profitability** (EBIT margin forecasted to increase from -16.2% in 2023e to 3.5% in 2026e).

1. **Economies of scale:** The strong top-line growth is set to drive economies of scale, especially on G&A as well as personnel costs. Beyond 2026e, we see further upside based on the re-introduction of online-theory in 2025e.
2. **Efficiency gains:** Efficiency gains as well as learning curve effects looks set to improve profitability as the company is continuously fine tuning its processes to reduce operating costs, especially on G&A.

Another driver of the strongly improving ROCE is the **rising capital turnover** (sales/avg. capital employed) which is seen to **increase to c. 1.5x by 2026e** (0.9x in 2023e). This is primarily based on the strong sales growth with a CAGR 2022-26e of 20%.

Returns

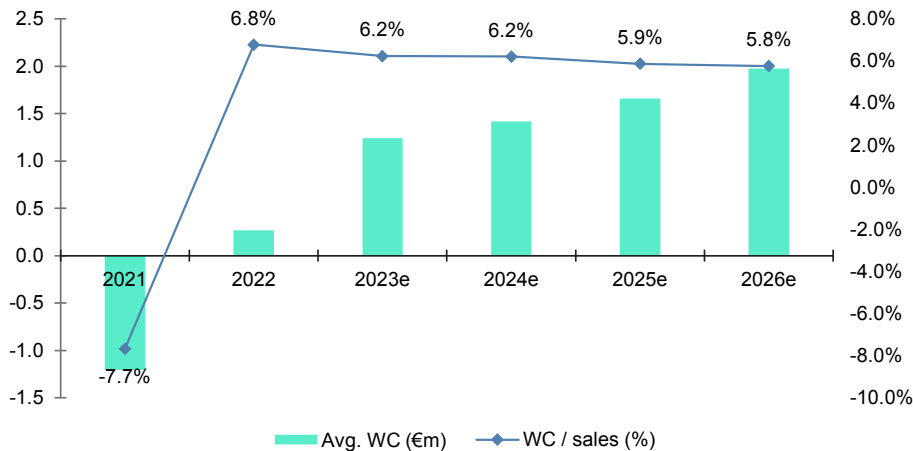


Source: NuWays Research

Slightly improving WC intensity

123fahrschule's business model runs on a comparably low working capital intensity of around 6.2% in 2023e with days to collect receivables and pay payables are not excessive (FY 2023e: 75 & 20). Being a service provider, inventories play de facto no role for the company. Going forward we model a stable payables turnover while we expect the company to show an ongoing slight improvement on the receivables turnover (eNuW: 60 days by 2026e) carried by the continuously increasing digitization of processes. Hence, the working capital turnover (WC/sales) should moderately decrease to 5.8% by 2026e.

Working capital development

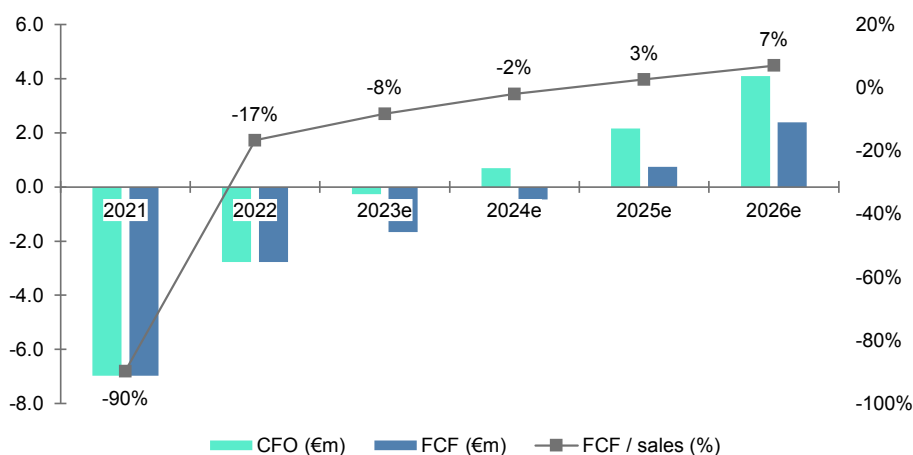


Source: NuWays Research

123fahrschule is expected to generate **positive free cash flow from 2025e onwards**, as dynamic top-line growth and profitability improvements are seen to feed through to cash flows. Importantly, the company's liquidity until 2025e is secured after management recently announced the intention to resolve a cash capital increase of up to c. 1.5m new shares with shareholders' subscription rights. Notably, the company concluded a backstop agreement with one of the existing shareholders, who committed to purchase all non-subscribed shares at a price of € 1.10 per new share. Subject to the approval of the Supervisory Board, the company can therefore expect gross proceeds of at least € 1.66m. Although the capital increase is not resolved yet, we already include into our model due to the backstop agreement.

In fact, the company looks set to generate **FCF of € 2.2m by 2026e** (vs € -1.7 in 2023e) thanks to ongoing efficiency gains as well as strong organic growth at favorable unit economics.

Cash flow development



Source: NuWays Research

Growth

- **Market expected to grow by 4.4% CAGR 2020-'25e**
- **Online theory will push growth and allow for improved profitability**
- **123fahrschule is seen to significantly gain market share** thanks to superior business model
- **Scale effects look set to become visible** in double-digit EBITDA margins by 2026e

Structurally growing market

The Germany driving school market is currently in a consolidation period, with smaller less digitized driving schools facing succession problems, which ultimately leads to a decreasing number of overall driving schools. Frequently, those driving schools are taken over by larger competitors like 123fahrschule, resulting in a changed industry structure. In fact, the share of driving schools generating annual revenues of > € 250k increased by 9.5pp since 2017 to 25.9% in 2022. In that timespan the total number of driving schools in Germany decreased by 7.1% to 10,273.

