

Buy EUR 2.10	Value Indicators: EUR DCF: 1.96 SotP: 2.31 Peer Group: 2.49	Share data: Bloomberg: AAQ GR Reuters: AAQG.DE ISIN: DE0005066609	Description: Producer of implants and biomaterials to mend broken bones
	Market Snapshot: EUR m Market cap: 37.7 No. of shares (m): 30.8 EV: 36.7 Freefloat MC: 16.3 Ø Trad. Vol. (30d): 27.99 th	Shareholders: Freefloat: 43.3 % Ratio Capital: 13.3 % Jürgen W. Krebs: 12.7 % Noes Beheer B.V.: 10.9 % Taaleritehdas: 6.3 %	Risk Profile (WRe): 2015e Beta: 1.5 Price / Book: 0.8 x Equity Ratio: 74 %
Price: EUR 1.22 Upside: 71.8 %			

Feedback company visit: Trauma sales seen improving in H2 2016

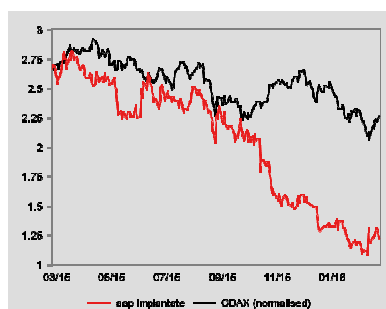
Focus on established markets: In the past, aap's distribution strategy mainly focused on the emerging markets (BRIC and SMIT countries). These markets provided for rapid development and strong growth as entry barriers were comparatively low. However, negative economic development in these regions in H2 2015 also affected aap's distribution partners (e.g. unfavourable FX-rates; declining oil price; macroeconomic uncertainties) and sales have declined owing to order delays. For the moment, no change is expected in the aforementioned macroeconomic trends. To reduce its dependence on these markets, aap is now increasing its distribution focus on developed markets such as the DACH-region and the US. The company has strengthened its sales forces especially in these markets with several executives providing extensive industry experience. Additionally, the product portfolio has expanded further and LOQTEQ implants can now be used for more than 90% of the relevant application areas. As a result, a sales improvement is expected in the Trauma segment in H2 2016.

Divestment of Biomaterial business: Management is still aiming to transform the company into a pure player in the Trauma segment. Hence, a potential divestment of Biomaterial business is likely in 2016. However, aap was affected by the recent consolidation in the med-tech market. For instance, two clients of aap's biomaterials products, Biomet and Zimmer, merged. The recent M&A activities in the market and the related priorities set by decision makers resulted in a decline in aap's project business in 2015. As aap's project business is cash generative and highly profitable, this decline could result in lower valuations. Therefore, the proceeds of a possible sale of aap Biomaterials could be lower than initially assumed. For the moment, a cash inflow of EUR 30-35m (old: >EUR 36m) is considered possible.

aap as an acquisition target: Around 88% of the orthopaedics market is dominated by six international players and with the latest mergers of Biomet and Zimmer, and Wright Medical and Tornier, consolidation of the market is continuing. These large companies are growing at a significantly slower rate than smaller niche players within the sector which have been more frequently purchased in recent years. aap with its innovative product LOQTEQ as well as its silver coating technology (approval filed) offers value-accretive potential by improving existing products in larger and more global structures. Therefore, a takeover scenario is highly likely in our view.

Valuation: Against the backdrop of the potential offered by LOQTEQ and a promising product pipeline, aap is an attractive investment opportunity. The undervaluation derived from the DCF model is clearly confirmed by the sum of the parts analysis. A possible acquisition of aap offers additional share price potential. Remains a Buy.

Changes in Estimates:							Comment on Changes:	
FY End: 31.12. in EUR m	2015e (old)	+ / -	2016e (old)	+ / -	2017e (old)	+ / -		
Sales	29.3	-2.1 %	31.8	0.0 %	34.5	0.0 %	<ul style="list-style-type: none"> Adjusting estimates after guidance announcement. For FY 2016, aap guided for a sales range of EUR 30-34m. EBITDA is forecast between EUR 0 and 1m. While the sales guidance was in line with our expectations, EBITDA guidance was below our assumptions. The lower EBITDA guidance is explained by higher costs regarding the roll-out of trauma product LOQTEQ in the US and in the DACH-region. For both regions, the company invested in marketing operations. 	
EBITDA	-0.7	n.m.	2.0	-78.1 %	3.2	-37.4 %		
EBT	-2.7	n.m.	-0.2	n.m.	0.9	n.m.		
EPS	-0.09	n.m.	-0.03	n.m.	0.02	n.m.		

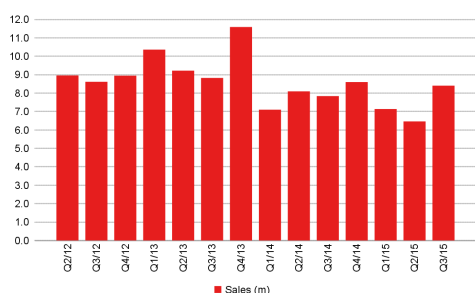


Rel. Performance vs CDAX:	
1 month:	5.4 %
6 months:	-38.2 %
Year to date:	2.4 %
Trailing 12 months:	-40.2 %

