## ABO Wind (AB9 GH) | Utilities

April 24, 2020

## A remarkably high level of professionalism and a full pipeline promise high profit dynamics

We find it remarkable that ABO Wind has once again succeeded in confirming the unusual consistency of positive results in what is by nature a rather volatile (project) business. The short-term project pipeline and the project successes already reported so far this year lead us to expect a continued positive result for 2020. The company has not yet been affected by any significant effects of Corona, but cannot rule out influences in the second half of the year. The medium- and long-term pipeline continues to fill up strongly and allows us to expect particularly dynamic growth in the coming years.

- According to the preliminary figures, the Group's net income for the year 2019 amounts to 11.4 million euros (the target had been "around ten million euros"). In 2019, ABO Wind generated 58 percent of its group sales outside Germany. Further details are not yet available. The complete consolidated annual financial statements will be published on 9 June 2020.
- The most recently published pipeline comprises projects of more than 10 gigawatts in fifteen counties. For comparison: in the 24 years of its existence, ABO Wind has developed a total of around 3.1 gigawatts.

Fundamentals (In EUR m)	2016	2017	2018	2019e	2020e	2021e
Sales	122	147	150	133	161	192
EBITDA	34	38	32	30	32	45
EBIT	24	25	22	18	20	33
EPS adj. (EUR)	2.15	2.22	1.67	1.35	1.53	2.52
DPS (EUR)	0.50	0.40	0.42	0.40	0.40	0.50
BVPS (EUR)	8.77	10.40	11.63	11.53	12.65	14.77
Net Debt incl. Provisions	25	1	48	33	30	19
Ratios	2016	2017	2018	2019e	2020e	2021e
EV/EBITDA	2.4	2.5	4.8	5.9	5.3	3.6
EV/EBIT	3.4	3.7	7.0	9.8	8.5	5.0
P/E adj.	3.4	5.4	8.3	12.8	11.1	6.7
Dividend yield (%)	6.8	3.3	3.0	2.3	2.4	3.0
EBITDA margin (%)	28.1	25.7	21.4	22.9	20.1	23.2
EBIT margin (%)	19.5	17.0	14.6	13.8	12.7	16.9
Net debt/EBITDA	0.7	0.0	1.5	1.1	0.9	0.4
ROE (%)	49.1	23.2	15.1	12.3	12.6	18.4
PBV	0.8	1.1	1.2	1.5	1.3	1.1

Sources: Refinitiv, Metzler Research

Eundamontale (in ELIP m)

## Buy Unchanged

Price\* EUR 16.90

Price target EUR 29.00 (unchanged)

\* XETRA trading price at the close of the previous day unless stated otherwise in the Disclosures

Market Cap (EUR m)	143
Enterprise Value (EUR m)	173
Free Float (%)	25.0



Performance (in %)	1m	3m	12m
Share	9.7	-8.2	15.8
Rel. to SDAX	-2.9	14.6	34.7

Changes in estimates (in %)	2019e	2020e	2021e
Sales	2.7	0.0	0.0
EBIT	11.3	0.0	0.0
EPS	12.8	0.0	0.0

## **Sponsored Research**



Author: Guido Hoymann
Financial Analyst Equities
+49 - 69 21 04 - 3 98
GHoymann@metzler.com

## Sustainably profitable

ABO Wind has once again succeeded in confirming the unusual consistency of positive results in what is by nature a rather volatile project business. According to the preliminary figures, the Group's net income for the year amounts to 11.4 million euros. This implies an EBITDA of around EUR 30m (e).

Robust profit development with positive trend in EURm													
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019e	2020e	2021e	2022e
EBITDA	5	14	22	12	20	20	34	38	32	30	32	45	45
Source: ABO Wind, Metzler Research													

## Strong pipeline

The most recently published pipeline comprises projects of more than 10 gigawatts in fifteen counties. For comparison: in the 24 years of its existence, ABO Wind has developed a total of around 3.1 gigawatts.

