

## NanoFocus AG

Date: 06/27/2014

Recommendation		Buy	as of	-
<b>before:</b>				
Target price (EUR)		4.20		
Price (Xetra) (EUR)		3.54		
	06/25/14		1:34 PM	
Share price potential		19%		

Company data	
Sector	Industrial measurement technology
Market segment	Entry Standard
ISIN	DE0005400667
Reuters	N2FGn.DE
Bloomberg	N2F

Share data	
Shares (m)	3.000
Freefloat	46.1%
Market cap. (EURm)	10.6
∅ Trading Volume	2,615
52W High	01/20/14 EUR4.40
52W Low	06/27/13 EUR2.15

Events	
Annual general meeting	07/09/2014
Q2 figures	08/29/2014

Performance		
	absolut	related to:
		DAX
1 month	-3.8%	-2.4%
3 months	-2.2%	-5.7%
6 months	7.6%	5.2%
12 months	47.5%	20.2%

Index weighting	
Entry Standard All Share	0.6%

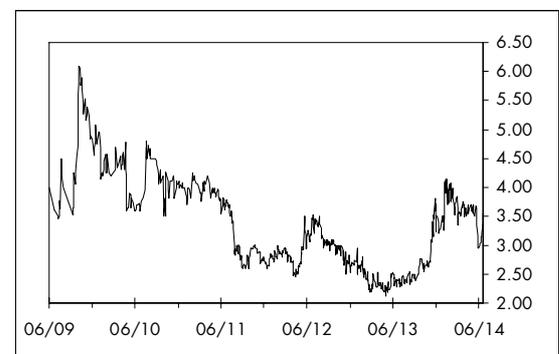
## Pushed marketing of standard products as a trigger

- ⇒ 2013 was a disappointment, both on the sales (-8.5%) and earnings side (EBIT: EUR-1.2m (+0.3; our forecast: +0.5)). One major reason was the weak business with standard products.
- ⇒ However, NanoFocus has clearly achieved advancements, especially in the Semiconductor (µsprint, first time application in production line of Epcos, projects with Samsung) and Automotive industry (further development of µsurf cylinder).
- ⇒ In May 2013 NanoFocus initiated the realignment of the marketing of standard products. According to CFO Sorg, positive effects have been clearly noticeable since Q4 2013.
- ⇒ The project volumes and thus sales should increase strongly and NanoFocus should generate economies of scale. Growth financing remains on the agenda. A first step was made with the convertible bond issued in February (volume: EUR1.35m).
- ⇒ The delays with projects are reflected by the figures and the share price. Due to the strong order backlog, we think H2 2014 results will be much stronger. With a price target of EUR4.20 (before: 3.90) we confirm our Buy recommendation.

	2010	2011	2012	2013	2014E	2015E
Sales	6.5	8.2	8.9	8.2	11.1	13.1
Sales growth	28.9%	26.9%	8.7%	-8.5%	35.9%	17.9%
EBIT	0.1	0.2	0.3	-1.2	0.4	0.7
EBIT margin	1.2%	2.7%	3.0%	neg.	3.6%	5.7%
Net income	-0.1	0.1	0.1	-1.4	0.3	0.7
Net margin	neg.	0.8%	1.7%	neg.	2.6%	5.1%
EPS	-0.02	0.02	0.05	-0.47	0.10	0.22
DPS	0.00	0.00	0.00	0.00	0.00	0.00
Net financial debt/EBITDA	-0.6	-0.7	-0.5	-	0.8	0.9
Net Gearing	-0.1	0.0	-0.1	0.1	0.1	0.2
Free cash flow (FCF)	-0.5	-0.5	-0.4	-1.1	-0.7	-0.1
FCF per share	-0.22	-0.16	-0.14	-0.37	-0.25	-0.05
EV / sales	1.5	1.1	0.9	1.0	1.0	0.9
EV / EBITDA	13.9	10.2	8.5	neg.	9.7	7.0
EV / EBIT	127.5	40.2	30.1	neg.	27.8	15.1
EV / FCF	neg.	neg.	neg.	neg.	neg.	neg.
P/E ratio	neg.	148.2	57.4	neg.	36.3	15.8
P/B ratio	1.1	1.0	0.9	0.9	1.2	1.1
Dividend yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Figures in EURm except EPS, DPS and FCF per share (EUR), PERs based on averaged share prices

Source: Independent Research, NanoFocus AG



Source: NanoFocus AG, Bloomberg

## Contact

 Independent Research GmbH

Friedrich-Ebert-Anlage 36  
60325 Frankfurt am Main

Telephone: +49 (69) 971490-0  
Telefax: +49 (69) 971490-90  
Internet: www.irffm.de

**Author: Stefan Röhle (analyst)**

E-Mail: sroehle@irffm.de

**Please take note of the information concerning the preparation of this document, the information concerning potential conflicts of interest, the compulsory information required by Section 34b WpHG (Wertpapierhandelsgesetz - German Securities Trading Act), and the liability statement at the end of this document. This financial analysis in the meaning of Section 34b WpHG shall only be distributed to professional clients or eligible counterparties according to Section 31a WpHG.**

## Valuation

### Three-step DCF model

*Rising EBIT margin reflects increase in economies of scale*

In our three-step discounted cash flow model (DCF Model) we have employed our specific forecasts in our detailed planning period until and including 2015 (before: 2014). As of 2016 (until 2023) we use a trend analysis. Until 2018 (before: 2017), we have assumed a decline in sales growth to 7.5%. The EBIT margin increases to 13.0% until 2018 (before: 2017). This reflects our expectation that NanoFocus will realise significant economies of scale as part of its transition from an R&D driven towards a manufacturing company (inline production). However, the current situation suggests that the transition period could take more time and that margins could be lower. In phase III (terminal value) we expect the free cash flow to grow 2.0% along with inflation.

*WACC of 10.1%*

We calculate an unchanged WACC of 10.1%. The relatively high figure is on the one hand owed to the beta of 1.4 that reflects the volatility and risk of the business model (small company; still R&D driven). On the other hand, we have assumed an equity ratio of 85%

DCF model										
EURm	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E
Sales	11.1	13.1	15.0	16.6	17.9	19.2	20.7	22.2	23.9	25.1
Growth y/y	8.7%	17.9%	14.4%	11.0%	7.5%	7.5%	7.5%	7.5%	7.5%	5.0%
EBIT margin	3.6%	5.7%	8.1%	10.6%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%
<b>EBIT</b>	<b>0.4</b>	<b>0.7</b>	<b>1.2</b>	<b>1.8</b>	<b>2.3</b>	<b>2.5</b>	<b>2.7</b>	<b>2.9</b>	<b>3.1</b>	<b>3.3</b>
- Income taxes	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.5	-0.8	-0.9	-1.0
+ Amortisation and depreciation	0.8	0.9	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0
+/- Change in long-term provisions	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
+/- Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Gross operating cash flow</b>	<b>1.2</b>	<b>1.6</b>	<b>1.8</b>	<b>2.4</b>	<b>2.9</b>	<b>3.1</b>	<b>3.0</b>	<b>3.0</b>	<b>3.2</b>	<b>3.4</b>
-/+ Change in net working capital	-1.1	-0.9	-0.9	-0.8	-0.6	-0.6	-0.6	-0.7	-0.7	-0.8
-/+ Investments in fixed assets	-0.5	-0.6	-0.7	-0.7	-0.8	-0.8	-0.9	-0.9	-1.0	-1.0
<b>Free cash flow</b>	<b>-0.3</b>	<b>0.2</b>	<b>0.3</b>	<b>0.9</b>	<b>1.6</b>	<b>1.7</b>	<b>1.5</b>	<b>1.4</b>	<b>1.5</b>	<b>1.6</b>
<b>Present values</b>	<b>-0.3</b>	<b>0.2</b>	<b>0.2</b>	<b>0.6</b>	<b>1.0</b>	<b>1.0</b>	<b>0.8</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>
Total present values	5.4									
Terminal value	7.8									
Value of operating business	13.2									
+ Cash and cash equivalents	1.7									
- Financial debt	-2.3									
<b>Fair market value of equity</b>	<b>12.6</b>									
Number of shares outstanding (m)	3.000									
<b>Fair value per share (EUR)</b>	<b>4.21</b>									