Changing market structure

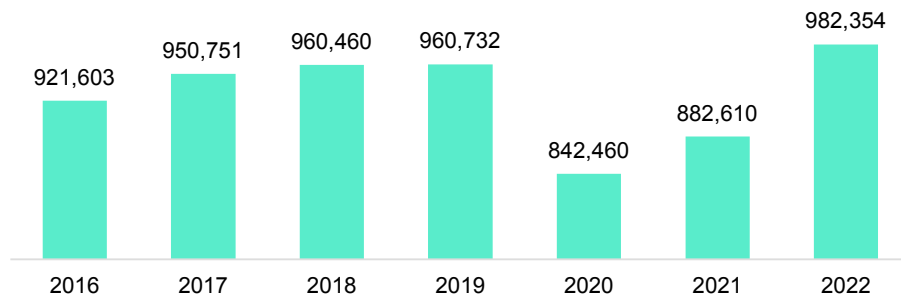


Source: NuWays Research, MOOVING

Going forward this trend is seen to further accelerate as ever more small players are seen struggling to keep up with the pace of digitization. Moreover, the financial impact of the Covid pandemic had an overproportioned impact on those players, which leaves some with no other way out but to sell their business. In light of these developments, researchers project that the number of driving schools will decline by an additional 9.5% by 2025e (MOVING Branchenreport).

While the number of driving schools is shrinking, the number of students aiming to obtain their driver's licenses showed a relatively stable development in recent years as it equals roughly 1% of population per year. Obtaining a driver's license remains desirable for many people, as it significantly expands their personal freedom of movement, which is why we expect demand to remain at a stable level. Moreover, the high inflow of non-EU citizens looks set to compensate demographic effects in Germany, which is already visible in an increasing number of foreign language exams.

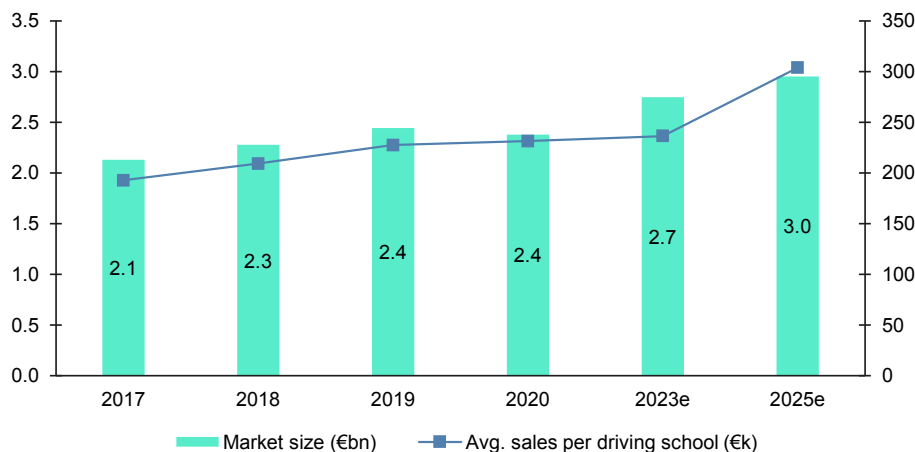
Annual # of obtained class B driving licenses in Germany



Source: NuWays Research, Statista

As we are observing a market with stable demand and a decreasing number of suppliers, the pricing power on the supply side is certainly getting stronger. This becomes visible, when looking at the development of the average cost for a class B (car) driving license in Germany, which increase by a whopping 32.6% since H1 2020. Considering a further decrease of suppliers, this trend looks set to continue, allowing for ongoing market growth. In fact, the **German driving school market is projected to grow at a CAGR 2020-25e of 4.4% to € 2.95bn.**

Market growth



Source: NuWays Research, MOVING

Online-theory to boost growth

As outlined in the quality part, the German government will re-allow driving schools to hold online lectures as of January 2025. It is currently assumed that 12 out of the 14 theoretical seminars may be held online and the remaining two will be in the conventional face-to-face format. While this has little financial implications for small driving schools, it implies **significant growth opportunities for larger players like 123fahrschule.**

We assume that 123fahrschule is currently holding 2,100 theory lectures in a regular month (excl. December), which translates into 17.8 theory lectures per FTE driving instructor. In the current format, lectures are held on a branch basis, meaning that every branch is educating its "own" students. We further assume that an average of ten students are able to participate in one lecture, implying a total monthly capacity of 21,000 students.

As the limiting factor space will be eliminated for most seminars by 2025e, we expect the company to shift the theoretical education from the branch level to the level of the twelve operating entities. We estimate that every operating entity will hold four lectures per day for up to 35 students each. Although the number of students

per online lecture is theoretically unlimited, a formal limitation will likely be introduced in order to allow for student participation and integration. As two seminars will likely have to be held on premise, our estimates include 16 lectures per branch in addition to the online lectures. Overall, this leaves us with a total capacity of almost 45,000 students per month. However, as we have rarely seen utilization rates of 100%, we conservatively assume a 20% increase in monthly registrations (currently c. 700) at the start of the online theory format. Our growth assumptions for registrations are based on (1) the reverse-effect we observed after Covid (c. -17% registrations yoy in H1'23) as well as far-reaching acceptance stops which are currently imposed by c. 33% of driving schools (MOVING 2023). As proximity is the #1 reason for potential students when they opt for a driving school, 123fahrschule is excellently positioned to take away customers from competitors with an inferior setup as the catchment area significantly widens in the hybrid format. With gross registration sales of € 361 (incl. App) this results in an incremental annual sales effect of € 580k.

However, the increase in registrations is not the only advantage. A total of 1,968 theory lectures in the hybrid format, which will be necessary to allow for a compelling theory offering also in several languages, indicates 1.1 freed hours per driving instructor, which can be used for additional practical driving lessons. With gross sales of € 53 per driving lesson, this translates into an annual sales effect of c. € 80k.

Offline setup		Hybrid setup	
Lectures p.m.	2,100	Lectures p.m. online	1,008
Lectures p.m. per FTE instructor	17.8	Lectures p.m. offline	960
		Total lectures p.m.	1,968
		Lectures p.m. per FTE instructor	16.7

Additional capacity p.m. per instructor (hours): 1.1	
Additional registrations p.m. : 140	

Sales impact p.a.	
Driving lessons (€ 52.9 net)	80,332 €
Registrations (€ 361 net)	580,412 €
Total sales effect	660,744 €

Source: NuWays Research

Considering average customer acquisition costs of € 40 as well as set up costs of c. € 10k per location (eNuW), **the total EBITDA effect in the current state scenario would be around € 480k**, as no further costs are incurred due to the already existing IT infrastructure. Applied to our 2023e this would improve EBITDA by 2.4pp. Mind you, that this comes only on top of the aforementioned cost saving potential of the *one city – one premise* strategy. Moreover, a higher number of driving instructors (eNuW 2025 avg. FTE: 156) exponentially increases the financial impact of the hybrid format.

