



**Buy** (old: Buy)

**Price target: EUR 31.00** (old: EUR 31.00)

|                   |           |                          |             |
|-------------------|-----------|--------------------------|-------------|
| <b>Price:</b>     | EUR 18.25 | <b>Next result:</b>      | FY 2019 tba |
| <b>Bloomberg:</b> | V3S GR    | <b>Market cap:</b>       | EUR 126.6 m |
| <b>Reuters:</b>   | V3SG.DE   | <b>Enterprise Value:</b> | EUR 126.5 m |

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## Ready, set, ... - Prepare for blow-out 2020; chg.

**Vectron is sitting on a gold mine:** its installed base of 120,000 cash registers in Germany provides direct access to the Point of Sale in the German hospitality sector, making it a unique asset.

The strategy to monetise this asset should **kick-start a phase of dynamic growth from 2020**, transforming Vectron into a much more profitable company with a rising share of repeat business. Two main thrusts:

- Fiscal regulation will require all cash registers to be tamper-proof from Jan. 1, 2020, which should trigger a major upgrade cycle between 2020 and 2022, **yielding total revenues for Vectron of € 66m** (eH&A).
- **Cross selling digital services** (payment, reservations, coupons etc.), where the cash register will act as the interface between the POS and external service providers (e.g. resmio, ePay), and Vectron will receive a high-margin fee per transaction.

The **digital offering proves appealing:** 2,300 clients have already signed up, and at the same time, Vectron has made a trial period with 100 cash registers collecting an average transaction fee of € 40-80 per month from payment alone.

As such, **Vectron is looking at an outstanding 2020** – and beyond. Sales should soar to € 52m next year (+103% yoy), carried by the upgrade cycle. By 2022E, however, **the digital business should dominate** and explain 64% of our € 79m revenue estimate. Given the digital model's scalability, the EBIT margin looks set to rise to 22% in the same timeframe, yielding remarkable returns of above 40%.

Our estimates even look conservative considering that Vectron has recently issued an initial guidance **targeting more than € 100m group revenues** by 2022.

**A high-conviction idea:** PRIMPULSE's recent 10% investment into Vectron underpins the attractive investment case as the technology-centric group has a nose for digital transformation stories, and own expertise to support the metamorphosis.

**Reiterate BUY** with an unchanged € 31 PT based on DCF. Adjusted estimates reflect new assumptions for the timing of the upgrade cycle and growth of the digital business.

| Y/E 31.12 (EUR m)   | 2016    | 2017    | 2018    | 2019E   | 2020E  | 2021E  | 2022E   |
|---------------------|---------|---------|---------|---------|--------|--------|---------|
| Sales               | 33.7    | 32.4    | 24.8    | 25.5    | 51.8   | 56.2   | 79.0    |
| Sales growth        | 30 %    | -4 %    | -23 %   | 3 %     | 103 %  | 8 %    | 41 %    |
| EBITDA              | 3.6     | 2.3     | -3.8    | -3.3    | 8.5    | 12.1   | 19.9    |
| EBIT                | 3.1     | 1.7     | -5.4    | -5.0    | 6.7    | 10.3   | 17.5    |
| Net income          | 2.0     | 1.1     | -3.9    | -3.7    | 4.3    | 6.8    | 11.1    |
| Net debt            | -7.2    | -1.7    | 1.2     | -1.0    | 2.4    | -0.3   | -4.4    |
| Net gearing         | -48.5 % | -12.1 % | 11.9 %  | -8.9 %  | 15.3 % | -1.2 % | -13.0 % |
| Net Debt/EBITDA     | 0.0     | 0.0     | -0.3    | 0.0     | 0.3    | 0.0    | 0.0     |
| EPS pro forma       | 0.30    | 0.16    | -0.59   | -0.52   | 0.60   | 0.93   | 1.52    |
| CPS                 | 0.05    | -0.45   | -0.39   | -0.42   | -0.37  | 0.48   | 0.60    |
| DPS                 | 0.25    | 0.06    | 0.05    | 0.00    | 0.00   | 0.03   | 0.05    |
| Dividend yield      | 1.4 %   | 0.3 %   | 0.3 %   | 0.0 %   | 0.0 %  | 0.2 %  | 0.3 %   |
| Gross profit margin | 54.4 %  | 55.6 %  | 53.3 %  | 54.5 %  | 61.5 % | 62.0 % | 63.0 %  |
| EBITDA margin       | 10.7 %  | 7.0 %   | -15.2 % | -12.8 % | 16.4 % | 21.5 % | 25.2 %  |
| EBIT margin         | 9.2 %   | 5.4 %   | -22.0 % | -19.5 % | 13.0 % | 18.4 % | 22.2 %  |
| ROCE                | 16.5 %  | 8.3 %   | -25.0 % | -20.4 % | 25.5 % | 32.7 % | 40.8 %  |
| EV/sales            | 3.3     | 3.5     | 4.7     | 5.0     | 2.5    | 2.3    | 1.6     |
| EV/EBITDA           | 30.4    | 50.8    | -31.1   | -38.8   | 15.3   | 10.5   | 6.2     |
| EV/EBIT             | 35.6    | 65.7    | -21.5   | -25.5   | 19.3   | 12.3   | 7.0     |
| PER                 | 58.4    | 107.0   | -29.7   | -33.8   | 29.2   | 18.7   | 11.4    |
| Adjusted FCF yield  | 2.0 %   | 0.1 %   | -2.0 %  | -2.6 %  | 3.8 %  | 5.8 %  | 8.3 %   |

Source: Company data, Hauck & Aufhäuser Close price as of: 11.12.2019



Source: Company data, Hauck & Aufhäuser

**High/low 52 weeks:** 17.55 / 7.60

**Price/Book Ratio:** 11.4

**Relative performance (SDAX):**

3 months 48.9 %

6 months 81.3 %

12 months -

### Changes in estimates

|      |      | Sales | EBIT | EPS  |
|------|------|-------|------|------|
| 2019 | old: | 38.0  | 3.1  | 0.27 |
|      | Δ    | na    | na   | na   |
| 2020 | old: | 57.2  | 8.3  | 0.79 |
|      | Δ    | -9%   | -19% | -24% |
| 2021 | old: |       |      |      |
|      | Δ    |       |      |      |

