

# **EDISON** Scale research report - Initiation

# publity

# An experienced investor in German real estate

publity is an asset manager with long-term experience of investing in German office buildings. It is the largest servicer of non-performing loans (NPLs) in Germany and is able to acquire assets from restructuring German banks. It focuses entirely on asset management and is not distracted by property and facility management. It evaluates and analyses more than 1,000 assets per year, acquiring individual assets for its clients, rather than making portfolio acquisitions. It currently has AUM of €3bn and a potential deal pipeline of more than €26bn. Current valuations are attractive relative to sector comparatives, despite having the highest yield in its peer group.

## Strategy: "Manage to core"

publity's strategy is to invest in properties that need cosmetic improvement and offer attractive earnings potential. With intensive asset management, these properties can be transformed into core property holdings. This is the "manage to core" strategy, publity focuses on property requiring limited investment spending, including property used as security for non-performing loans, which has often been neglected.

# Financials: Driven by expansion in AUM

Net profit almost doubled in 2016 to €23.1m. Sales increased 75% to €41.6m and net income improved 86% to €23.2m. The company expanded the business significantly in 2016, driven by the large increase in AUM and the first disposals from a joint venture portfolio. There was a significant (255%) increase in AUM to €3bn and the 2017 target was raised to €5.2bn (from €5bn). AUM of €7bn is also expected by the end of 2018. The targeted dividend of €2.80 per share for 2016 was confirmed at the recent AGM.

# Valuation: A wide discount to peers despite high yield

publity is currently trading on just 5.3x this year's forecast earnings, down from over 9x for 2016, due to forecast earnings growth of 76% this year. It trades at a wide discount to its peers on a P/E basis. The sector average is 16.5x for this year and 13.9x for FY18, so the discount to the sector average for this year is 67%. This attractive valuation is despite the steadily rising dividend yield, which is forecast to increase to over 9% this year and further to nearly 10% in 2018. This is by far the highest forecast dividend yield in the peer group.

| Consensus estimates |                 |             |            |            |            |              |  |
|---------------------|-----------------|-------------|------------|------------|------------|--------------|--|
| Year<br>end         | Revenue<br>(€m) | PBT<br>(€m) | EPS<br>(€) | DPS<br>(€) | P/E<br>(x) | Yield<br>(%) |  |
| 12/15               | 23.8            | 19.9        | 2.27       | 2.00       | 15.6       | 5.6          |  |
| 12/16               | 41.6            | 34.4        | 3.81       | 2.80       | 9.3        | 7.9          |  |
| 12/17e              | 68.9            | 62.4        | 6.70       | 3.35       | 5.3        | 9.4          |  |
| 12/18e              | 72.7            | 65.9        | 7.08       | 3.54       | 5.0        | 9.9          |  |

Source: Company accounts (historicals), Bloomberg consensus forecasts

#### Real estate asset management

3 July 2017





#### Share details Code **PBY GY** Listing Deutsche Börse Scale Shares in issue 6.05m Last reported net debt as at 31 €23m

#### **Business description**

December 2016

publity is an asset manager with a focus on German office buildings. It has a 17-year track record as an investor in commercial real estate in larger German cities and currently manages a portfolio worth €3bn.

#### Bull

- Highest dividend yield in the sector.
- Wide P/E discount to peers.
- Focused on one area of property market.

#### Bear

- Ambitious growth plans.
- Dependent on banks for property sourcing.
- Low interest rate environment could end.

#### **Analysts**

Mark Cartlich +44 (0)20 3077 5700 Julian Roberts +44 (0)20 3077 5748

financials@edisongroup.com

Edison Investment Research provides qualitative research coverage on companies in the Deutsche Börse Scale segment in accordance with section 36 subsection 3 of the General Terms and Conditions of Deutsche Börse AG for the Regulated Unofficial Market (Freiverkehr) on Frankfurter Wertpapierbörse (as of 1 March 2017). Two to three research reports will be produced per year. Research reports do not contain Edison analyst financial forecasts.



