

8 February 2021

**123fahrschule SE**

**Rating** Buy  
**Share price (EUR)** 5.60  
**Target price (EUR)** 24.80

Bloomberg LTQ GR  
Sector Service

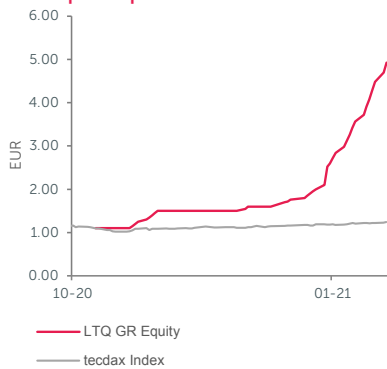
**Share data**

Shares out (m) 1.3  
Daily volume shs (m) n.a.  
Free float (%) 7.1  
Market cap (EUR m) 10  
DPS (EUR) 0.00  
Dividend yield (%) 0.0  
Payout ratio (%) 0.0

**Performance**

ytd (%) 95.8  
12 months (%) n.a.  
12 months rel. (%) n.a.  
Index SDAX

**Share price performance**



Source: Bloomberg

**Next triggers**

31.03.2021: FY2020 results

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# Unique play on the high-margin driving school industry consolidation

Our investment case is based on the unique characteristic features of the driving school market. Driving school owners have a big problem in finding a successor / buyer for their business as the average driving instructor is 54 years old. Furthermore, most driving schools exhibit only a minimum level of digitalization. This is beneficial for 123fahrschule, which grows by acquiring driving schools from retiring owners for extremely low prices and significantly increases the margins through digitalization. Hence, the company can grow very cost-effective, fast and profitable since even without digitalization the average driving school already has a surprisingly high margin. Therefore, the investment is quickly amortized and 123fahrschule should be able to finance its growth thereafter through its operating cash flow. On top of that, those acquisitions are mostly real asset deals that do not inflate goodwill. Some larger strategic takeovers are possible. We make a high conviction call and initiate 123fahrschule with a Buy rating and a DCF-based target price of EUR 24.80.

**Scalability potential**

123fahrschule is not yet profitable as they are just at the beginning of upscaling their business. Right now, the fixed costs are relatively high compared to the current total revenues, which is mainly due to the costs associated with the holding company. However, those are expected to remain relatively stable, which leads to a high scalability and strong growing margins once those costs are fully covered. We expect the business to grow by a CAGR 2020e-2024e of 46.3% and a positive net income as per 2023. Also operating cash flow should be sufficient to cover the acquisition related capital expenditures. Keep in mind, our growth rates look high, but we are coming from a very low absolute revenue level from which the company can upscale pretty fast.

**Technological edge increases efficiencies**

The company has digitized and automated many processes that previously involved service staff to cut down on administrative personnel. The company thereby reaches a much higher operational efficiency than most driving schools. In addition to the administrative advantages, theory sessions and driving lessons can be scheduled with 123fahrschule's online system. Even registration with the driving school is done online. Additionally, due to the company's far superior online marketing strategy, new customers can be acquired very cost effective. This greatly reduces the back office workload and increases the company's scalability and margin.

**Origin of value creation**

The value creation primarily stems from high margin growth for which 123fahrschule pays surprisingly little due to the age distribution of driving instructors. On top, the acquired revenues have a high margin as the newly added driving instructors should be already fully utilized with no start-up period.

Key figures		2018	2019	2020e	2021e	2022e
Sales	EUR m	1	3	4	6	10
EBITDA	EUR m	-2	-3	-3	-2	0
EBIT	EUR m	-3	-3	-3	-2	-1
EPS	EUR	-2.12	-2.85	-2.14	-1.37	-0.42
Sales growth	%	n.a.	108.0	27.6	51.9	69.9
EBITDA margin	%	-175.0	-106.9	-68.0	-37.4	-3.5
EBIT margin	%	-186.4	-114.7	-76.0	-43.2	-7.5
Net margin	%	-192.0	-124.2	-76.0	-44.2	-8.0
EV/Sales	ratio	2.97	0.84	1.26	1.23	0.72
P/E	ratio	-2.6	-2.0	-2.6	-4.1	-13.3

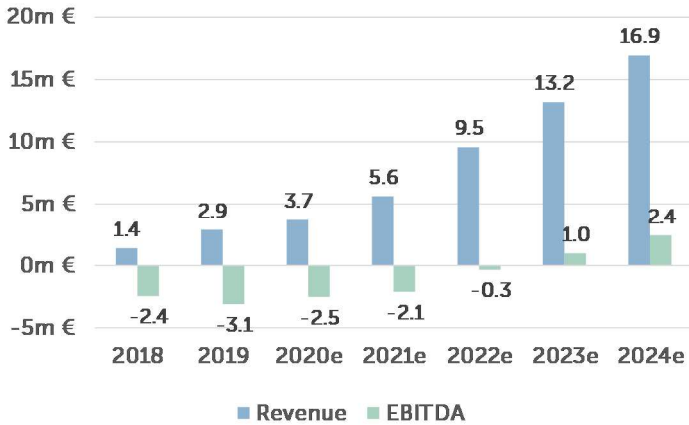
Source: Bloomberg, Company data, Quirin Privatbank estimates

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## Investment case in charts

### We model consistent growth and improving margins

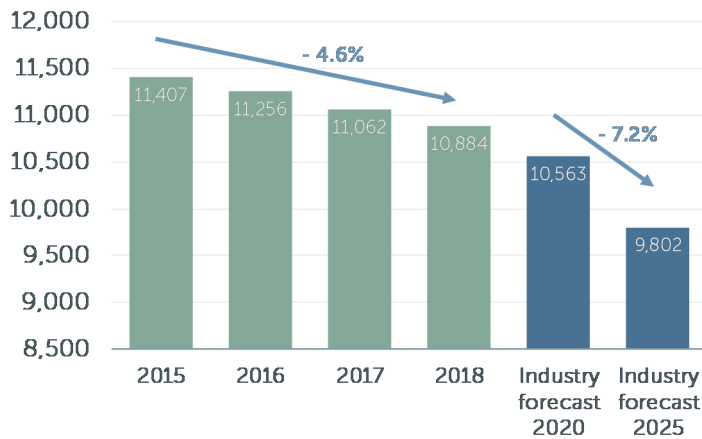


### Unique age structure of the driving school market...

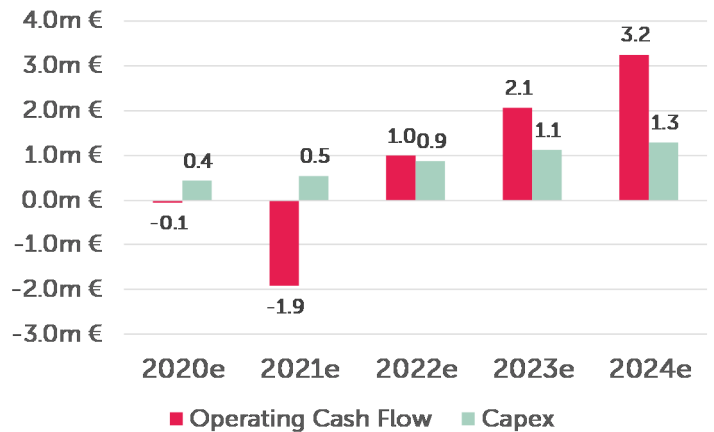
... allows 123fahrschule to make inexpensive acquisitions



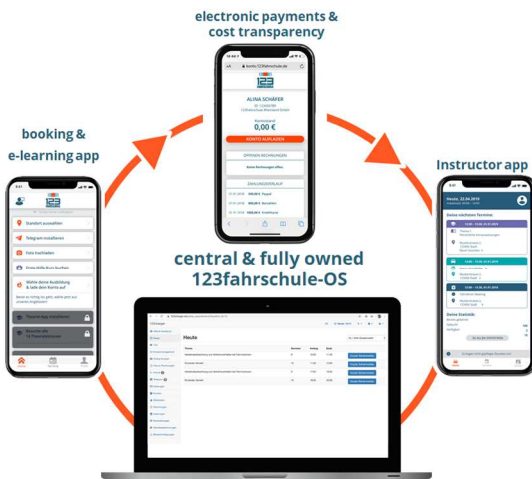
### Estimated number of driving schools sharply declining, which means less competition for 123fahrschule



### Operating cash flow outgrows capex over the next 3 years



### 123fahrschule proprietary operating system: E-learning app, instructor app, payments via app increases efficiencies



### Positive client ratings & website visitors developing very strongly - implicate already a high level of awareness

#### Website visitors of 123fahrschule.de

- Over 2.2 million website visitors in 2019
- Over 2 million website visitors alone from January to October in 2020.



4,4 ★★★★★  
882 Bewertungen aus 7 Quellen

Source: 123fahrschule SE, Quirin Privatbank AG

## Executive summary of investment case

**We estimate revenues to grow by a CAGR 2020-2024 of 46.3% to EUR 16.9m in 2024.**

**There are many acquisition targets, as many driving school owners are about to retire due to their high average age and are therefore looking for a successor.**

**The business is actually pretty scalable. The larger the business becomes, the less significant will be the overhead costs.**

**The upscaling through acquisitions should run relatively smoothly.**

**With the acquisition strategy, the new location immediately has a revenue stream and margins are improved through digitalization.**

### Revenue growth potential

We estimate revenues to grow by a CAGR 2020-2024 of 46.3% to EUR 16.9m in 2024. This growth is mainly driven by an increasing number of employed driving instructors; starting from an estimated average number of 37 FTE instructors in 2020, they are growing by a CAGR 2020-2024 of 33.4% to 127 in 2024. Keep in mind, our growth rates look high, but we are coming from a very low absolute revenue level from which the company can upscale pretty fast and finance itself through its operating cash flow.

It might even be possible that 123fahrschule is growing much faster, especially by acquiring significantly larger driving schools and hence taking on more driving instructors at once than we anticipated. Our valuation reacts rather sensitive to just a few additional driving instructors (see next page for scenario analysis) as we are coming from a very low absolute basis (just an average of 37 FTE driving instructors in 2020).

### Inexpensive acquisition targets

Those new driving instructors are added by acquiring smaller driving schools. The potential for this is high, as many driving school owners are about to retire due to their high average age (53.8 years) and are therefore looking for a successor. But for the same reason, those are also not easily found. Hence, 123fahrschule should find enough acquisition targets for relatively low prices. Some driving schools already had to be closed or sold at extremely low prices. In our view, this problem will intensify in the coming years – especially when the baby boomer generation will retire. Therefore, the prices for acquiring profitable driving schools are rather low.

The high average age of driving instructors might be a problem for smaller driving schools but in our view, 123fahrschule should still find young driving instructors by offering them an attractive compensation, together with modern and digital tools and additional benefits. This will somewhat affect their margin but this should be more than offset by their overall strong scalability.

### High scalability potential

Driving instructors when considered isolated, have a rather high profit margin. We calculate with monthly personnel expenses per FTE (full time equivalent) driving instructor of EUR 5,700 and about EUR 1,500 of monthly vehicle costs. Compared to perspective revenues per FTE driving instructor of EUR 12,000, this results in a margin of about 40% when not taking into account the overhead costs such as administrative costs, marketing and so on. Of course due to the scarcity of driving instructors, we model the personnel expenses to increase by 3% per year. But this should be offset by the increasing prices for driving licenses we observed over the past years. However, this shows that the business is actually pretty scalable. The larger the business becomes, the less significant will be the overhead costs and the margin is more and more approaching a level close below the 40% mark. As for 123fahrschule, there are relatively high fixed costs that are associated with the holding company, which manages the whole operations. Those fixed costs are relatively high at the moment when compared to the current revenues; however, those are expected to remain relatively stable, which leads to a high scalability and strong growing margins once those costs are fully covered. We expect a positive net income as per 2023. The upscaling through acquisitions should run relatively smoothly; hence, it is just a matter of time until those fixed costs are covered and 123fahrschule becomes profitable. According to our estimates, EBIT becomes positive the first time in 2023 with an EBIT margin of 4%, which quickly improves to about 13% in 2025, 17.5% in 2027 and 22% in 2029.

### Growth through acquisitions makes sense

We like the strategy to acquire smaller, already existing driving schools – 123fahrschule is entering the local market not as a new supplier of driving education but rather takes over an existing business, in most cases. This way, one competitor is already eliminated and the market share for 123fahrschule should be higher overall. Moreover, the new location immediately has a revenue stream and is starting with existing driving instructors, which are rather a scarcity. Our growth expectations can be exceeded in case 123fahrschule can successfully realize some larger strategic takeovers.