in % of total value: 59%

Model parameters / entity DCF model					
Target capital structure:	Equity:	85%	Financial debt:	15%	
Risk-free rate:	4.0%	Beta:	1.4	Risk prem. Debt:	3.0%
		Risk prem.:	5.0%	Tax shield:	30.0%
		Cost of equity:	11.0%	Cost of debt:	4.9%
Growth FCF:	2.0%	WACC:	10.1%	Date:	06/27/14

Source: Independent Research

Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document

<b>Sensitivity analysis (EUR)</b>					
		<b>Discount rate (WACC)</b>			
		9.6%	<b>10.1%</b>	10.6%	11.1%
<b>Growth (TV)</b>	<b>2.0%</b>	4.66	<b>4.21</b>	3.89	3.60
	2.5%	4.79	4.39	4.04	3.73
	3.0%	5.04	4.60	4.22	3.88
	3.5%	5.34	4.84	4.42	4.05

Source: Independent Research

(at market value) in the long-term target capital structure as NanoFocus has only a limited amount of financial debt. We have assumed an interest rate of 7.0% before tax and 4.9% after tax for debt, based on the interest rates for the loans already granted (between 4.4% and 6.2%) and the credit line.

#### **Slight increase in fair value**

We have calculated a fair value of equity of EUR12.6m (before: 11.9). Based on 3.000m shares we have calculated a fair value per share of EUR4.21 (before: 3.96).

*Fair value of EUR4.21  
(before: 3.96) per share.*

#### **Valuation multiples for 2014 and 2015 should improve**

Based on the fair value, the share is still highly valued with regard to the valuation multiples for 2014 with an EV/EBIT of 32.8 and a P/E ratio of 43.1 - as a result of the successive phase-out of higher-volume products (for example  $\mu$ sprint application for Epcos). For 2015, we expect an improvement of the multiples (EV/EBIT: 17.7; P/E ratio: 18.8). Notice should also be given to the share price being traded with a 2015 P/B ratio of only 1.1. This is extraordinarily low for a growth company.

*Share currently trades only  
slightly above book value*

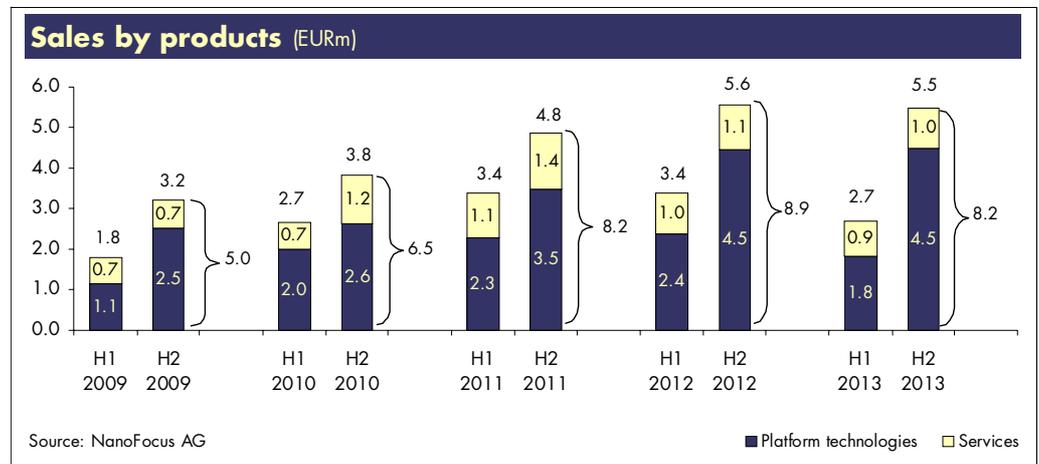
Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document

## Financial, balance sheet and income analysis

### Income analysis

*Strong sales growth in H1 2014 expected*

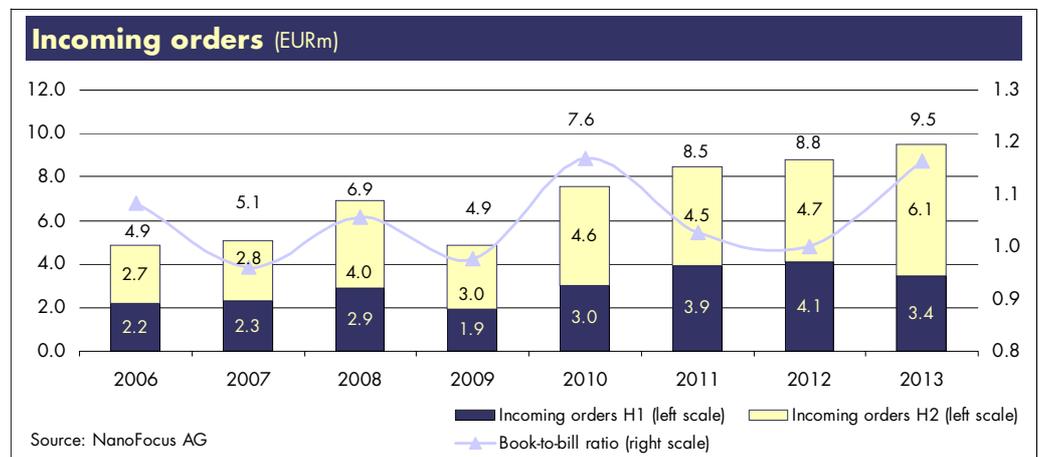
**Stable development in H2 2013 - full-year below expectation, however** H2 2013 was similarly strong as the preceding year with sales of EUR5.5m (5.6; our forecast: 7.9). After the unusually weak H1 2013, however, we had expected higher growth. According to CFO Sorg, there have been project delays. The order backlog on the other hand was on record level at the end of 2013 with EUR2.0m (December 31, 2012: 0.7) as was the order inflow of EUR9.5m (8.8) in 2013. We thus expect a clear sales increase of EUR4.2m (2.7) in H1 2014.



*EBIT loss due to expected increase in operating costs*

### Clear EBIT decrease in 2013

Operating costs were clearly up in 2013 (e.g. personnel expenses: EUR+0.4m). Due to a higher share of the project business the cost of materials / total operating performance ratio has increased to 36% (29%). The positive EBIT of EURO.3 (1.1; our forecast: 2.0) in H2 2013 thus did not compensate for the seasonal H1 2013 loss. However, we anticipate a clearly reduced EBIT loss of EUR-0.6m (-1.5) in H1 2014.



Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document

**Key financial data of the income statement H2 2013 and FY 2013**

	Unit: EURm	H2 2012	H2 2013	H2 2013	FY 2012	FY 2013	FY 2013
<b>Financial year:</b> Dec. 31							
<b>Accounting standard:</b> HGB							
<b>Sales</b>		<b>5.6</b>	<b>5.5</b>	<b>7.9</b>	<b>8.9</b>	<b>8.2</b>	<b>10.6</b>
growth yoy		14.7%	-1.5%	41.7%	8.7%	-8.5%	18.4%
<b>Total operating performance</b>		<b>5.8</b>	<b>5.8</b>	<b>8.2</b>	<b>9.6</b>	<b>9.0</b>	<b>11.4</b>
growth yoy		8.8%	-0.2%	42.3%	2.0%	-6.8%	18.6%
<b>EBIT</b>		<b>1.1</b>	<b>0.3</b>	<b>2.0</b>	<b>0.3</b>	<b>-1.2</b>	<b>0.5</b>
EBIT margin		19.8%	5.3%	24.9%	3.0%	neg.	4.3%
<b>Net income</b>		<b>1.1</b>	<b>0.2</b>	<b>2.0</b>	<b>0.1</b>	<b>-1.4</b>	<b>0.4</b>
as percentage of sales		20.4%	3.8%	25.2%	1.7%	neg.	3.5%
<b>Earnings per share (EUR)</b>		<b>0.38</b>	<b>0.07</b>	<b>0.07</b>	<b>0.05</b>	<b>-0.47</b>	<b>0.12</b>

Source: Independent Research; NanoFocus AG

*High order backlog as the basis for growth in 2014*

**First products for Epcos - pushing marketing of standard products**

NanoFocus forecasts sales of over EUR11m, a net profit of EURO.3m and EPS of EURO.10 for 2014. With regard to the high order backlog (end of April 2014: EUR2.4m) we believe that the guidance is achievable. NanoFocus has delivered the first product that is used in the inline production process of Epcos (quality control of production process for innovative semiconductor products). For the semiconductor industry,  $\mu$ sprint is also applied with Micro bumping or Flip Chip/3D bumping in middleware products. Further large projects with Samsung and the Volkswagen group (further development of  $\mu$ surf cylinder) are in the middle or at the start of development. We think the finished realignment of the marketing process for standard products was an important step. According to CFO Sorg first positive effects are already noticeable. We thus expect a clear enhancement of profitability in 2014 and 2015.

**Key financial data of the income statement H1 2014E and FY 2014E**

	Unit: EURm	H1 2013	H1 2014E	FY 2013	FY 2014E
<b>Financial year:</b> Dec. 31					
<b>Accounting standard:</b> HGB					
<b>Sales</b>		<b>2.7</b>	<b>4.2</b>	<b>8.2</b>	<b>11.1</b>
growth yoy		-20.0%	55.3%	-8.5%	35.9%
<b>Total operating performance</b>		<b>3.2</b>	<b>4.5</b>	<b>9.0</b>	<b>11.8</b>
growth yoy		-16.8%	39.7%	-6.8%	31.5%
<b>EBIT</b>		<b>-1.5</b>	<b>-0.6</b>	<b>-1.2</b>	<b>0.4</b>
EBIT margin		neg.	neg.	neg.	3.4%
<b>Net income</b>		<b>-1.6</b>	<b>-0.7</b>	<b>-1.4</b>	<b>0.3</b>
as percentage of sales		neg.	neg.	neg.	25.2%
<b>Earnings per share (EUR)</b>		<b>-0.54</b>	<b>-0.22</b>	<b>-0.47</b>	<b>0.10</b>

Source: Independent Research; NanoFocus AG

Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document

**Financial analysis**

**Unchanged solid equity capital ratio**

*Low price-to-book ratio for a growth company*

NanoFocus is well capitalised with an equity ratio of 72% (December 31, 2012: 75%) on December 31, 2013. The high ratio is also noteworthy against the background that NanoFocus posted a net loss in 2013 and has not carried out a capital increase, other than in 2012. The current market capitalisation of EUR8.9m is only slightly higher than total equity of EUR8.5m (December 31, 2012: 9.9) posted on December 31, 2013. A price-to-book ratio of 1.1 (2015E) is comparatively low for a growth company, in our opinion. It is owed to the still R&D-driven business model that NanoFocus so far does not earn its capital costs (many inline-able products are still in the development stage).

**Loss is reflected in negative cash flow**

*Low net financial debt*

Due to the unexpected high loss in 2013, both the cash flow from sales and the operating cash flow were negative with EUR-0.5m (+0.9; our forecast: +1.4) and EUR-0.3m (+0.4; our forecast: +0.7). Taking into account the capitalised assets (meaning capitalised development expenditures; to be found in the cash flow from investment activities) the operating cash flow would have been EUR-1.0m (-0.2). NanoFocus' net financial debt of EURO.6m (December 31, 2012 net liquidity: 0.5) as of December 31, 2013 is still low, in our opinion.

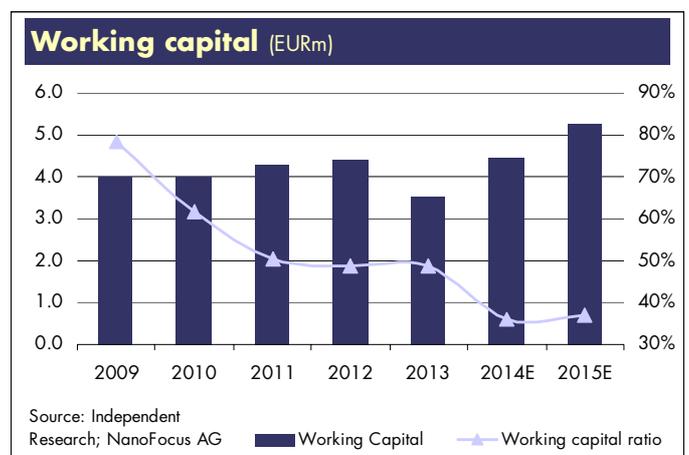
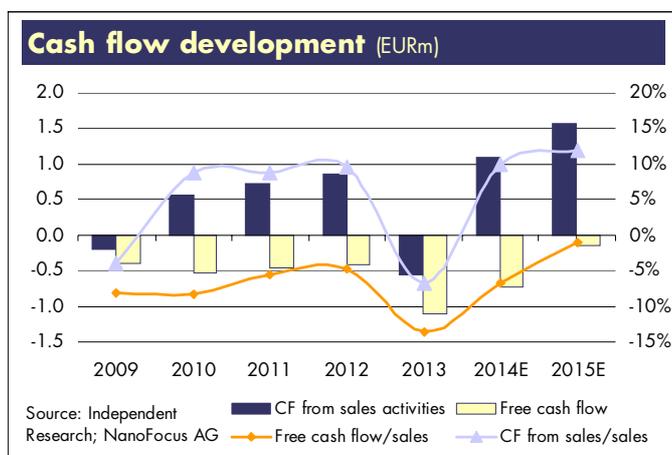
**Liquidity enhancement from issue of convertible bond**