The following sensitivity analysis provides an overview of the effect of increasing FTE and additional registrations on annual sales.

		Additional registrations				
		20%	30%	50%	75%	100%
FTE	118	660,744	950,950	1,531,362	2,256,876	2,982,391
	125	695,105	985,311	1,565,723	2,291,238	3,016,752
	150	791,645	1,081,850	1,662,262	2,387,777	3,113,292
	175	860,601	1,150,807	1,731,219	2,456,733	3,182,248
	200	912,319	1,202,524	1,782,936	2,508,451	3,233,966

Source: NuWays Research

Putting it all together – 20% sales CAGR 2023- '26e

Based on the underlying market dynamics as well as 123fahrschule's superior digital set-up and market position, we expect **sales to strongly increase going forward.**

	2022	2023e	2024e	2025e	2026e	CAGR 2023-'26e
Group sales (€m)	16.7	19.9	22.8	28.3	34.3	19.8%
yoy	215%	20%	14%	24%	21%	
Private Customers (€m)	13.5	16.1	18.3	23.1	28.3	20.7%
yoy	n.a.	19%	14%	26%	22%	
Professional driver education (€m)	1.0	1.5	2.1	2.6	3.2	28.2%
yoy	n.a.	57%	35%	25%	25%	
Driving instructor training (€m)	2.2	2.3	2.4	2.6	2.8	6.4%
yoy	n.a.	5%	5%	7%	7%	

Source: NuWays Research

How did we derive those estimates:

- **Private customers:** We subdivided this segment into driving sales, theory sales and exam sales, which are in the end all based on the number of FTE driving instructors employed. The latter looks set to show strong organic growth going forward thanks to the company's training centres gaining more and more traction as well as favourable working conditions for new hirings. For 2026e, we estimate 191 FTE driving instructors. Our sales estimates are then based on stable number of driving lessons per instructor, including slight improvements in 2025 & '26e due to online theory (eNuW: 150 p.m. vs 144 today). In addition, we reflect a price inflation of 3.5% as well as stable exam pass rates (1.3 tries per theoretical and 1.4 tries per practical exam on average) in our model.
- **Professional driver education:** We expect that the cooperation with major business partners will drive growth at a constant rate in this segment in the coming years, as 123fahrschule looks set to gain further traction after entering the market in 2021. Increasingly favourable working conditions and the lack of skilled workforce should provide further tailwinds.
- **Driving instructor training:** Similar effects like in the professional driver segment come into play here. Not least thanks to 123fahrschule, salaries for driving instructors significantly increased during recent years. Paired with the comparably low educational requirements, ever more young persons are set to opt for a career as a driving instructor. Here, 123fahrschule should be the training company of choice, as the company sets the industry standards in digital expertise, quality of training as well as salary. In addition, the relaxation of driving instructor training that came into force in 2018 should give the segment a further boost. Mind you, that the primary goal of this segment is to create organic growth for the private customer segment by fuelling the number of driving instructors.

Scale effects to become visible with top-line growth

123 fahrschule is seen to strongly benefit from scale effects going forward which should allow for **strong EBITDA growth to € 4.6m by 2026e** (13% margin) compared to negative € 0.7m in FY 2023e.

The significant growth in sales looks set to drive strong economies of scale on G&A and personnel expenses. Keep in mind, that we expect further margin upside beyond 2026e driven by increasing utilization rates as well as the rising effect of digital theory lectures. On top of this, efficiency gains and learning curve effects look set to contribute to profit growth as 123fahrschule continuously fine tunes its processes.

	in €m	2022	2023e	2024e	2025e	2026e	CAGR 2023-'26e
Net sales		16.7	19.9	22.8	28.3	34.3	19.8%
	yoy	215%	20%	14%	24%	21%	
+/- finished goods		0.0	0.0	0.0	0.0	0.0	
	in % of sales	0%	0%	0%	0%	0%	
Capitalized goods		0.1	0.2	0.2	0.2	0.3	
	in % of sales	1%	1%	1%	1%	1%	
Total sales		16.8	20.1	23.0	28.6	34.6	19.8%
	yoy	217%	20%	14%	24%	21%	
Personnel expenses		12.1	12.1	13.9	16.5	19.3	
	in % of sales	73%	61%	61%	58%	56%	
Other operating expenses		8.4	8.8	9.4	10.2	11.1	
	in % of sales	51%	44%	41%	36%	32%	
Other operating income		1.1	0.2	0.2	0.3	0.3	
	in % of sales	6%	1%	1%	1%	1%	
EBITDA		-2.7	-0.7	0.0	2.2	4.6	
	EBITDA margin	-16%	-3%	0%	8%	13%	
Depreciation & amortization		3.0	2.6	2.8	3.1	3.2	
	in % of sales	18%	13%	12%	11%	9%	
EBIT		-5.6	-3.2	-2.8	-0.9	1.4	
	EBIT margin	-34%	-16%	-12%	-3%	4%	
Financial result		0.0	-0.1	-0.2	-0.2	-0.2	
EBT		-5.7	-3.3	-2.9	-1.1	1.2	
	EBT margin	-34%	-17%	-13%	-4%	3%	
Income taxes		-1.3	-0.8	-0.7	-0.3	0.3	
	Tax rate	23%	25%	25%	25%	25%	
Net income		-7.0	-4.2	-3.7	-1.4	1.5	

Source: NuWays Research

Explanation of key P&L items:

- **Personnel expenses:** As aforementioned, we expect 123fahrschule to strongly extend its driving instructor workforce in the coming years based on its driving instructor training centres. In our calculations, we assume an average annual salary (incl. incidental wage costs) for driving instructors of € 65k, based on 144 driving lessons per month. We further calculate with an increase of the hourly wage for driving instructors of € 1 per year and an increase of monthly driving lessons to 147 in 2025e and to 150 in 2026e following the re-introduction of only theory. For the remaining workforce, we estimate an average annual salary of € 45k and 3% annual salary increase going forward.
- **Other operating expenses:** This item is composed of costs for vehicles, marketing and other costs, which mainly include rent and lease of properties. For the latter, we estimate an annual increase of 2%. The vehicle costs are influenced by two factors: (1) The number of cars increases accordingly to the number of driving instructors and (2) the cost per vehicle, which we expect to grow by 3% annually. For brand marketing, we also assume an increase of 3% p.a., while we estimate CAC to come down from currently € 50 (eNuW) to € 40 by 2025e thanks to a higher degree of brand recognition.
- **D&A:** D&A at 123fahrschule mainly relates to the scheduled amortization of intangibles as well as depreciation of office equipment. Moreover, goodwill arising on the consolidation of the 123fahrschule Holding subgroup is amortized over a period of seven years. We thus expect scale effects to also come through on the D&A level.