*The digital aspect is a major distinguishing feature, which should make 123fahrschule in most regions the preferred driving school and allows for superior profit margins*

*Overall, the impact of covid-19 was rather limited in 2020 and the company guidance for 2020 should still hold.*

*The possibility of online driving theory lessons substantially increases the efficiency. This could also become another competitive advantage over smaller, local driving schools.*

*The value creation primarily stems from high margin growth for which they pay surprisingly little.*

*The upside is huge if the company were able to hire just a few additional driving instructors per year compared to our estimates.*

### Digital aspect as major distinguishing feature

The company digitized and automated many processes to reduce back office workload, which leads to much lower personnel costs. On top, we believe this level of digitalization is a strong argument for potential students to choose 123fahrschule. Signing up online reduces the hurdle to start compared to going to the school's premises, waiting and talking to the administrative staff. Also online learning appears to be extremely convenient and students have full cost control and transparency with the app. In our view, this is a major distinguishing feature, which should make 123fahrschule in most regions the preferred driving school. Furthermore, due to the online marketing concept of 123fahrschule, the catchment area of each driving school location is significantly larger than the one of traditional driving schools and is therefore able to significantly cut down costs on premises.

### Impact of the covid-19 pandemic

Driving schools in North Rhine-Westphalia had to close from 20.03.2020. However, they were already reopened from 27.04.2020. Until December, operations were running relatively normally. From 16.12.2020 up to 14.02.2021, driving lessons are only permitted for job-related training and are otherwise prohibited. As of 11.01.2021, another exemption has been granted to learner drivers who have already completed more than half of the mandatory training sessions. These are allowed to complete their training including the exam. During practical driving lessons, there is an obligation to wear a mask with FFP2 protection standard. In addition, online theory lessons are permitted in North Rhine-Westphalia at least until 31.03.2021. In Berlin, driving lessons will no longer be permitted from 11.01.2021 until 14.02.2021. So overall, the impact of covid-19 was rather limited in 2020 and the company guidance for 2020 should still hold. What the impact will be in 2021 is subject to very high uncertainties, especially because of the new mutations. However, vaccination should make a positive contribution, even if it is slow. It remains to be seen what the regulations will look like after 14.02.2021. However, we expect relatively normal operations for the summer months.

### Online driving theory lessons would have positive implications for the margin

A major positive side effect of the pandemic is the approval of online driving theory lessons in North Rhine-Westphalia and 9 other federal states. Even though it is not certain just yet if the permit stays in place after the pandemic, the likelihood is extremely high and political players seem to be open-minded towards a permanent permit, for which 123fahrschule is actively lobbying. If the permit becomes permanent, there will be no multiple, large, centrally located and costly facilities needed anymore, leading to significant cost reductions. One location per metropolitan area would be sufficient to reach all students in the region thanks to online sales & marketing and online theory lessons. Also, this could become another competitive advantage over smaller, local driving schools, which might not have the resources to offer online theory sessions.

### DCF Valuation

We have derived our target price for 123fahrschule SE from our DCF model. With a WACC of 9.50% (resulting from a risk free rate of 2.0%, market premium of 5% and a high beta of 1.5), a mid-term revenue CAGR 2020-2024 of 46.3%, fading to a perpetual growth rate of 0% and a sustainable long-term EBIT margin of 22%, our DCF model derives a fair value of EUR 24.80 per share. Hence, we initiate 123fahrschule with a Buy recommendation. The value creation primarily stems from high margin growth for which they pay surprisingly little due to the driving school market environment with its unique age distribution.

### Scenario analysis

The whole success of 123fahrschule's business case depends on the number of driving instructors they will be able to hire. For our target price, we assume on average 21 new driving instructors per year until 2024, which equals a CAGR 2020-2024 of 33.4%. If the company were able to hire on average only 5 more driving instructors per year until 2024 (equals on average 26 new driving instructors per year / CAGR 2020-2024 of 38.1%), our fair value increased to EUR 31.50 per share. This shows that the upside potential is huge in case they were able to grow faster than we anticipate. This applies to the downside risk as well. In case they were only able to hire on average 16 driving instructors per year (5 less than we anticipate / CAGR 2020-2024 of 28.1%), our fair value were EUR 18.20 per share. However, we regard this scenario as rather unlikely.

## Company profile of 123fahrschule SE

*Through the ongoing expansion, the business model entails achieving major economies of scale. This is achieved by automating and centralizing most of the administrative tasks.*

*Many processes that previously involved service staff have been digitized. This greatly reduces the back office workload and leads to much lower personnel costs.*

*Online learning appears to be extremely convenient and attractive to students.*

### Business model with superior profit margins

123fahrschule is one of the largest driving school chains with 18 locations and 34 FTE driving instructors as of January 2020. The company mainly serves private customers with a strong focus on B-class (car) education. In 2021, the operations will be enriched by also introducing A-class (motorcycles) in most locations. 123fahrschule also stands out by a modern and digital approach in terms of education as well as in regard to their marketing strategy.

Through the ongoing expansion, the business model entails achieving major economies of scale. This is achieved by automating and centralizing most of the administrative tasks. Thus, 123fahrschule is able to achieve superior profit margins when compared to traditional, smaller driving schools. The company is fully vertically integrated, meaning that the branches and operational units are fully owned and run by 123fahrschule and the holding functions as a service GmbH providing IT, administrative & marketing services.

### 123fahrschule's digital aspect increases efficiencies

The backbone of 123fahrschule's operations is a fully-owned and self-developed operating system which ensures efficiency within the operations (ERP) and a superior customer relationship management (CRM). The company has digitized and automated many processes to cut down on administrative personnel. The company thereby reaches a much higher operational efficiency than most driving schools. With 123fahrschule's own learning app, learner drivers can prepare for the driving test and measure their progress. Students have the opportunity to manage their driving license training entirely online. With the help of a proprietary online system, theory sessions and driving lessons can be scheduled. Even registration with the driving school is done online. Many processes that previously involved service staff have been digitized. This greatly reduces the back office workload and leads to much lower personnel costs. This digital aspect leads to an automated administration, which increases the company's scalability (ratio of students to service personal goes up) and is another reason why we expect 123fahrschule's margins to reach levels above the industry average.

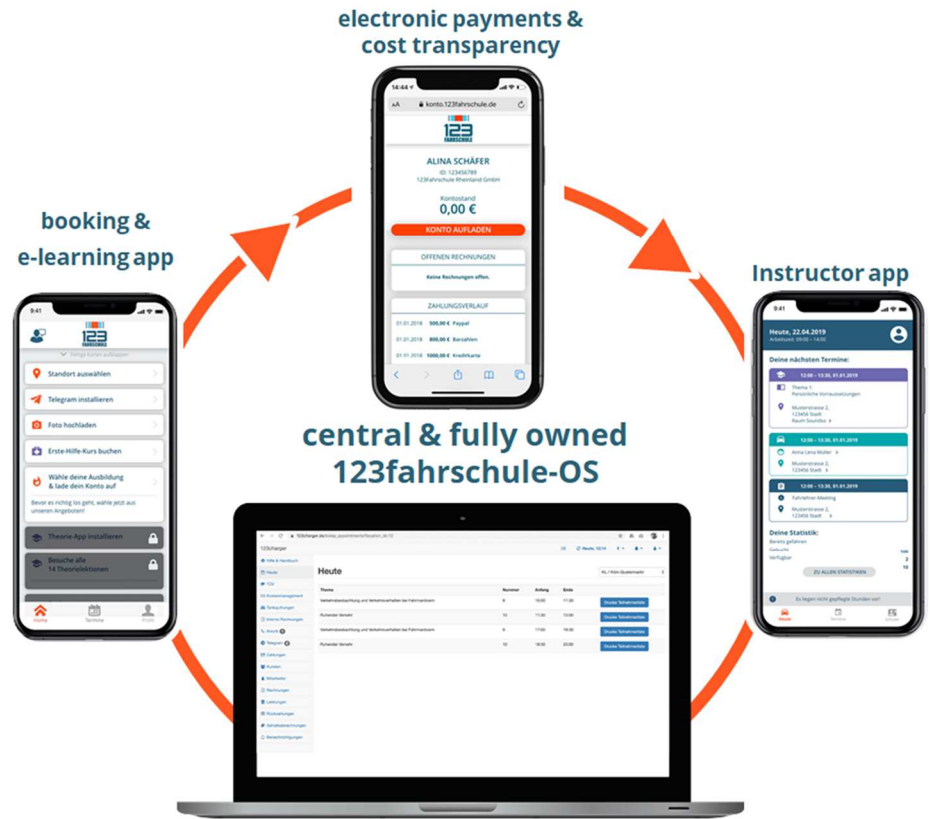
Overview of what has been digitized & automated so far and other measures that increase efficiencies:

- 100% digitized accounts receivable accounting
- 100% digitized payroll accounting
- 60% digital sales & customer support
- In case it will be allowed also after covid-19: 100% online theory sessions leading to significant cost cuts for rental and premises as well as personnel. Daily online theory lessons with up to 50 participants per session vs. traditional schools with daily theory lessons with 5 to 10 participants per session on premise
- Management goal 2021: 70% cost reduction for administration, rental & premises in comparison to competition
- One branch total per city vs. larger traditional driving schools with one branch per urban district
- One customer care employee for multiple locations vs. traditional schools with one full-time office worker per branch

### ...and a strong argument for potential students

On top, we believe this level of digitalization is a strong argument for potential students to choose 123fahrschule. Signing up online reduces the hurdle to start compared to going to the school's premises, waiting and talking to the administrative staff. Also online learning appears to be extremely convenient and students have full cost control and transparency with the app.

**123fahrschule proprietary operating system: Self-explanatory and modern booking & e-learning app, instructor app, payments via app increases efficiencies**



Source: 123fahrschule SE, Quirin Privatbank AG

*The acquired companies will be migrated to the 123fahrschule system and run under one strong national brand.*

**Expansion via M&A**

123fahrschule will expand its operations nationally within the next 5 year. The aim is to offer driving education in all major cities by 2025. To reach this goal, the company will aggressively buy profitable driving schools (with a focus on larger companies and local champions) and open new driving schools where this is not possible. The acquired companies will be migrated to the 123fahrschule system and run under one strong national brand. 123fahrschule already showed its capability of executing M&A activities as four acquisitions were already executed in the last 14 month and successfully integrated into the operations. First acquisitions for 2021 are already lined up and additional ones are in the planning. After an acquisition, the company gradually increases its market share in the individual cities through targeted marketing and continues to grow even organically.

*The company quickly became one of Germany's most innovative, digitized, and modern driving school chains.*

**123fahrschule's strategic vision**

The management's vision for 123fahrschule is to revolutionize the German driving school market by pushing the consolidation and digitizing the industry and thus, setting a new business standard. The management's goal is to dominate the German market by achieving a 5% market share by 2025 (EUR 1.9bn annual market volume). Since 2018, 123fahrschule has picked up tremendous pace in the development towards this goal. The company quickly became one of Germany's most innovative, digitized, and modern driving school chains. Already today, 123fahrschule is among the TOP-3 national players in the market with operations in 18 driving school locations.

*The team has vast experience in IT and (online-) marketing and also included personnel with extensive industry experience in the driving school market.*

*In the following years, 123fahrschule might also venture into the professional driving education segment for truck-drivers and bus-drivers.*

*The revenues of a driving school are characterized by a certain seasonality.*

### Clear differentiation through digital learning approaches

123fahrschule offers state of the art means of education to its customers by enhancing the classical driving education with digital products. These entail a fully interactive booking app through which the whole education is managed and the lessons are booked and paid as well as a novel e-learning system (app) to optimally prepare students for their examination. The young, online-/app-affine customer group demands a modern approach to driving education and appreciates 123fahrschule's point of differentiation.

### Experienced management team

The company's CEO, Boris Polenske, is experienced in leading listed companies to successes in the stock market. As such, he led KlickTel as its CEO and founder to an IPO and eventually a public takeover. In the 123fahrschule-team, he gathered an experienced management team around him. The team has vast experience in IT and (online-) marketing and also included personnel with extensive industry experience in the driving school market (see page 29 for details).

### Online theory lessons thanks to successful lobbying

Thanks to its size and standing in the market, 123fahrschule is able to execute political influence and to lobby towards policy changes that enable the company to further digitize driving education. A major achievement to date is the possibility to give online theory lessons (remote classroom) in NRW and 9 other federal states. This allows for a more efficient education and should result in potential cuts of rental costs. Prior to 123fahrschule's lobbying efforts, all 14 theoretical driving lessons had to be physically attended by the students in classrooms of the driving school.

### Further market potential possible

In the following years, 123fahrschule might also venture into the professional driving education segment for truck-drivers and bus-drivers. That will further enlarge the market potential for the company and increase its reputation.

### Personnel as key factor

A key element in the company's business success are committed, creative, responsible and highly motivated driving instructors. The company's top line growth is highly dependent on an increasing number of FTE driving instructors. Also, students are more likely to be satisfied if their instructors are satisfied. On top of that, there is a scarcity of driving instructors. In order to win them and increase their loyalty, 123fahrschule offers them flexibility, teamwork and top pay. The company also offers numerous other benefits such as permanent employment, 28 vacation days (with a 5-day week), modern teaching media and training rooms, modern company cars – also for private use, free company cell phone, modern equipped workplace with the latest technology, excellent career opportunities, continuous training and regular company events.

### Seasonality of sales

The revenues of a driving school are characterized by a certain seasonality. From November onwards, the number of new registrations and thus the revenues decrease slightly and are around 90% of an average month. Furthermore, typically in December revenues drop by roughly 30% due to company holidays and students being reluctant to start driving in the dark. Another reason for the weaker sales is higher spending on Christmas gifts. Since this leads to a relatively lower budget, many learner drivers do not sign up until January. As a result, and also due to New Year's resolutions, new registrations and sales in January amount to 105% of a normal month. Also, the summer months are generally rather strong. In some regions carnival also reduces sales temporally.