### Key share data:

Number of shares: (in m pcs) 7.3

Authorised capital: (in € m) 3.3

Book value per share: (in €) 1.5

Ø trading volume: (12 months) 10,500

### Major shareholders:

Management 46.0 %

Free Float 44.0 %

Primepulse SE 10.0 %

### Company description:

German market leader for POS systems looking to monetise its installed base

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## Company Background

|   | TRADITIONAL BUSINESS   | DIGITAL BUSINESS  | Group       |
|---|--|---|-------------|
|   |   |   |             |
|   | <b>MARKET AND TECHNOLOGY LEADER IN THE DACH REGION</b>   | <b>STRATEGY: MONETISE THE INSTALLED BASE THROUGH DIGITAL SERVICES</b>   |             |
| <b>Products</b>                             | <p>Vectron sells mobile, touch and regular stationary cash tills as well as the underlying software.</p> <p>The company has 200,000 POS installations in its core markets (120,000 in Germany) providing real-time access to POS - <b>its key asset</b>.</p> <p><b>Note:</b> As a rule of thumb, one merchant typically uses 1.5 cash tills per POS on average. Hence, 120,000 installations imply Vectron has 80,000 restaurateurs as customers.</p>  | <p><b>Vectron will act as a platform provider for digital services</b> including loyalty, EC payment, table reservations, coupons etc.</p> <p>Through the cash till at the point of sale, <b>Vectron will provide the interface / gateway for 3rd party service offerings</b>, which can then be used by the restaurateur.</p> <p>It is a pay per transaction model, of which Vectron will get a specified share, <b>yielding recurring, high-margin revenues</b>.</p>              |             |
| <b>Sales 20E (€ m)</b>                      | 46.8   | 5.0   | <b>51.8</b> |
| <b>Sales share</b>                          | 90%  | 10%   | <b>100%</b> |
| <b>Explanation</b>                          | <p><b>Vectron is the technology leader for high-end cash tills and the underlying software</b> in core markets Germany, Austria, Switzerland and Benelux. Customers can buy or lease the product.</p> <p>The high functionality and stability of its cash registers coupled with the tight integration between hardware and software is a <b>key differentiator</b>.</p> <p>While its core brand "Vectron" has a strong position in the high-end, its more standardised Duratec solution targets the mid-market, its Posmatic brand (iPad-based cash tills) targets entry level customers.</p> | <p>Digital service offerings and partners include:</p> <ul style="list-style-type: none"> <li>* <b>Maestro and credit card payments</b> - Partner is ePay</li> <li>* <b>Loyalty Card</b> - Partner is DeutschlandCard (2nd largest loyalty card provider in Germany)</li> <li>* <b>Table reservations</b> - Partner is resmio</li> <li>* <b>Food delivery service</b> - Partner is Restablo</li> <li>* <b>Coupons</b> - own service</li> </ul> <p><b>More services to come.</b></p> |             |
| <b>Market position &amp; customers</b>      | <p><b>25% SHARE IN CORE SECTORS</b></p> <p>Leader in selected verticals including hair salons, bakeries and restaurants. <b>Vectron holds roughly 25% market share in core sector</b>. Selected customers include Dunkin' Donuts, Häagen-Dasz, Kentucky Fried Chicken, Lavazza, and Coffee Fellows.</p>  | <p>The only player in the market <b>offering comprehensive access to the German hospitality sector</b> through 120,000 POS cash register installations, and who can thus offer this interface / gateway to third parties.</p> <p>The digital services will be fully integrated with the cash register, <b>which is unique</b>.</p>  |             |
| <b>Competitors</b>                          | Key rivals are small software companies (Hypersoft, Samuelson, PC-Cash), integrated hardware & software providers (Casio, Sharp, Schultes) and low-end iPad-based software providers (Orderbird, Gastrofix).   | Competition exists for certain parts of the new ventures e.g. for online reservations rivals include OpenTable or bookatable.com. However, <b>Vectron is a full service provider AND</b> its services will be fully integrated with the cash register, while others are not (e.g. a Deliveroo order typically has to be typed into the cash register by hand)   |             |
| <b>Raw Materials, Production, Suppliers</b> | Production is exclusively assembly and Vectron has several Taiwanese partners. Key raw materials are the LCD / touch display as well as the embedded cash system computer module.  |   |             |
| <b>Sales by region</b>                      | Vectron has a <b>strong distribution network</b> comprising >220 resellers in all of its regional markets for its high-end product (thereof 120 partners in Germany) and >75 partners for Duratec which also take care of service for the end-customer. <b>74% of sales are generated in Germany</b> , 25% in the rest of the EU and 1% in RoW. Key European markets are Germany, Austria, Switzerland, and Benelux.   |   |             |
| <b>EBIT 20E (€ m)</b>                       |  |   | <b>6.7</b>  |
| <b>EBIT-margin</b>                          |  |   | <b>13%</b>  |

Source: Company data, Hauck & Aufhäuser

## Investment Case in a nutshell

**Key asset:** Installed base of 120,000 cash registers in Germany providing direct access to the Point of Sale

This installed base offers **two major growth opportunities:**

- A huge windfall driven by German cash register regulation taking effect January 1, 2020
- Cross-selling a digital service offering (e.g. loyalty, payment, online reservations)

The growth and margin upside is not adequately reflected in valuation: **BUY**, € 31.00 PT (DCF)

## A look at the growth drivers



### German regulation – a major windfall starting 2020

- German regulation will require all cash registers to become “tamper-proof” by 2020E, **driving strong replacement demand**
- We derive a **total revenue opportunity of € 66m for Vectron** which should be realised from 2020E-22E

German legislation requiring cash registers to be tamper-proof **will come into effect at the beginning of 2020**. This means that existing, outdated POS installations will need to be replaced with systems fulfilling legal requirements. Non-compliant restaurateurs will face significant penalties of up to € 25,000.

**The potential windfall for Vectron should be huge and amount to € 66m in total**, in our view (*see below*), given its large installed base of c. 120,000 registers in Germany, which will have to be updated. Two options:

- **A technical software upgrade** should suffice to make newer cash registers compliant with legislation. We expect **60% of the installed base** to fall into this category.
- Older POS installations will have to be replaced altogether. This should be the case for **40% of the installed base** of which some 10% are expected to choose Vectron’s new digital platform offering (eH&A).

On top of this, Vectron should be able to **snap up market share** from rivals. To explain: There is still a substantial base of cash registers in Germany from the likes of Indatec, Casio and Sharp which have since left the market or cut investments - meaning these customers are “up for the taking” as their existing systems largely do not satisfy the new legislation.

We expect the **replacement cycle to stretch over the three years 2020** (50% of replacement demand), 2021 (20%) and 2022 (30%) as there are typically some early movers as well as laggards, and as there is a grace period for some cash registers – in our view 30% of the market – until 2023.

The table below provides a calculation of the sales potential assuming Vectron will charge € 100 for a software upgrade and € 1,350 for a new cash register (i.e. including a 10% volume discount).

| Total revenue potential German regulation       |                |
|---|----------------|
| <b>Installed base</b>                           | <b>120,000</b> |
| Software upgrade (60%)                          | 72,000         |
| Price per unit (€)                              | 100            |
| <b>I. Revenue software upgrade (€ m)</b>        | <b>7</b>       |
| New cash registers (36%)*                       | 43,200         |
| Price per unit (€)                              | 1,350          |
| <b>II. Revenue new cash registers (€ m)</b>     | <b>58</b>      |
| <b>[I. + II.] Total revenue potential (€ m)</b> | <b>66</b>      |

\*Vectron is expected to satisfy 10% of hardware upgrades (i.e. 10% of 40%) with its digital offering, where the cash register comes free of charge  
Source: Company data, Hauck & Aufhäuser

In total, Vectron is expected to reap **one-time sales of € 66m**, which we expect to be split 53% / 20% / 27% between 2020E, 2021E and 2022E, as mentioned before.

|  | 2020E     | 2021E     | 2022E     |
|--|-----------|-----------|-----------|
| Demand split according to year (in % of total) | 53%       | 20%       | 27%       |
| <b>Revenue from German regulation (€ m)</b>    | <b>35</b> | <b>13</b> | <b>17</b> |
| thereof software (€ m)                         | 5.8       | 1.4       | 0.0       |
| thereof new cash registers (€ m)               | 29        | 12        | 17        |

Source: Company data, Hauck & Aufhäuser

Note that we expect market share gains from the likes of Sharp, Indatec etc. to be **served by Vectron's new digital service offering** (see below), where the cash register will be given away for free, and clients pay per transaction for table reservations, loyalty, EC payment etc.

2

Digital Platform Offering

- **Digital platform offering:** Free POS hard- and software plus pay per use third-party services
- Vectron will **receive a high-margin share** of every transaction, driving growth and profitability
- **Scalable platform model:** € 50m sales and € 14m EBIT by 2022E

Vectron’s digital platform offers customers a universal integration platform that connects major third-party services such as e-payment, online reservations, online marketing tools, etc. directly to the POS via gateways, which yields a **compelling value proposition for customers** at highly competitive pricing.

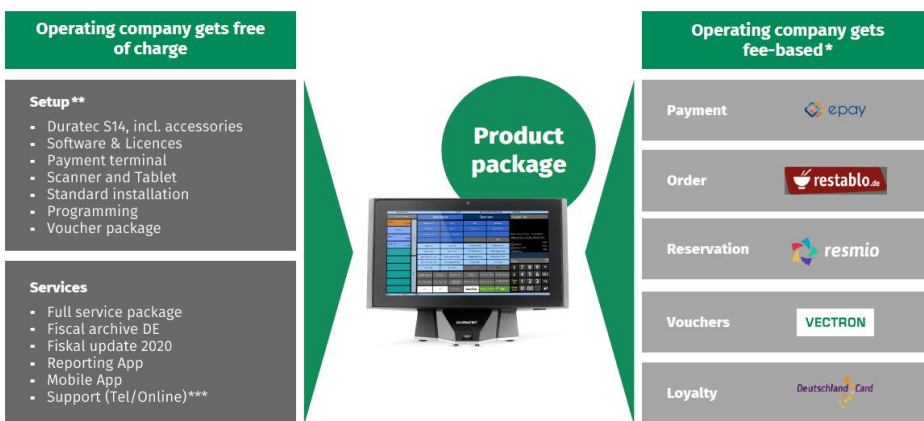
In fact, customers receive free POS hard- and software as well as support services plus additional pay per use online third-party services.

Third-party service providers include epay, restablo, resmio, DeutschlandCard, with more to come. Most of these providers pack a significant punch. For instance:

- resmio is the largest table reservation tool in Germany and the reservation software provider behind 150+ websites on the Internet.
- DeutschlandCard is the second largest loyalty card provider in Germany with more than 20m users.

Benefits for service providers are twofold: (1) **The platform increases their total addressable market** while (2) **significantly reducing customer acquisition costs**. For instance, DeutschlandCard currently lacks exposure to the hospitality sector. With the help of Vectron, it should win additional clients.

