

April 13, 2016

Europa | Germany | Auto Supplier

DR. KALLIWODA
RESEARCH GmbH

Update

BUY

Target Price: EUR 35.40

Industry: Automotive Supplier
 Country: Germany
 ISIN: DE0005558696
 Bloomberg: PGNNG.DE
 Reuters: PGN GR
 Website: www.paragon.ag

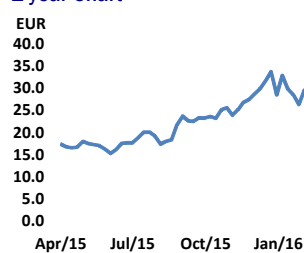
Last Price: 26.99
 High Low
 Price 52 W.: 36.40 14.05
 Market Cap. (EURm) 111.06
 No. of Shares (in m) 4.11

Shareholders

Klaus-Dieter Frers 51.32%
 Free Float 48.68%

Dividend	in EUR	in %
2011	0.25	0.93%
2012	0.35	1.30%
2013	0.25	0.93%
2014	0.25	0.93%

1-year Chart



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Also see our Bloomberg page: KALL

paragon AG

Peak in turnover; on track for a growing year

- **Growing full year results.** paragon AG closed a positive and eventful year in 2015. Revenues were up 20% y/y to €95m and significant investments to boost the electromobility business were completed (around €32.3m). Nevertheless, operating performance increased by 24.9% from €6.3m to €7.8m (margin 8.2%), net income enhanced from €2.8m to €3.4m and EPS was up 22.6% y/y.
- **Business segments overall rising.** The main contributions in group results were given by the cockpit (fully-integrated SphereDesign GmbH acquisition) and sensors businesses, which grew respectively from €27.5m to €31.9m (+16% y/y) and from €31.3m to €34.6m (+11% y/y). The electromobility business (VoltaBox Deutschland and Texas) contributed for €5.3m, 252.4% y/y (34% of consolidated sales expansion for 2015). Existing contracts in the e-mobility are ongoing in the current year.
- **Investments phase completed.** According to the strategic plan, paragon completed the investment phase started in 2013 to implement its business internationally. Therefore, the increase in operating cash flows from €7.0m to €12.9m recorded in 2015 (mainly because a better working capital management), was offset by one-offs payments to acquire tangible and intangible assets. However, capital expenditures are expected to be normalized to €14m in 2016 and net liabilities progressively reduced. Current earnings ensure paragon debt handling; net debt/EBITDA ratio stated at 2.8x (forecasts 2.6x in 2016 and 1.9x in 2017).
- **Dynamic development in the e-mobility.** We have left unchanged our target price of €35.40, and estimated the revenues CAGR 9.1% (2016-18E) and 11% ROCE in 2016. The scenario for the overall automotive industry is still unsure but the launch of new products, particularly environment friendly, should drive the development. paragon e-mobility business, with its new production plants active in the US and China and international partnership, might boost dynamically group business for the next two years. After encouraging earnings, a dividend of €0.25 per share for 2015 will be proposed at the upcoming annual board meeting.

Key Figures

EURm	2012	2013	2014	2015	2016E	2017E
Net sales	70.4	73.9	79.0	95.0	103.5	114.9
EBITDA	11.7	12.2	10.5	14.1	15.7	18.9
EBIT	7.8	7.9	6.2	7.8	10.1	12.7
Net income	4.6	3.9	2.8	3.4	5.1	6.8
EPS	1.1	1.0	0.7	0.8	1.2	1.7
BVPS	3.2	3.9	4.2	4.7	5.8	7.3
RoE	40.6%	27.3%	16.8%	18.6%	23.3%	25.3%
EBIT margin	11.0%	10.7%	7.9%	8.2%	9.7%	11.0%
P/E	24.0x	28.1x	40.0x	32.6x	22.0x	16.3x
P/BVPS	8.5x	7.0x	6.5x	6.0x	4.8x	3.8x
EV/EBITDA	13.1x	12.5x	14.5x	10.8x	9.7x	8.1x

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1 Company Profile

paragon AG was founded in 1988 as an electronics manufacturer. The company's headquarters are located in Delbrück (North Rhine-Westphalia). Other Company's divisions are based in Suhl, St. Georgen, Bexbach and Nuremberg (production or development). The paragon AG has also finished to build a battery production plant in Texas (USA), as well as a factory in Kunshan (greater Suzhou region), which will be fully operative in Autumn 2015. The Group currently employs a staff of 482 permanent and 79 temporary workers.