Company events:	
30.03.16	FY 2015
13.05.16	Q1
17.06.16	AGM
12.08.16	Q2

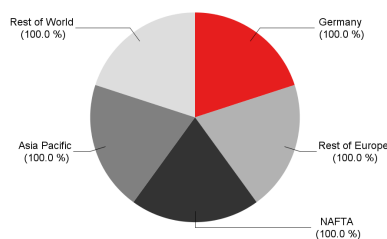
FY End: 31.12. in EUR m	CAGR (14-17e)	2011	2012	2013	2014	2015e	2016e	2017e
Sales	3.0 %	29.2	36.4	40.0	31.6	28.7	31.8	34.5
Change Sales yoy		2.7 %	24.7 %	9.8 %	-21.0 %	-9.2 %	10.9 %	8.4 %
Gross profit margin		85.3 %	78.4 %	72.7 %	68.8 %	65.0 %	71.0 %	73.0 %
EBITDA	-3.9 %	4.1	7.1	7.4	2.3	-1.2	0.4	2.0
Margin		14.1 %	19.6 %	18.4 %	7.2 %	-4.3 %	1.3 %	5.9 %
EBIT		1.2	3.2	-2.1	0.0	-3.3	-1.8	-0.4
Margin		4.0 %	8.8 %	-5.3 %	-0.1 %	-11.6 %	-5.7 %	-1.1 %
Net income		0.4	2.4	-2.2	-0.5	-3.4	-2.3	-0.2
EPS		0.01	0.08	-0.07	-0.01	-0.11	-0.07	-0.01
DPS		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dividend Yield		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FCFPS		-0.03	0.10	-0.07	-0.26	-0.18	-0.04	-0.10
FCF / Market cap		-2.7 %	10.4 %	-7.3 %	-7.3 %	-14.8 %	-3.4 %	-8.0 %
EV / Sales		1.2 x	0.9 x	1.2 x	2.4 x	1.2 x	1.2 x	1.2 x
EV / EBITDA		8.7 x	4.8 x	6.6 x	33.5 x	n.a.	86.0 x	19.6 x
EV / EBIT		30.8 x	10.7 x	n.a.	n.a.	n.a.	n.a.	n.a.
P / E		96.9 x	12.5 x	n.a.	n.a.	n.a.	n.a.	n.a.
FCF Yield Potential		2.6 %	11.0 %	9.3 %	-0.4 %	-10.0 %	-6.5 %	-0.8 %
Net Debt		7.1	3.9	3.2	-7.8	-2.2	-0.9	2.1
ROE		0.8 %	4.9 %	-4.4 %	-1.0 %	-7.6 %	-5.2 %	-0.5 %
ROCE (NOPAT)		1.4 %	5.2 %	n.a.	n.a.	n.a.	n.a.	n.a.
Guidance:		Guidance 2016: Revenue EUR 30-34m - EBITDA EUR 0.0-1m						

Sales development
in EUR m



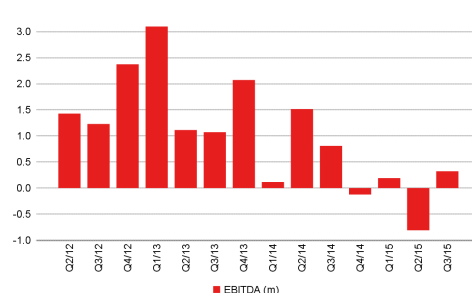
Source: Warburg Research

Sales by regions
2014; in %



Source: Warburg Research

EBITDA development
in EUR m



Source: Warburg Research

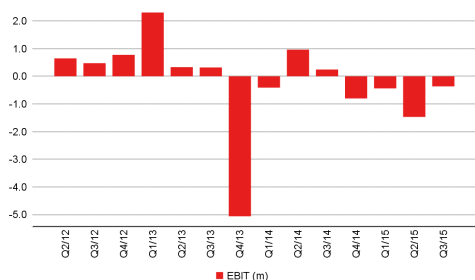
Company Background

- aap Implantate AG develops, produces and sells medical implants, which are primarily used in orthopaedics to mend fractures.
- With the business areas Trauma and Biomaterials, the company covers the entire value chain and sells the products worldwide with the focus on Europe, the USA as well as on the BRICS and SMIT markets.
- The products are sold by direct sale, international sales partners or OEMs (including Stryker, Zimmer, Biomet or Smith& Nephew).
- aap Implantate AG was founded in 1990 as a MBO from the Johnson & Johnson Group and is headquartered in Berlin. The company has 217 employees.

Competitive Quality

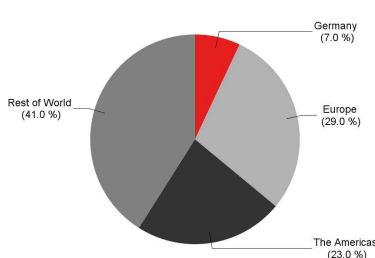
- aap Implantate AG has developed a patent protected Trauma implant (LOQTEQ), which provides significant improvements for surgeons, hospitals and clinics as well as patients.
- Additionally aap has a promising product pipeline with an antibacterial silver coating for the implants as well as resorbable magnesium implants.
- The sale of the Dutch subsidiary has provided the company with sufficient financial funds to grow organically and inorganically.
- In the Biomaterials division, aap has established a network with the largest Medtech companies (e.g. Zimmer, Stryker, Smith & Nephew, Johnson & Johnson).