Vectron's digital platform offering



\*per transaction; \*\* additional POS system + additional accessories can be added with costs; \*\*\* On-site support: 79 €/hour + travel expenses

Source: Company data

Vectron’s digitally integrated one-stop-solution allows restaurateurs to (1) cut down on the number of service partners and thus (2) lessen service charges, (3) save POS time and (4) reduce manual error or fraud (which is often seen with e.g. paper-based coupons) leading to **major efficiency improvements**. At the same time, the rich functionality should **boost revenue growth** thanks to increased visitor frequency and new client wins.

The appeal of the value proposition is demonstrated by the fact that **already 2.3k clients have signed up** following the kick-off in mid-2019. At the same time, Vectron has made a trial period with 100 cash registers where the company collected an average transaction fee of € 40-80 per month for EC payment alone.

Ultimately, **Vectron is seen to transition from a product company to a digital platform provider**: Keeping a share of all pay per use services is seen to yield high-margin repeat sales, naturally **making Vectron's business model more profitable while increasing predictability**.

**Model assumptions are as follows:**

| Digital platform: Revenue & EBIT 2020E to 2023E                    |              |               |               |               |
|--|--------------|---------------|---------------|---------------|
|  | 2020E        | 2021E         | 2022E         | 2023E         |
| I. Deriving the average number of participating cash registers     |              |               |               |               |
| (a) Vectron's installed base in Germany as of today (units)        | 120,000      | 120,000       | 120,000       | 120,000       |
| (b) Participating cash registers in % of (a)                       | 4%           | 15%           | 20%           | 23%           |
| (c) <b>[a x b] Participating cash registers (units)</b>            | <b>4,800</b> | <b>18,000</b> | <b>24,000</b> | <b>27,600</b> |
| (d) <b>Additional cash registers through new customer wins</b>     | <b>2,100</b> | <b>5,500</b>  | <b>8,500</b>  | <b>12,500</b> |
| (e) <b>Average number of participating cash registers (units)</b>  | <b>3,450</b> | <b>15,200</b> | <b>28,000</b> | <b>36,300</b> |
| II. Deriving the relevant revenues per participating cash register |              |               |               |               |
| (f) Revenues per cash register / month (€)                         | 120          | 145           | 150           | 175           |
| <b>[e x f] Total revenues per month (€ m)</b>                      | <b>0.4</b>   | <b>2.2</b>    | <b>4.2</b>    | <b>6.4</b>    |
| <b>1. Total revenues per year (€ m)</b>                            | <b>5.0</b>   | <b>26.4</b>   | <b>50.4</b>   | <b>76.2</b>   |

Source: Hauck & Aufhäuser estimates

**(1)** 20,000 customers will join the digital platform by 2022E (i.e. 24,000 cash registers / 20% of its installed base / note: 1.5 cash registers per client on average). A part of these already owns tamper-proof Vectron cash registers, i.e. does not require free hardware.

**(2)** Thanks to its seven new distribution partners, which solely focus on acquiring new customers, Vectron should be able to win c. 5,700 additional clients adding 8,500 cash registers to the platform by 2022E. In fact, **the fiscal regulation in Germany provides fertile ground for the digital rollout** and should allow Vectron to snap up market share.

Through market share gains, **Vectron is expected to win 10,000 cash registers until 2022/23E**, which is in fact a conservative assumption, as e.g. Indatec alone held a 4% market share in Germany prior to its exit, which is roughly equal to 20,000 installations.

**(3)** We expect Vectron to generate € 150 turnover per cash register per month by 2022E, resulting in **total repeat sales of € 50m in 2022E**. This is conservative considering that the company has just issued the target of > € 100m group sales in the same year.

|  | 2020E       | 2021E       | 2022E       | 2023E       |
|--|-------------|-------------|-------------|-------------|
| IV. Deriving operating expenses                      |             |             |             |             |
| (g) Acquisition costs per customer (€)               | 550         | 500         | 500         | 500         |
| (h) Net customer adds <sup>1</sup>                   | 3,450       | 11,067      | 6,000       | 5,067       |
| (i) <b>[g x h] Total acquisition costs (€ m)</b>     | <b>1.9</b>  | <b>5.5</b>  | <b>3.0</b>  | <b>2.5</b>  |
| (j) Other variable costs <sup>2</sup> (€ m)          | 2.9         | 15.1        | 29.0        | 44.3        |
| (k) Other fixed costs (€ m)                          | 2.0         | 2.6         | 4.0         | 4.6         |
| <b>2. [i + j + k] Total operating expenses (€ m)</b> | <b>6.8</b>  | <b>23.3</b> | <b>36.1</b> | <b>51.4</b> |
| <b>3. [1. - 2.] EBIT per year (€ m)</b>              | <b>-1.8</b> | <b>3.1</b>  | <b>14.3</b> | <b>24.8</b> |
| EBIT margin  | na          | 12%         | 28%         | 33%         |

<sup>1</sup>Assuming 1.5 cash register installations per customer

<sup>2</sup>Including transfer payments and depreciation

Source: Hauck & Aufhäuser estimates

**(4)** Vectron will have to spend € 500 to acquire one customer (i.e. 1.5 cash registers) and depreciate the cash registers, which are free of charge, over their 7-year lifespan (eH&A). Additionally, Vectron will have to share its transaction fee with its partners, keeping roughly 50% to itself. Other fixed costs to support the rollout and platform development should come on top.

**(5)** As a result, we expect **EBIT to amount to € 14m** by 2022E implying a c. 27% EBIT margin, which should move up further to a sustainable > 30% thanks to Vectron's scalable platform model.

Upside to our estimates could come from the data monetization potential, quicker/broader penetration and further service offerings (e.g. data analytics tools etc.) which should increase Vectron's total revenue per month per cash register. Conservatively, we have not included this into our estimates.

## Putting it all together – our revenue model for Vectron

Vectron's new revenue model is based on two pillars:

- **The “old” business** (90% of sales in 2020E), i.e. the sale of cash registers, software and services which should largely be driven by German legislation forcing the hospitality sector to replace outdated cash registers. Also, there will be “additional” demand from countries outside Germany.
- **The digital platform business** (10% of sales in 2020E): Vectron is expected to generate repeat sales thanks to its high-margin share of pay per use third-party services offered through its comprehensive platform.

The rising share of digital platform revenues (c. 80% of sales in the long term) should **strongly benefit Vectron's bottom line** as these are margin-rich yielding sustainable > 30% EBIT margins in the mid- to long term.



| Vectron: Sales trend 2015-22E       |             |             |             |             |             |             |             |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                     | 2016        | 2017        | 2018E       | 2019E       | 2020E       | 2021E       | 2022E       |
| <b>Sales</b>                        | <b>33.7</b> | <b>32.4</b> | <b>24.8</b> | <b>25.5</b> | <b>51.8</b> | <b>56.2</b> | <b>79.0</b> |
| yoy                                 | 30%         | -4%         | -23%        | 3%          | 103%        | 8%          | 41%         |
| <b>I Vectron cash registers</b>     | <b>22.5</b> | <b>20.2</b> | <b>15.0</b> | <b>15.0</b> | <b>33.4</b> | <b>16.9</b> | <b>21.7</b> |
| in % of sales                       | 67%         | 62%         | 60%         | 59%         | 64%         | 30%         | 27%         |
| a Regulation Germany                | -           | -           | -           | -           | 29.2        | 11.7        | 17.5        |
| b Additional cash register demand   | -           | -           | -           | -           | 4.2         | 5.2         | 4.2         |
| <b>II Software</b>                  | <b>2.3</b>  | <b>2.7</b>  | <b>2.0</b>  | <b>2.3</b>  | <b>6.8</b>  | <b>2.9</b>  | <b>1.0</b>  |
| in % of sales                       | 7%          | 8%          | 8%          | 9%          | 13%         | 5%          | 1%          |
| a Fiscal regulation Germany         | -           | -           | -           | -           | 5.8         | 1.4         | 0.0         |
| b Additional software demand        | -           | -           | -           | -           | 1.0         | 1.5         | 1.0         |
| <b>III Service</b>                  | <b>8.9</b>  | <b>9.4</b>  | <b>7.8</b>  | <b>8.1</b>  | <b>6.7</b>  | <b>9.9</b>  | <b>5.9</b>  |
| in % of sales                       | 26%         | 29%         | 32%         | 32%         | 13%         | 18%         | 7%          |
| <b>IV Digital platform services</b> | <b>-</b>    | <b>-</b>    | <b>-</b>    | <b>0.1</b>  | <b>5.0</b>  | <b>26.4</b> | <b>50.4</b> |
| in % of sales                       | -           | -           | -           | 0%          | 10%         | 47%         | 64%         |