ABO Wind - a well filled pipeline (status February 2020)							
		Phase II					
	Phase I	(Approval achieved,	Phase III				
	(Areas secured,	building maturity in	(In				
Country	approval in progress)	progress)	implementation)				
Germany	950	45	23				
France	950	45	29				
Finland	1400	165					
Ireland	173	45	11				
Spain	1000						
Greece	600		38				
Poland		21					
Hungary			5				
UK	200	40					
Argentine	900	900					
Columbia	500						
Canada	300	10					
Southafrica	1000	600					
Tansania	250						
Tunesia	40	50	2				
Total	8263	1921	108				
TOTAL		10292					

Source: ABO Wind, Metzler Research

## **Key Data**

#### Company profile

CEO: Andreas Höllinger, Dr. Jochen Ahn, Matthias Bockholt, Dr. Karsten Schlageter (all equal rights)

CFO: Wiesbaden
The renewables project developer ABO Wind, founded in 1996 and now active in 16 countries, has its roots in wind power, but in recent years has also expanded its wind farm management activities through services such as maintenance and expert reports (since 2014) and the construction of solar parks (since 2016).

## Major shareholders

Family Ahn (30%). Family Bockholt (30%), Mainova AG (10%), Baden-Württembergische Versorgungskasse der Ärzte (5%)