1.1 Products and Market Share

Founded as a contract manufacturer for electronics, paragon is now a pure Tier 1 automotive supplier. Its main focus relies on auto electronics for interior products to enhance the health, comfort, communication and efficiency. The product catalog includes more than 170 products with a capacity of over 15 million units produced per annum, in addition to its 250 patents owned.

Divisions		
Sensors	Acoustics	Electromobility
Air quality sensor AQS	Microphone	Energy Storage Powerpack
Air improvement system	Seatbelt microphone blet mic	Motor Controller MoDrive
Air treatment system		DC/DC Converter DCCon
Clutch travel sensor		Onboard Charger ChargeON
All gear sensor		
Start-stop sensor		
Cockpit	kinematics	
Interfaces	Aerodynamic	
Cradles & Consoles	Comfort	
cTablet docking station	Convertible tops	
Instruments	Safety	
Controls		
Reversing camera system		
Stepper Motors		

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Many of paragon's products own its unique features, such as the Voltabox battery systems, when they come to fruition in the enhancement of electromobility for commercial vehicles. The sensors, besides, can be softer and simultaneously faster gearshift, as well as for the vehicle manufacturer resulting in economic benefits, where a separate reverse gear sensor is no longer required.

1.2 Clients

paragon AG maintains long-term customer relationship, which is translated in the fact that its over 170 products are currently demanded by 23 customers for 172 vehicle models, where the largest automotive producers, Audi, VW, Daimler, BMW and Porsche, cover approximately about 77% of total sales (end of 2015). Even though the company is increasingly receiving new orders from new products and developed applications, such as CO² sensors, wireless charging products or new innovative belt microphones.

2 SWOT

Strengths	Weaknesses
<ul style="list-style-type: none"> • Combination of innovation and integration of force through company-wide culture of innovation with a focus in developing new products, while observing the product integration into the overall system for the automobile manufacturers; by First-Mover-Advantage and high success rate of bringing products to the market. Over 170 products and 250 patents. • Products with unique features in niche markets with high quantities in automated manufacturing. Therefore high margins and strong market position in several areas. • Direct supplier with many years of customer loyalty, knowing what customers want, means entry-market barriers. 	<ul style="list-style-type: none"> • High business risk due to strong sales focus on three German automotive manufacturers in the premium area, tempered by long-term customer relationships under contracts, all model series, and the relatively small dependence of premium manufacturers. • Low negotiating power with customers and suppliers in the low-selling environment of numerous competitors mitigated by the relatively higher willingness to pay the premium end-user customers. • Strong competition with high pressure to innovate, since more than half of key innovations are taking place in the field of electronics.
Opportunities	Risks
<ul style="list-style-type: none"> • Increasing use of paragon products in the compact and mid-range through new technologies and efficient production with a high degree of automation and economies of scale, eg. Air quality. • Growth and diversification through the field of electric mobility by expanding the customer base to smaller commercial vehicles in domestic and urban areas, where applications are already in use for electric mobility. With this regard, more distribution channels are sought. • Reduction of product-specific integration costs for the customer through development of applications to support the vehicle installation can be a significant competitive advantage. 	<ul style="list-style-type: none"> • Products are not expected to develop their potential and the number of units produced cannot cover the costs. paragon AG tries to avoid this by an intensive dialogue with automobile manufacturers. • Competitor may displace paragon of revenue-important market niches. • An unexpected slump in the automobile industry may lead to liquidity difficulties at paragon.

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3 Valuation

We have evaluated paragon AG with a traditional DCF model, which incorporates our outlook and forecasts. The final result is a 12-month price target of €35.40.

a. WACC

The discount rate was calculated by deriving the weighted cost of capital. We assumed that the target capital structure will not change in the subsequent business years. Risk free rate is based on the average profitability of the 10-year German government bond. Figuring a risk prime follows the capital asset pricing model (CAPM) and covers in particular the systemic risks (market risk prime exp. company specific risk).