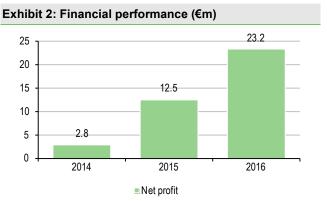
# Company description: German real estate investor

publity is a listed asset manager with long-term experience of and focus on German office buildings. It has a 17-year history as an investor in commercial real estate in larger German cities such as Frankfurt and Munich. It currently manages a portfolio worth €3.6bn and can boast a track record of 530 German assets sold profitably. It is the largest non-performing-loans servicer in Germany and has access to assets from the restructuring of German banks. It focuses entirely on asset management so is not distracted by property and facility management. It evaluates and analyses more than 1,000 assets per year, acquiring individual assets for its clients, rather than portfolio acquisitions. It currently has a deal pipeline of more than €26bn and claims a reputation for its transaction speed and purchasing power.

45 40 35 30 25 20 15 9.8 9.8 9.8

2015

■Sales



Source: Company data Source: Company data

2016

## **History**

2014

publity was founded in 1999 as an adviser to internet companies listing in Germany, in partnership with various German state banks, including SACHSEN LB Corporate Finance in Leipzig, LBBW Trust in Stuttgart and NORD LB Beteiligungen in Hannover. In 2001 publity relocated to Berlin and advised more than 70 companies on their stock exchange listing. Since 2004, publity has focused on investments in receivables and the security for non-performing property loans from German banks.

It is currently the leading investor in property assets released by German banks. publity combines special purpose vehicles and funds investing in this area, acting as an intermediary between the capital market and the banks' property assets. It has assembled a team of lawyers, asset managers, tax consultants, auditors and property experts to manage the assets. publity has also established branches in London and Luxembourg to expand in Europe's financial markets.

## **Objective**

publity's objective is to create innovative property investment solutions for investors. Its knowledge of property investment, an established network in the banking sector and management experience enable it to provide financial products tailored to individual customer requirements. It is also focused on the transparency of the investment process and product selection. publity's aim is to meet the objectives and strategies of its investors by optimising the value of its property. Not only does it invest in German real estate, it also manages the entire process of increasing its value and marketability, via professional asset management.

It has four divisions: Retail Funds, including its performance funds, which acquire smaller office buildings; Institutional Asset Management, where assets are acquired for clients; Joint Venture

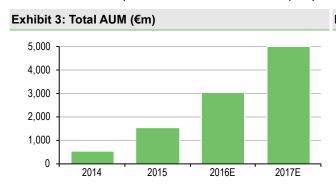


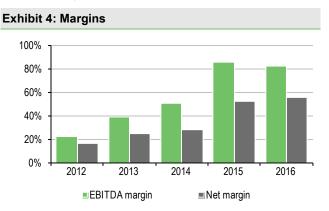
Asset Management, where assets are acquired for the JV, but publity will co-invest up to 3%; and Non-performing Loan (NPL) Servicing, which involves the processing and sale of portfolios for a servicing fee of 22% of all profits.

## **Asset management**

Asset management covers the whole range of services including the purchase, management and marketing of the property acquired by publity's funds. The main responsibilities include marketing and leasing properties, providing leaseholder services, overseeing the brokers, and arranging property and facility management. publity also develops fund strategies and exploits opportunities for development, to make the properties more attractive to potential buyers. The qualifications and experience of the publity asset managers are transferred to the funds to provide the expertise required.

publity is supported in its due diligence by external service providers. These include the surveyors who draft the reports to confirm the investment criteria have been met, before the custodian, CACEIS Bank, approves the purchase price for public funds. The due diligence process is presented in detail in the sales prospectuses of publity's funds.





Source: Company data Source: Company data

#### Quality property in good locations

Investing in a publity fund allows investors to earn a return from the purchase, management and sale of property used as collateral for non-performing loans. publity invests in a range of commercial property in the main regions of Frankfurt, Düsseldorf, Hamburg and Munich.