*Numerous measures to enhance liquidity*

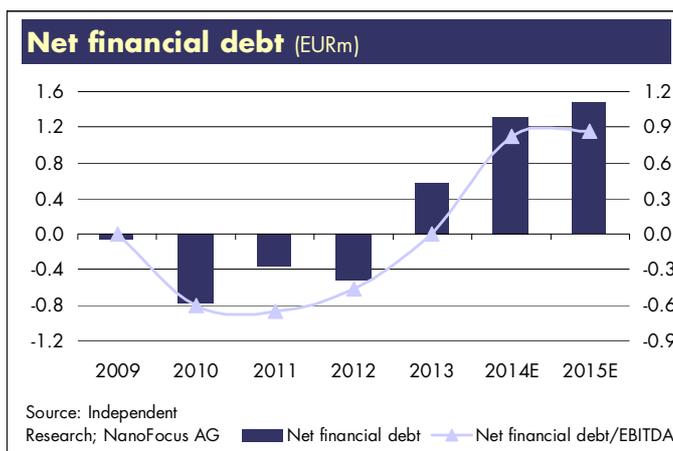
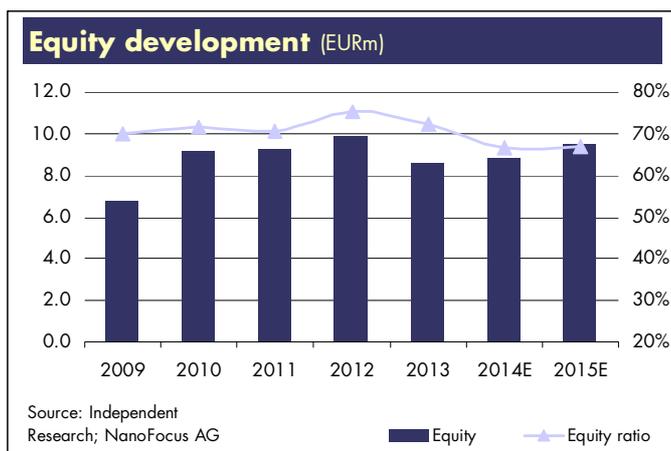
With regard to liquid funds (EURO.3m (December 31, 2012: 1.8) as at December 31, 2013 - also due to end of period effects), there is room for improvement. NanoFocus requires liquidity of between EUR1.5m and 2.0m to pre-finance the seasonally strong H2 (especially Q4) according to our estimates. Further, there are loan repayments of EURO.4m in 2014 (another EURO.6m between 2015 and 2017).

However, the enhancement of the liquidity basis by the following is noteworthy:

- the cancellation of restricted cash of EURO.5m
- the existing, still unused credit line of EURO.5m
- the convertible bond 2014/19 of EUR1.35m issued in February 2014



Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document



*Conversion premium of 29% is customary in the market*

The convertible bond 2014/19 placed with institutional investors with a volume of EUR1.35m (issued at 100%) has a coupon of 5.0%. The coupon increases by 3.0% p.a. if there is no conversion into shares. The yield thus is between 5.0% and 7.8%. The bond can be converted into 300,000 NanoFocus shares (10% of the current subscribed capital). The conversion premium of 29% (basis: average three-month price before the transaction was carried out on February 7, 2014: EUR3.48; conversion price: EUR4.50 per share) is customary in the market. NanoFocus has clearly enhanced its liquidity base with the proceeds from the convertible bond.

*Growth financing remains on the agenda*

### Positive operating cash flow expected

We further expect that NanoFocus' operating cash flow will be positive again in 2014 and 2015 with EUR0.2m and EUR0.7m. The working capital remains a factor of uncertainty. The successive start of production of higher-end products (for example for Epcos) will lead to clearly higher inventory and receivables. Investments into the expansion of production must further be taken into account which is why we still expect a negative free cash flow (2014E: EUR-0.7m; 2015E: EUR-0.1m). Growth financing thus remains on the agenda.

Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document

### Income Statement

	Unit: Financial year: Accounting standard:	EURm Dec. 31 HGB	2010	2011	2012	2013	2014E	2015E
<b>Sales</b>			<b>6.5</b>	<b>8.2</b>	<b>8.9</b>	<b>8.2</b>	<b>11.1</b>	<b>13.1</b>
Change in inventory			0.1	0.3	-0.1	0.1	0.1	0.1
Own work capitalised			0.5	0.6	0.6	0.6	0.5	0.3
Other operating income			0.7	0.3	0.2	0.1	0.1	0.2
<b>Total operating performance</b>			<b>7.7</b>	<b>9.5</b>	<b>9.6</b>	<b>9.0</b>	<b>11.8</b>	<b>13.7</b>
Cost of materials			-2.1	-2.8	-2.5	-2.9	-3.5	-4.0
<b>Gross profit</b>			<b>5.6</b>	<b>6.6</b>	<b>7.1</b>	<b>6.1</b>	<b>8.4</b>	<b>9.7</b>
Personnel expenses			-2.9	-3.4	-3.9	-4.3	-4.7	-5.2
Other operating expenses			-2.0	-2.3	-2.3	-2.2	-2.5	-2.9
<b>EBITDA</b>			<b>0.7</b>	<b>0.9</b>	<b>0.9</b>	<b>-0.5</b>	<b>1.2</b>	<b>1.6</b>
Depreciation and amortisation			-0.6	-0.6	-0.7	-0.7	-0.8	-0.9
<b>EBIT</b>			<b>0.1</b>	<b>0.2</b>	<b>0.3</b>	<b>-1.2</b>	<b>0.4</b>	<b>0.7</b>
Financial results			-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
<b>EBT</b>			<b>-0.1</b>	<b>0.1</b>	<b>0.2</b>	<b>-1.3</b>	<b>0.3</b>	<b>0.7</b>
Extraordinary expenses			0.0	0.0	0.0	0.0	0.0	0.0
Income taxes and other taxes			0.0	-0.1	0.0	-0.1	0.0	0.0
Minority interests			0.0	0.0	0.0	0.0	0.0	0.0
<b>Net income</b>			<b>-0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>-1.4</b>	<b>0.3</b>	<b>0.7</b>
Weighted average number of shares (m)			2.480	2.795	2.915	3.000	3.000	3.000
<b>Earnings per share (EUR)</b>			<b>-0.02</b>	<b>0.02</b>	<b>0.05</b>	<b>-0.47</b>	<b>0.10</b>	<b>0.22</b>
Dividends per share (EUR)			0.00	0.00	0.00	0.00	0.00	0.00