EBIT development
in EUR m



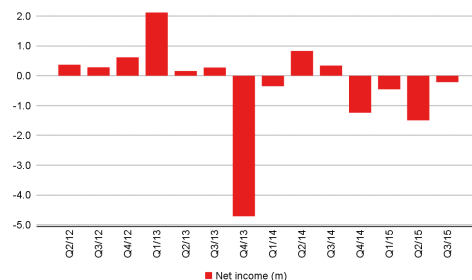
Source: Warburg Research

LOQTEQ - Sales by regions
2013; in %



Source: Warburg Research

Net income development
in EUR m



Source: Warburg Research

DCF model

Figures in EUR m	Detailed forecast period			Transitional period										Term. Value
	2015e	2016e	2017e	2018e	2019e	2020e	2021e	2022e	2023e	2024e	2025e	2026e	2027e	
Sales	28.7	31.8	34.5	37.4	40.6	44.2	48.2	51.5	55.2	59.3	63.9	69.0	74.6	
Sales change	-9.2 %	10.9 %	8.4 %	8.4 %	8.6 %	8.8 %	9.0 %	6.9 %	7.2 %	7.4 %	7.7 %	7.9 %	8.2 %	2.5 %
EBIT	-3.3	-1.8	-0.4	0.1	0.8	1.6	2.5	3.8	5.4	7.6	13.4	14.5	15.7	
EBIT-margin	-11.6 %	-5.7 %	-1.1 %	0.4 %	2.0 %	3.7 %	5.3 %	7.4 %	9.9 %	12.9 %	21.0 %	21.0 %	21.0 %	
Tax rate (EBT)	-6.2 %	-35.3 %	28.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	
NOPAT	-3.5	-2.4	-0.3	0.1	0.6	1.2	1.9	2.8	4.1	5.7	10.1	10.9	11.8	
Depreciation	2.1	2.2	2.4	2.4	2.6	2.9	3.1	3.3	3.6	3.9	4.2	4.5	4.8	
in % of Sales	7.3 %	7.0 %	7.0 %	6.5 %	6.5 %	6.5 %	6.5 %	6.5 %	6.5 %	6.5 %	6.5 %	6.5 %	6.5 %	
Changes in provisions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Change in Liquidity from														
- Working Capital	1.0	-2.2	1.8	0.5	1.5	1.6	1.8	1.5	-1.1	1.6	1.8	2.0	2.3	
- Capex	3.3	3.4	3.4	2.4	2.6	2.9	3.1	3.3	3.6	3.9	4.2	4.5	4.8	
Capex in % of Sales	11.5 %	10.7 %	9.9 %	6.5 %	6.5 %	6.5 %	6.5 %	6.5 %	6.5 %	6.5 %	6.5 %	6.5 %	6.5 %	
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Free Cash Flow (WACC Model)	-5.7	-1.4	-3.1	-0.4	-0.8	-0.4	0.1	1.4	5.2	4.1	8.3	8.8	9.5	11
PV of FCF	-5.8	-1.3	-2.6	-0.3	-0.6	-0.2	0.1	0.7	2.6	1.8	3.4	3.3	3.2	54
share of PVs	-16.75 %			23.91 %										92.85 %

Model parameter

Derivation of WACC:		Derivation of Beta:	
Debt ratio	0.00 %	Financial Strength	1.20
Cost of debt (after tax)	4.2 %	Liquidity (share)	1.50
Market return	7.00 %	Cyclicality	1.40
Risk free rate	1.50 %	Transparency	1.80
		Others	1.47
WACC	9.61 %	Beta	1.48

Valuation (m)

Present values 2027e	4		
Terminal Value	54		
Financial liabilities	8		
Pension liabilities	0		
Hybrid capital	0		
Minority interest	0		
Market val. of investments	0		
Liquidity	10	No. of shares (m)	30.8
Equity Value	60	Value per share (EUR)	1.96

Sensitivity Value per Share (EUR)

Beta	WACC	Terminal Growth							Beta	WACC	Delta EBIT-margin						
		1.75 %	2.00 %	2.25 %	2.50 %	2.75 %	3.00 %	3.25 %			-1.5 pp	-1.0 pp	-0.5 pp	+0.0 pp	+0.5 pp	+1.0 pp	+1.5 pp
1.66	10.6 %	1.43	1.47	1.51	1.55	1.59	1.64	1.69	1.66	10.6 %	1.31	1.39	1.47	1.55	1.63	1.71	1.79
1.57	10.1 %	1.60	1.64	1.69	1.74	1.79	1.85	1.91	1.57	10.1 %	1.48	1.57	1.65	1.74	1.83	1.91	2.00
1.52	9.9 %	1.69	1.74	1.79	1.85	1.90	1.97	2.03	1.52	9.9 %	1.58	1.67	1.76	1.85	1.94	2.02	2.11
1.48	9.6 %	1.79	1.84	1.90	1.96	2.02	2.09	2.17	1.48	9.6 %	1.68	1.77	1.87	1.96	2.05	2.15	2.24
1.43	9.4 %	1.90	1.96	2.02	2.08	2.15	2.23	2.31	1.43	9.4 %	1.80	1.89	1.99	2.08	2.18	2.28	2.37
1.38	9.1 %	2.02	2.08	2.15	2.22	2.30	2.38	2.47	1.38	9.1 %	1.92	2.02	2.12	2.22	2.32	2.42	2.52
1.29	8.6 %	2.27	2.35	2.43	2.52	2.62	2.72	2.84	1.29	8.6 %	2.20	2.31	2.41	2.52	2.63	2.74	2.85

- In 2013, one-third of the revenue was generated in the Trauma division and two-thirds in the Biomaterials division.
- This ratio will turn around in the medium term. As of 2020, Trauma is expected to generate almost 65% of revenue.
- In 2015e, the Trauma division is expected to break even.
- The EBIT margin in perpetuity is assumed at 21%. With successful market penetration, higher margins are possible.
- Beta is relatively low owing to the good financial situation and the sector's resistance to cyclicality.

Valuation

	2011	2012	2013	2014	2015e	2016e	2017e
Price / Book	0.6 x	0.6 x	1.0 x	1.9 x	0.8 x	0.9 x	0.9 x
Book value per share ex intangibles	0.34	0.37	1.06	0.99	0.92	0.84	0.82
EV / Sales	1.2 x	0.9 x	1.2 x	2.4 x	1.2 x	1.2 x	1.2 x
EV / EBITDA	8.7 x	4.8 x	6.6 x	33.5 x	n.a.	86.0 x	19.6 x
EV / EBIT	30.8 x	10.7 x	n.a.	n.a.	n.a.	n.a.	n.a.
EV / EBIT adj.*	30.8 x	10.7 x	n.a.	n.a.	n.a.	n.a.	n.a.
P / FCF	n.a.	9.6 x	n.a.	n.a.	n.a.	n.a.	n.a.
P / E	96.9 x	12.5 x	n.a.	n.a.	n.a.	n.a.	n.a.
P / E adj.*	96.9 x	12.5 x	n.a.	n.a.	n.a.	n.a.	n.a.
Dividend Yield	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Free Cash Flow Yield Potential	2.6 %	11.0 %	9.3 %	-0.4 %	-10.0 %	-6.5 %	-0.8 %

*Adjustments made for: -

SotP aap Implantate

	Sales		EV/ Sales	EV/ Sales	Trauma M&A	fair value 15	fair value 16	fair value 15
	2015e	2016e	2015e	2016e	Multiples			M&A
Trauma	11.00	14.3	2.69	2.45	4.67	29.6	34.9	51.3
Biomaterials	16.80	17.6	2.24	1.91	2.24	37.6	33.5	37.6
Other Assets								
Net Debt (without EMCM)						-2.4	-2.4	-2.4
Joint Venture aap Joints (at equity)						0.6	0.6	0.6
Fair Value						70.2	71.4	91.9
Number of shares						30.8	30.8	30.8
Fair Value per share						2.28	2.32	2.98