WACC assumptions	
Growth propositions	
Long-term growth rate	2.0%
Equity	
Long-term risk free rate	0.3%
Market risk premium	6.2%
Beta	1.30
Equity costs	8.3%
Debt	
Debt costs (before tax)	6.0%
Tax rate on debt interest	30.0%
Debt costs (after tax)	4.2%
Equity value	67.6%
Debt Value	32.4%
Gearing	48.0%
WACC	7.0%

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b. DCF

In our Discounted Cash Flow model we have assumed:

- **Revenues:** the forecasted revenues are based on the growing performance of the overall business divisions and especially the electromobility segment. The revenues are anticipated to expand rapidly, with the most notable period 2016-2018, in which we assumed new contracts from Voltabox Germany.
- **Terminal growth rate:** after a 3-year period of rapid expansion, the growth rate is forecasted to drop to 2% in the terminal period, which is in line with the long term inflation rate.
- **EBIT margin:** we assumed a stable margin of around 10%.
- **Fair value:** we calculated a fair value of equity of €136.2m after deducting €41.5m of net debt, which correspond to the fair value per share of €35.40.

DCF-Analysis**Discounted-Cash-Flow-Modell (Basis 4/2016)**

in EUR m	2016E	2017E	2018E	2019E	2020E	2021E	2022E
Net sales	103.50	114.89	123.27	128.94	133.84	137.19	140.51
(y-o-y change)	9.0%	11.0%	7.3%	4.6%	3.8%	2.5%	2.4%
EBIT	10.08	12.67	13.60	14.14	14.67	14.89	15.19
(EBIT margin)	9.0%	10.2%	10.2%	10.1%	10.1%	10.1%	10.1%
NOPLAT	7.05	8.87	9.52	9.90	10.27	10.42	10.63
+ Depreciation and Amortization	5.59	6.20	6.65	6.96	7.22	7.40	7.58
= Net operating cash flow	12.64	15.07	16.17	16.85	17.49	17.83	18.21
- Total investments (Capex and WC)	-11.07	-7.71	-7.90	-7.97	-7.37	-6.71	-6.29
Capital expenditure	-8.70	-6.72	-7.17	-7.47	-6.94	-6.42	-6.00
Working capital	-2.37	-1.00	-0.73	-0.50	-0.43	-0.29	-0.29
= Free cash flow (FCF)	1.57	7.35	8.27	8.88	10.12	11.12	11.93
PV of FCF's	1.50	6.55	6.89	6.91	7.37	7.56	7.59
PV of FCFs in explicit period	44.37						
PV of FCFs in terminal period	133.30						
Enterprise value (EV)	177.67						
+ Net cash / - net debt	-41.50						
+ Investitionen / - Minderheiten	0.00						
Shareholder value	136.17						
Number of shares outstanding (m)	4.11						
WACC	7.0%						
Cost of equity	15.3%						
Pre-tax cost of debt	6.0%						
Normal tax rate	30.0%						
After-tax cost of debt	4.2%						
Share of equity	25.0%						
Share of debt	75.0%						
Fair value per share in € (today)	33.09						
Fair value per share in € (in 12 months)	35.40						

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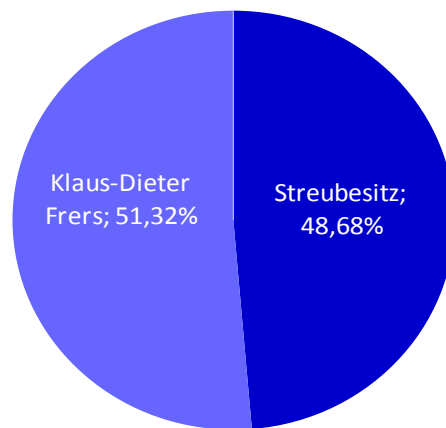
4 Outlook

After promising order backlog, with orders on hand up 12.2% y/y, we expect pursuance in sales growth for the first quarter. The pipeline and investments in business development (facilities in the US, China and Germany), seem to prepare an acceleration in revenues for next two years, which we assumed in €103.5m for 2016 (+16% y/y) and €114.9m(+11% y/y) for 2017.