Valuation

DCF valuation

Our DCF valuation derives a **price target of € 8.70** per share for 123fahrschule SE. The key assumptions for our model are:

- **Terminal EBIT margin of 15%:** This compares to a 4.0% EBIT margin 123fahrschule is expected to achieve in 2026e. Our long-term EBIT margin assumption reflects the significant scale potential based on the digital business model.
- **Terminal growth of 2.0%:** The mid-term growth rate is seen at a dynamic 15.6% (2026-30e) based on further optimization potentials as well as organic growth based on the driving instruction training centres.
- The **WACC of 12.0%** is derived from a beta of 1.5, a 6.0% risk premium and a 3.0% risk free rate.

DCF (EUR m) (except per share data and beta)	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	Terminal value
NOPAT	-2.4	-2.1	-0.7	1.0	2.8	4.6	6.7	9.2	7.0
Depreciation	2.6	2.8	3.1	3.2	3.1	3.2	3.3	3.4	3.2
Increase/decrease in working capital	0.4	1.0	0.7	0.8	0.4	0.3	0.2	0.2	0.3
Increase/decrease in long-term provisions and accruals	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Capex	2.2	2.1	2.4	2.7	2.8	2.8	3.2	3.7	3.2
Acquisitions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital increase	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash flow	0.7	-0.3	0.9	2.5	3.6	5.5	7.2	9.2	7.5
Present value	0.7	-0.3	0.7	1.8	2.2	3.0	3.6	4.1	30.0
WACC	10.4%	10.3%	10.6%	11.7%	12.0%	12.0%	12.0%	12.0%	12.0%

DCF per share derived from		DCF avg. growth and earnings assumptions	
Total present value	46	Short term growth (2022-2026)	19.8%
thereof terminal value	66%	Medium term growth (2026 - 2030)	15.6%
Net debt (net cash) at start of year	3	Long term growth (2030 - infinity)	2.0%
Financial assets	0	Terminal year EBIT margin	15.0%
Provisions and off balance sheet debt	1		
Equity value	42		
No. of shares outstanding	4.8		
Discounted cash flow per share	8.7		
upside/(downside)	220%		

WACC derived from	
Cost of borrowings before taxes	8.0%
Tax rate	25.0%
Cost of borrowings after taxes	6.1%
Required return on invested capital	12.0%
Risk premium	6.0%
Risk-free rate	3.0%
Beta	1.50

Share price	
	2.72

Sensitivity analysis DCF							Sensitivity analysis DCF					
WACC		Long term growth						EBIT margin terminal year				
		1%	1.5%	2.0%	2.5%	3.0%		13%	14%	15%	16%	17%
14.0%	6.6	6.8	7.0	7.2	7.4	6.4	6.7	7.0	7.2	7.5		
13.0%	7.2	7.5	7.7	8.0	8.3	7.1	7.4	7.7	8.1	8.4		
12.0%	8.1	8.4	8.7	9.1	9.5	7.9	8.3	8.7	9.1	9.5		
11.0%	9.1	9.5	9.9	10.4	10.9	9.0	9.5	9.9	10.4	10.9		
10.0%	10.4	10.9	11.5	12.2	12.9	10.4	10.9	11.5	12.1	12.6		

Source: NuWays Research

Theme

- **Backstop agreement seen to put shares under pressure in the short term**
- **December to weigh on FY profitability**
- **Position paper on driving simulators recently published**
- **Autonomous driving poses no threat to the industry**

Capital increase creates short-term uncertainty

Last week, 123fahrschule released an ad-hoc, in which the company stated the intention to resolve a cash capital increase in order to secure liquidity. For this purpose, up to 1,509,946 new shares are to be issued in the context of a capital increase with subscription rights. To hedge against the risk of an insufficient subscription rate, the company entered into a backstop agreement with an existing shareholder, who committed to acquire all non-subscribed shares at a price of € 1.10 per share. Hence, gross cash inflows to the tune of € 1.66m are secured. With this, the **company secured financing for the coming years** (eNuW: positive FCF from 2025e onwards) as well as the ability to redeem existing debt.

However, as the subscription price (equal to backstop price) is significantly below the current share price, the pressure that is currently weighing on the stock (shares fell 29% since the ad-hoc to yesterday's close price of € 2.72) could continue until the capital increase is resolved.

To put this into perspective: While the company pursued an aggressive M&A strategy in times of low capital costs to allow for strong top-line growth, changing market conditions made access to financing more difficult, which increased liquidity pressure. The secured funding is therefore an important step for 123fahrschule. That said, we are now looking at a **company that is fully financed until FCF generation is seen to kick in in 2025e** while providing an attractive business model in an unconsolidated and technologically outdated market. Hence, the **investment case remains fully intact**, especially as the risk factor liquidity should belong to the past.

Seasonally weak December will likely weigh on profitability

123fahrschule had a strong start to the year, as the company achieved **positive EBITDA in every of the first six months, totaling € 0.2m at H1, an increase of 117% yoy**. Although we expect this trend to continue based on the stable demand for driving licenses, the FY EBITDA is seen to turn negative (eNuW: € -0.7m). This is mainly due to the seasonally weak December, where several effects come together to weigh on profitability. (1) December sales are seen to be some 40-50% below the average month, as students are reluctant to take driving lessons during Christmas time as well as parents preferring to spend on Christmas gifts. (2) Although of less severance, other OpEx are also above the monthly average based on the built up of provisions, especially vacation accruals, which are entirely build at YE.

Still, this should not overshadow the **significant efficiency gains the company realized throughout the year**, especially thanks to the reduction of the executive management, restructuring of customer care as well as cost cutting measures in middle management. All those measures are seen to have a cost-saving potential of around € 1.8m in the mid-term. Hence, we estimate **EBITDA to turn positive from 2024e onwards**.