Source: Warburg Research, Bloomberg

Consolidated profit & loss

In EUR m	2011	2012	2013	2014	2015e	2016e	2017e
Sales	29.2	36.4	40.0	31.6	28.7	31.8	34.5
Change Sales yoy	2.7 %	24.7 %	9.8 %	-21.0 %	-9.2 %	10.9 %	8.4 %
Increase / decrease in inventory	0.8	0.2	-1.0	2.1	0.0	0.0	0.0
Own work capitalised	3.0	2.7	2.0	0.3	0.9	1.0	1.7
Total Sales	33.0	39.3	41.0	34.0	29.6	32.8	36.2
Material Expenses	8.1	10.8	12.0	12.3	10.9	10.2	11.0
Gross profit	24.9	28.6	29.1	21.7	18.7	22.6	25.2
<i>Gross profit margin</i>	<i>85.3 %</i>	<i>78.4 %</i>	<i>72.7 %</i>	<i>68.8 %</i>	<i>65.0 %</i>	<i>71.0 %</i>	<i>73.0 %</i>
Personnel expenses	11.9	13.5	14.6	12.2	12.3	13.2	14.1
Other operating income	1.9	3.3	4.3	3.1	2.9	2.9	3.3
Other operating expenses	10.8	11.2	11.4	10.3	10.5	11.8	12.3
Unfrequent items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	4.1	7.1	7.4	2.3	-1.2	0.4	2.0
<i>Margin</i>	<i>14.1 %</i>	<i>19.6 %</i>	<i>18.4 %</i>	<i>7.2 %</i>	<i>-4.3 %</i>	<i>1.3 %</i>	<i>5.9 %</i>
Depreciation of fixed assets	1.1	1.1	2.2	0.8	0.7	0.6	0.7
EBITA	3.1	6.0	5.2	1.5	-1.9	-0.2	1.3
Amortisation of intangible assets	1.9	2.8	7.3	1.5	1.4	1.6	1.7
Goodwill amortization	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	1.2	3.2	-2.1	0.0	-3.3	-1.8	-0.4
<i>Margin</i>	<i>4.0 %</i>	<i>8.8 %</i>	<i>-5.3 %</i>	<i>-0.1 %</i>	<i>-11.6 %</i>	<i>-5.7 %</i>	<i>-1.1 %</i>
EBIT adj.	1.2	3.2	-2.1	0.0	-3.3	-1.8	-0.4
Interest income	0.1	0.0	0.0	0.0	0.3	0.3	0.3
Interest expenses	0.6	0.5	0.2	0.1	0.2	0.2	0.2
Other financial income (loss)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBT	0.6	2.7	-2.3	-0.2	-3.2	-1.7	-0.3
<i>Margin</i>	<i>2.1 %</i>	<i>7.5 %</i>	<i>-5.7 %</i>	<i>-0.6 %</i>	<i>-11.3 %</i>	<i>-5.3 %</i>	<i>-0.8 %</i>
Total taxes	0.2	0.3	-0.2	0.3	0.2	0.6	-0.1
Net income from continuing operations	0.4	2.4	-2.0	-0.5	-3.4	-2.3	-0.2
Income from discontinued operations (net of tax)	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
Net income before minorities	0.4	2.4	-2.2	-0.5	-3.4	-2.3	-0.2
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	0.4	2.4	-2.2	-0.5	-3.4	-2.3	-0.2
<i>Margin</i>	<i>1.3 %</i>	<i>6.6 %</i>	<i>-5.4 %</i>	<i>-1.4 %</i>	<i>-12.0 %</i>	<i>-7.2 %</i>	<i>-0.6 %</i>
Number of shares, average	29.6	30.7	30.7	30.7	30.8	30.8	30.8
EPS	0.01	0.08	-0.07	-0.01	-0.11	-0.07	-0.01
EPS adj.	0.01	0.08	-0.07	-0.01	-0.11	-0.07	-0.01

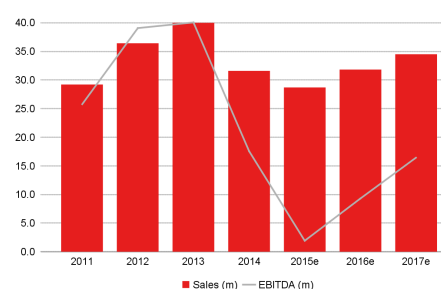
*Adjustments made for:

Guidance: Guidance 2016: Revenue EUR 30-34m - EBITDA EUR 0.0-1m

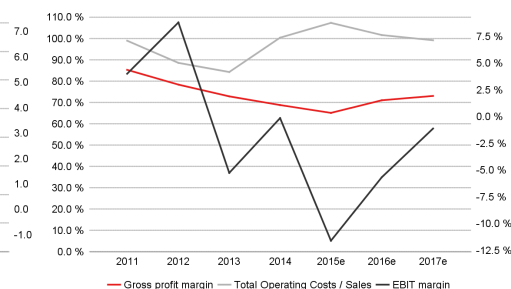
Financial Ratios

	2011	2012	2013	2014	2015e	2016e	2017e
Total Operating Costs / Sales	98.9 %	88.5 %	84.2 %	100.4 %	107.3 %	101.7 %	99.1 %
Operating Leverage	23.1 x	7.1 x	n.a.	4.7 x	-780.6 x	-4.2 x	-9.3 x
EBITDA / Interest expenses	6.8 x	13.7 x	40.6 x	28.8 x	n.m.	2.1 x	10.1 x
Tax rate (EBT)	36.1 %	11.5 %	10.0 %	-162.1 %	-6.2 %	-35.3 %	28.0 %
Dividend Payout Ratio	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Sales per Employee	109,793	137,932	336,042	213,473	n.a.	n.a.	n.a.