| Vectron: Bottom-line trend 2015-22E |             |             |             |             |             |             |             |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                     | 2016        | 2017        | 2018E       | 2019E       | 2020E       | 2021E       | 2022E       |
| <b>Material expenses</b>            | <b>15.4</b> | <b>14.0</b> | <b>11.5</b> | <b>11.4</b> | <b>19.6</b> | <b>21.0</b> | <b>28.4</b> |
| in % of sales                       | 46%         | 43%         | 46%         | 45%         | 38%         | 37%         | 36%         |
| <b>Gross Profit</b>                 | <b>18.4</b> | <b>18.4</b> | <b>13.3</b> | <b>14.1</b> | <b>32.2</b> | <b>35.2</b> | <b>50.6</b> |
| Gross Margin                        | 54%         | 57%         | 54%         | 55%         | 62%         | 63%         | 64%         |
| <b>Personnel expenses</b>           | <b>8.6</b>  | <b>9.7</b>  | <b>10.2</b> | <b>10.4</b> | <b>15.7</b> | <b>15.6</b> | <b>20.5</b> |
| in % of sales                       | 26%         | 30%         | 41%         | 41%         | 30%         | 28%         | 26%         |
| <b>Other operating expenses</b>     | <b>6.6</b>  | <b>7.0</b>  | <b>7.4</b>  | <b>7.5</b>  | <b>8.9</b>  | <b>8.5</b>  | <b>11.6</b> |
| in % of sales                       | 19%         | 21%         | 30%         | 29%         | 17%         | 15%         | 15%         |
| <b>Other operating income</b>       | <b>0.4</b>  | <b>0.6</b>  | <b>0.5</b>  | <b>0.5</b>  | <b>0.9</b>  | <b>1.0</b>  | <b>1.4</b>  |
| in % of sales                       | 1%          | 2%          | 2%          | 2%          | 2%          | 2%          | 2%          |
| <b>EBITDA</b>                       | <b>3.6</b>  | <b>2.3</b>  | <b>-3.8</b> | <b>-3.3</b> | <b>8.5</b>  | <b>12.1</b> | <b>19.9</b> |
| EBITDA margin                       | 11%         | 7%          | -15%        | -13%        | 16%         | 22%         | 25%         |
| <b>D&amp;A</b>                      | <b>0.5</b>  | <b>0.5</b>  | <b>1.7</b>  | <b>1.7</b>  | <b>1.7</b>  | <b>1.8</b>  | <b>2.4</b>  |
| in % of sales                       | 2%          | 2%          | 7%          | 7%          | 3%          | 3%          | 3%          |
| <b>EBIT</b>                         | <b>3.1</b>  | <b>1.7</b>  | <b>-5.4</b> | <b>-5.0</b> | <b>6.7</b>  | <b>10.3</b> | <b>17.5</b> |
| EBIT margin                         | 9.2%        | 5.4%        | -22.0%      | -19.5%      | 13.0%       | 18.4%       | 22.2%       |
| <b>Financial result</b>             | <b>-0.1</b> | <b>-0.1</b> | <b>-0.2</b> | <b>-0.5</b> | <b>-0.5</b> | <b>-0.5</b> | <b>-0.5</b> |
| <b>Taxes</b>                        | <b>1.0</b>  | <b>0.6</b>  | <b>-1.7</b> | <b>-1.7</b> | <b>1.9</b>  | <b>3.0</b>  | <b>5.3</b>  |
| Tax rate                            | 34%         | 35%         | 31%         | 31%         | 31%         | 31%         | 31%         |
| <b>Net income</b>                   | <b>2.0</b>  | <b>1.1</b>  | <b>-3.9</b> | <b>-3.7</b> | <b>4.3</b>  | <b>6.8</b>  | <b>11.1</b> |
| in % of sales                       | 6%          | 3%          | -16%        | -15%        | 8%          | 12%         | 14%         |

Source: Company data, Hauck & Aufhäuser

## Valuation: DCF

- A DCF model yields a **price target of € 31.00 per share** for Vectron
- **DCF best reflects Vectron's expected transformation** towards repeat higher-margin digital platform revenues

We chose a DCF model to value Vectron as it seems best suited to account for Vectron's transformation from a product company towards a digital platform company.

In the long term we expect Vectron's revenue mix to incorporate:

- 80% of total revenues from the digital platform business p.a. at a 30% EBIT margin.
- 20% of total revenues from the cash register, software and services business p.a. at a 5% EBIT margin.

This explains our long term DCF assumptions of a terminal year EBIT margin of 25%. The mid-term growth rate is set at 15% considering the increasing share of repeat sales from Vectron's digital platform business and the cash register replacement demand arising from German legislation. The terminal growth rate is set at 2.0% and the WACC of 8.0% is made up of a 1.5% risk-free rate, beta of 1.2 and a risk premium of 5.5%.

**The DCF model results in a price target of € 31.00 per share.**

| Vectron DCF (EUR m)<br>(except per share data and beta) | 2019E      | 2020E       | 2021E      | 2022E      | 2023E       | 2024E       | 2025E       | 2026E       | Terminal value |
|---|------------|-------------|------------|------------|-------------|-------------|-------------|-------------|----------------|
| NOPAT   | -3.4       | 4.7         | 7.1        | 11.4       | 15.7        | 16.8        | 19.0        | 20.1        | 20.0           |
| Depreciation  | 1.7        | 1.7         | 2.6        | 2.4        | 3.8         | 4.5         | 6.4         | 6.8         | 6.9            |
| Increase/decrease in working capital                    | 0.7        | -7.0        | -3.3       | -5.9       | -2.3        | -1.0        | -2.1        | -0.5        | -0.6           |
| Increase/decrease in long-term provisions and accruals  | 0.0        | 0.0         | 0.0        | 0.0        | 0.0         | 0.0         | 0.0         | 0.0         | 0.0            |
| Capex   | -1.1       | -2.4        | -2.6       | -3.9       | -5.5        | -5.8        | -6.4        | -6.8        | -6.9           |
| Acquisitions  | 0.0        | 0.0         | 0.0        | 0.0        | 0.0         | 0.0         | 0.0         | 0.0         | 0.0            |
| Capital increase  | 5.0        | 0.0         | 0.0        | 0.0        | 0.0         | 0.0         | 0.0         | 0.0         | 0.0            |
| <b>Cash flow</b>  | <b>2.8</b> | <b>-3.0</b> | <b>3.9</b> | <b>4.0</b> | <b>11.7</b> | <b>14.5</b> | <b>16.9</b> | <b>19.7</b> | <b>19.4</b>    |
| Present value   | 2.8        | -2.8        | 3.3        | 3.1        | 8.5         | 9.8         | 10.5        | 11.4        | 173.8          |
| WACC  | 8.1%       | 8.0%        | 8.1%       | 8.1%       | 8.1%        | 8.1%        | 8.1%        | 8.1%        | 8.0%           |

| DCF per share derived from            |            |
|---------------------------------------|------------|
| Total present value                   | 220        |
| thereof terminal value                | 79%        |
| Net debt (net cash) at start of year  | -2         |
| Financial assets                      | 2          |
| Provisions and off balance sheet debt | 1          |
| Equity value                          | 223        |
| No. of shares outstanding             | 7.3        |
| <b>Discounted cash flow per share</b> | <b>31</b>  |
| <b>upside/(downside)</b>              | <b>68%</b> |

**Share price** 18.3

| Sensitivity analysis DCF |       | Long term growth |      |      |      |      |
|--------------------------|-------|------------------|------|------|------|------|
|                          |       | 0.0%             | 1.0% | 2.0% | 3.0% | 4.0% |
| WACC                     | 10.0% | 19               | 21   | 22   | 24   | 27   |
|                          | 9.0%  | 22               | 23   | 26   | 29   | 33   |
|                          | 8.0%  | 25               | 27   | 31   | 35   | 43   |
|                          | 7.0%  | 29               | 33   | 38   | 45   | 58   |
|                          | 6.0%  | 35               | 40   | 48   | 62   | 90   |

| DCF avg. growth and earnings assumptions |      |
|--|------|
| Short term growth (2018-2021E)           | 31%  |
| Medium term growth (2021E - 2026E)       | 15%  |
| Long term growth (2026E - infinity)      | 2.0% |
| Terminal year EBIT margin                | 25%  |

| WACC derived from                   |       |
|-------------------------------------|-------|
| Cost of borrowings before taxes     | 5.0%  |
| Tax rate                            | 35.0% |
| Cost of borrowings after taxes      | 3.5%  |
| Required return on invested capital | 8.1%  |
| Risk premium                        | 5.5%  |
| Risk-free rate                      | 1.5%  |
| Beta                                | 1.2   |

| Sensitivity analysis DCF |       | EBIT margin terminal year |     |     |     |     |  |
|--------------------------|-------|---------------------------|-----|-----|-----|-----|--|
|                          |       | 20%                       | 23% | 25% | 28% | 30% |  |
| WACC                     | 10.0% | 19                        | 21  | 22  | 24  | 25  |  |
|                          | 9.0%  | 22                        | 24  | 26  | 28  | 30  |  |
|                          | 8.0%  | 26                        | 28  | 31  | 33  | 36  |  |
|                          | 7.0%  | 31                        | 34  | 38  | 41  | 44  |  |
|                          | 6.0%  | 40                        | 44  | 48  | 53  | 57  |  |