Source: Independent Research; NanoFocus AG

### Income Statement (positions in % of sales)

	Unit: Financial year: Accounting standard:	in % Dec. 31 HGB	2010	2011	2012	2013	2014E	2015E
<b>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>
Change in inventory			0.9%	4.1%	-1.1%	0.8%	0.7%	0.6%
Own work capitalised			7.1%	7.3%	6.9%	7.9%	4.4%	2.6%
Other operating income			10.3%	3.6%	2.1%	1.3%	1.3%	1.3%
<b>Total operating performance</b>			<b>118.3%</b>	<b>115.0%</b>	<b>108.0%</b>	<b>110.0%</b>	<b>106.4%</b>	<b>104.6%</b>
Cost of materials			-32.5%	-34.2%	-28.5%	-35.8%	-31.2%	-30.6%
<b>Gross profit</b>			<b>85.8%</b>	<b>80.8%</b>	<b>79.5%</b>	<b>74.1%</b>	<b>75.2%</b>	<b>73.9%</b>
Personnel expenses			-44.9%	-41.9%	-43.6%	-52.9%	-42.5%	-39.7%
Other operating expenses			-30.2%	-28.3%	-25.3%	-27.2%	-22.3%	-21.9%
<b>EBITDA</b>			<b>10.7%</b>	<b>10.6%</b>	<b>10.6%</b>	<b>-5.9%</b>	<b>10.4%</b>	<b>12.3%</b>
Depreciation and amortisation			-9.5%	-7.9%	-7.6%	-8.9%	-6.8%	-6.6%
<b>EBIT</b>			<b>1.2%</b>	<b>2.7%</b>	<b>3.0%</b>	<b>-14.8%</b>	<b>3.6%</b>	<b>5.7%</b>
Financial results			-2.1%	-1.3%	-0.9%	-0.7%	-1.0%	-0.6%
<b>EBT</b>			<b>-0.9%</b>	<b>1.4%</b>	<b>2.1%</b>	<b>-15.5%</b>	<b>2.6%</b>	<b>5.1%</b>
Extraordinary expenses			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Income taxes and other taxes			0.0%	-0.6%	-0.4%	-1.6%	0.0%	0.0%
Minority interests			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Net income</b>			<b>-0.9%</b>	<b>0.8%</b>	<b>1.7%</b>	<b>-17.1%</b>	<b>2.6%</b>	<b>5.1%</b>

Source: Independent Research; NanoFocus AG

Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document

**Balance sheet**

	<b>Unit:</b> EURm						
	<b>Financial year:</b> Dec. 31	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014E</b>	<b>2015E</b>
	<b>Accounting standard:</b> HGB						
Capital subscribed not paid in		0.0	0.0	0.0	0.0	0.0	0.0
Expenditures for start-up and expansion of business operations		0.0	0.0	0.0	0.0	0.0	0.0
Intangible assets		2.6	2.8	3.0	3.0	3.1	3.0
Property, plant and equipment		0.5	0.5	0.5	0.5	0.6	0.7
Financial assets		0.1	0.1	0.1	0.1	0.1	0.1
<b>Total non-current assets</b>		<b>3.2</b>	<b>3.4</b>	<b>3.6</b>	<b>3.6</b>	<b>3.8</b>	<b>3.9</b>
Inventories		2.0	2.7	2.6	2.9	3.4	4.0
Receivables and other assets		3.0	3.2	3.4	3.2	3.9	4.4
Trade receivables		2.6	2.8	2.6	1.9	2.4	2.9
Other current receivables/assets		0.4	0.4	0.9	1.4	1.5	1.6
Securities		0.0	0.0	0.0	0.0	0.0	0.0
Cash and cash equivalents		3.2	2.2	1.8	0.3	0.3	0.2
<b>Total current assets</b>		<b>8.2</b>	<b>8.1</b>	<b>7.9</b>	<b>6.4</b>	<b>7.7</b>	<b>8.6</b>
Deferred expenses and accrued income		0.1	0.1	0.1	0.1	0.1	0.1
Deferred tax assets		1.3	1.5	1.7	1.7	1.7	1.7
<b>Total assets</b>		<b>12.8</b>	<b>13.1</b>	<b>13.2</b>	<b>11.8</b>	<b>13.3</b>	<b>14.2</b>
Subscribed capital		2.8	2.8	3.0	3.0	3.0	3.0
Capital reserve		5.8	5.8	6.1	6.1	6.1	6.1
Retained earnings related to deferred taxes		1.2	1.2	1.2	1.2	1.2	1.2
Capital contributions		0.0	0.0	0.0	0.0	0.0	0.0
Profit/loss carried forward		0.0	0.0	0.0	0.0	0.0	0.0
Retained earnings		0.0	0.0	0.0	0.0	0.0	0.0
Net income		-0.6	-0.5	-0.4	-1.8	-1.5	-0.8
<b>Total equity</b>		<b>9.2</b>	<b>9.2</b>	<b>9.9</b>	<b>8.5</b>	<b>8.8</b>	<b>9.5</b>
Investment grants to non-current assets		0.0	0.0	0.0	0.0	0.0	0.0
<b>Provisions</b>		<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.4</b>
Financial liabilities		2.2	1.8	1.3	0.9	1.7	1.7
Advanced payments received		0.1	0.1	0.0	0.2	0.2	0.2
Trade payables		0.5	1.1	0.8	1.0	1.2	1.4
Liabilities to affiliated companies		0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities		0.4	0.3	0.3	0.1	0.3	0.4
<b>Total liabilities</b>		<b>3.3</b>	<b>3.3</b>	<b>2.4</b>	<b>2.3</b>	<b>3.4</b>	<b>3.6</b>
Deferred income and accrued expenses		0.0	0.0	0.0	0.0	0.1	0.1
Deferred tax liabilities		0.2	0.3	0.5	0.7	0.7	0.7
<b>Total equity and liabilities</b>		<b>12.8</b>	<b>13.1</b>	<b>13.2</b>	<b>11.8</b>	<b>13.3</b>	<b>14.2</b>

Source: Independent Research; NanoFocus AG

Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document

**Balance sheet** (Positions in % of balance sheet total)

<b>Unit:</b> <b>Financial year:</b> <b>Accounting standard:</b>	in % Dec. 31 HGB	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014E</b>	<b>2015E</b>
Capital subscribed not paid in		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Expenditures for start-up and expansion of business operations		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Intangible assets		20.2%	21.3%	22.5%	25.3%	23.2%	20.9%
Property, plant and equipment		3.6%	3.8%	3.6%	4.3%	4.5%	5.2%
Financial assets		1.0%	1.0%	1.1%	1.2%	1.1%	1.0%
<b>Total non-current assets</b>		<b>24.8%</b>	<b>26.0%</b>	<b>27.1%</b>	<b>30.8%</b>	<b>28.8%</b>	<b>27.1%</b>
Inventories		15.9%	20.5%	19.6%	24.5%	25.7%	27.8%
Receivables and other assets		23.2%	24.4%	26.0%	27.2%	29.5%	31.2%
Trade receivables		20.3%	21.5%	19.5%	15.8%	18.3%	20.2%
Other current receivables/assets		3.0%	2.9%	6.4%	11.5%	11.2%	11.0%
Securities		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash and cash equivalents		25.2%	17.2%	14.0%	2.8%	2.5%	1.3%
<b>Total current assets</b>		<b>64.3%</b>	<b>62.1%</b>	<b>59.6%</b>	<b>54.5%</b>	<b>57.8%</b>	<b>60.3%</b>
Deferred expenses and accrued income		0.5%	0.4%	0.6%	0.6%	0.7%	0.8%
Deferred tax assets		10.4%	11.4%	12.7%	14.2%	12.6%	11.8%
<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>
Subscribed capital		21.9%	21.4%	22.7%	25.4%	22.6%	21.1%
Capital reserve		45.2%	44.1%	46.5%	51.9%	46.3%	43.2%
Retained earnings related to deferred taxes		9.1%	8.9%	8.8%	9.9%	8.8%	8.2%
Capital contributions		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Profit/loss carried forward		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Retained earnings		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net income		-4.5%	-3.9%	-2.7%	-14.9%	-11.1%	-5.6%
<b>Total equity</b>		<b>71.8%</b>	<b>70.5%</b>	<b>75.3%</b>	<b>72.3%</b>	<b>66.6%</b>	<b>66.8%</b>
Investment grants to non-current assets		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Provisions</b>		<b>1.5%</b>	<b>1.7%</b>	<b>2.3%</b>	<b>2.5%</b>	<b>2.7%</b>	<b>2.7%</b>
Financial liabilities		17.6%	13.6%	9.8%	7.6%	12.4%	11.6%
Advanced payments received		0.6%	0.9%	0.0%	1.6%	1.4%	1.4%
Trade payables		4.3%	8.3%	5.8%	8.7%	8.9%	9.7%
Liabilities to affiliated companies		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other liabilities		3.0%	2.2%	2.4%	1.2%	2.5%	2.6%
<b>Total liabilities</b>		<b>25.5%</b>	<b>24.9%</b>	<b>18.0%</b>	<b>19.1%</b>	<b>25.3%</b>	<b>25.3%</b>
Deferred income and accrued expenses		0.0%	0.3%	0.2%	0.3%	0.4%	0.4%
Deferred tax liabilities		1.2%	2.6%	4.2%	5.7%	5.1%	4.8%
<b>Total equity and liabilities</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: Independent Research; NanoFocus AG

Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document

**Cash flow statement**

<b>Unit:</b>	EURm						
<b>Financial year:</b>	Dec. 31	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014E</b>	<b>2015E</b>
<b>Accounting standard:</b>	HGB						
Net income		-0.1	0.1	0.1	-1.4	0.3	0.7
+/- Loss/gain on the disposal of PP&E		0.0	0.0	0.0	0.0	0.0	0.0
+ Depreciation and amortisation		0.6	0.7	0.7	0.7	0.8	0.9
+/- Own work capitalised		0.0	0.0	0.0	0.0	0.0	0.0
+/- Changes in provisions		0.0	0.0	0.0	0.0	0.1	0.0
+/- Other non-cash expenses/income		0.0	0.0	0.0	0.1	0.0	0.0
<b>Cash flow from sales activities</b>		<b>0.6</b>	<b>0.7</b>	<b>0.9</b>	<b>-0.6</b>	<b>1.1</b>	<b>1.6</b>
-/+ Changes in inventories, receivables/other current assets		-0.5	-0.9	-0.2	-0.1	-1.3	-1.1
+/- Changes in payables and other liabilities		0.0	0.6	-0.3	0.3	0.4	0.2
+/- Gain/loss from extraordinary items		0.0	0.0	0.0	0.0	0.0	0.0
<b>Cash flow from operating activities</b>		<b>0.1</b>	<b>0.4</b>	<b>0.4</b>	<b>-0.3</b>	<b>0.2</b>	<b>0.7</b>
+ Proceeds from sale of assets		0.0	0.0	0.0	0.0	0.0	0.0
- Expenses for purchase of assets		-0.1	-0.3	-0.2	-0.2	-0.5	-0.6
- Own work capitalised		-0.5	-0.6	-0.6	-0.6	-0.5	-0.3
<b>Cash flow from investing activities</b>		<b>-0.6</b>	<b>-0.9</b>	<b>-0.9</b>	<b>-0.8</b>	<b>-0.9</b>	<b>-0.9</b>
+ Proceeds from equity increases		1.3	0.0	0.6	0.0	0.0	0.0
+ Proceeds from finance lease		-0.1	-0.1	-0.1	0.0	0.0	0.0
-/+ Repayments of/proceeds from financial liabilities		0.6	-0.5	-0.5	-0.4	0.8	0.0
<b>Cash flow from financial activities</b>		<b>1.8</b>	<b>-0.5</b>	<b>0.0</b>	<b>-0.4</b>	<b>0.8</b>	<b>0.0</b>
<b>Change in financial position</b>		<b>1.3</b>	<b>-1.0</b>	<b>-0.4</b>	<b>-1.5</b>	<b>0.0</b>	<b>-0.1</b>
Other non-cash items		0.0	0.0	0.0	0.0	0.0	0.0
Financial position - start of period		1.9	3.2	2.2	1.8	0.3	0.3
<b>Financial position - end of period</b>		<b>3.2</b>	<b>2.2</b>	<b>1.8</b>	<b>0.3</b>	<b>0.3</b>	<b>0.2</b>

Source: Independent Research; NanoFocus AG

Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document

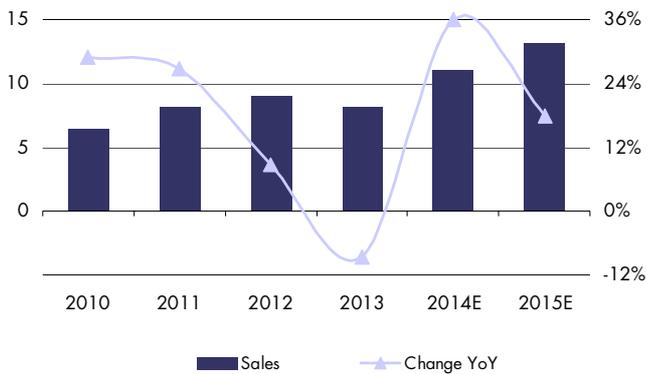
## Key figures

Financial year: Accounting standard:	Dec. 31 HGB	2010	2011	2012	2013	2014E	2015E
<b>Growth rates</b>							
Sales growth		28.9%	26.9%	8.7%	-8.5%	35.9%	17.9%
EBITDA growth		-	26.1%	8.7%	-	-	38.7%
EBIT growth		-	192.7%	21.1%	-	-	84.6%
EBT growth		-	-	63.4%	-	-	129.1%
EPS growth		-	-	130.3%	-	-	129.1%
<b>Margins</b>							
EBITDA margin		10.7%	10.6%	10.6%	neg.	10.4%	12.3%
EBIT margin		1.2%	2.7%	3.0%	neg.	3.6%	5.7%
EBT margin		neg.	1.4%	2.1%	neg.	2.6%	5.1%
Net margin		neg.	0.8%	1.7%	neg.	2.6%	5.1%
<b>Yield analysis</b>							
ROI		-0.5%	0.5%	1.1%	-11.2%	2.3%	4.9%
ROCE		1.1%	1.6%	2.7%	-17.6%	5.2%	8.5%
ROE before taxes		-0.7%	1.2%	1.9%	-13.7%	3.4%	7.3%
ROE after taxes		-0.7%	0.7%	1.6%	-15.1%	3.4%	7.3%
ROIC		0.7%	1.1%	1.9%	-12.7%	4.0%	6.8%
<b>Balance sheet analysis</b>							
Equity ratio		71.8%	70.5%	75.3%	72.3%	66.6%	66.8%
Equity/non-current assets ratio		2.9	2.7	2.8	2.3	2.3	2.5
Equity + non-current debt/non-current assets ratio		3.5	3.1	3.1	2.5	2.6	2.8
Asset intensity		24.8%	26.0%	27.1%	30.8%	28.8%	27.1%
Inventory turnover		3.0	3.5	3.4	3.0	3.5	3.6
Receivables turnover		2.8	3.0	3.3	3.7	5.2	4.9
Days of sales outstanding		130.8	119.8	110.0	99.1	70.6	73.9
Working capital/sales ratio		61.6%	50.4%	48.7%	48.6%	36.1%	37.2%
Days of payables outstanding		76.6	105.4	132.8	112.0	116.6	116.5
<b>Debt ratios</b>							
Net financial debt		-0.8	-0.4	-0.5	0.6	1.3	1.5
Net financial debt/EBITDA		-0.6	-0.7	-0.5	-	0.8	0.9
Net Gearing		-0.1	0.0	-0.1	0.1	0.1	0.2
EBITDA interest coverage		4.4	6.2	9.3	-	10.2	21.2
EBIT interest coverage		0.5	1.6	2.6	-	3.5	9.8
<b>Cash flow analysis</b>							
Free cash flow (FCF)		-0.5	-0.5	-0.4	-1.1	-0.7	-0.1
FCF/sales		-8.3%	-5.5%	-4.7%	-13.6%	-6.7%	-1.1%
FCF/net income		-	-723.8%	-282.6%	-	-253.9%	-22.2%
FCF per share (EUR)		-0.22	-0.16	-0.14	-0.37	-0.25	-0.05
FCF yield		-5.2%	-4.9%	-4.9%	-14.4%	-7.0%	-1.4%
Capex		0.1	0.3	0.2	0.2	0.5	0.6
Capex /depreciation		49.2%	92.7%	71.8%	42.5%	111.9%	106.6%
Capex/sales		2.0%	3.4%	2.7%	1.9%	4.1%	4.2%
<b>Valuation multiples</b>							
EV / sales		1.5	1.1	0.9	1.0	1.0	0.9
EV / EBITDA		13.9	10.2	8.5	neg.	9.7	7.0
EV / EBIT		127.5	40.2	30.1	neg.	27.8	15.1
EV / FCF		neg.	neg.	neg.	neg.	neg.	neg.
P/E		neg.	148.2	57.4	neg.	36.3	15.8
P/B		1.1	1.0	0.9	0.9	1.2	1.1
P/CF		126.7	21.3	19.9	neg.	51.5	14.3
P/S		1.6	1.1	1.0	0.9	1.0	0.8
Dividend yield		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Independent Research; NanoFocus AG