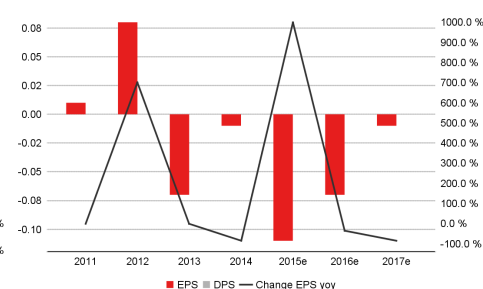
Sales, EBITDA
in EUR m



Operating Performance
in %



Performance per Share



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

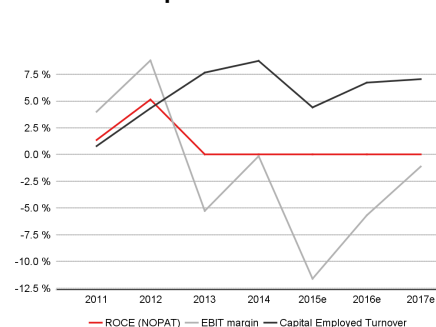
Consolidated balance sheet

In EUR m	2011	2012	2013	2014	2015e	2016e	2017e
Assets							
Goodwill and other intangible assets	38.2	39.4	14.5	15.2	16.6	17.0	17.3
thereof other intangible assets	5.5	5.1	0.9	0.5	1.5	1.9	2.2
thereof Goodwill	12.5	12.5	1.6	1.6	1.6	1.6	1.6
Property, plant and equipment	5.1	5.1	5.9	7.7	8.3	9.1	9.8
Financial assets	0.4	0.4	1.8	1.7	1.7	1.7	1.7
Other long-term assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fixed assets	43.7	44.9	22.2	24.5	26.6	27.7	28.7
Inventories	14.0	13.9	9.4	9.4	9.6	10.6	11.5
Accounts receivable	5.5	4.2	7.0	9.3	11.8	8.7	9.5
Liquid assets	2.2	3.7	1.6	12.2	10.5	9.2	6.2
Other short-term assets	0.8	1.8	25.0	2.4	2.8	2.8	2.8
Current assets	22.5	23.7	43.0	33.3	34.7	31.3	30.0
Total Assets	66.2	68.6	65.2	57.9	61.2	59.0	58.7
Liabilities and shareholders' equity							
Subscribed capital	30.7	30.7	30.7	30.7	30.8	30.8	30.8
Capital reserve	40.4	18.6	18.8	17.6	17.6	17.6	17.6
Retained earnings	0.2	0.2	0.7	0.7	0.7	-1.6	-1.8
Other equity components	-23.0	1.4	-3.1	-3.6	-4.1	-4.1	-4.1
Shareholders' equity	48.4	50.9	47.0	45.4	45.1	42.8	42.6
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total equity	48.4	50.9	47.0	45.4	45.1	42.8	42.6
Provisions	0.2	0.2	0.3	0.4	0.4	0.4	0.4
thereof provisions for pensions and similar obligations	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Financial liabilities (total)	9.2	7.6	4.7	4.3	8.1	8.1	8.1
thereof short-term financial liabilities	5.5	4.5	2.6	2.0	6.7	6.7	6.7
Accounts payable	3.1	3.3	2.9	2.9	4.7	4.8	4.7
Other liabilities	5.2	6.7	10.4	4.8	2.9	2.9	2.9
Liabilities	17.8	17.7	18.2	12.4	16.2	16.3	16.2
Total liabilities and shareholders' equity	66.2	68.6	65.2	57.9	61.2	59.0	58.7

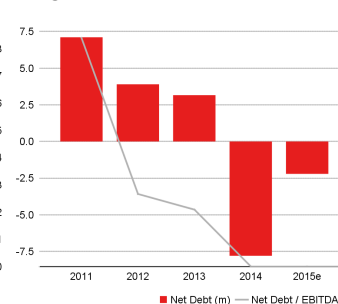
Financial Ratios

	2011	2012	2013	2014	2015e	2016e	2017e
Efficiency of Capital Employment							
Operating Assets Turnover	1.4 x	1.9 x	2.0 x	1.3 x	1.1 x	1.3 x	1.3 x
Capital Employed Turnover	0.5 x	0.7 x	0.8 x	0.8 x	0.7 x	0.8 x	0.8 x
ROA	0.9 %	5.4 %	-9.7 %	-1.9 %	-12.9 %	-8.3 %	-0.7 %
Return on Capital							
ROCE (NOPAT)	1.4 %	5.2 %	n.a.	n.a.	n.a.	n.a.	n.a.
ROE	0.8 %	4.9 %	-4.4 %	-1.0 %	-7.6 %	-5.2 %	-0.5 %
Adj. ROE	0.8 %	4.9 %	-4.4 %	-1.0 %	-7.6 %	-5.2 %	-0.5 %
Balance sheet quality							
Net Debt	7.1	3.9	3.2	-7.8	-2.2	-0.9	2.1
Net Financial Debt	7.1	3.9	3.1	-7.9	-2.3	-1.0	1.9
Net Gearing	14.7 %	7.7 %	6.7 %	-17.2 %	-4.9 %	-2.2 %	4.8 %
Net Fin. Debt / EBITDA	171.4 %	54.4 %	42.6 %	n.a.	n.a.	n.a.	96.3 %
Book Value / Share	1.6	1.7	1.5	1.5	1.5	1.4	1.4
Book value per share ex intangibles	0.3	0.4	1.1	1.0	0.9	0.8	0.8