Role of driving simulators could increase going forward

In September, the German Federal Highway Research Institute (BASt) organized a workshop on behalf of the Federal Ministry for Digital Affairs and Transport (BMDV) regarding the usage of driving simulators in the driving license training. Within the event, the BMDV as well as the BASt signaled political interest to increase the role of driving simulators significantly and compulsorily. While it is not intended that simulators can replace practical driving lessons, their use is understood as a useful supplement. We estimate that simulators could be suitable for the training of parking

as well as hazardous situations. In addition, driving lessons with manual gear shifting could be moved to the simulator, which would result in savings in vehicle leasing.

Although it will still take some time before the legal framework for a mandatory introduction has been created, it is worth flagging the potential impact this would have on a company like 123fahrschule, in our view. In a current state scenario, where we conservatively estimate 8,500 annual registrations, the introduction of simulators would imply € 1m additional sales given an average of 4 simulator hours at € 29 (net) per student. Compared to total costs of € 540k (€ 750 monthly cost per simulator for leasing and space rent at 60 locations), this would result in an EBITDA contribution of almost € 0.5m.

However, as there is no political decision published to date, we do not include this in our estimates.

No threat from autonomous driving

In recent years, there has been plenty of attention on autonomous driving, driven among others by Tesla's advances in this area. Although technology advanced quickly in the past decade with features like cruise control, lane keeping assistants or automated distance control there is still a long way to go until fully autonomous driving is achieved. To better understand what this actually means, it is sensible to have a look on the five stages of autonomous driving:

Stage 1: Assisted driving

Assistance systems support the driver. However, the driver must be in constant control of the vehicle and is fully reliable for any damage or traffic violations.

Stage 2: Partially automated driving

Assistance systems are able to simultaneously keep the lane, brake and accelerate. However, the driver must be in constant control of the vehicle and is fully reliable for any damage or traffic violations.

Stage 3: Highly automated driving

Assistance systems can perform certain driving tasks independently and without human intervention, but only for a limited period of time and under suitable conditions. Although the driver may temporarily turn away from the driving task and traffic, he must always be able to take over on short notice if requested by the systems. At the start of 2023, Mercedes was the first company to receive admission to test stage 3 autonomous driving in the state of Nevada and California.

Stage 4: Fully automated driving

The driver can completely relinquish control of the vehicle and becomes a passenger, as cars would even be allowed to travel without occupants. However, this only applies to certain situations, like drives on the freeways, but not city traffic.

Stage 5: Autonomous driving

The technology in the car copes with all traffic situations.

While some manufacturers have already received level 3 permission, the technological gap between this and level 5 are enormous and will thus take time to achieve. According to a study by Prognos on behalf of the ADAC, c. 50% of cars will have some kind of automation functions by 2050. However, the researchers also estimate that most of those functions will be only applicable on the freeway and a significant effect of autonomous driving will only become visible well after 2050. Hence, there is **no threat of autonomous driving on 123fahrschule's business model** from today's perspective.

Company Background

History

123fahrschule was founded in 2016 by CEO Boris Polenske and Daniel Radziwon with the initial support of several angel investors. After the initial business case of creating a novel SaaS product for driving schools had met with only little approval in the analogue and highly fractured German driving school market, the founder decided to launch their own digitally enabled and fully vertically integrated driving school chain.

Since the beginning, management aimed to revolutionize the market via digitization in order to achieve the ultimate goal of consolidating the German market, which is currently valued at € 2.75bn.

In order to fund the cash intensive growth objectives, 123fahrschule relied on several VC investors, as VCDE and Media Ventures were the first to join back in 2017. Two further financing rounds followed in 2018 (BLSW) and 2019 (Delphi & KlickVentures) before the company went public via reversed IPO in late 2020. In 2021, two cash capital increases were resolved, as 123fahrschule raised a total of € 7.4m.

The collected funds were merely used for the further development of the tech-stack and the company's state-of-the-art student app before the company started its bolt-on M&A strategy in 2019.

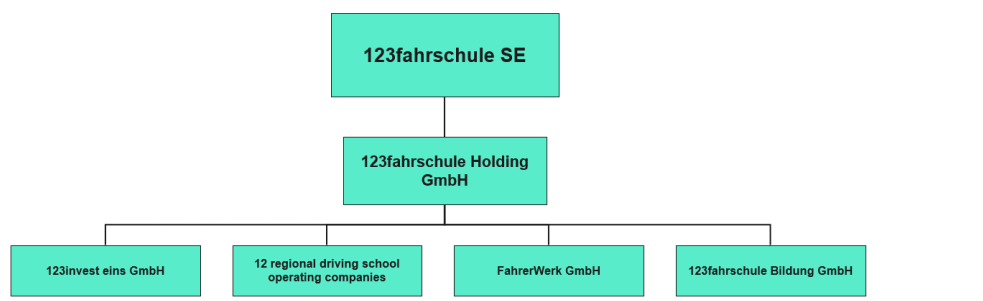
Since then, 123fahrschule acquired a total of 26 driving schools, adding 37 locations in 22 cities to the portfolio. With a total of 60 school locations, the company is now Germany's largest trans-regional driving school chain.

In order to increase the value chain coverage and to also meet the future demand for driving instructors, 123fahrschule acquired the driving instructor training company FahrerWerk GmbH in December 2021.

Business structure

The company operates a holding structure where 123fahrschule GmbH acts as a strategic management holding company performing tasks across the Group. Further, the group includes 123invest eins GmbH – the shelf company for investment, the FahrerWerk GmbH that covers all business related to driving instructor training, and 123fahrschule Bildung GmbH which represent the driving instructor training centers, the main operating business is conducted by the 12 regional operating companies which entail the driving schools.

Organizational structure



Source: NuWays Research

Business model

123fahrschule's revenues are composed of three segments:

- **Private customers** (76% of sales) comprises the nationwide training of private customers mainly in the driving license classes A, B and BE at the company's 60 driving school locations.

- **Professional driver education & education vouchers** (11% of sales) covers the training of professional drivers and customers whose vocational training and further training is supported by the employment agency with education vouchers.
- **Driving instructor training** (13% of sales) which is conducted at the training facilities in Berlin, Erkrath (Düsseldorf), Recklinghausen and Wesel.