Source: Company data, Hauck & Aufhäuser

## Financials

| Profit and loss (EUR m)                                   | 2016        | 2017        | 2018         | 2019E        | 2020E       | 2021E       | 2022E       |
|---|-------------|-------------|--------------|--------------|-------------|-------------|-------------|
| <b>Net sales</b>  | <b>33.7</b> | <b>32.4</b> | <b>24.8</b>  | <b>25.5</b>  | <b>51.8</b> | <b>56.2</b> | <b>79.0</b> |
| <i>Sales growth</i>                                       | 30.4 %      | -4.0 %      | -23.3 %      | 2.7 %        | 103.1 %     | 8.5 %       | 40.6 %      |
| Increase/decrease in finished goods and work-in-process   | 0.0         | 0.6         | 0.2          | 0.4          | 0.5         | 0.6         | 1.3         |
| <b>Total sales</b>  | <b>33.7</b> | <b>33.0</b> | <b>25.0</b>  | <b>25.9</b>  | <b>52.3</b> | <b>56.8</b> | <b>80.3</b> |
| Other operating income                                    | 0.4         | 0.6         | 0.5          | 0.5          | 0.9         | 1.0         | 1.4         |
| Material expenses   | 15.4        | 14.6        | 11.7         | 11.8         | 20.1        | 21.6        | 29.7        |
| Personnel expenses  | 8.6         | 9.7         | 10.2         | 10.4         | 15.7        | 15.6        | 20.5        |
| Other operating expenses                                  | 6.6         | 7.0         | 7.4          | 7.5          | 8.9         | 8.5         | 11.6        |
| Total operating expenses                                  | 30.1        | 30.7        | 28.8         | 29.1         | 43.8        | 44.7        | 60.4        |
| <b>EBITDA</b>   | <b>3.6</b>  | <b>2.3</b>  | <b>-3.8</b>  | <b>-3.3</b>  | <b>8.5</b>  | <b>12.1</b> | <b>19.9</b> |
| Depreciation  | 0.3         | 0.3         | 0.3          | 0.3          | 0.3         | 0.4         | 0.4         |
| <b>EBITA</b>  | <b>3.3</b>  | <b>1.9</b>  | <b>-4.1</b>  | <b>-3.6</b>  | <b>8.1</b>  | <b>11.7</b> | <b>19.5</b> |
| Amortisation of goodwill                                  | 0.0         | 0.0         | 0.0          | 0.0          | 0.0         | 0.0         | 0.0         |
| Amortisation of intangible assets                         | 0.2         | 0.2         | 1.4          | 1.4          | 1.4         | 1.4         | 2.0         |
| Impairment charges  | 0.0         | 0.0         | 0.0          | 0.0          | 0.0         | 0.0         | 0.0         |
| <b>EBIT (inc revaluation net)</b>                         | <b>3.1</b>  | <b>1.7</b>  | <b>-5.4</b>  | <b>-5.0</b>  | <b>6.7</b>  | <b>10.3</b> | <b>17.5</b> |
| Interest income   | 0.1         | 0.1         | 0.0          | 0.0          | 0.0         | 0.0         | 0.1         |
| Interest expenses   | 0.2         | 0.2         | 0.2          | 0.5          | 0.5         | 0.6         | 0.6         |
| Other financial result                                    | 0.0         | 0.0         | 0.0          | 0.0          | 0.0         | 0.0         | 0.0         |
| Financial result  | -0.1        | -0.1        | -0.2         | -0.5         | -0.5        | -0.5        | -0.5        |
| <b>Recurring pretax income from continuing operations</b> | <b>3.0</b>  | <b>1.7</b>  | <b>-5.6</b>  | <b>-5.4</b>  | <b>6.3</b>  | <b>9.8</b>  | <b>17.1</b> |
| Extraordinary income/loss                                 | 0.0         | 0.0         | 0.0          | 0.0          | 0.0         | 0.0         | 0.0         |
| <b>Earnings before taxes</b>                              | <b>3.0</b>  | <b>1.7</b>  | <b>-5.6</b>  | <b>-5.4</b>  | <b>6.3</b>  | <b>9.8</b>  | <b>17.1</b> |
| Taxes   | 1.0         | 0.6         | -1.7         | -1.7         | 1.9         | 3.0         | 5.3         |
| <b>Net income from continuing operations</b>              | <b>2.0</b>  | <b>1.1</b>  | <b>-3.9</b>  | <b>-3.7</b>  | <b>4.3</b>  | <b>6.8</b>  | <b>11.8</b> |
| Result from discontinued operations (net of tax)          | 0.0         | 0.0         | 0.0          | 0.0          | 0.0         | 0.0         | 0.0         |
| <b>Net income</b>   | <b>2.0</b>  | <b>1.1</b>  | <b>-3.9</b>  | <b>-3.7</b>  | <b>4.3</b>  | <b>6.8</b>  | <b>11.8</b> |
| Minority interest   | 0.0         | 0.0         | 0.0          | 0.0          | 0.0         | 0.0         | 0.7         |
| <b>Net profit (reported)</b>                              | <b>2.0</b>  | <b>1.1</b>  | <b>-3.9</b>  | <b>-3.7</b>  | <b>4.3</b>  | <b>6.8</b>  | <b>11.1</b> |
| Average number of shares                                  | 6.6         | 6.6         | 6.6          | 6.9          | 7.3         | 7.3         | 7.3         |
| <b>EPS reported</b>                                       | <b>0.30</b> | <b>0.16</b> | <b>-0.59</b> | <b>-0.54</b> | <b>0.60</b> | <b>0.93</b> | <b>1.52</b> |