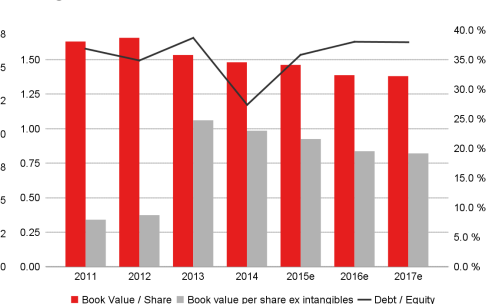
ROCE Development



Net debt in EUR m



Book Value per Share in EUR



Source: Warburg Research

Source: Warburg Research

Source: Warburg Research

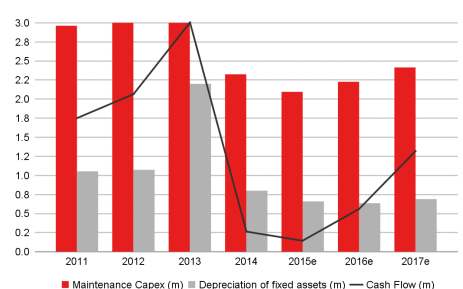
Consolidated cash flow statement

In EUR m	2011	2012	2013	2014	2015e	2016e	2017e
Net income	0.4	2.4	-2.2	-0.5	-3.4	-2.3	-0.2
Depreciation of fixed assets	1.1	1.1	2.2	0.8	0.7	0.6	0.7
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	1.9	2.8	7.3	1.5	1.4	1.6	1.7
Increase/decrease in long-term provisions	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Other non-cash income and expenses	0.2	-1.9	0.0	-3.0	0.0	0.0	0.0
Cash Flow	3.5	4.5	7.3	-1.0	-1.3	-0.1	2.2
Increase / decrease in inventory	-0.5	1.4	-4.6	-2.0	-0.2	-1.0	-0.9
Increase / decrease in accounts receivable	0.0	0.0	0.0	0.0	-2.5	3.1	-0.8
Increase / decrease in accounts payable	0.2	1.3	0.8	0.0	1.8	0.1	-0.1
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 (total)	-0.3	2.6	-3.8	-2.0	-1.0	2.2	-1.8
Net cash provided by operating activities	3.2	7.1	3.5	-2.9	-2.3	2.1	0.4
Investments in intangible assets	-3.1	-2.8	-5.7	-2.0	-2.0	-2.0	-2.0
Investments in property, plant and equipment	-0.9	-1.1	-1.1	-1.2	-1.3	-1.4	-1.4
Payments for acquisitions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	0.3	0.0	3.5	18.3	0.0	0.0	0.0
Net cash provided by investing activities	-3.7	-3.9	-2.2	13.2	-3.3	-3.4	-3.4
Change in financial liabilities	-1.1	-1.4	-1.5	-0.6	3.9	0.0	0.0
Dividends paid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	-0.1	-0.2	-1.0	0.0	0.0	0.0	0.0
Net cash provided by financing activities	1.8	-1.6	-2.5	-0.6	3.9	0.0	0.0
Change in liquid funds	1.2	1.5	-1.2	9.7	-1.7	-1.3	-3.0
Effects of exchange-rate changes on cash	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash and cash equivalent at end of period	2.2	3.7	2.5	12.2	10.5	9.2	6.2

Financial Ratios

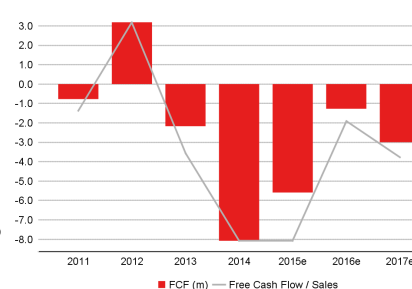
	2011	2012	2013	2014	2015e	2016e	2017e
Cash Flow							
FCF	-0.8	3.2	-2.2	-8.1	-5.6	-1.3	-3.0
Free Cash Flow / Sales	-2.6 %	8.7 %	-8.2 %	-19.4 %	-19.5 %	-4.0 %	-8.7 %
Free Cash Flow Potential	0.9	3.8	4.5	-0.3	-3.5	-2.4	-0.3
Free Cash Flow / Net Profit	-197.2 %	132.3 %	151.5 %	1347.6 %	162.7 %	55.3 %	1422.6 %
Interest Received / Avg. Cash	3.8 %	1.0 %	0.0 %	0.0 %	2.7 %	3.1 %	3.9 %
Interest Paid / Avg. Debt	6.3 %	6.2 %	2.9 %	1.8 %	3.2 %	2.5 %	2.5 %
Management of Funds							
Investment ratio	13.6 %	10.7 %	17.1 %	10.1 %	11.5 %	10.7 %	9.9 %
Maint. Capex / Sales	10.1 %	8.2 %	7.5 %	7.4 %	7.3 %	7.0 %	7.0 %
Capex / Dep	134.6 %	99.8 %	72.0 %	137.6 %	157.5 %	152.7 %	140.8 %
Avg. Working Capital / Sales	54.4 %	41.0 %	34.3 %	46.5 %	56.5 %	49.0 %	44.6 %
Trade Debtors / Trade Creditors	176.5 %	129.7 %	246.6 %	315.3 %	251.1 %	181.3 %	202.1 %
Inventory Turnover	0.6 x	0.8 x	1.3 x	1.3 x	1.1 x	1.0 x	1.0 x
Receivables collection period (days)	69	42	64	107	150	100	101
Payables payment period (days)	141	110	87	88	157	172	155
Cash conversion cycle (Days)	595	379	252	274	296	312	329