With increasingly strict capital requirements, banks are expected to continue selling property as part of their reallocation process. Institutional investors also prefer to sell property to a strong financial partner from the real estate industry, publity will invest in high quality property in sustainable locations. It only acquires investment property if the due diligence establishes that the investment criteria have been met, or its exclusion criteria have not been met. The funds will only invest in properties expected to deliver a long-term return and thus a tangible increase in value.

#### Disposal and reinvestment

The publity management team has years of experience managing and selling property. The funds only invest in properties likely to achieve forecast revenues and investments are only made in properties with stable valuations in metropolitan areas, with good development potential. publity also optimises the tenant structure to achieve the best returns. Targeted returns can be reached via an efficient disposal process and capital reinvestment. The investment companies should also benefit from rising property prices in Germany and from publity's access to the property sold by German banks.



However, fund-to-fund transactions within the publity group are prohibited. Therefore, the fund management company cannot purchase any property that is already owned by a company in the publity group. Also, no purchases or disposals of investment properties are allowed by people working for the publity group.

# Strategy: "Manage to core" concept

#### Long-term returns from an alternative investment strategy

publity's strategy is to find properties that need improvement and offer attractive earnings potential. With intensive asset management, these investment properties can be transformed into core property holdings. This is the "manage to core" strategy. publity focuses on property with the potential for improvement with limited investment spending. Property used as security for non-performing loans is often neglected by its owners and the lending banks, sometimes for years. Therefore, the target is to elevate the property into a lower-risk class via the "manage to core" process.

publity's funds invest exclusively in sites with development potential, in good locations. Before each investment, a due diligence process is carried out by external advisers. This process forms the basis for each investment decision by publity's fund managers. The potential for increasing the property's value derives from various factors including:

- an attractive purchase price from the restructuring bank;
- a technical evaluation for the improvement of the property;
- an increase in the occupancy rate; and
- optimisation of the lease length and rent roll.

## Portfolio: Huge potential pipeline

The company has 71 assets in its portfolio, with 1.3m sqm and a 14-month average holding period. It currently has €3.6bn of property assets under management. It has sold 530 assets since inception, with an average holding period of 16 months and an average equity return of 27%. It applies the following acquisition criteria when investing:

- business properties (office buildings preferred);
- no owner operator properties;
- single or multi-tenant;
- core, core plus, or value add;
- an occupancy rate of 0-100%;
- in the top 10 locations in Germany;
- commission-free acquisitions; and
- single properties in a range of €5-100m.

It currently has a pipeline of 1,218 assets, with a value of €26bn. Of this total, 24 assets valued at €1.28bn are in exclusive negotiations.

publity | 3 July 2017





Source: Company data

publity believes it has a number of market advantages in making property acquisitions. It can prepare bids within a short time frame, following the signing of a letter of intent. Whether exclusive or not, the standardised due diligence timeline and completion of transaction can be as little as four to six weeks. Acquisitions can be secured quickly because they are funded entirely with equity, which can be verified when the proposal is submitted. The charts below show the source and locations of the pipeline, half of which is expected to come from banks (with another 18% in asset or mortgage-backed securities) and more than half is expected to be located in Munich.

**Exhibit 6: Pipeline sources Exhibit 7: Pipeline locations** Leipzig Stuttgart ABS/MBS 18% Hamburg 5% Nürnberg 6% Banks Munich Cologne 50% 9% 53% Funds 32% Source: Company accounts Source: Company accounts

# Recent newsflow and upcoming catalysts

In April publity received a further asset management mandate for a "low billion euro" sum from a South American investor. The company will use the funds to acquire office properties in Germany over the next 30 months. publity believes that it will be possible to manage the new mandate using the existing asset management platform without having to increase resources.

The interim results are due to be released in August 2017.