## The German driving school market

*As the practical driving exam is very extensive, the average student takes 30 practical driving lessons (incl. the mandatory ones) before entering the exam (35 in urban areas).*

*There are large regional differences in regard to pricing of driving lessons and sign up fees.*

### Obtaining a driving license in Germany

The class B driving license in Germany, allowing one to drive cars, requires students to attend 14 theoretical driving lessons (90 minutes each) and a minimum of 12 special purpose driving lessons (5 long-distance, 4 highway, 3 night - 45 minutes each) to be legally allowed to take the driving exams. As the practical driving exam is very extensive, the average student takes 30 practical driving lessons (incl. the mandatory ones) before entering the exam (35 in urban areas).

### Driving license costs depend on individual factors and federal state

Average retail costs for obtaining a driving license for the B category (passenger cars up to 3.5 tons) in Germany vary by the number of driving lessons taken, the driving school as well as the federal state. Average fixed costs include a basic amount of EUR 270 for the driving school (also cover the theoretical driving lessons), 12 legally required special training rides ("Sonderfahrten") of EUR 606, fees for the theoretical- and practical examination of EUR 50 and EUR 126, respectively as well as ancillary costs for study material, application at the authority, health certificates etc. of EUR 169. Additional variable costs result from – not mandatory but recommended and in most cases needed – practice rides of approx. EUR 700 and upon failure of the practical examination additional test fees as well as further recommended practice rides. Depending on the federal state, location (usually higher costs in urban areas) and respective driving school the average costs for obtaining a B-class driving license in Germany in 2019 amounted to EUR 1,900 with large national price differences.

### Driving license average costs in Germany, 2019

Service	Average costs	Required	Costs	Change yoy (vs. 2018)
Base amount	€ 270	1	€ 270	2.4%
Special training rides	€ 51	min. 12	€ 606	3.7%
Practice ride	€ 41	individual (estimate: 17h)	∅ € 697	4.7%
Theoretical exam	€ 50	min. 1	€ 50	3.5%
Practical examination	€ 126	min. 1	€ 126	8.2%
Application at the authority/ ancillary	€ 169	1	€ 169	n/a
<b>Total</b>			<b>€ 1,900</b>	

Source: DATAPART Factoring GmbH, as of 07/2019

*Within the last couple of years, the costs for driving lessons have significantly risen due to the demand for lessons being larger than the capacity of the schools (supply) in Germany.*

### Rising prices should further increase profitability

The costs of driving lessons in general vary from region to region. On average a full education costs roughly EUR 1,900 (see graph above and below). Within the last couple of years, the costs for driving lessons have significantly risen due to the demand for lessons being larger than the capacity of the schools (supply) in Germany. This trend has been apparent for quite some time and we see no reason why it should stop – further increasing the profitability of 123fahrschule over time. The timespan students take for their driving education varies greatly. It spans from 3 weeks all the way to 12 month and more with the average taking roughly 6 to 8 months. It can be summarized, that taking your driving education is a significant monetary investment and also of a student's time in Germany. 78% of students take their driving education at ages between 16.5 and 30. Hence, the average customer is rather young and can be assumed to be tech-/app-savvy in general.

### Average costs of driving licenses per region and category

Driving licence category	Average	South	West	North	East
A (motorcycle)	€ 1,656	€ 1,684	€ 1,728	€ 1,581	€ 1,562
B (passenger car)	€ 1,903	€ 1,960	€ 2,018	€ 1,889	€ 1,648
C (HGV/ lorry)	€ 2,817	€ 2,721	€ 3,148	€ 2,630	€ 2,826

Source: MOVING Fahrschul-Klima-Index 2018, incl. total additional costs

*The different rules and regulations vary in the federal states and serve as a barrier to entry, which gives 123fahrschule at least a head start of 24 months.*

*In the future, legislation might also allow for true e-learning in the form of asynchronous video lectures (recorded sessions) being part of the driving education.*

*Given around 11,000 driving schools, this translates into 119 students per driving school per year.*

### Legislation of driving school market as barriers to entry

The legislation of driving school markets is a federal affair in Germany. Therefore, the rules and regulations may vary slightly between the federal states and in some details even between cities. This must be regarded in the company structure of large players in this market. This learning curve is necessary for new players entering the driving school market and provides a competitive advantage for 123fahrschule, which already mastered the different rules and regulations. Hence, the barrier to entry is rather large giving 123fahrschule at least a head start of 24 months.

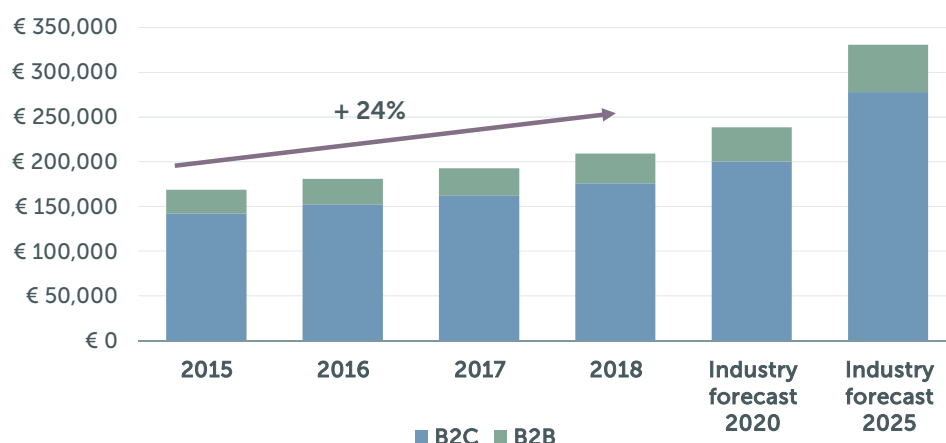
### Online Theory increases profitability & advantage over local players

Historically, in order to take the 14 theory sessions, students needed to visit the classroom on premise at their driving school. Thanks to the intensified lobbying effort of 123fahrschule, aided by the increased urgency for the decision due to Covid-19, 10 out of 16 federal states in Germany now allow online theory. These lessons take place in form of online sessions which are streamed to the students' devices. Hence (online) attendance is still required and lessons are conducted live. This significantly reduces the costs for personnel and premises in regard to the theory education for digitally handy driving school companies like 123fahrschule. In the future, legislation might also allow for true e-learning in the form of asynchronous video lectures (recorded sessions) being part of the driving education. In our view, this should also contribute to an increasing margin at 123fahrschule. Also, this could become another competitive advantage over smaller, local driving schools, which might not have the resources to offer online theory sessions. There is no arguing that an online theory session is much more comfortable and therefore preferable for students than coming to the premises every time. Some might even accept higher prices for this comfort.

### A quantitative look at the German driving school market

The German driving school market is highly fragmented. Today, about 11,000 driving schools serve an estimated 1.3m students per year (109,300 per month), who receive their car driving certificate (class B). Given around 11,000 driving schools, this translates into 119 students per driving school per year. With an average student gross revenue around EUR 2,000 this results in an average revenue per driving school of about EUR 238,000 per year. We estimate the current overall driving school market at roughly EUR 2.6bn, we estimate to grow to about EUR 3.2bn in 2025 and in accordance with the Federal Statistical Office (Destatis).

### Average revenue per driving school (estimates)



Source: Moving international road safety association, Quirin Privatbank

*As per 2015, only 34 driving schools achieve revenues over EUR 2m.*

Further, the average driving school has 3 instructors (some of which statistically speaking work part-time). Also, the vast majority of driving schools have the legal form of sole proprietorship. All in all, the high market fragmentation leaves a surprisingly open white spot in a EUR 2.6bn market. As per 2015, only 34 driving schools achieve revenues over EUR 2m (see graph below). Today, this number should be somewhat higher but still on a rather low level. Hence, the number of driving schools operating nationally as business chain with the target to actively consolidate the market is rather small; thus, 123fahrschule is not facing high competition given the large market.

*Many existing driving schools operate very inefficiently and still largely paper-based.*

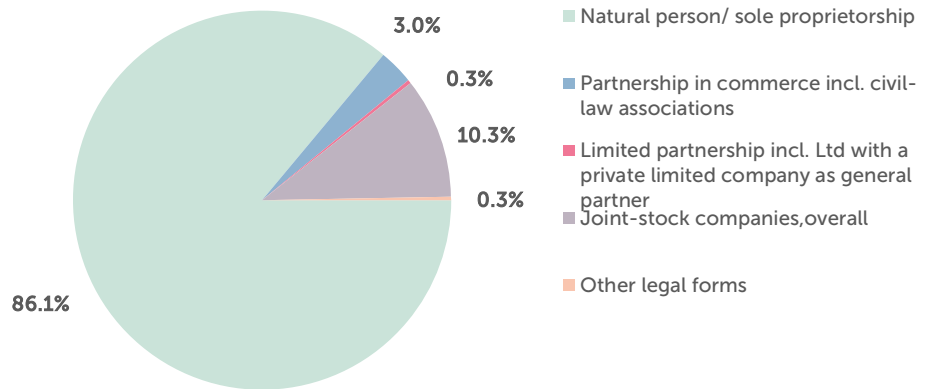
Many existing driving schools operate very inefficiently and still largely paper-based. Most of them have mediocre to bad web presence, do not make use of modern online marketing and communication, and have an antiquated company branding and shop design. Still, they receive profit margins of between 7%-15%, even with HR-heavy administrations.

### Number of driving schools per sales volume (data as per 2015)

Company size by turnover (EUR)	No. of taxable entities	Annual turnover (EUR m)	% Share	
			of number	of turnover
17,500 - 50,000	2,119	73.3m	18.6%	3.8%
50,000 - 100,000	3,405	250.4m	29.9%	13.0%
100,000 - 250,000	4,019	631.0m	35.2%	32.8%
250,000 - 500,000	1,339	456.3m	11.7%	23.7%
500,000 - 1m	401	267.1m	3.5%	13.9%
1m - 2m	90	118.4m	0.8%	6.1%
2m - 5m	26	75.5m	0.2%	3.9%
5m - 10m	8	53.4m	0.1%	2.8%
<b>Sum</b>	<b>11,407</b>	<b>1,925.3m</b>	<b>100%</b>	<b>100%</b>

Source: Statistical Office, Wiesbaden 2017, Umsatzsteuerstatistik 2015

### Distribution of legal forms of driving schools in Germany



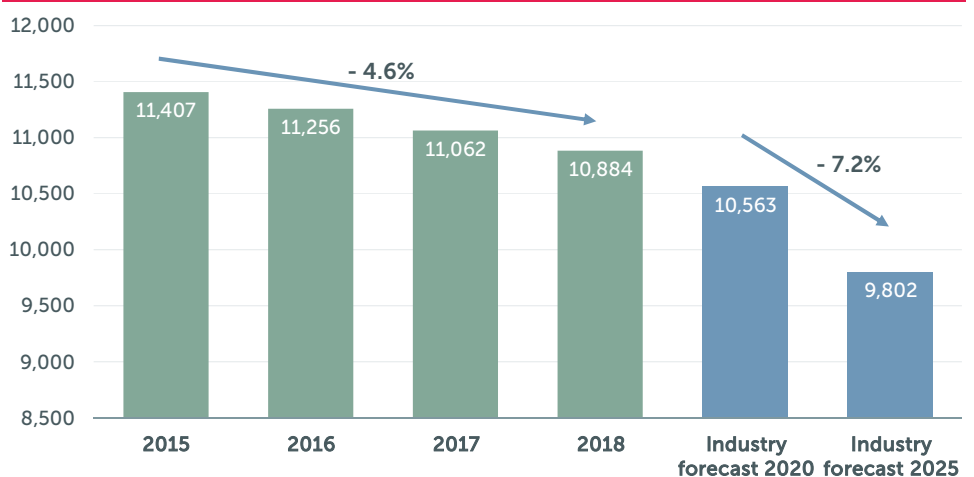
Source: Statistical Office, Wiesbaden 2016

*The overall decline in driving schools is mainly due to a decrease in smaller, local businesses while the number of larger driving schools is growing.*

### Trend towards fewer but larger driving schools in Germany

The overall decline in driving schools is mainly due to a decrease in smaller, local businesses while the number of larger driving schools is growing. According to the International Road Safety Association, from 2009 to 2017 the number of very small driving schools with an annual turnover of up to EUR 50,000 has dropped by approx. 32% while large companies with more than EUR 250,000 turnover increased by approx. 20%. This phenomenon is even stronger in Eastern Germany where small driving schools usually make up the majority unlike Western Germany. We think, this trend towards further consolidation of driving schools in Germany will continue with approx. 9,500 driving schools by 2023e.