CAPEX and Cash Flow
in EUR m



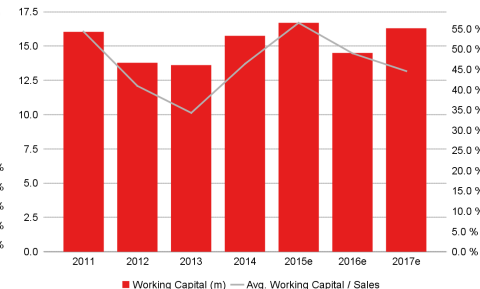
Source: Warburg Research

Free Cash Flow Generation



Source: Warburg Research

Working Capital



Source: Warburg Research

LEGAL DISCLAIMER

This research report was prepared by the Warburg Research GmbH, a fully owned subsidiary of the M.M.Warburg & CO (AG & Co.) KGaA and is passed on by the M.M.Warburg & CO (AG & Co.) KGaA. It contains selected information and does not purport to be complete. The report is based on publicly available information and data ("the information") believed to be accurate and complete. Warburg Research GmbH neither does examine the information to be accurate and complete, nor guarantees its accuracy and completeness. Possible errors or incompleteness of the information do not constitute grounds for liability of M.M.Warburg & CO (AG & Co.) KGaA or Warburg Research GmbH for damages of any kind whatsoever, and M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH are not liable for indirect and/or direct and/or consequential damages. In particular, neither M.M.Warburg & CO (AG & Co.) KGaA nor Warburg Research GmbH are liable for the statements, plans or other details contained in these analyses concerning the examined companies, their affiliated companies, strategies, economic situations, market and competitive situations, regulatory environment, etc. Although due care has been taken in compiling this research report, it cannot be excluded that it is incomplete or contains errors. M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH, their shareholders and employees are not liable for the accuracy and completeness of the statements, estimations and the conclusions derived from the information contained in this document. Provided a research report is being transmitted in connection with an existing contractual relationship, i.e. financial advisory or similar services, the liability of M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH shall be restricted to gross negligence and wilful misconduct. In case of failure in essential tasks, M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH are liable for normal negligence. In any case, the liability of M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH is limited to typical, expectable damages. This research report does not constitute an offer or a solicitation of an offer for the purchase or sale of any security. Partners, directors or employees of M.M.Warburg & CO (AG & Co.) KGaA, Warburg Research GmbH or affiliated companies may serve in a position of responsibility, i.e. on the board of directors of companies mentioned in the report. Opinions expressed in this report are subject to change without notice. All rights reserved.

COPYRIGHT NOTICE

This work including all its parts is protected by copyright. Any use beyond the limits provided by copyright law without permission is prohibited and punishable. This applies, in particular, to reproductions, translations, microfilming, and storage and processing on electronic media of the entire content or parts thereof.

DISCLOSURE ACCORDING TO §34B (1) OF THE GERMAN SECURITIES TRADING ACT (WHPG) AND THE ORDINANCE ON THE ANALYSIS OF FINANCIAL INSTRUMENTS (FINANV)

The valuation underlying the investment recommendation for the company analysed here is based on generally accepted and widely used methods of fundamental analysis, such as e.g. DCF Model, Free Cash Flow Potential, Peer Group Comparison or Sum of the Parts Model. The result of this fundamental valuation is modified to take into consideration the analyst's assessment as regards the expected development of investor sentiment and its impact on the share price.

Independent of the applied valuation methods, there is the risk that the price target will not be met, for instance because of unforeseen changes in demand for the company's products, changes in management, technology, economic development, interest rate development, operating and/or material costs, competitive pressure, supervisory law, exchange rate, tax rate etc. For investments in foreign markets and instruments there are further risks, generally based on exchange rate changes or changes in political and social conditions.

This commentary reflects the opinion of the relevant author at the point in time of its compilation. A change in the fundamental factors underlying the valuation can mean that the valuation is subsequently no longer accurate. Whether, or in what time frame, an update of this commentary follows is not determined in advance.

In accordance with § 5 (4) of the Ordinance on the Analysis of Financial Instruments (FinAnV) Warburg Research GmbH has implemented additional internal and organisational arrangements to prevent or to deal with conflicts of interest. Among these are the spatial separation of Warburg Research GmbH from M.M.Warburg & CO (AG & Co.) KGaA and the creation of areas of confidentiality. This prevents the exchange of information, which could form the basis of conflicts of interest for Warburg Research in terms of the analysed issuers or their financial instruments.

The analysts of Warburg Research GmbH do not receive a gratuity – directly or indirectly – from the investment banking activities of M.M.Warburg & CO (AG & Co.) KGaA or of any company within the Warburg Group.

All prices of financial instruments given in this financial analysis are the closing prices on the last stock-market trading day before the publication date stated, unless another point in time is explicitly stated.

M.M.Warburg & CO (AG & Co.) KGaA and Warburg Research GmbH are subject to the supervision of the Federal Financial Supervisory Authority, BaFin.

SOURCES

All data and consensus estimates have been obtained from FactSet except where stated otherwise.

Additional information for clients in the United States

1. This research report (the "Report") is a product of Warburg Research GmbH, Germany, a fully owned subsidiary of M.M.Warburg & CO (AG & Co.) KGaA, Germany (in the following collectively "Warburg"). Warburg is the employer of the research analyst(s), who have prepared the Report. The research analyst(s) reside outside the United States and are not associated persons of any U.S. regulated broker-dealer and therefore are not subject to the supervision of any U.S. regulated broker-dealer.
2. The Report is provided in the United States for distribution solely to "major U.S. institutional investors" under Rule 15a-6 of the U.S. Securities Exchange Act of 1934.
3. Any recipient of the Report should effect transactions in the securities discussed in the Report only through J.P.P. Euro-Securities, Inc., Delaware.
4. J.P.P. Euro-Securities, Inc. does not accept or receive any compensation of any kind for the dissemination of the research reports from Warburg.

Reference in accordance with section 34b of the German Securities Trading Act (WpHG) and the Ordinance on the Analysis of Financial Instruments (FinAnV) regarding possible conflicts of interest with the analysed company:

- 1- Warburg Research, or an affiliated company, or an employee of one of these companies responsible for the compilation of the research, hold a **share of more than 5%** of the equity capital of the analysed company.
- 2- Warburg Research, or an affiliated company, within the last twelve months participated in the **management of a consortium** for an issue in the course of a public offering of such financial instruments, which are, or the issuer of which is, the subject of the financial analysis.
- 3- Companies affiliated with Warburg Research **manage financial instruments**, which are, or the issuers of which are, subject of the financial analysis, in a market based on the provision of buy or sell contracts
- 4- Warburg Research, or an affiliated company, were in the last twelve months bound by a service agreement with the issuers, who are themselves or their financial instruments are, subject of the financial analysis, in connection with **investment banking business** for which a service or a promise of a service emanated.
- 5- The company compiling the analysis or an affiliated company had reached an **agreement on the compilation of the financial analysis** with the analysed company.
- 6- Companies affiliated with Warburg Research **regularly trade** financial instruments of the analysed company or derivatives of these.
- 7- The company preparing the analysis as well as its affiliated companies and employees have **other important interests** in relation to the analysed company, such as, for example, the exercising of mandates at analysed companies.

Company	Disclosure	Link to the historical price targets and rating changes (last 12 months)
aap Implantate	5	http://www.mmwarburg.com/disclaimer/disclaimer_en/DE0005066609.htm

INVESTMENT RECOMMENDATION

Investment recommendation: expected direction of the share price development of the financial instrument up to the given price target in the opinion of the analyst who covers this financial instrument.