In the short to medium term, we see opportunities for paragon in the Chinese market for air quality sensors (AQS), due to smog pollution problems developed in several cities. In this field the company from Delbrück has an established experience and solutions for vehicle interiors (e.g. particle sensors for air quality in automobiles), which should match the demand. R&D investments in the sensor segment have a strong focus on clean air concept. The electro mobility business (Votabox) might take also advantage in the Chinese market, given its battery packs for electric bus, and commercial and conventional vehicles, ensuring clear air in the vehicle's interior.

According to Navigation Research, the overall market for lithium-ion batteries for use in vehicles, which reached the value of \$7.8bn in 2015, is expected to grow at a CAGR 16% y/y by 2024. In this market we see paragon e-mobility segment potential to expand company earnings, diversifying also the revenues mix. Hence, in our forecast we have considered a rising up in EBIT margin from the current year.

5 Shareholder's Structure



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6 Profit and Loss Statement

Profit and Loss statement - paragon AG						
	Fiscal year					
in mEUR	2012	2013	2014	2015	2016E	2017E
Net sales	70.45	73.88	79.04	94.99	103.50	114.89
<i>Change in inventories</i>	0.57	0.26	0.79	1.44	0.62	0.74
<i>Capitalised assets</i>	2.03	1.68	5.15	12.75	4.59	5.24
Total Output	73.04	75.81	84.98	112.37	111.96	124.17
<i>Cost of goods sold</i>	-36.95	-36.27	-41.85	-55.52	-55.42	-62.09
Gross profit	36.09	39.54	43.13	56.85	56.54	62.09
<i>Personnel costs</i>	-18.85	-19.60	-21.76	-26.31	-28.62	-31.61
<i>Depreciation & Amortization</i>	-3.89	-4.31	-4.27	-6.29	-5.59	-6.20
<i>Write-downs</i>	-0.14	-0.27	-0.02	-0.11	0.00	0.00
<i>Other operating expenses</i>	-7.45	-8.54	-12.20	-16.33	-15.51	-14.92
EBIT	7.78	7.92	6.25	10.99	10.08	12.67
<i>Net financial results</i>	-1.08	-1.49	-1.96	-2.79	-2.86	-2.94
EBT	6.70	6.43	4.29	8.21	7.21	9.73
<i>Income taxes</i>	-2.07	-2.49	-1.51	-1.62	-2.16	-2.92
<i>Minority interests</i>	0.00	0.00	0.00	0.00	0.00	0.00
Net income / loss	4.64	3.95	2.78	6.59	5.05	6.81
EPS	1.13	0.96	0.67	0.83	1.23	1.66
Change y-o-y						
<i>Net sales</i>	n.a	4.87%	6.98%	20.18%	8.96%	11.00%
<i>Total Output</i>	n.a	3.80%	12.09%	32.22%	-0.36%	10.91%
<i>Cost of goods sold</i>	n.a	-1.85%	15.39%	32.66%	-0.17%	12.03%
<i>Gross profit</i>	n.a	9.58%	9.07%	31.80%	-0.54%	9.81%
<i>Personnel costs</i>	n.a	3.98%	10.98%	20.92%	8.78%	10.47%
<i>Depreciation & Amortization</i>	n.a	10.91%	-1.02%	47.55%	-11.25%	11.00%
<i>Write-downs</i>	n.a	98.52%	n.a	n.a	n.a	n.a
<i>Other operating expenses</i>	n.a	14.59%	42.85%	33.92%	-5.02%	-3.80%
<i>EBIT</i>	n.a	1.88%	-21.13%	75.90%	-8.33%	25.69%
<i>Net financial results</i>	n.a	38.35%	31.68%	42.05%	2.69%	2.62%
<i>EBT</i>	n.a	-3.99%	-33.36%	91.39%	-12.07%	34.85%
<i>Income taxes</i>	n.a	20.34%	-39.15%	7.01%	33.77%	34.85%
<i>Minority interests</i>	n.a	n.a	n.a	n.a	n.a	n.a
<i>Net income / loss</i>	n.a	-14.82%	-29.71%	137.37%	-23.33%	34.85%
<i>EPS</i>	n.a	-14.82%	-29.71%	22.63%	48.40%	34.85%
<i>DPS</i>	n.a	n.a	n.a	n.a	n.a	n.a
Share in total revenues						
<i>Net sales</i>	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
<i>Total Output</i>	103.68 %	102.62 %	107.52 %	118.29 %	108.17 %	108.08 %
<i>Cost of goods sold</i>	-52.45 %	-49.09 %	-52.95 %	-58.44 %	-53.55 %	-54.04 %
<i>Gross profit</i>	51.23 %	53.53 %	54.57 %	59.85 %	54.63 %	54.04 %
<i>Personnel costs</i>	-26.76 %	-26.54 %	-27.53 %	-27.69 %	-27.65 %	-27.52 %
<i>Depreciation & Amortization</i>	-5.51 %	-5.83 %	-5.40 %	-6.62 %	-5.40 %	-5.40 %
<i>Write-downs</i>	-0.19 %	-0.36 %	-0.02 %	-0.12 %	0.00 %	0.00 %
<i>Other operating expenses</i>	-10.58 %	-11.56 %	-15.43 %	-17.19 %	-14.99 %	-12.99 %
<i>EBIT</i>	11.04 %	10.72 %	7.91 %	11.57 %	9.74 %	11.02 %
<i>Net financial results</i>	-1.53 %	-2.02 %	-2.48 %	-2.93 %	-2.77 %	-2.56 %
<i>EBT</i>	9.51 %	8.71 %	5.42 %	8.64 %	6.97 %	8.47 %
<i>Income taxes</i>	-2.93 %	-3.36 %	-1.91 %	-1.70 %	-2.09 %	-2.54 %
<i>Minority interests</i>	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %
<i>Net income / loss</i>	6.58 %	5.34 %	3.51 %	6.93 %	4.88 %	5.93 %