### Estimated number of driving schools



Source: Moving Branchenreport 2018, Quirin Privatbank

*Most driving school owners are just before retirement and hence willing to sell their business.*

*Some driving schools already had to be closed or sold at extremely low prices.*

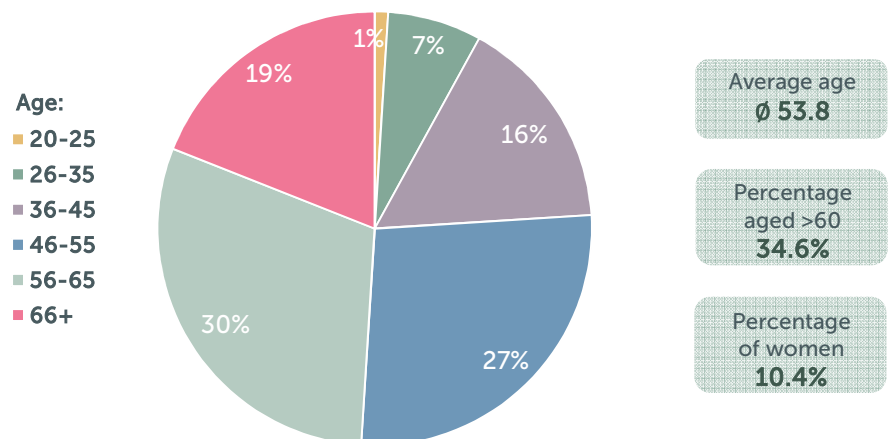
*The takeover of a driving school is quite inexpensive and on average does not cost more than setting up the operations themselves but with the difference of immediate revenue streams.*

### A key factor for the investment case: Successor problems

The average age of driving instructors in Germany is 53.8 years and thus quite high. 34.6% of driving instructors are over 60 years old (see graph below). **Therefore, also most driving school owners are just before retirement and hence willing to sell their business.** However, the shortage of especially younger driving instructors is resulting in a lack of possible successors (see graphs below for "age structure of driving instructors" & "number of driving instructors"). On top, financial difficulties during the covid-19 crisis might have increased the pressure to quickly find a **successor**. Some driving schools already had to be closed or sold at extremely low prices. In our view, this problem will intensify in the coming years – especially when the baby boomer generation will retire. Therefore, the prices for acquiring profitable driving schools are rather low and quite negotiable, which should be very positive for 123fahrschule. The low purchase prices also result from the fact that the cost of setting up a new driving school is not very high, as no expensive tangible assets are required. The takeover of an existing driving school must therefore be financially viable compared to setting up a new one.

Hence, the door is currently wide open for aggressive M&A activities in this market. Combined with the digital approach and capabilities of 123fahrschule, we forecast high growth rates over the next 5 years. The successor problems of driving school owners and their willingness to sell is actually an important key element in our investment case. Due to that, the takeover of a driving school is quite inexpensive and on average does not cost more than setting up the operations themselves but with the difference of immediate revenue streams. Hence, 123fahrschule should be able to scale their operations up massively by spending rather little money for additional revenue. In regard to those acquisitions, one should not think of them as usual M&A deals. Rather, they are mostly asset deals; meaning, 123fahrschule intends to buy the assets of the target and also takes over the employment contracts of the personnel. Therefore, we model those investments through capital expenditures with negative effect on free cash flow. Additionally, goodwill should not be inflated by those asset deals.

### Age structure of driving instructors



Source: Moving Branchenreport 2018, Quirin Privatbank

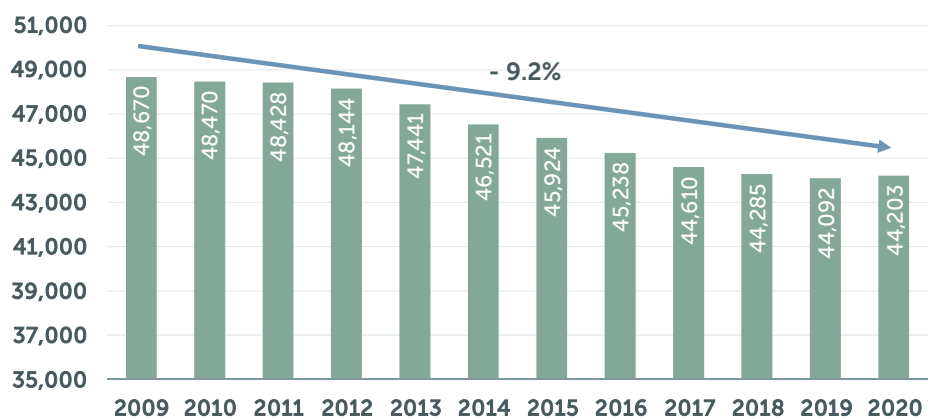
*The number of people having a driving instructor license declined by -9.2% from 48,670 in 2009 to 44,203 in 2020.*

*Overall, we estimate only 26,603 of FTE (full time equivalent) driving instructors.*

### Shortage of driving instructors seen as greatest challenge

The shortage of driving instructors is a key element in this market. The number of people holding a driving instructor license declined by -9.2% from 48,670 in 2009 to 44,203 in 2020 (see graph below). This equals a CAGR 2009-2020 of -0.87%. This trend even intensified since 2012 and picked up the first time in 2020. Almost 40% of driving schools see the shortage of driving instructors in 2018 as a key challenge for the future (MOVING Fahrschul-Klima-Index). This makes it the most frequently cited major challenge and is no wonder when looking at the age structure of the existing driving instructors in the market (see graph above). Likewise, one in three driving schools feels the shortage of driving instructors very strongly in their day-to-day work – especially large and very large driving schools and urban driving schools. This intensifies the willingness to sell their business in many cases. Over half of them state that higher salaries already have to be paid due to the shortage of driving instructors in order to find suitable staff in the first place. More than a third of the driving schools have already suffered losses in revenues. We believe this situation has hardly changed until 2021. Therefore, in order to secure this key element, it is important for 123fahrshule to offer their driving instructors as well as prospective ones very attractive packages with higher than average salaries. We expect their driving instructors' salaries to be above average, as the scarcity of driving instructors is especially high in urban areas, their primary market. However, this should be offset by 123fahrshule's more efficient operations thanks to their high level of digitalization. Additionally, 123fahrshule partners with education centers for new instructor apprentices in order to secure a steady supply of instructors. According to the International Road Safety Association, the number of active driving instructors is far lower – many are still holding their license but are not active anymore. They estimate that there are about 35,500 active driving instructors in 2019. However, only about 11,000 of those are driving school owners, who we expect to work full time. About 17,700 are employed of which we estimate 65% to work full time. Then there are 6,800 driving instructors in minor employment. Overall, we estimate only 26,603 of FTE (full time equivalent) driving instructors.

### Number of people under 75 years holding a driving instructor license



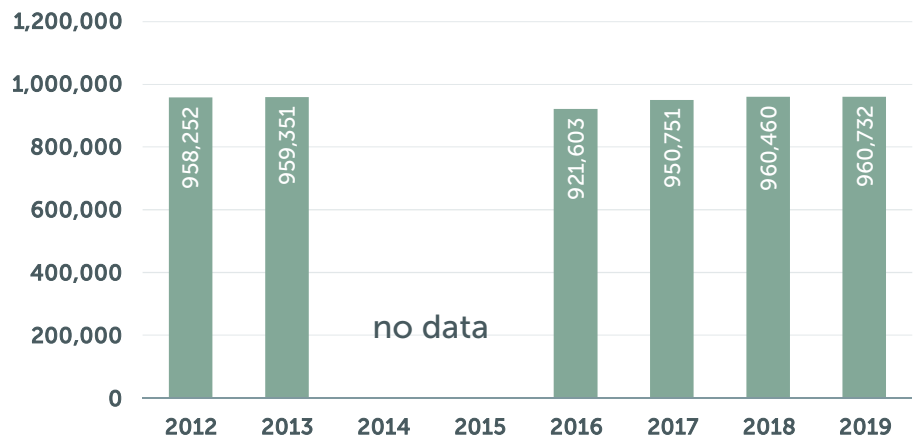
Source: Kraftfahrt-Bundesamt 2017, Moving Branchenreport 2018

*The covid-19 pandemic is shifting the focus from public transport towards private transport again.*

**Number of students (demand) relatively stable**

We believe the demand for driving licenses will remain relatively stable as the data from 2012 onwards indicates. Roughly 1% of the population obtains a driving license per year. In our view, especially in urban areas, car sharing is increasing the attractiveness of a driving license. Moreover, the covid-19 pandemic is shifting the focus from public transport towards private transport again.

**Relatively stable demand: Number of people receiving a driving license for cars**



Source: Statista

**Additional market opportunities**

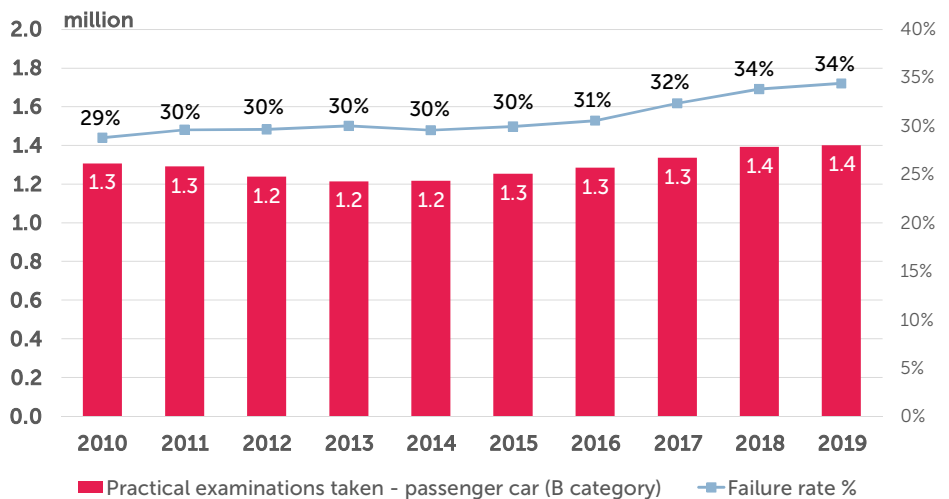
New forms of individual transportation have occurred in the past years and are likely to keep being invented such as e-scooters or e-bikes. With increasing motorization and accident numbers of these vehicles, it is likely that new classes of driving licenses will be required. This might lead to somewhat higher potential revenues.

*In 2019, approx. a total of 1.4m students took practical examinations for their driving permits.*

**Constant annual development of practical examinations**

According to statistical data from the German Federal Motor Transport Authority KBA, in 2019, approx. a total of 1.4m students took practical examinations for their driving permits (including multiple attempts). The average failure rate has increased over recent years to 34.4% in 2019 against on average 30% from 2011 throughout 2016.

**Number of practical examinations taken (B category) with failure rate**



Source: Kraftfahrt-Bundesamt, Flensburg

*For our valuation, we assume about 5.7 new students on average for every FTE (full time equivalent) driving instructor per month.*

*There are about 960,000 students on cars per year, who on average need 30 driving lessons.*

### Validating our estimate for student growth at 123fahrschule

For our valuation, we assume about 5.7 new students on average for every FTE (full time equivalent) driving instructor per month. However, the number of students who sign up for a driving license should be roughly 30% higher. But those estimated 30% never reach the practical part of the education and stop somewhere beforehand. This adds to revenues per instructor and since the costs associated with those signups are only minimal, these revenues have pretty high margins. But since there is no reliable data available, we do not consider those signups in our estimates and therefore they might provide some significant upside.

In this part, we ask ourselves, if the assumption of 5.7 new students on average for every FTE (full time equivalent) driving instructor per month is realistic given the total number of students and driving instructors in the market.

The number of practical driving tests (cars and trucks etc.) conducted in Germany in 2019 amounted to 1.74m. Given an estimated 35,500 active driving instructors, this results in 49 students on average per driving instructor in 2019. When looking just at the number of people who received a driving license for passenger cars (960,000), this results in 27 students on average per driving instructor in 2019. However, some of them are not working full time; therefore, we are interested in the FTE (full time equivalent) of driving instructors on cars. Only then we can estimate how many students a FTE driving instructor of 123fahrschule has on average per year so we can determine their degree of utilization. As already stated earlier, we estimate that there are about 35,500 active driving instructors. However, only about 11,000 of those are driving school owners, who we expect to work full time. About 17,700 are employed of which we estimate 65% to work full time. Then there are 6,800 driving instructors in minor employment. Overall, we estimate only 26,603 of FTE (full time equivalent) driving instructors (see calculation below). There are about 960,000 students on cars per year, who on average need 30 driving lessons. Then there are 780,000 students who receive a license for non-cars (trucks etc.), who we estimate to need about 25 driving lessons on average. This means that an estimated 60% or 15,962 of the total 26,603 FTE driving instructors are teaching only on cars. Dividing the number of students on cars (960,000) by those 15,962 FTE driving instructors only teaching on cars gets us an average number of students per FTE driving instructor on cars of 60 per year.

However, we believe the average number of students per driving instructor is higher in major cities and urban areas. Since 123fahrschule is only active in those areas with high population density, we estimate on average 70 students per driving instructor per year. This results in 5.8 students per month per driving instructor and is an equivalent of 174 (5.8 students x 30 lessons) needed driving lessons. These figures are slightly exceeding our needed 170 driving lessons or 5.7 students per month, which are necessary for full utilization.