Key figures P&L (in EUR m)	2016	%	2017	%	2018	%	2019e	%	2020e	%	2021e	%
Sales	122	n.a.	147	20.0	150	2.4	133	-11.7	161	21.6	192	18.9
EBITDA	34	n.a.	38	9.6	32	-14.8	30	-5.7	32	7.0	45	37.1
EBITDA margin (%)	28.1	n.a.	25.7	-8.7	21.4	-16.7	22.9	6.8	20.1	-12.0	23.2	15.3
EBIT	24	n.a.	25	4.5	22	-12.0	18	-16.6	20	11.6	33	58.9
EBIT margin (%)	19.5	n.a.	17.0	-12.9	14.6	-14.0	13.8	-5.5	12.7	-8.2	16.9	33.7
Financial result	-2	n.a.	-1	1.6	-1	38.7	-2	-118.1	-2	0.0	-2	0.0
EBT	22	n.a.	23	4.9	21	-10.3	16	-22.4	18	13.0	31	65.3
Taxes	6	n.a.	6	9.4	9	32.3	5	-42.6	6	13.0	9	65.3
Tax rate (%)	26.4	n.a.	27.5	n.a.	40.6	n.a.	30.0	n.a.	30.0	n.a.	30.0	n.a.
Net income	16	n.a.	17	3.3	13	-24.9	11	-10.5	13	13.0	21	65.3
Minority interests	0	n.a.	0	-55.0	0	88.9	0	-100.0	0	n.a.	0	n.a.
Net Income after minorities	16	n.a.	17	3.4	13	-25.0	11	-10.4	13	13.0	21	65.3
Number of shares outstanding (m)	8	0.0	8	0.0	8	0.0	8	10.8	8	0.0	8	0.0
EPS adj. (EUR)	2.15	n.a.	2.22	3.4	1.67	-25.0	1.35	-19.1	1.53	13.0	2.52	65.3
DPS (EUR)	0.50	100.0	0.40	-20.0	0.42	5.0	0.40	-4.8	0.40	0.0	0.50	25.0
Dividend yield (%)	6.8	n.a.	3.3	n.a.	3.0	n.a.	2.3	n.a.	2.4	n.a.	3.0	n.a.
Cash Flow (in EUR m)	2016	%	2017	%	2018	%	2019e	%	2020e	%	2021e	%
Gross Cash Flow	27	n.a.	30	10.9	22	-25.4	23	6.1	25	6.3	33	33.9
Increase in working capital	-27	n.a.	3	n.a.	-39	n.a.	-15	n.a.	-15	n.a.	-15	n.a.
Capital expenditures	2	n.a.	1	-47.2	3	149.2	3	-7.4	3	0.0	4	33.3
D+A/Capex (%)	428.1	n.a.	982.8	n.a.	314.8	n.a.	400.0	n.a.	400.0	n.a.	300.0	n.a.
Francisco de Marco (N. Antologo de Martin)						470.0	5	126.9	7	27.4	14	107.5
Free cash flow (Metzler definition)	-3	n.a.	25	889.5	-20	-179.2	5	120.0	,	27.4	17	107.5
Free cash flow (Metzler definition)  Free cash flow yield (%)	<b>-3</b> -5.7	n.a.	<b>25</b> 27.9	<b>889.5</b> n.a.	<b>-20</b> -19.1	-1/9.2 n.a.	3.7	n.a.	4.8	n.a.	10.0	n.a.
Free cash flow yield (%) Dividend paid	-5.7 2			n.a. 100.0				n.a. 16.3		n.a. -4.8		
Free cash flow yield (%)	-5.7	n.a.	27.9	n.a.	-19.1	n.a.	3.7	n.a.	4.8	n.a.	10.0	n.a.
Free cash flow yield (%) Dividend paid	-5.7 2	n.a.	27.9 4	n.a. 100.0	-19.1 3	n.a. -20.0	3.7 4	n.a. 16.3	4.8	n.a. -4.8	10.0	n.a. 0.0
Free cash flow yield (%) Dividend paid Free cash flow (post dividend)	-5.7 2 <b>-5</b>	n.a. n.a. <b>n.a.</b>	27.9 4 <b>22</b>	n.a. 100.0 <b>521.4</b>	-19.1 3 <b>-23</b>	n.a. -20.0 <b>-207.4</b>	3.7 4 <b>2</b>	n.a. 16.3 <b>108.1</b>	4.8 3 <b>4</b>	n.a. -4.8 <b>88.4</b>	10.0 3 <b>11</b>	n.a. 0.0 <b>210.6</b>
Free cash flow yield (%) Dividend paid Free cash flow (post dividend) Balance sheet (in EUR m) Assets	-5.7 2 -5 2016	n.a. n.a. <b>n.a.</b>	27.9 4 <b>22</b> 2017	n.a. 100.0 <b>521.4</b>	-19.1 3 -23 2018	n.a. -20.0 <b>-207.4</b>	3.7 4 <b>2</b> 2019e	n.a. 16.3 108.1	4.8 3 <b>4</b> 2020e	n.a. -4.8 <b>88.4</b>	10.0 3 11 2021e	n.a. 0.0 <b>210.6</b>
Free cash flow yield (%) Dividend paid Free cash flow (post dividend) Balance sheet (in EUR m) Assets Goodwill	-5.7 2 -5 2016 147	n.a. n.a. <b>n.a.</b> % <b>n.a.</b>	27.9 4 <b>22</b> 2017 174	n.a. 100.0 <b>521.4</b> % 18.7	-19.1 3 -23 2018 194	n.a. -20.0 <b>-207.4</b> % 11.6	3.7 4 2 2019e 199	n.a. 16.3 108.1 % 2.5	4.8 3 4 2020e 204	n.a. -4.8 <b>88.4</b> % <b>2.5</b>	10.0 3 11 2021e 227	n.a. 0.0 <b>210.6</b> %
Free cash flow yield (%) Dividend paid Free cash flow (post dividend)  Balance sheet (in EUR m) Assets Goodwill Shareholders' equity	-5.7 2 -5 2016 147 0	n.a. n.a. n.a. % n.a. n.a.	27.9 4 22 2017 174 0	n.a. 100.0 <b>521.4</b> % 18.7 n.a.	-19.1 3 -23 2018 194 0	n.a. -20.0 <b>-207.4</b> % 11.6 n.a.	3.7 4 2 2019e 199 0	n.a. 16.3 108.1 % 2.5 n.a.	4.8 3 4 2020e 204 0	n.a. -4.8 <b>88.4</b> % <b>2.5</b> n.a.	10.0 3 11 2021e 227 0	n.a. 0.0 <b>210.6</b> % 11.4 n.a.
Free cash flow yield (%) Dividend paid Free cash flow (post dividend) Balance sheet (in EUR m)	-5.7 2 -5 2016 147 0 67	n.a. n.a. n.a. % n.a. n.a. n.a.	27.9 4 22 2017 174 0 80	n.a. 100.0 <b>521.4</b> % 18.7 n.a. 18.7	-19.1 3 -23 2018 194 0	n.a. -20.0 -207.4 % 11.6 n.a. 11.8	3.7 4 2 2019e 199 0 98	n.a. 16.3 108.1 % 2.5 n.a. 9.8	4.8 3 4 2020e 204 0 107	n.a. -4.8 <b>88.4</b> % <b>2.5</b> n.a. <b>9.8</b>	10.0 3 11 2021e 227 0 125	n.a. 0.0 <b>210.6</b> % 11.4 n.a. 16.8
Free cash flow yield (%) Dividend paid Free cash flow (post dividend)  Balance sheet (in EUR m) Assets Goodwill Shareholders' equity Equity/total assets (%)	-5.7 2 -5 2016 147 0 67 45.7 25	n.a. n.a. n.a. % n.a. n.a. n.a.	27.9 4 22 2017 174 0 80 45.7	n.a. 100.0 <b>521.4</b> % 18.7 n.a. 18.7 n.a.	-19.1 3 -23 2018 194 0 89 45.9	n.a. -20.0 -207.4 % 11.6 n.a. 11.8 n.a.	3.7 4 2 2019e 199 0 98 51.2	n.a. 16.3 108.1 % 2.5 n.a. 9.8 n.a.	4.8 3 4 2020e 204 0 107 52.2	n.a. -4.8 <b>88.4</b> % <b>2.5</b> n.a. 9.8 n.a.	10.0 3 11 2021e 227 0 125 54.8	n.a. 0.0 210.6 % 11.4 n.a. 16.8
Free cash flow yield (%) Dividend paid Free cash flow (post dividend)  Balance sheet (in EUR m) Assets Goodwill Shareholders' equity Equity/total assets (%) Net Debt incl. Provisions	-5.7 2 -5 2016 147 0 67 45.7	n.a. n.a. % n.a. n.a. n.a. n.a. n.a. n.a	27.9 4 22 2017 174 0 80 45.7	n.a. 100.0 521.4 % 18.7 n.a. 18.7 n.a. -95.3	-19.1 3 -23 2018 194 0 89 45.9	n.a. -20.0 -207.4 % 11.6 n.a. 11.8 n.a.	3.7 4 2 2019e 199 0 98 51.2 33	n.a. 16.3 108.1 % 2.5 n.a. 9.8 n.a.	4.8 3 4 2020e 204 0 107 52.2 30	n.a. -4.8 88.4 % 2.5 n.a. 9.8 n.a.	10.0 3 11 2021e 227 0 125 54.8 19	n.a. 0.0 210.6 % 11.4 n.a. 16.8 n.a.