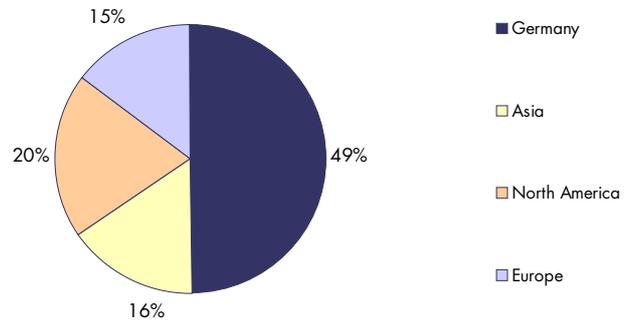
Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document

**Sales development (EURm)**



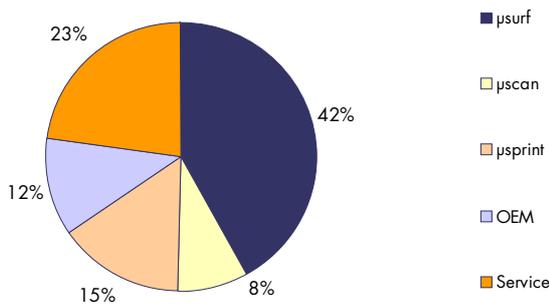
⇒ The unexpected decrease in sales in 2013 is the result of delayed sales recognition and delayed projects (e.g. automotive industry).  
 ⇒ In 2014, NanoFocus expects sales of more than EUR11m.

**Sales by region (2013)**



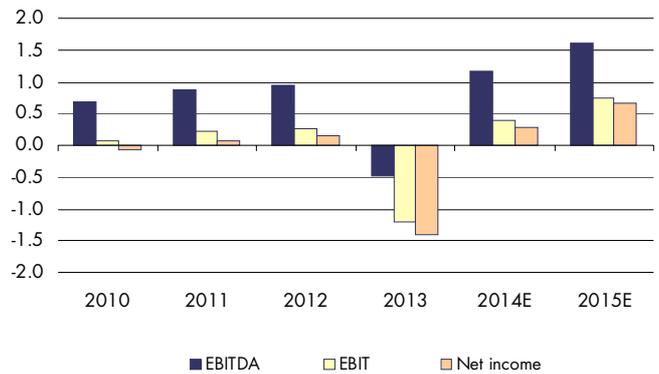
⇒ NanoFocus still makes about half its sales in Germany.  
 ⇒ Through the strong growth in the Semiconductor segment (e.g. customer Samsung) the Asian business gained in importance.

**Sales by product (2013)**



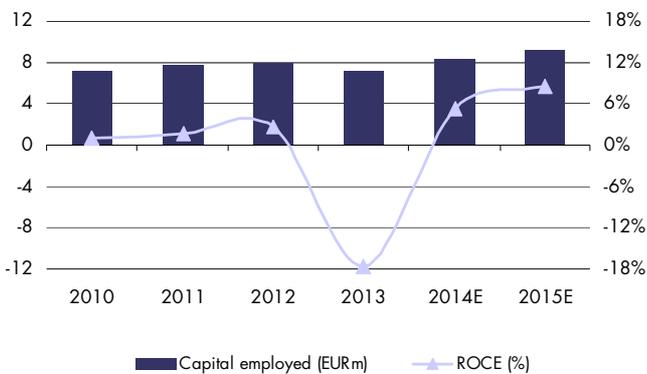
⇒ The µsurf platform technology is still dominating sales (e.g. µsurf cylinder for the automotive industry).  
 ⇒ Due to the semiconductor industry, µsprint becomes more important.

**Earnings development (EURm)**



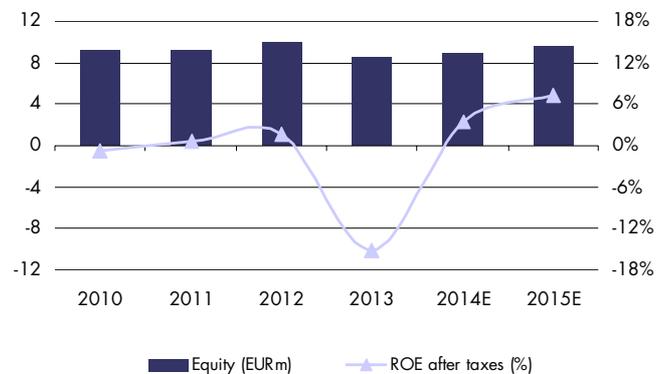
⇒ The loss reported in 2013 was surprising to us (unexpected low sales level).  
 ⇒ Along with the change towards a producing company economies of scale should gain importance step by step.

**ROCE and capital employed**



⇒ Due to the loss in 2013 the ROCE was negative.  
 ⇒ In spite of the increase in capital employed (e.g. capex), we expect to see successively higher ROCE due to the earnings improvement.

**ROE and equity**



⇒ CAGR of equity from 2010 to 2015: +1%.(due to loss in 2013).  
 ⇒ In line with the successively increasing profitability ROE should improve as well. However, with about 7% in 2015 ROE remains at a quite low level.

Source: Independent Research; NanoFocus AG

Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document

## Disclaimer

### Recommendations concerning particular shares (starting December 18, 2009)

- Buy: According to our assessment, the stock will rise by at least 15% in absolute terms within a 6-month period.
- Hold: According to our assessment, the stock will rise by between 0% and 15% in absolute terms within a 6-month period.
- Sell: According to our assessment, the stock will decline in absolute terms within a 6-month period.