### Estimating the average number of students per driving instructor on cars per year

	Number of instructors	Full-time staff	FTE (full time equivalent) 1 FTE = 170 lessons / month
Driving school owners	11,000	100%	11,000
Employed driving instructors	17,700	65%	14,603
Driving instructors in minor employment (salary only max. EUR 450 per month) (EUR 450 / EUR 18 = 25 lessons per month)	6,800	100%	1,000
<b>Total FTE driving instructors</b>			<b>26,603</b>
<b>Issued licenses for cars / year (= students on cars / year)</b>			<b>960,000</b>
Issued licenses for non-cars / year			780,000
Estimated proportion of FTE instructors exclusively on cars			60%
<b>Resulting FTE instructors only on cars</b>			<b>15,962</b>
<b>Average number of students per FTE driving instructor on cars / year</b>			<b>60</b>

Source: Statista, International Road Safety Association e. V., Quirin Privatbank AG

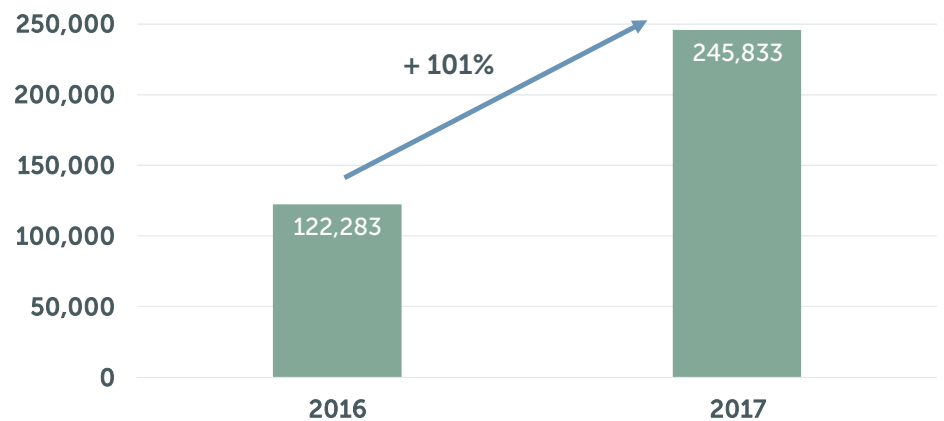


*Due to strong immigration, the number of applicants for driving licenses in Germany increased recently.*

### Current market trends

In the last years, Germany has seen increasing numbers of immigrants. As immigrants from most non-EU countries do need to retake their driving exam and in most cases large parts of their driving education, in order to be allowed to drive on German roads, the number of applicants for driving licenses in Germany increased recently. As long as the trend of immigration continues, we expect this additional market growth to continue. This trend can also be observed in the rising number of theoretical driving exams being taken in languages other than German.

### Number of theoretical exams taken in a foreign language



Source: TÜV/DEKRA, 2018

## Autonomous driving should pose no threat

*Driverless vehicles need to “learn” how to deal with unpredictability, which will certainly take a lot of time until sufficiently implemented.*

*Full implementation lies far in the future and people will still need driving licenses*

*The likelihood that politics will get rid of the need for driving licenses all together is extremely low as major legal and ethical considerations in regard to liability are far from settled.*

*A significant relevance of autonomous vehicles can, according to the authors, be expected only well after 2050.*

### A perspective: Germany’s “pioneering role” in autonomous driving

Over the past years, there has been a lot of attention on the trend of autonomous driving (AD) which is very often seen as the future of individual transport. German Government wants Germany to take on a “pioneering role” in the development of self-driving cars in the future. According to the German Research Center for Artificial Intelligence, aspired benefits from autonomous vehicles not only include an increase in travel comfort and productive time, but above all an increase in safety. Moreover, there is evidence that for the vast majority of accidents the human driver was responsible. Therefore, one may raise the question whether AD may let driving licenses become redundant in the very long term. While we certainly do not doubt the technical feasibility of AD, one of the biggest challenges remains – and that is the accommodation of driverless vehicles to human interactions in daily traffic. Interaction will always be needed – for instance, between the driver and a pedestrian at a crosswalk where eye contact, gesture and intuition are to assure safe navigation. Thus, driverless vehicles need to “learn” how to deal with unpredictability, which will certainly take a lot of time until sufficiently implemented.

### Driving licenses seem to remain indispensable

Aforementioned interactions between people and machines raise new ethical questions during times of digitization and self-learning systems. As the world’s first nation, in mid-2018 the German ethics committee has put guidelines in place to address these ethical questions. These stipulate that autonomous vehicles must do the least amount of harm if put into a situation where hitting a human is inevitable irrespective of observable factors apart from the amount of lives.

However, full implementation lies far in the future and people will still need driving licenses, as they have to or even have the right to intervene in critical situations and drive the car on their own.

### Real autonomous vehicles only expected well after 2050

A study conducted and published by Prognos for the German automobile club ADAC in 2018 assessed the pace of the introduction of autonomous vehicles (AV) in the German market. The study differentiates between different levels of AV: 1) cars that can drive autonomously on the highway only 2) cars that can additionally move autonomously within a city’s grid 3) cars that can truly move door to door from any location to another and are thus truly driverless. The authors of the study find that the introduction of autonomous technology in the market will be a long and slow process rather than a disruptive event. They project that in 2050 roughly 50% of all new cars will contain some sort of AV functionality, but in the overwhelming number of cases this will be of type 1 (moving solely on the highway in an autonomous manner). A significant relevance of autonomous vehicles can, according to the authors, be expected only well after 2050. Also, the likelihood that politics will get rid of the need for driving licenses all together is extremely low as major legal and ethical considerations in regard to liability are far from settled.

## Competitive analysis

*Each driving school location faces a different competitive situation depending on the number of driving schools nearby.*

*As the graph below shows, the competitive pressure increased significantly in West Germany and larger cities. This coincided with the start of operations of 123fahrschule and might be related.*

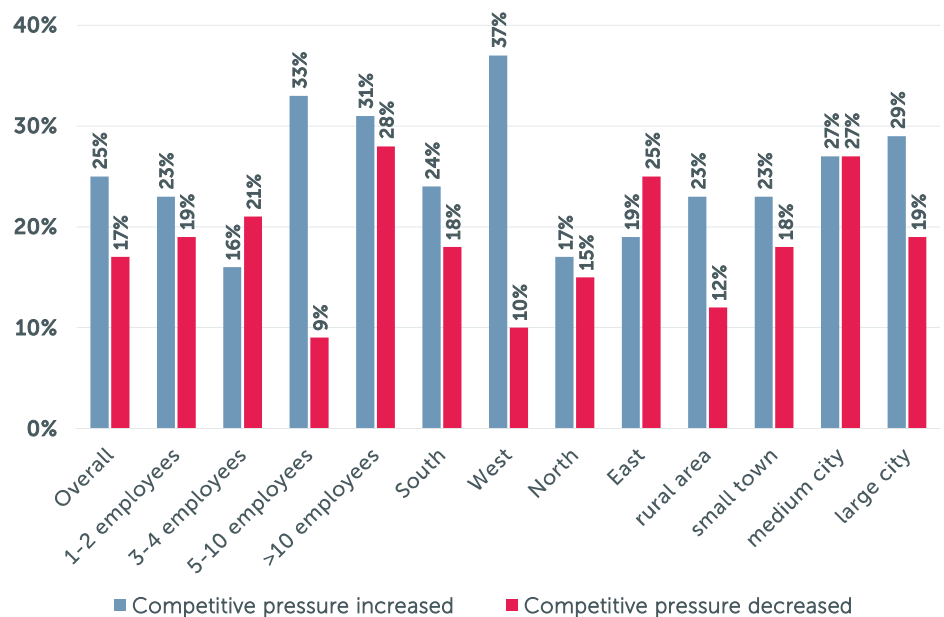
### Competition is happening only locally

Competition for customers in the driving school market is a local affair. As students need to attend a driving school in a location close to their place of living, the potential suppliers of driving education are limited geographically. Therefore, driving schools compete only with peers regionally close to them. Each driving school location faces a different competitive situation depending on the number of driving schools nearby.

### Competition is generally somewhat decreasing

According to the Moving industry report (2018), only 6% of driving schools named competitive pressure as their greatest challenge in 2018, whereas this figure was at 11% in 2016. Also, the proportion of driving schools for which competitive pressure has decreased or decreased significantly has increased from 10% to 17% from 2016 to 2018. It can also be seen that the proportion of driving schools for which competitive pressure has increased or increased strongly has decreased from 31% to 25% from 2016 to 2018. Thus, overall the competitive pressure somewhat decreased and we assume this trend has persisted until 2021. As the graph below shows, the competitive pressure increased significantly in West Germany and larger cities. This coincided with the start of operations of 123fahrschule and might be related. Moreover, an increasing competitive pressure should increase the willingness to sell.

### How did the competitive pressure developed in the industry since H2 2017?



Source: Moving International Road Safety Association, Quirin Privatbank AG

### Competitive advantage through a digital learning approach

The large majority of driving schools are only small businesses, which often appear somewhat outdated and do not have the resources to offer online theory sessions, for example. In contrast, 123fahrschule appears quite modern with its fresh brand image and has the capacities and digital resources to offer additional benefits such as online theory sessions. In our view, the young generation as their main customer that is digitally savvy demands a modern and digital approach to driving education and will therefore favor 123fahrschule over the classical, small driving school. Those smaller players neither have the ability nor the necessary economies of scale to be able to develop and offer comparable digital products. Therefore, 123fahrschule has the clear technological edge and communicates this aggressively in their marketing campaigns. Chances are pretty high when 123fahrschule is approaching a new location; they will mostly compete with those smaller, less digitalized driving schools and should therefore be the preferred choice.

*In our view, the young generation as their main customer that is digitally savvy demands a modern and digital approach to driving education and will therefore favor 123fahrschule.*

*The partial allowance of online theory lessons since 2020 has enabled 123fahrschule to significantly enlarge their catchment area as students do not have the burden of traveling far to the schools' premises.*

*With its fully owned and new operating system, 123fahrschule will be able to increase the profitability of acquired targets very fast.*

### Classical displacement competition

The market is rather stable in terms of new students signing up for driving education (see on pages 15 and 16). This constant but not growing demand results in a classical displacement competition. The entrance of a new player in a local market does not increase the overall number of students signing up per month but rather redistributes the market share within its local reach. This is another reason why it seems a better strategy to acquire smaller, already existing driving schools – 123fahrschule is entering the local market not as a new supplier of driving education but rather takes over an existing business. This way, one competitor is already eliminated and the market share for 123fahrschule should be higher overall.

### 123fahrschule has a wider catchment area

The partial allowance of online theory lessons since 2020 has enabled driving schools to significantly enlarge their catchment area as students do not have the burden of traveling far to the schools premises for their online lessons. Yet, only schools with online competence, digital sign-up possibilities and online marketing skills can reap these benefits. With its digital approach and online marketing, 123fahrschule is in a prime position to reach students of a larger region now with just one school location and thereby presents a true threat to all local players in the city where it offers their services.

### Even larger than usual competitors pose only a limited threat

The German driving school market is highly fragmented with only 34 players that exceed EUR 2m in revenues. Also, all of these larger driving school chains operate in a regional market only and show no intention of expanding their operations past these regions. To our knowledge, most or even all of those existing chains use outdated software provided by the old traditional publishing companies of the industry. These software products are not built to scale and do not provide the in-depth business insides and automation functionalities needed for scaling operations larger. Therefore, these bigger players do not pose a threat to 123fahrschule in their efforts to consolidate the market but rather serve as viable acquisition targets. With its fully owned and new operating system, 123fahrschule will be able to increase the profitability of acquired targets very fast as it automates most administrative and customer facing processes.

### Direct comparison with DriveEddy

The only other player with digital potential in the driving school market is Berlin-based start-up DriveEddy. DriveEddy tries (similar to Mr. Polenske's initial business idea) to earn a provision by providing student leads and contracts to existing driving schools in the market. As driving schools have rather too much than too little work though, this marketplace business model is prone to fail. Also, their efforts of providing online lessons for students does not look promising without having own driving schools, as authorities do not accept theory lessons taken outside of the school's context. If DriveEddy was to follow 123fahrschule in its path to become a vertically integrated player in the market, the market lead of 123fahrschule's operations is estimated to be at least 24 month. Therefore, DriveEddy does not pose a viable threat to 123fahrschule in the years to come.

### No immediate threat from other larger & national players expected

Even if DriveEddy follows that path or other larger, national driving school chains appear, we believe, they would rather choose locations with no other larger competitor such as 123fahrschule, so they only compete with those small, regional, often somewhat dated driving schools. This seems logical as the market is big enough to avoid competition with other large chains over which they would have no competitive edge.

## Financial analysis

*We estimate a capital requirement of about EUR 4.5m to be necessary for future acquisitions and to cover the current negative cash flow.*

*We expect the business to be self-sustaining once the margin increases through the upscaling of the business.*

### Balance sheet

The total assets of 123fahrschule amounted to EUR 2.7m as of 31.12.2019 and were down from last year (2018: EUR 2.8m). Non-current assets of EUR 1.3m (2018: EUR 1.9m) mainly include other equipment, operating and office equipment of EUR 0.6m (2018: EUR 0.7m). As of 31.12.2019, the company recognises equity of EUR 0.59m. Hence, the equity ratio amounted to 28% in 2019.