| Profit and loss (common size)                             | 2016           | 2017           | 2018           | 2019E          | 2020E          | 2021E          | 2022E          |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>Net sales</b>  | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> |
| Increase/decrease in finished goods and work-in-process   | 0.1 %          | 1.9 %          | 0.9 %          | 1.5 %          | 1.0 %          | 1.0 %          | 1.7 %          |
| <b>Total sales</b>  | <b>100.1 %</b> | <b>101.9 %</b> | <b>100.9 %</b> | <b>101.5 %</b> | <b>101.0 %</b> | <b>101.0 %</b> | <b>101.7 %</b> |
| Other operating income                                    | 1.3 %          | 1.7 %          | 1.8 %          | 2.0 %          | 1.8 %          | 1.8 %          | 1.8 %          |
| Material expenses   | 45.6 %         | 45.2 %         | 47.1 %         | 46.2 %         | 38.9 %         | 38.4 %         | 37.6 %         |
| Personnel expenses  | 25.6 %         | 30.0 %         | 41.1 %         | 40.7 %         | 30.4 %         | 27.8 %         | 25.9 %         |
| Other operating expenses                                  | 19.5 %         | 21.5 %         | 29.7 %         | 29.4 %         | 17.2 %         | 15.2 %         | 14.7 %         |
| Total operating expenses                                  | 89.4 %         | 95.0 %         | 116.1 %        | 114.3 %        | 84.6 %         | 79.5 %         | 76.5 %         |
| <b>EBITDA</b>   | <b>10.7 %</b>  | <b>7.0 %</b>   | <b>neg.</b>    | <b>neg.</b>    | <b>16.4 %</b>  | <b>21.5 %</b>  | <b>25.2 %</b>  |
| Depreciation  | 1.0 %          | 1.1 %          | 1.2 %          | 1.2 %          | 0.6 %          | 0.6 %          | 0.5 %          |
| <b>EBITA</b>  | <b>9.7 %</b>   | <b>5.9 %</b>   | <b>neg.</b>    | <b>neg.</b>    | <b>15.7 %</b>  | <b>20.9 %</b>  | <b>24.7 %</b>  |
| Amortisation of goodwill                                  | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          |
| Amortisation of intangible assets                         | 0.6 %          | 0.5 %          | 5.6 %          | 5.5 %          | 2.7 %          | 2.5 %          | 2.5 %          |
| Impairment charges  | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          |
| <b>EBIT (inc revaluation net)</b>                         | <b>9.2 %</b>   | <b>5.4 %</b>   | <b>neg.</b>    | <b>neg.</b>    | <b>13.0 %</b>  | <b>18.4 %</b>  | <b>22.2 %</b>  |
| Interest income   | 0.2 %          | 0.2 %          | 0.2 %          | 0.2 %          | 0.1 %          | 0.1 %          | 0.1 %          |
| Interest expenses   | 0.6 %          | 0.5 %          | 0.8 %          | 2.0 %          | 1.0 %          | 1.0 %          | 0.7 %          |
| Other financial result                                    | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          |
| Financial result  | neg.           | neg.           | neg.           | neg.           | neg.           | neg.           | neg.           |
| <b>Recurring pretax income from continuing operations</b> | <b>8.8 %</b>   | <b>5.1 %</b>   | <b>neg.</b>    | <b>neg.</b>    | <b>12.1 %</b>  | <b>17.5 %</b>  | <b>21.6 %</b>  |
| Extraordinary income/loss                                 | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          |
| <b>Earnings before taxes</b>                              | <b>8.8 %</b>   | <b>5.1 %</b>   | <b>neg.</b>    | <b>neg.</b>    | <b>12.1 %</b>  | <b>17.5 %</b>  | <b>21.6 %</b>  |
| Tax rate  | 33.7 %         | 35.2 %         | 31.0 %         | 31.0 %         | 31.0 %         | 31.0 %         | 31.0 %         |
| <b>Net income from continuing operations</b>              | <b>5.8 %</b>   | <b>3.3 %</b>   | <b>neg.</b>    | <b>neg.</b>    | <b>8.4 %</b>   | <b>12.1 %</b>  | <b>14.9 %</b>  |
| Income from discontinued operations (net of tax)          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          |
| <b>Net income</b>   | <b>5.8 %</b>   | <b>3.3 %</b>   | <b>neg.</b>    | <b>neg.</b>    | <b>8.4 %</b>   | <b>12.1 %</b>  | <b>14.9 %</b>  |
| Minority interest   | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.9 %          |
| <b>Net profit (reported)</b>                              | <b>5.8 %</b>   | <b>3.3 %</b>   | <b>neg.</b>    | <b>neg.</b>    | <b>8.4 %</b>   | <b>12.1 %</b>  | <b>14.0 %</b>  |

Source: Company data, Hauck & Aufhäuser

| Balance sheet (EUR m)                                     | 2016        | 2017        | 2018        | 2019E       | 2020E       | 2021E       | 2022E       |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Intangible assets</b>                                  | <b>0.4</b>  | <b>1.5</b>  | <b>0.2</b>  | <b>-0.3</b> | <b>0.2</b>  | <b>0.9</b>  | <b>2.1</b>  |
| Property, plant and equipment                             | 0.7         | 0.6         | 0.6         | 0.5         | 0.6         | 0.8         | 1.1         |
| Financial assets  | 0.9         | 1.8         | 1.8         | 1.8         | 1.8         | 1.8         | 1.8         |
| <b>FIXED ASSETS</b>                                       | <b>2.1</b>  | <b>4.0</b>  | <b>2.6</b>  | <b>2.0</b>  | <b>2.6</b>  | <b>3.5</b>  | <b>5.0</b>  |
| Inventories   | 4.8         | 7.6         | 5.8         | 5.1         | 10.4        | 11.2        | 14.4        |
| Accounts receivable                                       | 4.9         | 3.3         | 2.3         | 2.3         | 4.7         | 7.2         | 10.6        |
| Other current assets                                      | 1.0         | 0.8         | 0.9         | 0.9         | 0.9         | 0.9         | 0.9         |
| Liquid assets   | 11.7        | 5.5         | 11.6        | 13.7        | 10.4        | 15.5        | 17.2        |
| Deferred taxes  | 0.1         | 0.1         | 1.7         | 1.7         | 1.7         | 1.7         | 1.7         |
| Deferred charges and prepaid expenses                     | 0.1         | 0.2         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         |
| <b>CURRENT ASSETS</b>                                     | <b>22.5</b> | <b>17.5</b> | <b>22.3</b> | <b>23.8</b> | <b>28.2</b> | <b>36.7</b> | <b>44.8</b> |
| <b>TOTAL ASSETS</b>                                       | <b>24.6</b> | <b>21.5</b> | <b>24.9</b> | <b>25.8</b> | <b>30.8</b> | <b>40.2</b> | <b>49.8</b> |
| <b>SHAREHOLDERS EQUITY</b>                                | <b>14.9</b> | <b>14.3</b> | <b>10.1</b> | <b>11.1</b> | <b>15.4</b> | <b>22.2</b> | <b>33.7</b> |
| MINORITY INTEREST   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Long-term debt  | 4.4         | 3.8         | 12.8        | 12.8        | 12.8        | 12.8        | 12.8        |
| Provisions for pensions and similar obligations           | 2.1         | 1.4         | 0.9         | 0.9         | 0.9         | 0.9         | 0.9         |
| Other provisions  | 1.1         | 0.2         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| <b>Non-current liabilities</b>                            | <b>7.6</b>  | <b>5.5</b>  | <b>13.7</b> | <b>13.7</b> | <b>13.7</b> | <b>13.7</b> | <b>13.7</b> |
| short-term liabilities to banks                           | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 2.5         | 0.0         |
| Accounts payable  | 1.5         | 1.4         | 0.6         | 0.6         | 1.3         | 1.4         | 1.9         |
| Advance payments received on orders                       | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Other liabilities (incl. from lease and rental contracts) | 0.6         | 0.2         | 0.4         | 0.4         | 0.4         | 0.4         | 0.4         |
| Deferred taxes  | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Deferred income   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| <b>Current liabilities</b>                                | <b>2.0</b>  | <b>1.7</b>  | <b>1.0</b>  | <b>1.0</b>  | <b>1.7</b>  | <b>4.3</b>  | <b>2.3</b>  |
| <b>TOTAL LIABILITIES AND SHAREHOLDERS EQUITY</b>          | <b>24.6</b> | <b>21.5</b> | <b>24.9</b> | <b>25.8</b> | <b>30.8</b> | <b>40.2</b> | <b>49.8</b> |