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7 Balance Sheet

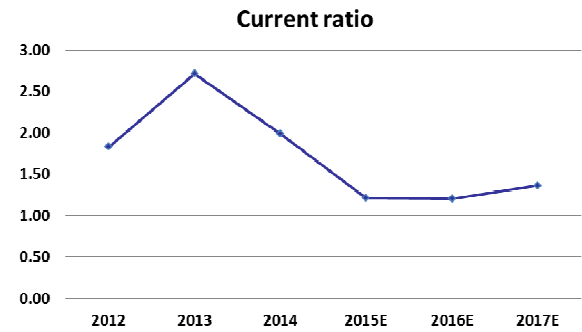
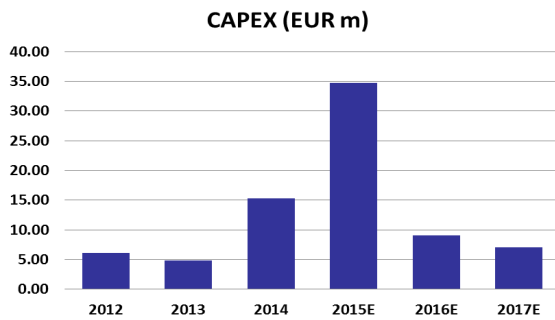
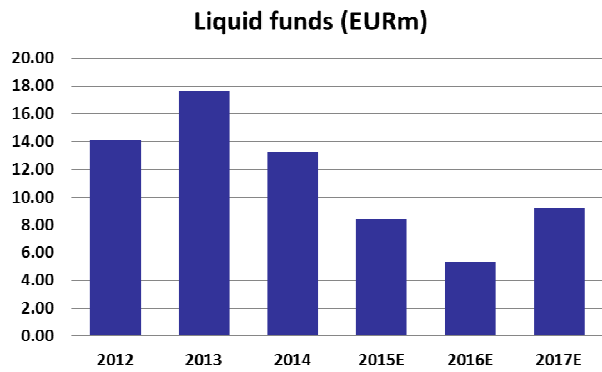
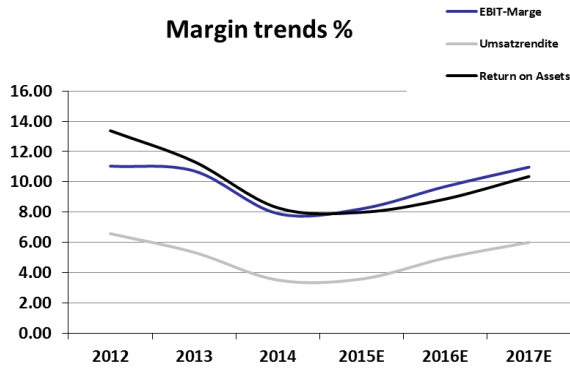
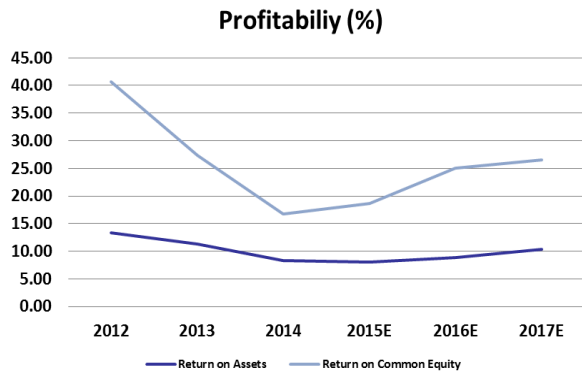
Balance Sheet - paragon AG						
in mEUR	Fiscal year					
	2012	2013	2014	2015	2016E	2017E
Assets						
Cash and cash equivalents	14.08	17.65	13.26	8.45	5.18	8.67
Inventories	7.31	7.47	6.91	11.22	11.20	12.54
Trade accounts and notes receivables	1.79	6.04	9.76	10.38	11.31	12.55
Other current assets	2.20	1.95	2.40	2.81	3.11	3.45
Current assets	25.39	33.10	32.34	32.86	30.79	37.21
Property, plant and equipment	13.54	12.98	20.18	34.55	36.77	36.98
Sonstige immaterielle Vermögenswerte	4.91	5.60	9.44	23.96	24.86	25.16
Firmenwert	0.00	0.00	0.00	0.77	0.77	0.77
Other assets	0.12	0.25	0.47	0.41	0.45	0.50
Deferred tax assets	0.00	0.00	0.00	0.00	0.00	0.00
Non-current assets	18.58	18.83	30.08	59.69	62.84	63.41
Total assets	43.97	51.94	62.42	92.55	93.64	100.62
Liabilities						
Trade payables	3.04	3.36	6.12	10.72	10.70	11.98
Other liabilities	8.13	5.91	4.54	7.04	5.90	6.55
Short-term financial debt	2.39	2.86	5.50	9.34	9.26	9.09
Provisions	0.30	0.06	0.09	0.02	0.14	0.17
Current liabilities	13.86	12.18	16.24	27.12	25.99	27.79