We estimate a capital requirement of about EUR 4.5m to be necessary for future acquisitions and to cover the current negative cash flow. Therefore, we model additional equity of EUR 4.7m for 2021. In the past, founder and CEO Boris Polenske has repeatedly recapitalized the company with capital increases. On 26.10.2020, at the most recent annual general meeting of Livonia SE (name before it became 123fahrschule SE) the shareholders resolved a capital increase of 500,000 shares.

### Liquidity

The cash position of the company as of 31.12.2020 amounted to 0.06m. There were insufficient cash inflows from operating activities to finance the business in 2019. The operating cash flow amounted to EUR -3.0m. Current liquidity was secured through shareholder financing.

We expect the business to be self-sustaining once the margin increases through the upscaling of the business. Until then, we expect that the solvency is ensured by shareholder financing in the form of loans or additional equity, as stated in the 2019 annual report.

### Profit situation

For 2019, revenues came in at EUR 2.9m (previous year: EUR 1.4m), generated by revenues from driving schools and first aid courses. Personnel expenses totaled EUR 3.0m (previous year: EUR 2.1m). With an average number of employees of 65 (previous year: 40), personnel expenses amounted to EUR 46k per employee (previous year: EUR 51k per employee). Other operating expenses amounted to EUR 3.2m (previous year: EUR 1.9m). These include in particular expenses for rents, leases, vehicle operating costs and advertising. The consolidated net loss for the financial year was EUR 3.6m (previous year: EUR 2.7m).

### Guidance 2020

Management has published a guidance for 2020 in their 2019 annual report. Management expects revenues in the range of EUR 2.5m to EUR 3.5m and a net result between EUR -2.5m and EUR -3.5m. However, we regard this guidance as rather conservative. Our estimates are at the upper end of the guided range.

## DCF Valuation

### Revenues – understanding our top-line modelling

#### Inexpensive growth through acquisitions

The top line of 123fahrschule is primarily driven by the number of employed driving instructors. Due to the already outlined scarcity of driving instructors, the supply of driving lessons is declining while the demand of people taking their driving exam recently even increased (for details see pages 14 & 15). Therefore, driving instructors are mostly fully utilized; meaning, growth is only possible through hiring additional driving instructors. The easiest and fastest way to do that is by acquiring smaller driving schools. The benefit of this approach is that the driving instructors are immediately fully utilized with no start-up period and multiple driving instructors can be hired at a time.

Also, due to the outlined high average age of driving instructors and driving school owners, many want to retire and sell their business, but for the same reason there is a huge problem in the market to find successors. Therefore, driving schools are offered rather cheap, which means 123fahrschule can add further growth by rather small investments, which can mostly be financed by their cash flow. In fact, those acquisitions are just asset deals and therefore quite inexpensive as driving schools are holding only a few tangible assets. The positive side effect is that goodwill will not be inflated.

#### Checking our assumption of fully utilized driving instructors

For our estimates, we assume that 123fahrschule's driving instructors are mostly fully utilized. In order to achieve this, a driving instructor has to give on average 8.9 driving lessons (each 45min) per day, which equals 6.7 full hours per day. Driving exams and giving theory lessons make up the rest of their working days. We also assume that a driving instructor is working on average 19 days per month; adjusted for holidays etc. they are not working on. This results in about an average 170 driving lessons per driving instructor per month. But is it a valid assumption that those 170 possible driving lessons are met by a corresponding demand, which leads to full utilization?

Overall, we estimate only 26,603 of FTE (full time equivalent) driving instructors in Germany (for details and calculation see page 16). There are about 960,000 students on cars per year, who on average need 30 driving lessons. Then there are 780,000 students who receive a license for non-cars (trucks etc.), who we estimate to need about 25 driving lessons on average. This means that an estimated 60% or 15,962 of the total 26,603 FTE driving instructors are teaching only on cars. Dividing the number of students on cars (960,000) by those 15,962 FTE driving instructors only teaching on cars gets us an average number of students per FTE driving instructor on cars of 60 per year. However, we believe the average number of students per driving instructor is a bit higher in major cities and urban areas. Since 123fahrschule is only active in those areas with high population density, we estimate on average 70 students per driving instructor per year. This results in 5.8 students per month per driving instructor – an equivalent of 174 (5.8 students x 30 lessons) needed driving lessons. These figures are slightly exceeding our needed 170 driving lessons or 5.7 students per month, which are necessary for full utilization. However, even if there are less than an average of 5.7 students per driving instructor and per month, we already outlined that 123fahrschule should experience a higher demand than old-fashioned, small driving schools. This means on average more students are signing up at 123fahrschule until their capacity is utilized. Moreover, we already outlined the increasing scarcity of driving instructors due to their average age of 58.8; hence the supply is declining over time as more driving instructors are retiring than there are new ones entering the market, while the number of students even increased recently (for details see pages 14 & 15). Over time, this results even in an increasing number of students per driving instructor.

#### Composition of our top line modelling

Monthly revenue per driving instructor is formed by the net price per driving lesson multiplied by the driving lessons per month (see below for P&L calculations). We start with a net price per driving session of EUR 45, which we increase at a CAGR 2020-2024 of 4% as the trend clearly shows driving lessons are becoming more expensive. We estimate the maximal driving lessons per month at 170 (45 min each) – for this we estimate a driving instructor can give 8.9 practical lessons (45min each) on average per day and we imply 19 average working days per month, adjusted for holidays. Hence, we

*Driving instructors are mostly fully utilized; meaning, growth is only possible through hiring additional driving instructors.*

*Driving instructors give roughly 8 to 10 lessons per day (each 45min).*

*123fahrschule should experience a higher demand than old-fashioned, small driving schools.*

*We estimate about EUR 92,000 revenues per FTE (full time equivalent) driving instructor in 2020 for giving driving lessons alone.*

estimate about EUR 92,000 revenues per FTE (full time equivalent) driving instructor in 2020 alone for giving driving lessons.

(EUR 92,000 = EUR 45 per lesson x 170 lessons x 12 months)

*We assume an annual price increase of 3% for the driving exams.*

On top of that, we estimate EUR 190 per practical driving exam. Since the average student takes about 30 driving lessons before passing the exam and each FTE driving instructor gives 170 lessons per month – there are on average 5.7 students (170/30) taking the exam per month and per driving instructor, who each pays EUR 190. This translates into EUR 12,900 additional revenues per driving instructor in 2020. However, this estimate is rather conservative as many students have to take the exam more than once (see page 15). We assume an annual price increase of 3% for the driving exams. (EUR 12,900 = 5.7 students x EUR 190 exam x 12 months)

*Driving schools have only marginal costs for the theoretical education.*

The third revenue stream comes from the price for the theoretical education. The theoretical lessons are covered by the base amount each student has to pay when enrolling at a driving school – we estimate the base amount at EUR 200. In addition, the students have to pay for the theoretical exam, which we estimate at EUR 55 and also a learning App, which we estimate at EUR 45. So overall, students have to pay EUR 300 for their theoretical education. Again, we are modelling the number of students taking the exam or enrolling via the driving instructors, who have a capacity of on average 5.7 students per month (max. 170 driving lessons per month / 30 driving lessons needed per student). This translates into EUR 20,400 additional revenues per driving instructor in 2020. We assume an annual price increase of 3% for the theoretical education. However, keep in mind, that our estimate of new students do not take into account students who sign up, pay the base amount but never reach the practical part of the education and stop somewhere beforehand. We estimate the number of new students for every FTE driving instructor per month to be roughly 30% higher than our assumption of 5.7 students. This adds to revenues per instructor and since the costs associated with those signups are only minimal; these revenues have pretty high margins. But since there is no reliable data available, we do not consider those signups in our estimates and therefore they might provide some significant upside.

(EUR 20,400 = EUR 300 theoretical education x 5.7 students x 12 months)

#### **...putting it all together**

Those three revenue streams add up to EUR 125,300 per driving instructor in 2020e (EUR 92,000 for driving lessons, EUR 12,900 for practical exams and EUR 20,400 for theoretical education). This figure is then multiplied by the average number of driving instructors for total revenue in 2020e. In order to adjust for the temporary shutdown of driving schools due to covid-19, we adjust total revenues by 20% (see below for modelling). Overall, this results in estimated revenues of EUR 3.7m in 2020. We estimate revenues to grow by a CAGR 2020-2024 of 46.3% to EUR 16.9m in 2024. This growth is mainly driven by an increasing number of employed driving instructors; starting from an estimated average number of 37 FTE instructors in 2020, they are growing by a CAGR 2020-2024 of 33.4% to 127 in 2024. Also the prices for driving lessons are increasing by 4% yearly, prices for exams and theoretical education are increasing by 3% per year.

For 2021, we model a covid-19 effect of 15% due to possible shut downs and people holding back, not signing up at a driving school due to financial uncertainties and in regard to their job.

Of course, it is possible 123fahrschule is growing much faster, especially by acquiring significantly larger driving schools and hence taking on more driving instructors at once than we anticipated. Our valuation would react rather sensitive to just a few large driving schools as we are coming from a very low absolute basis (just an average of 37 FTE driving instructors in 2020). But this is unpredictable and we rather stay conservative.

*We model still relatively high growth beyond 2024 with a CAGR 2024-2029 of 14%.*

After a revenue CAGR 2020-2024 of 46.3%, we model still relatively high growth beyond 2024 with a CAGR 2024-2029 of 14%. In our view, this seems realistic as over time more and more driving schools should be on the market for sale. Also, in absolute terms our anticipated growth seems quite manageable. However, we model a terminal growth rate of 0% (from 2029 forward) since at some point 123fahrschule should be active in most major cities and urban areas where it makes sense given the local competitive environment.

### Past acquisitions & regional acquisition focus

123fahrschule already showed its capability of successfully executing M&A deals as four acquisitions were already executed in the last 14 month and successfully integrated into the operations. With those four deals revenues of EUR 1.4m were acquired, which equals in an estimated 11.7 new FTE driving instructors. We assumed 18 new FTE driving instructors in 2021, much more, since the acquisition phase is just getting started. First acquisitions for 2021 are already lined up and additional ones are in the planning. We expect the number of acquisitions per year to increase as the strong expansion is planned to start in 2021. After an acquisition, the company gradually increases its market share in the individual cities through targeted marketing and continues to grow even organically. Primary focus in 2021 is to grow in North Rhine-Westphalia and Berlin. Apart from that they are planning anchor acquisition in all capitals of the other federal states.

### Company guidance

In the 2019 annual report, the management is guiding revenues for 2020 in the range of EUR 2.5m to 3.5m and net income in the range of EUR -2.5m to -3.5m. We are slightly exceeding the top line guidance with an estimated EUR 3.7m in revenues and a net income of EUR -2.8m, at the upper end of their guided range.

*We are slightly exceeding the top line guidance with an estimated EUR 3.7m in revenues and a net income of EUR -2.8m, at the upper end of the guided range.*

### Margins

#### Margin of a single driving instructor

Driving instructors when considered isolated, have a rather high profit margin. We calculate with monthly personnel expenses per FTE driving instructor of EUR 5,700 and about EUR 1,500 of monthly vehicle costs. Compared to perspective revenues per FTE driving instructor of EUR 12,000, this results in a margin of about 40% when not taking into account the overhead costs such as administrative costs, marketing and so on. Of course due to the scarcity of driving instructors, we model the personnel expenses to increase by 3% per year. But this should be offset by the increasing prices for driving licenses.

#### Increasing prices for driving licenses

Within the last couple of years, the prices for driving licenses have significantly risen due to the demand for lessons being larger than the capacity of the schools (supply) in Germany. This trend has been apparent for quite a while and we see no reason why it should stop; especially when considering the large amount of driving instructors retiring over the next few years. This should further increase the profitability of 123fahrschule.

*Within the last couple of years, the prices for driving licenses have significantly risen due to the demand for lessons being larger than the capacity of the schools.*

#### Rather low expansion risk

We consider the risks related to the margins as rather low since we already outlined above that driving instructors should be fully utilized. Hence, the risk of scaling the business too quickly, so that utilization doesn't keep up, is relatively low in our view.

#### Scalability potential & costs of holding company

The scalability in regard to the personnel expenses of the driving instructors is rather limited as those costs are more or less increasing proportionally with additional revenues. However, the other personnel expenses associated with the customer service and the holding company are growing much slower. For example a customer service employee can take on multiple locations. When looking at our P&L, the vehicle costs as part of other operating expenses are also growing rather fast since every new driving instructor needs his own car. We calculate with EUR 1,500 for vehicle costs per driving instructor and per month. The other operating costs such as rental costs and marketing costs are not growing as fast and contribute to a high degree of scalability. Overall, there are relatively high fixed costs that are associated with the holding company, which manages the whole operations. Those fixed costs are relatively high at the moment when compared to the current revenues; however, they are expected to remain relatively stable, which lead to a high scalability and strong growing margins once those costs are fully covered. We expect a positive net income as per 2023. The upscaling through acquisitions should run relatively smoothly; hence, it is just a matter of time until those fixed costs are covered and 123fahrschule becomes profitable.