-B-	Buy:	The price of the analysed financial instrument is expected to rise over the next 12 months.
-H-	Hold:	The price of the analysed financial instrument is expected to remain mostly flat over the next 12 months.
-S-	Sell:	The price of the analysed financial instrument is expected to fall over the next 12 months.
“-“	Rating suspended:	The available information currently does not permit an evaluation of the company.

WARBURG RESEARCH GMBH – RESEARCH UNIVERSE BY RATING

Rating	Number of stocks	% of Universe
Buy	124	65
Hold	58	31
Sell	4	2
Rating suspended	4	2
Total	190	100

WARBURG RESEARCH GMBH – ANALYSED RESEARCH UNIVERSE BY RATING ...

... taking into account only those companies which were provided with major investment banking services in the last twelve months.

Rating	Number of stocks	% of Universe
Buy	27	82
Hold	4	12
Sell	1	3
Rating suspended	1	3
Total	33	100

PRICE AND RATING HISTORY AAP IMPLANTATE AS OF 23.02.2016



The chart has markings if Warburg Research GmbH changed its rating in the last 12 months. Every marking represents the date and closing price on the day of the rating change.

EQUITIES

Roland Rapelius +49 40 3282-2673
Head of Equities rrapelius@mmwarburg.com

RESEARCH

Michael Heider +49 40 309537-280
Head of Research mheider@warburg-research.com

Henner Rüschemeyer +49 40 309537-270
Head of Research hrueschmeier@warburg-research.com

Lucas Boventer +49 40 309537-290
Renewables, Internet, Media lboventer@warburg-research.com

Christian Cohrs +49 40 309537-175
Engineering, Logistics ccohrs@warburg-research.com

Felix Ellmann +49 40 309537-120
Software, IT fellmann@warburg-research.com

Jörg Philipp Frey +49 40 309537-258
Retail, Consumer Goods jfrey@warburg-research.com

Harald Hof +49 40 309537-125
Medtech hhof@warburg-research.com

Ulrich Huwald +49 40 309537-255
Health Care, Pharma uhuwald@warburg-research.com

Thilo Kleibauer +49 40 309537-257
Retail, Consumer Goods tkleibauer@warburg-research.com

Eggert Kuls +49 40 309537-256
Engineering ekuls@warburg-research.com

Andreas Pläsier +49 40 309537-246
Banks, Financial Services aplaesier@warburg-research.com

Malte Räther +49 40 309537-185
Telco, Internet, Media mraether@warburg-research.com

Jochen Reichert +49 40 309537-130
Telco, Internet, Media jreichert@warburg-research.com

J. Moritz Rieser +49 40 309537-260
Real Estate mrieser@warburg-research.com

Arash Roshan Zamir +49 40 309537-155
Cap. Goods, Renewables aroshanzamir@warburg-research.com

Malte Schaumann +49 40 309537-170
Technology mschaumann@warburg-research.com

Oliver Schwarz +49 40 309537-250
Chemicals, Agriculture oschwarz@warburg-research.com

Marc-René Tonn +49 40 309537-259
Automobiles, Car Suppliers mtonn@warburg-research.com

Björn Voss +49 40 309537-254
Steel, Car Suppliers bvoss@warburg-research.com

Andreas Wolf +49 40 309537-140
Software, IT awolf@warburg-research.com

INSTITUTIONAL EQUITY SALES

Holger Nass +49 40 3282-2669
Head of Equity Sales, USA hnass@mmwarburg.com

Klaus Schilling +49 40 3282-2664
Dep. Head of Equity Sales, GER kschilling@mmwarburg.com

Tim Beckmann +49 40 3282-2665
United Kingdom tbeckmann@mmwarburg.com

Lyubka Bogdanova +49 69 5050-7411
United Kingdom, Australia lbogdanova@mmwarburg.com

Jens Buchmüller +49 69 5050-7415
Scandinavia, Austria jbuchmueller@mmwarburg.com

Paul Dontenwill +49 40 3282-2666
USA pdontenwill@mmwarburg.com

Matthias Fritsch +49 40 3282-2696
United Kingdom mfritsch@mmwarburg.com

Marie-Therese Grübner +49 40 3282-2630
France, Switzerland mgruebner@mmwarburg.com

Michael Kriszun +49 40 3282-2695
United Kingdom mkriszun@mmwarburg.com

Marc Niemann +49 40 3282-2660
Germany mniemann@mmwarburg.com

Fabian Roggemann +49 40 3282-2667
USA froggemann@mmwarburg.com

Sanjay Oberoi +49 69 5050-7410
United Kingdom soberoi@mmwarburg.com

Juliane Willenbruch +49 40 3282-2694
Roadshow/Marketing jwillenbruch@mmwarburg.com

SALES TRADING

Oliver Merkel +49 40 3282-2634
Head of Sales Trading omerckel@mmwarburg.com

Michael Ilgenstein +49 40 3282-2700
Sales Trading milgenstein@mmwarburg.com

Bastian Quast +49 40 3282-2701
Sales Trading bquast@mmwarburg.com

Jörg Treptow +49 40 3262-2658
Sales Trading jtreptow@mmwarburg.com

Jan Walter +49 40 3262-2662
Sales Trading jwalter@mmwarburg.com

MACRO RESEARCH

Carsten Klude +49 40 3282-2572
Macro Research cklude@mmwarburg.com

Matthias Thiel +49 40 3282-2401
Macro Research mthiel@mmwarburg.com

Dr. Christian Jasperneite +49 40 3282-2439
Investment Strategy cjasperneite@mmwarburg.com

Our research can be found under:

Warburg Research research.mmwarburg.com/en/index.html
Bloomberg MMWA GO
FactSet www.factset.com

Thomson www.thomson.com
Reuters www.knowledge.reuters.com
Capital IQ www.capitaliq.com

For access please contact:

Andrea Schaper +49 40 3282-2632
Sales Assistance aschaper@mmwarburg.com

Kerstin Muthig +49 40 3282-2703
Sales Assistance kmuthig@mmwarburg.com