Management Board

Boris Polenske – Chief Executive Officer

Boris Polenske studied business administration in Bochum. Already at the age of 16, he founded his first company "Klicksoft", a software development company for the publishing and office industry. A few years later he founded the company "Klick-Tel", which he also successfully took public. Polenske then achieved a successful exit with the company, which was acquired by Telegate AG (now 11880 Internet Services AG). In 2016, he founded 123fahrschule and is responsible as CEO and board member for the areas of strategy, IT, HR and finance. In addition, he is taking the lead in driving forward the digitalization of the business model.

Supervisory Board

Stefan Petter - Chairman

Stefan Petter studied business administration at Humboldt University in Berlin and graduated in 2000 with a degree in business administration. Mr. Petter has many years of experience in the investment business as well as in transaction and SME consulting. He began his professional career in 2001 as an audit assistant and later consultant at RölfsPartner, a medium-sized auditing and consulting firm. There he accompanied various corporate transactions as well as diverse consulting and restructuring projects. In 2008, Stefan Petter joined Media Ventures GmbH. He worked for the medium-sized investment company with a broad investment portfolio as head of department for controlling and corporate development and later as authorized signatory. Since February 2018, Stefan Petter has been Commercial Managing Director of Media Ventures GmbH.

Rudolf Rizzolli – Deputy Chairman

Mr. Rizzolli studied business administration at University Luigi Bocconi in Milan. Afterwards he started his professional career at BCG, followed by positions as CEO at Kamps Holding GmbH, Hülpert Mobility and Sixt Leasing. Currently he is the CEO of MeinAuto Group AG.

Dr. Bert Brinkhaus

Dr. Brinkhaus went to law school at the University of Münster where he graduated with a PhD in Law in 1996. Afterwards he held several positions as an Attorney as well as assistant to the CEO at KAEFER Group. He currently acts as Managing Director for EnjoyVenture Management GmbH, a German based high-tech VC investor.

Dr. Heinrich Zetlmayer

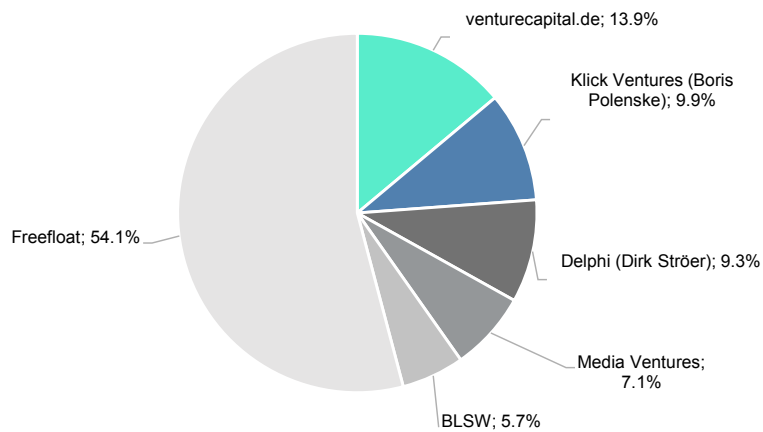
Heinrich Zetlmayer is the founder, CEO and managing partner of BVV. His journey with BVV started at the launch of Lykke Corporation; a global trading platform based on blockchain technology. He has a unique wealth of experience as the previous Vice President of IBM, Co-CEO of ESL, and an active member of the board in Lykke.

123fahrschule SE

Full note / Initiation - 17.10.2023

Shareholder structure

The shareholder structure of 123fahrschule clearly displays the early VC involvements. The largest shareholder is venturecapital.de, holding 13.9% of shares. Further shareholders are Klick Ventures (Boris Polenske) (9.9%), the investment vehicle of CEO Polenske, Dirk Ströer (9.3%), Media Ventures (7.1%) and BLSW (5.7%). The remaining 54.1% is freefloat.



Source: NuWays Research, Company data

Investment Risks

As with any investment, there are certain risks associated with investing in 123fahrschule. The key investment risks, in our view, include:

- **Competition:** If some of the other large players in the industry decided to opt for a similar approach like 123fahrschule, a rising price competition could weigh on margin development.
- **Liquidity:** Should the Supervisory Board not agree with managements intention to resolve the upcoming capital increase, liquidity could become an issue for 123fahrschule.
- **Market risk:** One risk factor is the development of the global economy, which will have an effect on the development of 123fahrschule. A significant deterioration of the global economy hence could have negative implications on the demand for driving licenses.
- **Share price volatility:** Disruptions on the capital market could come with notable share price movements, which can be unrelated to the operational performance of the company. Limited liquidity can also cause additional volatility during eventful times.

Financials

Profit and loss (EUR m)	2020	2021	2022	2023e	2024e	2025e
Net sales	4.3	7.8	16.7	19.9	22.8	28.3
<i>Sales growth</i>	47.1%	81.8%	114.8%	19.6%	14.5%	24.0%
Increase/decrease in finished goods and work-in-process	0.0	0.0	0.1	0.2	0.2	0.2
Total sales	4.3	7.8	16.8	20.1	23.0	28.6
Other operating income	0.2	0.3	1.1	0.2	0.2	0.3
Material expenses	0.0	0.0	0.0	0.0	0.0	0.0
Personnel expenses	3.6	6.2	12.1	12.1	13.9	16.5
Other operating expenses	3.1	5.6	8.4	8.8	9.4	10.2
Total operating expenses	6.4	11.6	19.5	20.8	23.1	26.4
EBITDA	-2.2	-3.8	-2.7	-0.7	-0.0	2.2
Depreciation	0.0	0.1	0.0	0.9	0.9	0.9
EBITA	-2.2	-3.9	-2.7	-1.6	-0.9	1.2
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.7	1.8	3.0	1.7	1.8	2.2
Impairment charges	0.0	0.0	0.0	0.0	0.0	0.0
EBIT (inc revaluation net)	-2.9	-5.7	-5.6	-3.2	-2.8	-0.9
Interest income	0.0	0.0	0.0	0.0	0.0	0.0
Interest expenses	0.0	0.0	0.0	0.1	0.1	0.1
Investment income	0.0	0.0	0.0	0.0	0.0	0.0
Financial result	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1
Recurring pretax income from continuing operations	-2.9	-5.7	-5.6	-3.3	-2.9	-1.1
Extraordinary income/loss	0.0	0.0	0.0	0.0	0.0	0.0
Earnings before taxes	-2.9	-5.7	-5.6	-3.3	-2.9	-1.1
Income tax expense	-0.9	-1.3	-1.4	-0.8	-0.7	-0.3
Net income from continuing operations	-2.0	-4.5	-4.4	-2.5	-2.2	-0.8
Income from discontinued operations (net of tax)	0.0	0.0	0.0	0.0	0.0	0.0
Net income	-2.0	-4.5	-4.4	-2.5	-2.2	-0.8
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0
Net profit (reported)	-2.0	-4.5	-4.4	-2.5	-2.2	-0.8
Average number of shares	1.3	2.4	3.1	3.3	3.3	3.3
EPS reported	-1.58	-1.85	-1.40	-0.76	-0.66	-0.24