| Balance sheet (common size)                               | 2016           | 2017           | 2018           | 2019E          | 2020E          | 2021E          | 2022E          |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>Intangible assets</b>                                  | <b>1.8 %</b>   | <b>7.2 %</b>   | <b>0.8 %</b>   | <b>-1.2 %</b>  | <b>0.7 %</b>   | <b>2.3 %</b>   | <b>4.2 %</b>   |
| Property, plant and equipment                             | 2.9 %          | 2.8 %          | 2.3 %          | 1.9 %          | 2.0 %          | 1.9 %          | 2.2 %          |
| Financial assets  | 3.7 %          | 8.4 %          | 7.3 %          | 7.0 %          | 5.9 %          | 4.5 %          | 3.6 %          |
| <b>FIXED ASSETS</b>                                       | <b>8.4 %</b>   | <b>18.4 %</b>  | <b>10.3 %</b>  | <b>7.7 %</b>   | <b>8.6 %</b>   | <b>8.8 %</b>   | <b>10.0 %</b>  |
| Inventories   | 19.4 %         | 35.4 %         | 23.4 %         | 19.8 %         | 33.6 %         | 28.0 %         | 28.8 %         |
| Accounts receivable                                       | 19.9 %         | 15.3 %         | 9.1 %          | 9.0 %          | 15.4 %         | 18.0 %         | 21.3 %         |
| Other current assets                                      | 3.9 %          | 3.5 %          | 3.7 %          | 3.6 %          | 3.0 %          | 2.3 %          | 1.9 %          |
| Liquid assets   | 47.5 %         | 25.8 %         | 46.5 %         | 53.2 %         | 33.8 %         | 38.6 %         | 34.5 %         |
| Deferred taxes  | 0.5 %          | 0.5 %          | 6.7 %          | 6.4 %          | 5.4 %          | 4.1 %          | 3.3 %          |
| Deferred charges and prepaid expenses                     | 0.4 %          | 1.0 %          | 0.3 %          | 0.3 %          | 0.2 %          | 0.2 %          | 0.1 %          |
| <b>CURRENT ASSETS</b>                                     | <b>91.6 %</b>  | <b>81.6 %</b>  | <b>89.7 %</b>  | <b>92.3 %</b>  | <b>91.4 %</b>  | <b>91.2 %</b>  | <b>90.0 %</b>  |
| <b>TOTAL ASSETS</b>                                       | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> |
| <b>SHAREHOLDERS EQUITY</b>                                | <b>60.6 %</b>  | <b>66.8 %</b>  | <b>40.8 %</b>  | <b>42.9 %</b>  | <b>50.0 %</b>  | <b>55.2 %</b>  | <b>67.8 %</b>  |
| MINORITY INTEREST   | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          |
| Long-term debt  | 18.1 %         | 17.8 %         | 51.3 %         | 49.4 %         | 41.4 %         | 31.8 %         | 25.6 %         |
| Provisions for pensions and similar obligations           | 8.4 %          | 6.6 %          | 3.8 %          | 3.7 %          | 3.1 %          | 2.4 %          | 1.9 %          |
| Other provisions  | 4.6 %          | 1.0 %          | 0.1 %          | 0.1 %          | 0.1 %          | 0.1 %          | 0.0 %          |
| <b>Non-current liabilities</b>                            | <b>31.1 %</b>  | <b>25.5 %</b>  | <b>55.2 %</b>  | <b>53.2 %</b>  | <b>44.6 %</b>  | <b>34.2 %</b>  | <b>27.6 %</b>  |
| short-term liabilities to banks                           | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 6.2 %          | 0.0 %          |
| Accounts payable  | 5.9 %          | 6.7 %          | 2.4 %          | 2.4 %          | 4.1 %          | 3.4 %          | 3.9 %          |
| Advance payments received on orders                       | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          |
| Other liabilities (incl. from lease and rental contracts) | 2.4 %          | 1.1 %          | 1.6 %          | 1.5 %          | 1.3 %          | 1.0 %          | 0.8 %          |
| Deferred taxes  | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          |
| Deferred income   | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          | 0.0 %          |
| <b>Current liabilities</b>                                | <b>8.3 %</b>   | <b>7.8 %</b>   | <b>4.0 %</b>   | <b>3.9 %</b>   | <b>5.4 %</b>   | <b>10.6 %</b>  | <b>4.6 %</b>   |
| <b>TOTAL LIABILITIES AND SHAREHOLDERS EQUITY</b>          | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> | <b>100.0 %</b> |

Source: Company data, Hauck & Aufhäuser

| Cash flow statement (EUR m)                          | 2016        | 2017        | 2018        | 2019E       | 2020E       | 2021E       | 2022E       |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Net profit/loss                                      | 2.0         | 1.1         | -3.9        | -3.7        | 4.3         | 6.8         | 11.8        |
| Depreciation of fixed assets (incl. leases)          | 0.3         | 0.3         | 0.3         | 0.3         | 0.3         | 0.4         | 0.4         |
| Amortisation of goodwill                             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Amortisation of intangible assets                    | 0.2         | 0.2         | 1.4         | 1.4         | 1.4         | 1.4         | 2.0         |
| Others   | 0.8         | -1.8        | -2.1        | 0.0         | 0.0         | 0.0         | 0.0         |
| Cash flow from operations before changes in w/c      | 3.3         | -0.2        | -4.3        | -2.0        | 6.1         | 8.5         | 14.2        |
| Increase/decrease in inventory                       | -1.0        | -2.8        | 1.8         | 0.7         | -5.3        | -0.9        | -3.1        |
| Increase/decrease in accounts receivable             | -1.5        | 1.6         | 1.0         | -0.1        | -2.4        | -2.5        | -3.4        |
| Increase/decrease in accounts payable                | 0.0         | 0.0         | -0.8        | 0.0         | 0.6         | 0.1         | 0.6         |
| Increase/decrease in other working capital positions | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Increase/decrease in working capital                 | -2.5        | -1.3        | 2.0         | 0.7         | -7.0        | -3.3        | -5.9        |
| <b>Cash flow from operating activities</b>           | <b>0.8</b>  | <b>-1.5</b> | <b>-2.3</b> | <b>-1.4</b> | <b>-1.0</b> | <b>5.3</b>  | <b>8.2</b>  |
| CAPEX  | 0.4         | 1.5         | 0.3         | 1.1         | 2.4         | 2.6         | 3.9         |
| Payments for acquisitions                            | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Financial investments                                | 0.0         | 0.9         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Income from asset disposals                          | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| <b>Cash flow from investing activities</b>           | <b>-0.4</b> | <b>-2.4</b> | <b>-0.3</b> | <b>-1.1</b> | <b>-2.4</b> | <b>-2.6</b> | <b>-3.9</b> |
| Cash flow before financing                           | 0.3         | -3.9        | -2.6        | -2.5        | -3.3        | 2.6         | 4.4         |
| Increase/decrease in debt position                   | -3.3        | -0.6        | 8.9         | 0.0         | 0.0         | 2.5         | -2.5        |
| Purchase of own shares                               | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Capital measures                                     | 5.9         | 0.0         | 0.0         | 5.0         | 0.0         | 0.0         | 0.0         |
| Dividends paid                                       | 0.7         | 1.6         | 0.3         | 0.3         | 0.0         | 0.0         | 0.2         |
| Others   | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| Effects of exchange rate changes on cash             | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         |
| <b>Cash flow from financing activities</b>           | <b>1.9</b>  | <b>-2.2</b> | <b>8.6</b>  | <b>4.7</b>  | <b>0.0</b>  | <b>2.5</b>  | <b>-2.7</b> |
| Increase/decrease in liquid assets                   | 2.2         | -6.1        | 6.0         | 2.2         | -3.3        | 5.1         | 1.6         |
| <b>Liquid assets at end of period</b>                | <b>11.7</b> | <b>5.5</b>  | <b>11.6</b> | <b>13.7</b> | <b>10.4</b> | <b>15.5</b> | <b>17.2</b> |

Source: Company data, Hauck & Aufhäuser

| Regional split (EUR m) | 2016        | 2017        | 2018        | 2019E       | 2020E       | 2021E       | 2022E       |
|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Domestic               | 25.9        | 23.7        | 18.2        | 19.9        | 42.5        | 48.0        | 69.2        |
| yoy change             | 43.7 %      | -8.2 %      | -23.3 %     | 9.3 %       | 113.6 %     | 13.0 %      | 44.2 %      |
| Rest of Europe         | 7.4         | 8.2         | 6.3         | 5.4         | 8.9         | 7.9         | 9.5         |
| yoy change             | 11.6 %      | 11.3 %      | -23.1 %     | -15.4 %     | 66.4 %      | -11.7 %     | 20.5 %      |
| NAFTA                  | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| yoy change             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| Asia Pacific           | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| yoy change             | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         | n/a         |
| Rest of world          | 0.5         | 0.4         | 0.3         | 0.3         | 0.4         | 0.3         | 0.3         |
| yoy change             | -20.9 %     | -8.2 %      | -29.7 %     | -14.4 %     | 62.5 %      | -18.6 %     | -6.3 %      |
| <b>TTL</b>             | <b>33.7</b> | <b>32.4</b> | <b>24.8</b> | <b>25.5</b> | <b>51.8</b> | <b>56.2</b> | <b>79.0</b> |
| yoy change             | 30.4 %      | -4.0 %      | -23.3 %     | 2.7 %       | 103.1 %     | 8.5 %       | 40.6 %      |