1.5

n.a.

1.1

n.a.

0.9

n.a.

0.4

n.a.

### Structure

Net debt/EBITDA

## Sales by area of activity 2018



0.7

n.a.

0.0

n.a.

Sources: Refinitiv, Metzler Research

## **Disclosures**

## **Recommendation history**

Recommendations for each financial instrument or issuer - mentioned in this document - published by Metzler in the past twelve months

Date of dissemi- nation	Metzler recon Previous	nmendation * Current	Current price **	Price target *	Author ***
Issuer/Financial Ir	nstrument (ISIN	): ABO Wind (DEC	0005760029)		
17.03.2020	Buy	Buy	13.80 EUR	29.00 EUR	Hoymann, Guido
21.02.2020	Buy	Buy	20.40 EUR	29.00 EUR	Hoymann, Guido
01.10.2019	Buy	Buy	15.20 EUR	23.70 EUR	Hoymann, Guido
09.09.2019	n.a.	Buy	15.50 EUR	23.70 EUR	Hoymann, Guido

- \* Effective until the price target and/or investment recommendation is updated (FI/FX recommendations are valid solely at the time of publication)
- \*\* XETRA trading price at the close of the previous day unless stated otherwise herein: ABO Wind AG: Hamburg Stock Exchange

### **ABO Wind**

17 . Metzler and/or a company affiliated with Metzler had reached an agreement on the compilation of the investment analysis with the analysed company. Prior to publication of the financial analysis, the provider gives the issuer a one-off opportunity to comment (comparison of facts in accordance with the DVFA Code) within the regulatory framework to avoid quality defects.