Profit and loss (common size)	2020	2021	2022	2023e	2024e	2025e
Net sales	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
<i>Sales growth</i>	47.1%	81.8%	114.8%	19.6%	14.5%	24.0%
Increase/decrease in finished goods and work-in-process	0.0%	0.0%	0.9%	0.9%	0.9%	0.9%
Total sales	100.0%	100.0%	100.9%	100.9%	100.9%	100.9%
Other operating income	5.8%	4.4%	6.5%	1.0%	1.0%	1.0%
Material expenses	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%
Personnel expenses	84.3%	80.5%	72.8%	60.8%	60.7%	58.2%
Other operating expenses	72.2%	72.7%	50.4%	44.4%	41.3%	36.1%
Total operating expenses	150.9%	148.9%	116.9%	104.2%	101.0%	93.3%
EBITDA	-50.9%	-48.9%	-16.0%	-3.3%	-0.2%	7.6%
Depreciation	0.0%	1.9%	0.0%	4.5%	4.0%	3.2%
EBITA	-50.9%	-50.7%	-16.0%	-7.8%	-4.2%	4.4%
Amortisation of goodwill	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Amortisation of intangible assets	16.0%	23.2%	17.8%	8.4%	8.1%	7.6%
Impairment charges	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
EBIT (inc revaluation net)	-66.9%	-73.9%	-33.8%	-16.2%	-12.2%	-3.2%
Interest income	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest expenses	0.9%	0.1%	0.0%	0.6%	0.6%	0.5%
Investment income	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Financial result	neg.	neg.	neg.	neg.	neg.	neg.
Recurring pretax income from continuing operations	-67.9%	-74.1%	-33.9%	-16.8%	-12.8%	-3.7%
Extraordinary income/loss	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Earnings before taxes	-67.9%	-74.1%	-33.9%	-16.8%	-12.8%	-3.7%
Tax rate	31.1%	22.5%	24.0%	25.0%	25.0%	25.0%
Net income from continuing operations	-46.8%	-57.8%	-26.1%	-12.6%	-9.6%	-2.8%
Income from discontinued operations (net of tax)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net income	-46.8%	-57.8%	-26.1%	-12.6%	-9.6%	-2.8%
Minority interest	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net profit (reported)	-46.8%	-57.8%	-26.1%	-12.6%	-9.6%	-2.8%

Source: Company data, NuWays

Balance sheet (EUR m)	2020	2021	2022	2023e	2024e	2025e
Intangible assets	9.5	9.2	10.9	12.1	11.4	10.7
Property, plant and equipment	0.9	1.5	4.5	4.6	4.6	4.6
Financial assets	0.0	0.0	0.0	0.0	0.0	0.0
FIXED ASSETS	10.3	10.8	15.4	16.7	16.0	15.3
Inventories	0.0	0.0	0.0	0.0	0.0	0.0
Accounts receivable	0.4	0.5	3.5	4.1	4.4	5.0
Other assets and short-term financial assets	0.6	1.8	2.3	2.3	2.3	2.3
Liquid assets	0.0	3.2	0.3	1.5	1.1	1.8
Deferred taxes	0.3	1.6	3.0	3.0	3.0	3.0
Deferred charges and prepaid expenses	0.1	0.0	0.2	0.2	0.2	0.2
CURRENT ASSETS	1.4	7.1	9.4	11.1	10.9	12.4
TOTAL ASSETS	11.7	17.9	24.8	27.8	26.9	27.7

SHAREHOLDERS EQUITY	7.9	15.8	16.8	16.5	15.4	15.7
MINORITY INTEREST	0.0	0.0	0.0	0.0	0.0	0.0
Provisions for pensions and similar obligations	0.0	0.0	0.0	0.0	0.0	0.0
Other provisions and accrued liabilities	0.4	0.3	0.4	0.5	0.6	0.8
Short-term liabilities to banks	0.0	0.1	2.2	2.7	2.7	2.7
Accounts payable	1.0	0.1	1.1	1.1	1.3	1.6
Advance payments received on orders	1.2	1.0	1.3	1.6	1.6	1.6
Other liabilities (incl. from lease and rental contracts)	0.0	0.0	0.0	0.0	0.0	0.0
Deferred taxes	0.0	0.0	0.0	2.4	2.4	2.4
Deferred income	0.0	0.0	0.9	0.9	0.9	0.9
CURRENT LIABILITIES	2.2	1.1	2.4	2.7	2.9	3.2
TOTAL LIABILITIES AND SHAREHOLDERS EQUITY	11.7	17.9	24.8	27.8	26.9	27.7

Balance sheet (common size)	2020	2021	2022	2023e	2024e	2025e
Intangible assets	80.7%	51.5%	44.1%	43.6%	42.4%	38.6%
Property, plant and equipment	7.4%	8.6%	18.0%	16.4%	16.9%	16.8%
Financial assets	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
FIXED ASSETS	88.1%	60.2%	62.1%	60.0%	59.4%	55.3%
Inventories	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Accounts receivable	3.5%	3.0%	14.3%	14.7%	16.3%	18.2%
Other assets and short-term financial assets	5.0%	9.8%	9.5%	8.5%	8.7%	8.5%
Liquid assets	0.0%	17.7%	1.4%	5.4%	3.9%	6.5%
Deferred taxes	2.9%	9.1%	12.1%	10.8%	11.1%	10.8%
Deferred charges and prepaid expenses	0.5%	0.2%	0.7%	0.6%	0.6%	0.6%
CURRENT ASSETS	11.9%	39.8%	37.9%	40.0%	40.6%	44.7%
TOTAL ASSETS	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SHAREHOLDERS EQUITY	67.1%	88.2%	68.0%	59.5%	57.3%	56.8%
MINORITY INTEREST	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Provisions for pensions and similar obligations	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other provisions and accrued liabilities	3.3%	1.7%	1.8%	1.9%	2.3%	2.7%
Short-term liabilities to banks	0.0%	0.4%	8.7%	9.7%	10.0%	9.7%
Accounts payable	8.5%	0.8%	4.5%	3.9%	4.6%	5.6%
Advance payments received on orders	10.5%	5.5%	5.2%	5.9%	6.1%	6.0%
Other liabilities (incl. from lease and rental contracts)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Deferred taxes	0.0%	0.0%	0.0%	8.6%	8.9%	8.7%
Deferred income	0.0%	0.0%	3.6%	3.2%	3.3%	3.3%
CURRENT LIABILITIES	19.0%	6.3%	9.7%	9.9%	10.8%	11.6%
TOTAL LIABILITIES AND SHAREHOLDERS EQUITY	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Company data, NuWays