Source: Company data, Hauck & Aufhäuser

| Key ratios (EUR m)                   | 2016   | 2017    | 2018     | 2019E   | 2020E    | 2021E    | 2022E   |
|--------------------------------------|--------|---------|----------|---------|----------|----------|---------|
| <b>P&amp;L growth analysis</b>       |        |         |          |         |          |          |         |
| Sales growth                         | 30.4 % | -4.0 %  | -23.3 %  | 2.7 %   | 103.1 %  | 8.5 %    | 40.6 %  |
| EBITDA growth                        | 36.7 % | -37.5 % | -267.0 % | -13.4 % | -325.0 % | -470.7 % | 64.8 %  |
| EBIT growth                          | 49.3 % | -43.4 % | -411.9 % | -9.0 %  | -223.8 % | -308.2 % | 69.7 %  |
| EPS growth                           | 51.0 % | -45.4 % | -460.5 % | -7.9 %  | -201.7 % | -272.5 % | 63.3 %  |
| <b>Efficiency</b>                    |        |         |          |         |          |          |         |
| Total operating costs / sales        | 89.4 % | 95.0 %  | 116.1 %  | 114.3 % | 84.6 %   | 79.5 %   | 76.5 %  |
| Sales per employee                   | 221.1  | 186.6   | 132.0    | 124.7   | 240.9    | 244.3    | 403.1   |
| EBITDA per employee                  | 23.7   | 13.0    | -20.0    | -15.9   | 39.4     | 52.6     | 101.7   |
| <b>Balance sheet analysis</b>        |        |         |          |         |          |          |         |
| Avg. working capital / sales         | 22.1 % | 29.0 %  | 36.0 %   | 30.0 %  | 21.6 %   | 22.2 %   | 26.1 %  |
| Inventory turnover (sales/inventory) | 7.1    | 4.3     | 4.3      | 5.0     | 5.0      | 5.0      | 5.5     |
| Trade debtors in days of sales       | 53.0   | 37.1    | 33.4     | 33.4    | 33.4     | 47.0     | 49.0    |
| A/P turnover [(A/P*365)/sales]       | 15.8   | 16.2    | 8.9      | 8.9     | 8.9      | 8.9      | 8.9     |
| Cash conversion cycle (days)         | 131.5  | 190.9   | 195.6    | 172.2   | 198.3    | 214.1    | 201.8   |
| <b>Cash flow analysis</b>            |        |         |          |         |          |          |         |
| Free cash flow                       | 0.3    | -3.0    | -2.6     | -2.5    | -3.3     | 2.6      | 4.4     |
| Free cash flow/sales                 | 1.0 %  | -9.2 %  | -10.5 %  | -9.8 %  | -6.5 %   | 4.7 %    | 5.5 %   |
| FCF / net profit                     | 17.6 % | neg.    | neg.     | neg.    | neg.     | 38.6 %   | 39.4 %  |
| Capex / depn                         | 82.4 % | 473.6 % | 16.5 %   | 66.0 %  | 137.7 %  | 150.1 %  | 162.0 % |
| Capex / maintenance capex            | 59.9 % | 16.1 %  | 89.5 %   | 13.5 %  | 26.9 %   | 28.7 %   | 18.4 %  |
| Capex / sales                        | 1.3 %  | 7.4 %   | 1.1 %    | 4.4 %   | 4.6 %    | 4.7 %    | 4.9 %   |
| <b>Security</b>                      |        |         |          |         |          |          |         |
| Net debt                             | -7.2   | -1.7    | 1.2      | -1.0    | 2.4      | -0.3     | -4.4    |
| Net Debt/EBITDA                      | 0.0    | 0.0     | -0.3     | 0.0     | 0.3      | 0.0      | 0.0     |
| Net debt / equity                    | neg.   | neg.    | 0.1      | neg.    | 0.2      | neg.     | neg.    |
| Interest cover                       | 16.0   | 11.5    | 0.0      | 0.0     | 13.2     | 18.4     | 31.3    |
| Dividend payout ratio                | 84.0 % | 153.4 % | 100.0 %  | 0.0 %   | 0.0 %    | 3.2 %    | 3.3 %   |
| <b>Asset utilisation</b>             |        |         |          |         |          |          |         |
| Capital employed turnover            | 1.5    | 1.6     | 1.0      | 1.0     | 1.8      | 1.5      | 1.7     |
| Operating assets turnover            | 3.8    | 3.2     | 3.1      | 3.5     | 3.6      | 3.1      | 3.3     |
| Plant turnover                       | 47.7   | 53.1    | 44.3     | 52.0    | 82.7     | 72.8     | 72.3    |
| Inventory turnover (sales/inventory) | 7.1    | 4.3     | 4.3      | 5.0     | 5.0      | 5.0      | 5.5     |
| <b>Returns</b>                       |        |         |          |         |          |          |         |
| ROCE                                 | 16.5 % | 8.3 %   | -25.0 %  | -20.4 % | 25.5 %   | 32.7 %   | 40.8 %  |
| ROE                                  | 13.2 % | 7.5 %   | -38.3 %  | -33.8 % | 28.1 %   | 30.5 %   | 32.8 %  |
| <b>Other</b>                         |        |         |          |         |          |          |         |
| Interest paid / avg. debt            | 4.0 %  | 3.7 %   | 2.5 %    | 4.0 %   | 4.0 %    | 4.0 %    | 4.0 %   |
| No. employees (average)              | 153    | 174     | 188      | 205     | 215      | 230      | 196     |
| Number of shares                     | 6.6    | 6.6     | 6.6      | 6.9     | 7.3      | 7.3      | 7.3     |
| DPS                                  | 0.3    | 0.1     | 0.1      | 0.0     | 0.0      | 0.0      | 0.1     |
| EPS reported                         | 0.30   | 0.16    | -0.59    | -0.54   | 0.60     | 0.93     | 1.52    |
| <b>Valuation ratios</b>              |        |         |          |         |          |          |         |
| P/BV                                 | 7.7    | 8.0     | 11.4     | 11.4    | 8.2      | 5.7      | 3.8     |
| EV/sales                             | 3.3    | 3.5     | 4.7      | 5.0     | 2.5      | 2.3      | 1.6     |
| EV/EBITDA                            | 30.4   | 50.8    | -31.1    | -38.8   | 15.3     | 10.5     | 6.2     |
| EV/EBITA                             | 33.5   | 60.0    | -28.9    | -35.5   | 15.9     | 10.8     | 6.3     |
| EV/EBIT                              | 35.6   | 65.7    | -21.5    | -25.5   | 19.3     | 12.3     | 7.0     |
| EV/FCF                               | 317.5  | -38.4   | -45.1    | -50.4   | -38.9    | 48.6     | 28.3    |
| Adjusted FCF yield                   | 2.0 %  | 0.1 %   | -2.0 %   | -2.6 %  | 3.8 %    | 5.8 %    | 8.3 %   |
| Dividend yield                       | 1.4 %  | 0.3 %   | 0.3 %    | 0.0 %   | 0.0 %    | 0.2 %    | 0.3 %   |

Source: Company data, Hauck & Aufhäuser

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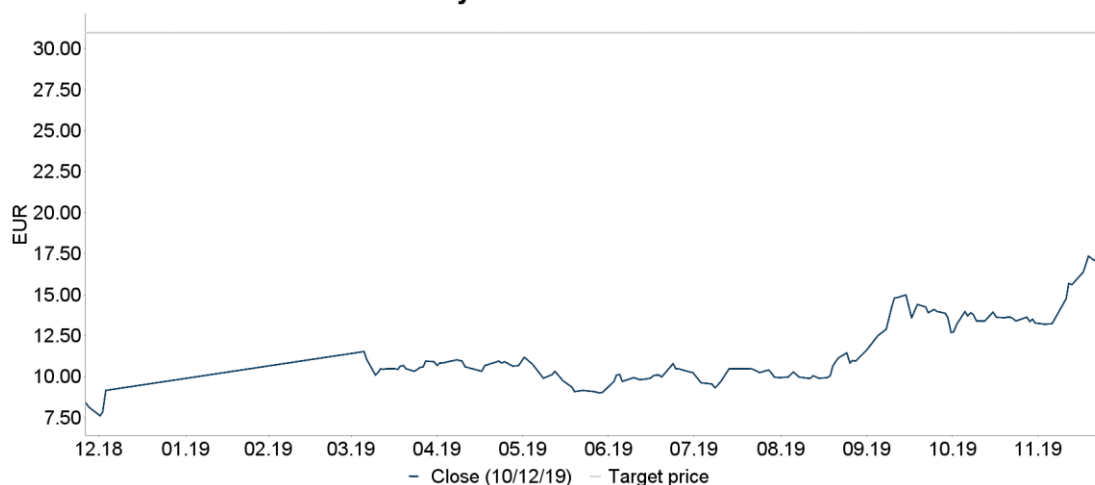
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| Company            | Disclosure |
|--------------------|------------|
| Vectron Systems AG | 8          |

### Historical target price and rating changes for Vectron Systems AG in the last 12 months

#### Price and Rating History Vectron Systems AG as of 11/12/19

Initiation coverage  
27-January-16



| Company            | Date       | Analyst              | Rating | Target price | Close    |
|--------------------|------------|----------------------|--------|--------------|----------|
| Vectron Systems AG | 20.12.2018 | Wunderlich, CFA, Tim | Buy    | EUR 31,00    | EUR 9,15 |

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|             |         |         |
|-------------|---------|---------|
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The adj. FCF method is based on the assumption that investors purchase assets only at a price (enterprise value) at which the operating cash flow return after taxes on this investment exceeds their opportunity costs in the form of a hurdle rate of 7.5%. The operating cash flow is calculated as EBITDA less maintenance capex and taxes.

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