*The upscaling through acquisitions should run relatively smoothly; hence, it is just a matter of time until those fixed costs are covered and 123fahrschule becomes profitable.*



According to our estimates, EBIT becomes positive the first time in 2023 with an EBIT margin of 4%, which quickly improves to about 13% in 2025, 17.5% in 2027 and 22% in 2029.

### Estimated P&L of 123fahrschule SE

EUR million	2020e	2021e	2022e	2023e	2024e	CAGR 2020e-2024e
<b>Revenue</b>	<b>3.7</b>	<b>5.6</b>	<b>9.5</b>	<b>13.2</b>	<b>16.9</b>	<b>46.3%</b>
growth yoy		52%	70%	38%	28%	
Covid-19 effects	80%	85%	100%	100%	100%	
Driving instructors FTE (end of year)	42	60	82	107	127	
Average number of driving instructors FTE	37	51	71	95	117	33.4%
Revenue per driving instructor	0.12	0.13	0.13	0.14	0.14	
Net sales single driving lesson	45	47	49	51	53	4.0%
Driving lessons per month (per day: 8.9 x 45min)	170	170	170	170	170	
Net sales driving exams	0.01	0.01	0.01	0.01	0.01	3.0%
Net sales theoretical education + exam + App	0.02	0.02	0.02	0.02	0.02	3.0%
Other operating income	0.1	0.2	0.3	0.4	0.5	
<b>Total revenues</b>	<b>3.8</b>	<b>5.8</b>	<b>9.8</b>	<b>13.6</b>	<b>17.4</b>	
<b>Operating expenses</b>	<b>-6.3</b>	<b>-7.9</b>	<b>-10.2</b>	<b>-12.6</b>	<b>-15.0</b>	
Cost of materials / cost of purchased services	0.0	0.0	0.0	0.0	0.0	
Personnel expenses	-3.9	-5.0	-6.5	-8.5	-10.4	27.9%
Costs per driving instructor	-0.068	-0.070	-0.073	-0.075	-0.077	3.0%
Costs customer service	-0.47	-0.48	-0.50	-0.51	-0.53	3.0%
Personnel expenses of holding company	-0.89	-0.89	-0.89	-0.89	-0.89	
Other operating expenses	-2.4	-2.9	-3.6	-4.1	-4.6	17.0%
Rental costs	-0.48	-0.62	-0.86	-0.92	-0.85	
Vehicle costs	-0.67	-0.92	-1.28	-1.70	-2.11	
Marketing costs	-0.18	-0.28	-0.38	-0.40	-0.51	
Other costs	-1.10	-1.10	-1.10	-1.10	-1.10	
<b>EBITDA</b>	<b>-2.5</b>	<b>-2.1</b>	<b>-0.3</b>	<b>1.0</b>	<b>2.4</b>	
margin %	-68%	-37%	-3%	7%	14%	
Depreciation & Amortization	-0.3	-0.3	-0.4	-0.5	-0.6	
<b>EBIT</b>	<b>-2.8</b>	<b>-2.4</b>	<b>-0.7</b>	<b>0.5</b>	<b>1.8</b>	
EBIT margin %	-76%	-43%	-7%	4%	11%	
Financial result	0.0	-0.1	-0.1	-0.1	-0.1	
<b>EBT</b>	<b>-2.8</b>	<b>-2.5</b>	<b>-0.8</b>	<b>0.4</b>	<b>1.7</b>	
Income tax	0.0	0.0	0.0	-0.1	-0.5	
Tax rate %	0%	0%	0%	30%	30%	
<b>Net income</b>	<b>-2.8</b>	<b>-2.5</b>	<b>-0.8</b>	<b>0.3</b>	<b>1.2</b>	
Profit margin %	-76%	-44%	-8%	2%	7%	
No. shares outstanding (m)	1.3	1.8	1.8	1.8	1.8	
<b>EPS</b>	<b>-2.14</b>	<b>-1.37</b>	<b>-0.42</b>	<b>0.17</b>	<b>0.67</b>	

Source: Quirin Privatbank AG

### Capital expenditures & cash flow

According to our estimates, 123fahrschule's operating cash flow becomes positive in 2022 the first time when the rather large fixed costs of the holding company are sufficiently covered through upscaling the business. After the expected capital increase to finance the initial upscaling, 123fahrschule should be able to finance the following acquisitions and growth through their operating cash flow. We assume capital expenditures of EUR 80,000 per acquired and profitable driving school with an average number of 3-4 driving instructors.

### Beta

We have chosen a rather high company beta of 1.5 that results in a rather high WACC of 9.50%. We find the underlying risk pretty reasonable but want to stay conservative in our modelling. The high beta is only owed to the fact that 123fahrschule just started their growth path and we want them to show further proof of concept, before lowering our beta. If our estimates are roughly met, we will steadily decrease our beta to a beta of 1.0, which should be reasonable for a driving school business with their high-margins and high level of predictability. This would result in a significantly higher target price.

### DCF Valuation

We have derived our target price for 123fahrschule SE from our DCF model (see page 27). With a WACC of 9.50% (resulting from a risk free rate of 2.0%, market premium of 5% and a beta of 1.5), a mid-term revenue CAGR 2020-2024 of 46.3%, fading to a perpetual growth rate of 0% and a sustainable long-term EBIT margin of 22%, our DCF model derives a fair value of EUR 24.80 per share. Hence, we initiate 123fahrschule with a Buy recommendation. The value creation primarily stems from high margin growth for which they pay surprisingly little due to the driving school market environment with its unique age distribution.

### Scenario analysis

The whole success of 123fahrschule's business case depends on the number of driving instructors they will be able to hire. For our target price, we assume on average 21 new driving instructors per year until 2024, which equals a CAGR 2020-2024 of 33.4%. If the company were able to hire on average only 5 more driving instructors per year until 2024 (equals on average 26 new driving instructors per year / CAGR 2020-2024 of 38.1%), our fair value increased to EUR 31.50 per share. This shows that the upside potential is huge in case they were able to grow faster than we anticipate. This applies to the downside risk as well. In case they were only able to hire on average 16 driving instructors per year (5 less than we anticipate / CAGR 2020-2024 of 28.1%), our fair value were EUR 18.20 per share.

*The high beta is only owed to the fact that 123fahrschule just started their growth path and we want them to show further proof of concept, before lowering our beta.*

*The upside is huge if the company were able to hire just a few more driving instructors per year.*

## DCF Model for 123fahrerschule SE

(EUR m)	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	TV
<b>Sales</b>	<b>3.7</b>	<b>5.6</b>	<b>9.5</b>	<b>13.2</b>	<b>16.9</b>	<b>20.9</b>	<b>24.9</b>	<b>28.4</b>	<b>31.1</b>	<b>32.6</b>	
growth yoy	27.6%	51.9%	69.9%	38.1%	28.4%	23.7%	19.0%	14.2%	9.5%	4.7%	
<b>EBIT</b>	<b>-2.8</b>	<b>-2.4</b>	<b>-0.7</b>	<b>0.5</b>	<b>1.8</b>	<b>2.7</b>	<b>3.8</b>	<b>5.0</b>	<b>6.1</b>	<b>7.2</b>	
EBIT margin	-76.0%	-43.2%	-7.5%	3.7%	10.7%	12.9%	15.2%	17.5%	19.7%	22.0%	
<b>Taxes</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.1</b>	<b>-0.5</b>	<b>-0.8</b>	<b>-1.1</b>	<b>-1.5</b>	<b>-1.8</b>	<b>-2.2</b>	
Tax rate	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	
<b>Depreciation</b>	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.7</b>	<b>0.7</b>	
% of sales	8.0%	5.8%	4.0%	3.8%	3.8%	2.9%	2.4%	2.2%	2.1%	2.0%	
<b>Capex</b>	<b>-0.4</b>	<b>-0.6</b>	<b>-0.9</b>	<b>-1.1</b>	<b>-1.3</b>	<b>-1.0</b>	<b>-0.9</b>	<b>-0.8</b>	<b>-0.7</b>	<b>-0.7</b>	
% of sales	11.9%	10.0%	9.2%	8.6%	7.7%	4.8%	3.4%	2.7%	2.4%	2.0%	
<b>Δ NWC</b>	<b>0.3</b>	<b>0.7</b>	<b>1.4</b>	<b>1.3</b>	<b>1.3</b>	<b>1.6</b>	<b>1.9</b>	<b>2.2</b>	<b>2.4</b>	<b>2.5</b>	
% of sales	-7.5%	-11.9%	-14.3%	-9.6%	-7.7%	-7.7%	-7.7%	-7.7%	-7.7%	-7.7%	
<b>FCF</b>	<b>-2.7</b>	<b>-2.0</b>	<b>0.2</b>	<b>1.0</b>	<b>1.9</b>	<b>3.1</b>	<b>4.3</b>	<b>5.5</b>	<b>6.6</b>	<b>7.5</b>	<b>79.4</b>
growth yoy	nm	-25.6%	nm	nm	95.9%	62.3%	39.5%	27.8%	19.8%	13.7%	0.0%
<b>PV FCF</b>	<b>-2.7</b>	<b>-1.8</b>	<b>0.1</b>	<b>0.7</b>	<b>1.3</b>	<b>2.0</b>	<b>2.5</b>	<b>3.0</b>	<b>3.2</b>	<b>3.4</b>	<b>35.4</b>

PV Forecast Period	12	<b>Sensitivity Analysis</b>					
PV Terminal Value	35	<b>Terminal growth rate</b>					
		<b>-1.0%</b>	<b>-0.5%</b>	<b>0.0%</b>	<b>0.5%</b>	<b>1.0%</b>	
<b>Enterprise value</b>	<b>47</b>	<b>8.55%</b>	26.6	27.8	29.2	30.8	32.6
- Net Debt / Net Cash	2.2	<b>9.03%</b>	24.6	25.7	26.9	28.3	29.8
- Pension Provisions	0	<b>WACC 9.50%</b>	22.8	23.7	<b>24.8</b>	26.0	27.3
<b>Equity value</b>	<b>45</b>	<b>9.98%</b>	21.1	22.0	22.9	23.9	25.1
Number of shares	1.8	<b>10.45%</b>	19.6	20.4	21.2	22.1	23.1
<b>Value per share (€)</b>	<b>24.8</b>	<b>Risk free rate</b>	2.00%	<b>Equity ratio</b>		100%	
		<b>Cost of debt</b>	3.00%	<b>Company beta</b>		1.5	
		<b>Market Premium</b>	5.00%	<b>WACC</b>		9.50%	

Source: Quirin Privatbank AG

## Company history

*The initial business idea was to create novel SaaS products for existing driving schools and to act as a marketplace in the industry.*

*The funds were used to further develop the tech-stack, a relaunch and facelift of the student app and to open and acquire new school locations.*

*123fahrshule is now listed at the stock market in Düsseldorf*

### The company emerged from an originally different idea

123fahrshule was founded in Q4 2016 by Boris Polenske and Daniel Radziwon and backed from inception by several angel investors (friends and family). Their initial business idea was to create novel SaaS products for existing driving schools and to act as a marketplace in the industry. The focus quickly shifted as the two founders realized that the antiquated and fractured market was not ready for radical steps of digitization. The business owners in the industry that understood the benefits and efficiency gains of automation and have the necessary minimal level of digital literacy were too scarce. Additionally, there are only a few bigger players in the market. Those would benefit the most from these SaaS products. Therefore, the founder's final business model was to start their own, fully vertically integrated and digitally enabled driving school chain. Hence, the goal of 123fahrshule is to not only revolutionize/digitize the operations of driving schools and to offer superior digital products to the students but also to consolidate the EUR 1.9bn industry under a nationally operating and strong brand.

### Multiple investors backed the company since 2017

In order to fund this business endeavor the founders were able to win two VCs, namely VCDE and Media Ventures, in 2017. The duo was extended by the entrance of the BLSW in 2018 as a third lead investor that provided fresh capital for the company's growth. Daniel Radziwon left the company at the end of 2018 due to personal reasons while Boris Polenske remained as CEO to this day. In 2019, the Delphi Beteiligungsgesellschaft mbH and KlickVentures provided new growth capital for the company. The funds were used to further develop the tech-stack, a relaunch and facelift of the student app and to open and acquire new school locations.

### Locations & operational structure

Since 2016, the operations of 123fahrshule have grown to 18 driving school locations. 13 of those were newly opened by 123fahrshule between 2017 - 2019 and 5 were acquired between 2019 - 2020, successfully integrated into the operations and rebranded to 123fahrshule. Today, 123fahrshule has operations in Berlin, Cologne, Düsseldorf, Essen, Dortmund, Duisburg, Recklinghausen, Herne, Gelsenkirchen, Marl, Pulheim and Leverkusen. 123fahrshule has a holding structure with 4 operational GmbHs that run the driving school locations in each geographical area and the holding GmbH which functions as a service GmbH for IT, marketing, financing and administrative tasks.