Cash flow statement (EUR m)	2020	2021	2022	2023e	2024e	2025e
Net profit/loss	-1.2	-4.5	-4.4	-2.5	-2.2	-0.8
Depreciation of fixed assets (incl. leases)	0.0	0.1	0.0	0.9	0.9	0.9
Amortisation of goodwill & intangible assets	0.5	1.8	3.0	1.7	1.8	2.2
Others	0.0	0.0	0.0	0.0	0.0	0.0
Cash flow from operating activities	1.8	-7.0	-2.8	-0.3	0.7	2.2
Increase/decrease in inventory	0.0	0.1	0.0	0.0	0.0	0.0
Increase/decrease in accounts receivable	0.6	-1.3	-3.7	-0.6	-0.3	-0.7
Increase/decrease in accounts payable	0.6	-1.8	3.6	-0.0	0.2	0.3
Increase/decrease in other working capital positions	0.0	-0.1	-0.1	1.0	1.1	1.1
Increase/decrease in working capital	1.2	-3.1	-0.2	0.4	1.0	0.7
Cash flow from operating activities	1.8	-7.0	-2.8	0.5	1.6	3.2
CAPEX	0.0	0.0	0.0	2.2	2.1	2.4
Payments for acquisitions	10.8	2.3	7.8	0.0	0.0	0.0
Financial investments	0.0	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	0.0	0.0	0.2	0.0	0.0	0.0
Cash flow from investing activities	-10.8	-2.3	-7.6	-2.2	-2.1	-2.4
Cash flow before financing	-9.0	-9.3	-10.3	-1.7	-0.4	0.8
Increase/decrease in debt position	0.0	0.0	2.1	0.5	0.0	0.0
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	8.8	12.4	5.4	2.3	0.0	0.0
Dividends paid	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.0
Effects of exchange rate changes on cash	-0.0	0.0	0.0	0.0	0.0	0.0
Cash flow from financing activities	8.8	12.4	7.5	2.8	0.0	0.0
Increase/decrease in liquid assets	-0.2	3.1	-2.8	1.2	-0.4	0.8
Liquid assets at end of period	0.0	3.2	0.3	1.5	1.1	1.8

Key ratios (EUR m)	2020	2021	2022	2023e	2024e	2025e
P&L growth analysis						
Sales growth	47.1%	81.8%	114.8%	19.6%	14.5%	24.0%
EBITDA growth	-30.0%	74.7%	-29.6%	-75.2%	-94.4%	-5936.6%
EBIT growth	-13.5%	100.8%	-1.6%	-42.9%	-13.5%	-67.0%
EPS growth	-90.6%	17.4%	-24.4%	-46.1%	-12.5%	-63.8%
Efficiency						
Sales per employee	426.7	310.4	476.2	352.8	298.4	323.5
EBITDA per employee	-217.1	-151.7	-76.3	-11.7	-0.5	24.6
No. employees (average)	10	25	35	56	76	88
Balance sheet analysis						
Avg. working capital / sales	30.4%	-15.5%	1.6%	6.2%	6.2%	5.9%
Inventory turnover (sales/inventory)	n.a.	n.a.	n.a.	4.5	5.0	5.5
Accounts receivable turnover	35.2	24.9	77.3	75.0	70.0	65.0
Accounts payable turnover	84.8	6.7	24.5	20.0	20.0	20.0
Cash flow analysis						
Free cash flow	1.8	-7.0	-2.8	-1.7	-0.4	0.8
Free cash flow/sales	42.5%	-89.8%	-16.6%	-8.3%	-1.9%	2.7%
FCF / net profit	neg.	155.4%	63.6%	66.1%	20.2%	neg.
Capex / sales	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Solvency						
Net debt	1.2	-2.5	3.8	3.2	3.6	2.9
Net Debt/EBITDA	-0.6	0.0	-1.4	-4.8	-98.2	1.3
Dividend payout ratio	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest paid / avg. debt	6.0%	1.2%	0.1%	4.7%	3.2%	3.0%
Returns						
ROCE	-31.0%	-43.7%	-29.5%	-14.9%	-13.1%	-4.4%
ROE	-25.4%	-28.4%	-25.9%	-15.2%	-14.2%	-5.0%
Adjusted FCF yield	-19.4%	-41.7%	-9.3%	-4.5%	-1.5%	10.5%
Dividend yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
DPS	0.0	0.0	0.0	0.0	0.0	0.0
EPS reported	-1.58	-1.85	-1.40	-0.76	-0.66	-0.24
Average number of shares	1.3	2.4	3.1	3.3	3.3	3.3
Valuation ratios						
P/BV	0.4	0.4	0.5	0.5	0.6	0.6
EV/sales	1.2	0.6	0.7	0.6	0.6	0.4
EV/EBITDA	-2.4	-1.3	-4.6	-18.4	-343.2	5.5
EV/EBIT	-1.8	-0.9	-2.2	-3.8	-4.5	-13.0

Source: Company data, NuWays

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Conflicts of interest that existed at the time when this research report was published:

Company	Disclosures
123fahrschule SE	2,8

Historical target price and rating changes for 123fahrschule SE

Company	Date	Analyst	Rating	Target Price	Close
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According to Article 4(1) No. i of the delegated regulation 2016/958 supplementing regulation 596/2014 of the European Parliament, further information regarding investment recommendations of the last 12 months are published under:

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