Long-term financial debt	12.26	20.21	24.71	38.53	38.03	37.53
Special benefits	2.09	1.50	1.27	1.18	1.66	1.84
Pension obligations	2.73	1.22	1.88	2.09	1.86	2.32
Deferred tax liabilities	0.00	0.94	1.12	3.51	2.20	1.15
Long-term liabilities	17.08	23.86	28.98	45.31	43.75	42.83
Total liabilities	30.94	36.04	45.23	72.43	69.74	70.63
Shareholders equity	13.03	15.89	17.20	19.40	23.89	29.99
Minority interests	0.00	0.00	0.00	0.00	0.00	0.00
Total equity and liabilities	43.97	51.94	62.42	91.83	93.64	100.62

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8 Cash Flow Statement


Cash Flow statement - paragon						
in mEUR	Fiscal year					
	2012	2013	2014	2015	2016E	2017E
Net income	4.64	3.95	2.78	3.40	5.05	6.81
Depreciation	3.89	4.31	4.27	6.29	5.59	6.20
Change of working capital	-1.62	-3.42	-2.24	-0.30	-2.37	-1.00
Others	-1.10	0.27	0.22	2.32	-1.19	-1.02
Net operating cash flow	5.80	5.10	5.03	11.72	7.08	10.99
Cash flow from investing	-6.15	-4.81	-15.30	-34.79	-8.70	-6.72
Free cash flow	-0.35	0.29	-10.27	-23.07	-1.62	4.28
Cash flow from financing	-0.90	3.27	5.89	18.26	-1.65	-0.79
Change in cash	-1.25	3.56	-4.38	-4.81	-3.27	3.49
Cash, start of the year	15.33	14.08	17.65	13.26	8.45	5.18
Cash, end of the year	14.08	17.65	13.26	8.45	5.18	8.67

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