Compiled: April 24, 2020 07:56 AM CEST Initial release: April 24, 2020 07:56 AM CEST

<sup>\*\*\*</sup> All authors are financial analysts



## Disclaimer

This document has been prepared by B. Metzler seel. Sohn & Co. KGaA (Metzler) and is addressed exclusively to eligible counterparties and professional clients. It is thus not suitable for retail clients.

This document is based on information which is generally available and which Metzler believes to be fundamentally reliable. Metzler has not verified the accuracy or completeness of the information, however, and thus provides no warranty or representation in respect of the accuracy or completeness of the information, opinions, estimates, recommendations and forecasts contained in this document. Neither Metzler nor any of its shareholders or employees are liable for damage or any other disadvantage suffered due to inaccurate or incomplete information, opinions, estimates, recommendations or forecasts as a result of the distribution or use of or in connection to this document.

This document does not constitute or form part of any offer to buy or solicitation of any offer to buy securities, other financial instruments or other investment instruments. Neither does it take account of the particular investment objectives, financial situation or needs of individual recipients nor does it constitute personal investment advice. Metzler does not act as investment advisor or portfolio manager in preparing and publishing this document. Recipients must make their own investment decisions in accordance with their specific financial situation and investment objectives, based on independent processes and analyses, taking sales or other prospectuses, information memoranda and other investor information into account, and consult with an independent financial advisor where necessary. Recipients should note that any information regarding past performance should not be relied upon as an indication of future performance and should therefore not form the basis of any decision whether or not to invest in any financial instruments.

The information, opinions, estimates, recommendations and forecasts contained in this document reflect the personal views of the author at the time of publication on the financial instruments or issuers that form the subject of this document and do not necessarily reflect the opinions of Metzler, the issuer or third parties. They may also be subject to change on account of future events and developments. Metzler has no obligation to amend, supplement or update this document or to otherwise notify recipients in the event that any information, opinions, estimates, recommendations or forecasts stated herein should change or subsequently become inaccurate, incomplete or misleading. The model calculations contained in this document, if any, are examples showing the possible performance and are based on various assumptions (e.g. regarding earnings and volatility). The actual performance may be higher or lower, depending on market trends and on the correctness of assumptions underlying the model calculations. Accordingly, actual performance cannot be guaranteed, warranted or assured.

Recipients should assume that (a) Metzler is entitled to acquire orders for investment banking, securities or other services from or with companies which form the subject of research publications and that (b) analysts who were involved in preparing research publications may, within the scope of regulatory laws, be indirectly involved in the acquisition of such orders.

Metzler and its employees may hold positions in securities of the companies analysed or in other investment objects or may conduct transactions with such securities or investment objects.

This document is provided for information purposes only and may not be copied, duplicated, forwarded to third parties or otherwise published, in whole or in part, without Metzler's written consent. Metzler reserves all copyrights and rights of use, including those relating to electronic media. Insofar as Metzler provides hyperlinks to websites of the companies cited in research publications, this does not mean that Metzler confirms, recommends or warrants any data contained on the linked sites or data which can be accessed from such sites. Metzler accepts no liability for links or data, nor for any consequences which may arise as a result of following the links and/or using the data.

This document is subject to the laws of the Federal Republic of Germany. Venue of jurisdiction for any disputes shall be Frankfurt am Main, Germany.

By accepting this document the recipient declares his/her agreement with the above provisions.