### Recommendations concerning particular shares (until December 17, 2009)

- Buy: According to our assessment, the stock will rise by at least 15% in absolute terms within a 6-month period.
- Accumulate: According to our assessment, the stock will rise by between 0% and 15% in absolute terms within a 6-month period.
- Reduce: According to our assessment, the stock will decline by between 0% and 15% in absolute terms within a 6-month period.
- Sell: According to our assessment, the stock will decline by least 15% in absolute terms within a 6-month period.

### **Compulsory information required under Section 34b of the German Securities Trading Act (WpHG) and the Financial Analysis Regulation**

#### Key sources of information

Key sources of information used in the preparation of this document are publications in foreign and domestic media such as information services (e.g. Reuters, VWD, Bloomberg, DPA-AFX etc.), the financial press (e.g. Börsenzeitung, Handelsblatt, FAZ, FTD, Wall Street Journal, Financial Times etc.), specialised journals, published statistics, rating agencies and publications of the issuers under coverage.

#### Summary of the valuation principles used:

##### Analyses of shares:

In valuing companies standard and accepted valuation methods (amongst others the Discounted Cash Flow Method (DCF Method), Peer-Group Analysis) are applied. Under the DCF Method the net value of the issuer is calculated, which represents the sum of the discounted company results, i.e. the net present value of the issuer's future net cash flows. The net value is therefore determined with reference to the company's anticipated future results and the discount rate applied. Under the Peer-Group Analysis Method issuers quoted on the Stock Exchange are valued with reference to the comparison of valuation multiples (e.g. price/earnings ratio, price/book value, enterprise value/sales, enterprise value/EBITDA, enterprise value/EBIT). Comparability of the valuation multiples is primarily determined by business activity and economic prospects.

##### Sensitivity of the valuation parameters:

The figures taken from the income statement, the cash flow statement and the balance sheet, upon which the valuation of companies is based, are numerical estimates and therefore subject to risks. These may change at any time without prior notice.

Quite apart from the valuation method applied, there is a very real risk that the share price target may not be reached in the anticipated period of time. Risks include unforeseen changes in competitive pressure or in demand for the issuer's products. Such fluctuations in demand may arise as a result of changes of a technological nature, the overall level of economic activity or in some cases as a result of changes in moral concepts. Changes in tax law, in exchange rates and, in certain business segments, in regulations are other factors which can influence valuations. The above discussion of valuation methods and risk factors makes no claim to be exhaustive.

**Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document**

**Timing conditions of planned updates:****Analyses of shares:**

Independent Research GmbH maintains a list of issuers for whom company-based financial analyses („Coverage list of share analyses“) are published. The criterion for the inclusion or removal of an issuer from this list is governed primarily by the company's inclusion in an index (DAX®, EuroStoxx 50<sup>SM</sup>, and Stoxx Europe 50<sup>SM</sup>). In addition, selected issuers from the mid and small cap segment or from the US markets are included. In such cases the inclusion or removal of these issuers from the coverage list is at the sole discretion of Independent Research GmbH. If deemed appropriate by the analysts, Independent Research GmbH will release a short expert commentary or studies concerning the companies on the coverage list. As a rule, such research products will be published following the release of financial figures of a company under coverage. Moreover, every day company-specific events such as ad hoc announcements or important news relating to individual companies on the coverage list are evaluated. The decision as to which issuers are covered by such publications is at the sole discretion of Independent Research GmbH. Moreover, fundamental analyses are prepared for the issuers included on the coverage list. The decision as to which issuers are covered by such publications is at the sole discretion of Independent Research GmbH.

It may occur at any time that, in fulfilment of the provisions of the German Securities Trading Act, the publication of financial analyses of individual issuers included in the coverage list is restricted without any prior warning.

Internal organisational measures to deal with the prevention or handling of conflicts of interest:

Employees of Independent Research GmbH who are involved in the preparation and/or the offering of financial analyses are subject to the company's internal compliance regulations which classify them as employees in an environment requiring confidentiality. The company's internal compliance regulations are in accordance with Sections 33 and 33b of the German Securities Trading Act (WpHG).

**Possible conflicts of interest – as at: 06/27/2014 –**

**There are potential conflicts of interest with the following issuers mentioned in this research report:**

<b>Emittent</b>	<b>Conflicts of interest</b>
<b>NanoFocus AG</b>	<b>5, 6</b>

**Independent Research GmbH and/or its affiliated companies:**

- 1) own at least 1% of the issuer's share capital.
- 2) have been involved in the management of a consortium issuing financial instruments of the issuer by way of a public offer within the last twelve months.
- 3) look after financial instruments of the issuer in a market through the placement of buying or selling orders.
- 4) have concluded an agreement with issuers within the last twelve months, which are either themselves or through their financial instruments the object of a financial analysis, covering services related to investment banking transactions or have received a service or a promise of services in such an agreement.
- 5) made this financial analysis available to the issuer prior to publication without the Valuation/Forecasts section and subsequently amended it.
- 6) have concluded an agreement with the issuers which are either themselves or through their financial instruments the object of the financial analysis regarding the preparation of the financial analysis.

Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document

**Liability statement**

This document is for information purposes only. It has been prepared by Independent Research GmbH and shall be distributed in Germany only. This document is not directed to persons or companies domiciled and/or maintaining branch-offices outside Germany, particularly in the United States of America, Canada, United Kingdom, and Japan. This document shall only be distributed according to the applicable laws of the respective country. Any persons receiving this document, i.e. this information and material, shall be obliged to inform themselves about the applicable laws of the respective country and to act accordingly.

This document constitutes neither an offer nor an invitation to subscribe to or to purchase a security. Especially with preparation of this document Independent Research GmbH shall neither act as an investment consultant nor act on the basis of some asset management duty or obligation. Any investment decision regarding any security or other financial instruments must be based on individual, professional advice and/or on the prospectus or information memorandum.

This document constitutes an independent assessment of the respective issuer and/or the negotiable securities by Independent Research GmbH. All and any herein contained assessments, opinions and statements are those of the author of this document and do not necessarily reflect the opinion of the issuer or third parties.

All and any information this document is based on has been taken from resources considered as reliable but has not necessarily been verified by Independent Research. Therefore, Independent Research GmbH does not warrant the accuracy, completeness and correctness of the information and opinions contained herein.

Independent Research GmbH assumes no responsibility or liability for direct or indirect damage arising from the use or distribution of this document or of the information contained therein or which otherwise may arise from it.

The information, opinions and statements represent the status quo of the day of the preparation of the document. Future developments may render them out of date without any changes made to this document. Price movements experienced in the past, simulations or forecasts are no reliable indicators for future price movements of securities. The tax treatment of financial instruments depends on the individual circumstances of the respective investor and may be subject to future changes, which may be retroactive.

Although Independent Research GmbH may provide hyperlinks to websites of companies mentioned in this study, the inclusion of a given hyperlink shall not mean that Independent Research GmbH confirms, recommends or authorises all and any data on the respective website or data that can be accessed from the website. Independent Research GmbH assumes no liability for such data nor for any consequences arising from the use of same.

**As at: 06/27/2014**

**Independent Research GmbH  
Friedrich-Ebert-Anlage 36  
60325 Frankfurt am Main  
Germany**

**Responsible supervisory authority:**  
Federal Financial Supervisory Authority  
(Bundesanstalt für Finanzdienstleistungsaufsicht)  
Graurheindorfer Str. 108, 53117 Bonn  
and  
Marie-Curie-Straße 24-28, 60439 Frankfurt

**Please notice the advice regarding possible conflicts of interests as well as the disclaimer at the end of this document**