### Next step towards its IPO

In Q4 2020, 123fahrshule's shareholders decided to acquire Livonia SE to perform a reverse IPO at the stock market in Düsseldorf. The 123fahrshule Holding GmbH was introduced as non-cash capital increase followed by an initial cash capital increase. Now, 123fahrshule is listed at the stock market in Düsseldorf (Fremdverkehr) as 123fahrshule SE (WKN: A2P4HL - ISIN: DE000A2P4HL9)

## Management overview

### Boris Polenske - CEO

123fahrschule's CEO and founder Boris Polenske is an avid serial entrepreneur with extensive stock market experience. Throughout his career his strong IT background allowed him to pursue digitization enterprises in various industries. Already as a high school student he founded KlickTel. The company would become a huge success story under his lead and was eventually sold in a public takeover. Ever since Boris Polenske built and sold two more companies, namely bewertet.de/salesorker GmbH and PKW.de and thus built a prime reputation as entrepreneur and CEO.

### Jan Hoffmann - Business Planning & Development / IR

Jan Hoffmann joined 123fahrschule in 2018 and helped grow the company significantly ever since. His strong analytical background helped to build transparent operational controlling and business intelligence within the company. Before 123fahrschule, Mr. Hoffmann founded and built his own company that digitized processes in the gym climbing niche industry. Next to data analytics and business planning, he aids Mr. Polenske in all questions related to investor relations.

### Felix Jansen - Head of Marketing

Felix Jansen leads 123fahrschule's (online) marketing team since 2019. His formidable marketing education at Deutsche Telekom, extensive international experience and accomplishments as marketing manager and team leader at respondi AG and nextmarkets make him a perfect fit for 123fahrschule. Ever since joining the company, Mr. Jansen was able to significantly reduce the CPO (cost per order) by smart optimization of the marketing campaigns and well-targeted email automations.

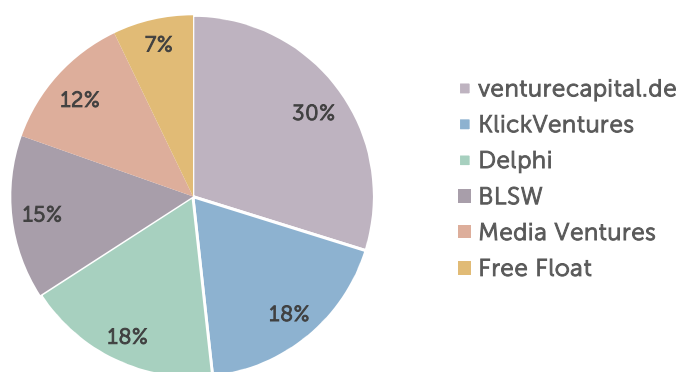
### Christoph Tietz - Head of IT

With 123fahrschule's co-founder Daniel Radziwon leaving in 2018; Christoph Tietz took over the role as head of IT. His excellent resume as product owner and developer for well-known companies such as METRO AG, Trusted Shops and Justix makes Mr. Tietz a true win for the company. He was responsible for the successful launch of new digital products in 2020 that enable the company to grow in the future.

## Shareholder structure

The main investors that funded 123fahrschule prior to its IPO are also the majority shareholders in the new SE. The current shareholder structure is as follows: venturecapital.de 29.84%, KlickVentures GmbH (Boris Polenske) 18.42%, Delphi 17.60%, BLSW 14.55% and Media Ventures 12.46%. All other shareholders are currently holding 7.13%.

### 123fahrschule's shareholder structure



Source: 123fahrschule SE, Quirin Privatbank

## SWOT analysis

### Strengths

- Excellent market position
- Generally high-margin business
- Capable of integrating acquired driving schools fast and efficiently
- Management/Founder are committed and holding shares
- Quite resilient business model since almost everyone obtains a driving license
- High growth potential through inorganic growth (M&A)
- Already acquired driving schools serve as reference for further acquisitions
- Positive ratings in the internet serve as reference for potential clients
- Using their self-built systems and modern marketing in order to increase efficiencies
- Modern appearance as differentiation versus smaller, local players
- No mentionable FX risks

### Weaknesses

- Generally increasing wages due to higher competition for driving instructors
- Track record does not reflect current investment case (modelling of sales and margins); however, inorganic growth expected to accelerate

### Opportunities

- Permission of online theory classes even after covid-19
- Offering additional driving license categories
- No strong competition from other large driving school chains
- Systematic acquisition of driving schools to improve the business model and grow inorganically

### Threats

- Increasing competition for driving instructors and increasing wages
- Decreasing number of learner drivers (demand) due to demographic change and a smaller proportion willing to have a driving license
- Potential loss of key people
- Potentially rising vehicle costs
- Possible increasing competition and emergence of other large national players
- Changes to regulatory requirements for example in regard to online theoretical lessons, mandatory driving lessons needed etc.
- Possible over-indebtedness

## Profit &amp; loss statement

Profit & loss statement (EUR m)	2018	YOY	2019	YOY	2020e	YOY	2021e	YOY	2022e	YOY
Sales	1.4		2.9	108.0 %	3.7	27.6 %	5.6	51.9 %	9.5	69.9 %
Other own work capitalized	0.1		0.2		0.1		0.2		0.3	
Gross profit	1.5		3.1		3.8		5.8		9.8	
Personnel expenses	-2.1		-3.0		-3.9		-5.0		-6.5	
Depreciation	-0.2		-0.2		-0.3		-0.3		-0.4	
Other operating expenses	-1.9		-3.2		-2.4		-2.9		-3.6	
EBITDA	-2.4		-3.1	27.0 %	-2.5	-18.8 %	-2.1	-16.5 %	-0.3	-84.2 %
EBITDA margin (%)	-175.02		-106.85		-68.01		-37.37		-3.47	
EBIT	-2.6		-3.3	27.9 %	-2.8	-15.4 %	-2.4	-13.7 %	-0.7	-70.7 %
EBIT margin (%)	-186.43		-114.65		-76.00		-43.19		-7.45	
Income from Participations	0.0		0.0		0.0		0.0		0.0	
Net financial result	-0.1		-0.3		0.0		-0.1		-0.1	
Pretax profit	-2.7		-3.6	34.2 %	-2.8	-21.7 %	-2.5	-11.7 %	-0.8	-69.1 %
Pretax margin (%)	-192.03		-123.87		-76.00		-44.17		-8.03	
Taxes	0.0		0.0		0.0		0.0		0.0	
Tax rate (%)	0.00		-0.27		30.00		30.00		30.00	
Earnings after taxes	-2.7		-3.6		-2.8		-2.5		-0.8	
Minorities	0.0		0.0		0.0		0.0		0.0	
Group attributable income	-2.7		-3.6	34.6 %	-2.8	-21.9 %	-2.5	-11.7 %	-0.8	-69.1 %
No. of shares (m)	1.3		1.3		1.3		1.3		1.3	
Earnings per share (EUR)	-2.12		-2.85	34.6 %	-2.14	-24.9 %	-1.37	-36.0 %	-0.42	-69.1 %

Source: Company data, Quirin Privatbank estimates



## Balance sheet

Balance sheet (EUR m)	2018	YOY	2019	YOY	2020e	YOY	2021e	YOY	2022e	YOY
<b>Assets</b>										
Cash and cash equivalents	0.0		0.1		0.0		2.6		2.7	
Accounts receivables	0.1		0.1		0.2		0.3		0.5	
Other current assets	0.8		1.1		1.3		1.7		2.3	
<b>Total current assets</b>	<b>0.9</b>		<b>1.3</b>	<b>54.0 %</b>	<b>1.5</b>	<b>11.0 %</b>	<b>4.6</b>	<b>206.8 %</b>	<b>5.5</b>	<b>19.6 %</b>
Fixed assets	0.7		0.7		0.8		1.0		1.4	
Goodwill	1.2		0.3		0.3		0.3		0.3	
Other intangible assets	0.1		0.3		0.4		0.4		0.5	
Financial assets	0.0		0.0		0.0		0.0		0.0	
Deferred taxes	0.0		0.0		0.0		0.0		0.0	
<b>Total fixed assets</b>	<b>1.9</b>		<b>1.3</b>	<b>-30.6 %</b>	<b>1.5</b>	<b>10.8 %</b>	<b>1.7</b>	<b>15.7 %</b>	<b>2.2</b>	<b>28.8 %</b>
<b>Total assets</b>	<b>2.8</b>		<b>2.7</b>	<b>-4.4 %</b>	<b>3.0</b>	<b>10.9 %</b>	<b>6.3</b>	<b>111.1 %</b>	<b>7.7</b>	<b>22.1 %</b>
<b>Equity &amp; Liabilities</b>										
Subscribed capital	0.1		0.2		0.2		0.2		0.2	
Reserves & other	2.5		7.5		7.5		7.5		7.5	
Revenue reserves	-3.5		-7.1		-9.5		-7.2		-8.0	
Accumulated other comprehensive	0.0		0.0		0.0		0.0		0.0	
<b>Shareholder's equity</b>	<b>-0.9</b>		<b>0.6</b>	<b>-165.8 %</b>	<b>-1.8</b>	<b>-399.6 %</b>	<b>0.5</b>	<b>-126.8 %</b>	<b>-0.3</b>	<b>-163.3 %</b>
Minorities	0.0		0.0		0.0		0.0		0.0	
<b>Shareholder's equity incl. minorities</b>	<b>-0.9</b>		<b>0.6</b>	<b>-165.8 %</b>	<b>-1.8</b>	<b>-399.6 %</b>	<b>0.5</b>	<b>-126.8 %</b>	<b>-0.3</b>	<b>-163.3 %</b>
<b>Long-term liabilities</b>										
Pension provisions	0.0		0.0		0.0		0.0		0.0	
Financial liabilities	1.7		0.0		2.2		2.2		2.2	
Tax liabilities	0.0		0.0		0.0		0.0		0.0	
Other liabilities	0.8		0.9		1.0		1.4		1.9	
<b>Total long-term debt</b>	<b>2.5</b>		<b>0.9</b>	<b>-61.9 %</b>	<b>3.2</b>	<b>247.0 %</b>	<b>3.6</b>	<b>9.8 %</b>	<b>4.1</b>	<b>16.0 %</b>
<b>Short-term debt</b>										
Other provisions	0.3		0.0		0.0		0.0		0.1	
Trade payables	0.2		0.1		0.1		0.1		0.2	
Financial debt	0.0		0.0		n.a.		n.a.		n.a.	
Other liabilities	0.0		0.0		0.0		0.0		0.0	
<b>Total short-term debt</b>	<b>0.5</b>		<b>0.1</b>	<b>-83.5 %</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>
<b>Total equity &amp; liabilities</b>	<b>2.8</b>		<b>2.7</b>	<b>-4.4 %</b>	<b>3.0</b>	<b>10.9 %</b>	<b>6.3</b>	<b>111.1 %</b>	<b>7.7</b>	<b>22.1 %</b>

Source: Company data, Quirin Privatbank estimates

## Financial key ratios

Key ratios	2018	2019	2020e	2021e	2022e
<b>Per share data (EUR)</b>					
EPS	-2.12	-2.85	-2.14	-1.37	-0.42
Book value per share	-0.7	0.5	-1.3	0.3	-0.2
Free cash flow per share	2.2	2.4	2.5	0.0	0.0
Dividend per share	0.00	0.00	0.00	0.00	0.00
<b>Valuation ratios</b>					
EV/Sales	2.97	0.84	1.26	1.23	0.72
EV/EBITDA	-1.7	-0.8	-1.9	-3.3	-20.8
EV/EBIT	-1.6	-0.7	-1.7	-2.9	-9.7
P/E	-2.6	-2.0	-2.6	-4.1	-13.3
P/B	-0.7	0.5	-1.3	0.3	-0.2
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
<b>Growth</b>					
Sales growth (%)	n.a.	108.0	27.6	51.9	69.9
EBITDA growth (%)	n.a.	27.0	-18.8	-16.5	-84.2
EBIT growth (%)	n.a.	27.9	-15.4	-13.7	-70.7
EPS growth (%)	n.a.	34.6	-24.9	-36.0	-69.1
<b>Profitability ratios</b>					
EBITDA margin (%)	-175.0	-106.9	-68.0	-37.4	-3.5
EBIT margin (%)	-186.4	-114.7	-76.0	-43.2	-7.5
Net margin (%)	-192.0	-124.2	-76.0	-44.2	-8.0
<b>Financial ratios</b>					
Total equity (EUR m)	-0.9	0.6	-1.8	0.5	-0.3
Equity ratio (%)	-31.6	21.8	-58.8	7.4	-3.9
Net financial debt (EUR m)	1.6	-0.1	2.2	-0.4	-0.5
Net debt/Equity	-0.3	0.2	-0.6	0.1	0.0
Net debt/EBITDA	-0.7	0.0	-0.9	0.2	1.4
Payout ratio (%)	0.0	0.0	0.0	0.0	0.0
Working Capital (EUR m)	-0.9	-1.0	-1.3	-2.0	-3.3
Working capital/Sales	-0.62	-0.35	-0.35	-0.35	-0.35

Source: Company data, Quirin Privatbank estimates

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08.02.2021	24.80	Buy	08.02.2021

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