Information in accordance with Regulation (EU) No. 596/2014, Delegated Regulation (EU) No. 2016/958 and section 85 (1) of the German Securities Trading Act (Wertpapier-handelsgesetz)

## Persons responsible for this document

The company responsible for preparing this document is B. Metzler seel. Sohn & Co. KGaA, Untermainanlage 1, 60329 Frankfurt am Main, Germany, which is subject to supervision by the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*; BaFin), Marie-Curie-Straße 24–28, 60439 Frankfurt/Main, Germany, and by the European Central Bank (ECB), Sonnemannstraße 20, 60314 Frankfurt/Main, Germany.

### Key information sources

The sources of information referred to when preparing research publications include publications by national and international media, the European Central Bank and other public authorities, information services (such as Reuters and Bloomberg), the financial press, published statistics, information published by rating agencies, annual reports and other information provided by the issuers.

## Valuation criteria and methods

Valuations are based on standard and acknowledged methods of fundamental and technical analysis (e.g. DCF model, peer-group analysis, sum-of-the-parts model, relative-value analysis). The valuation models are affected by macro-economic values such as interest rates, exchange rates, commodities prices and economic performance, as well as by market sentiments. Detailed information on the valuation principles and methods used by Metzler and the assumptions on which they are based is available at: <a href="https://www.metzler.com/disclaimer-capital-markets-en">www.metzler.com/disclaimer-capital-markets-en</a>.

### Sensitivity of valuation parameters; risks

The figures on which the company valuations are based are date-specific estimates and thus carry inherent risks. They may be adjusted at any time without prior notice.



Irrespective of the valuation principles and methods used and the assumptions on which they are based, there is always a risk that a particular price target is not achieved or that the assumptions and forecasts prove inaccurate. This can, for instance, be the result of unexpected changes in demand, management, technology, economic or political developments, interest rates, costs, the competitive situation, the legal situation and other factors. Investments in foreign markets and instruments are subject to additional risks, as a result of changes in exchange rates or in the economic, political or social situation, for instance. This outline of risks makes no claim to be exhaustive.

### <u>Definition of categories for investment recommendations</u>

The categories for investment recommendations in research publications by Metzler have the following meanings:

Shares:

BUY The price of the analysed financial instrument is expected to rise in the next 12 months.

HOLD The price of the analysed financial instrument is expected to largely remain stable in the next 12 months.

SELL The price of the analysed financial instrument is expected to fall in the next 12 months.

Bonds:

BUY The analysed financial instrument is expected to perform better than similar financial instruments.

HOLD The analysed financial instrument is not expected to perform significantly better or worse than similar financial instruments.

SELL The analysed financial instrument is expected to perform worse than similar financial instruments.

#### Summary of investment recommendations

A list of all investment recommendations for each financial instrument or issuer published by Metzler in the past twelve months can be found at www.metzler.com/disclaimer-capital-markets-en.

The quarterly quotation of the number of all investment recommendations given as "buy", "hold", "sell" or similar for the past 12 months as a proportion of the total number of investment recommendations made by Metzler and the quotation of the proportion of these categories relating to issuers to whom Metzler has provided services within the meaning of Annex I sections A and B of Regulation 2014/65/EU within the past 12 months can be accessed and downloaded at <a href="https://www.metzler.com/disclaimer-capital-markets-en">www.metzler.com/disclaimer-capital-markets-en</a>

#### Planned updates of this document

This document reflects the opinion of the respective author at the time of its preparation. Any changes of factors can cause information, opinions, estimates, recommendations and forecasts contained in this document to cease to be accurate. No decision has as yet been taken as to whether, and if so when, this document will be updated. If an investment recommendation is updated, the updated investment recommendation replaces the previous investment recommendation upon publication.

## Compliance arrangements; conflicts of interest

All analysts are bound by Metzler's internal compliance regulations which ensure that the research publications are prepared in accordance with statutory and regulatory provisions. The analysts are classified as working in a confidential sector and are thus required to observe the resulting statutory and regulatory provisions. This is monitored on a regular basis by the Compliance department and external auditors. The Compliance department ensures that potential conflicts of interest do not affect the original result of the analysis. Metzler has a binding Conflicts of Interest Policy in place which ensures that relevant conflicts of interest within Metzler, the Metzler Group, the analysts and staff of Metzler's Capital Markets division and persons associated with them are avoided or, if they cannot be avoided, are appropriately identified, managed, disclosed and monitored. A detailed description of Metzler's policy for avoiding conflicts of interest is available at <a href="https://www.metzler.com/disclaimer-capital-markets-en">www.metzler.com/disclaimer-capital-markets-en</a>.

Details of the conflicts of interests to be disclosed under regulatory requirements are published at www.metzler.com/disclosures-en.

## Remuneration

The remuneration of the Metzler staff members and other persons involved in preparing this document is in no way, either in whole or in any variable part, directly or materially linked to transactions in securities services or other transactions processed by Metzler.

#### **Prices**

All prices for financial instruments stated in this document are, unless otherwise stated, closing prices for the trading day preceding the respective stated publication date on the market which we regard as the most liquid market for the respective financial instrument.

## Scope of application

This document was prepared in the Federal Republic of Germany in line with the legal provisions valid there. It may therefore be possible that this document does not comply with all provisions relating to the preparation of such documents in other countries.



## Metzler Capital Markets

B. Metzler seel. Sohn & Co. Kommanditgesellschaft auf Aktien Untermainanlage 1 60329 Frankfurt/Main, Germany Phone (+49 - 69) 21 04 - extension Fax (+49 - 69) 21 04 - 6 79 www.metzler.com Mario Mattera

Head of Capital Markets

Research Fax (+49 - 69) 28 31 59	Pascal Spano	Head of Research	43 65
rax (+49 - 09) 26 31 39	Guido Hoymann Stephan Bauer Stephan Bonhage Tom Diedrich Alexander Neuberger Holger Schmidt Jochen Schmitt David Varga Jürgen Pieper	Head of Equity Research, Transport, Utilities Industrial Technology Small/Mid Caps, Construction Media, Retail Industrial Technology, Small/Mid Caps Software, Technology, Telecommunications Financials, Real Estate Basic Resources Automobiles, Senior Advisor	3 98 43 63 5 25 2 39 43 66 43 60 43 59 43 62 5 29
	Hendrik König Sergii Piskun	Strategy / Quantitative Research Quantitative Research	43 71 2 37
	Eugen Keller Juliane Rack Sebastian Sachs Thomas Weber Daniel Winkler	Head of FI/FX Research FI/FX Strategy FI/FX Strategy FI/FX Strategy FI/FX Strategy	3 29 17 48 5 26 5 27 5 28
Equities	Werner Litzinger	Head of Equities	41 78
Sales	Mustafa Ansary Eugenia Buchmüller Uwe Hohmann Hugues Jaouen Alexander Kravkov Jasmina Schul	Head of Equity Sales	3 51 2 38 3 66 41 73 41 72 17 66
Trading	Sven Knauer Kirsten Fleer Stephan Schmelzle Thomas Seibert	Head of Equity Trading	2 45 2 46 2 47 2 28
FI/FX	Mario Mattera	Head of FI/FX	6 87
FI Sales	Minush Nori Sebastian Luther Claudia Ruiu	Head of Fixed Income Sales	6 89 6 88 6 83



	Gloria Traidl		2 80
FI Trading/ALM	Sven Klein Bettina Koch Susanne Kraus	Head of ALM	6 86 2 91 6 58
	Andreas Tanneberger Silke Amelung Christian Bernhard	Head of Fixed Income Trading	6 85 2 89 2 66
FX Sales	Thomas Rost Tobias Martin Gideon Tjoe Steffen Völker	Head of FX	2 92 6 14 2 82 2 93
FX Trading	Rainer Jäger Andreas Zellmann		2 76 6 10
Currency Management CM Advisory	Özgür Atasever Georgios Tsiourvas Achim Walde Harwig Wild	Head of Currency Management	2 81 6 82 2 75 2 79
CM Operations	Dominik Müller Christopher Haase Florian Hartel Simon Wesch	Head of Operations	2 74 16 17 17 73 3 50