# Market overview: A huge potential market

The German economy achieved its strongest growth rate for five years in 2016, with a GDP rise of 1.9%. This is expected to continue into 2017, with encouraging business conditions continuing. The forecast of 1.35% is lower than 2016, but strong domestic demand, low interest rates and strong employment should continue to drive growth. There are uncertainties, including Brexit and potential



protectionism in the US, which are a concern within two of Germany's largest trading partners. Consumer sentiment remains strong and resistant to external developments due to salary rises, low interest rates and high employment. Private consumption should remain a driver of business growth, with stable retail turnover, even with higher inflation, from rising energy costs and residential rents.

The political situation will continue to create some uncertainty, with 2016 events (Brexit and Trump's election) continuing to have an impact. The lack of clarity over refugee policy still divides Europe and has seen increased populism in the region. Polls show that the CDU/CSU alliance and the SPD should gain a large majority, even if the AfD is the third strongest party. Coalition negotiations could extend the uncertainty for investors, but this is unlikely to affect volumes in the German real estate investment market, according to CBRE.

Another important trend has been the low returns in the bond markets in the past few years, relative to property in its core markets. This has generated significant investment appetite from both European and North American investors and saw investment volumes exceed the previous 2008 peak in 2016. As a result, of the US\$66bn raised for closed-end real estate funds in the first nine months of 2016, 29% was raised for Europe. In a recent survey of investor intentions Europe is actually expected to exceed North America as a regional investment target over the next 12 months.

Exhibit 8: German real estate investment volume (€bn)

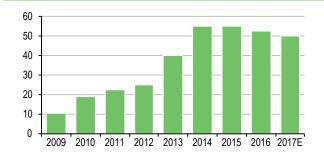
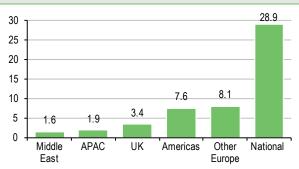


Exhibit 9: German real estate investment 2016 (€bn)



Source: CBRE Source: CBRE

German real estate has been seen as a safe haven for property investors globally. Despite the limited supply available, transaction volumes are expected to reach €50bn in 2017, similar to the €52.5bn invested in 2016. Nearly €20bn was invested in Q416 alone. These are the highest volumes since the boom years of 2006-07. Volumes are only limited by the lack of supply of marketable properties, so domestic and international investor demand has been unsatisfied.

The attractions, as well as the strong economic fundamentals, are the positive letting trends and rental growth in the office, retail and logistics markets. International investors remain focused on prime locations, but are increasingly looking at regional and secondary locations. The strong fundamentals in the office sector have seen attention move to lower-value assets and other well-located properties outside the central locations. Investors are also now more willing to invest in developments and forward-funded projects, as prime office yields have fallen so far. This does mean that holding periods have fallen, as investors take advantage of the opportunity to dispose of portfolios that have already met their targeted returns.

#### A market worth billions of euros

publity focuses on the property used to secure banks' non-performing loans. The global financial crisis and its aftermath created a huge opportunity in this area. Banks have large portfolios of receivables from loans that have been terminated and property that served as collateral on them.

publity | 3 July 2017



Against this background the pressure to sell can be high and has resulted in banks, state banks and savings banks having to sell a portion of their property, as they reduce their credit exposure. It is all part of the process of the banks restructuring their loan businesses and improving their performance.

Some estimates of the value of the property used as collateral by banks, which could be released, are as high as several hundred billion euros. This has been appreciated by international investors for a while, but remains a potentially lucrative market for publity. The intention is not to acquire property from compulsory auctions, but via direct acquisitions from the refinancing of distressed property, at prices well below market, in order to resell them swiftly and profitably. In the meantime, it can earn a decent return from the rental income prior to disposal. publity only invests if the quality, location and returns from the property are sufficiently attractive. As it is important to have in-depth knowledge of the market, publity only invests in the German property market.

# Management, board and shareholders

## **Management board**

Thomas Olek, head of board. Thomas has been an entrepreneur since 1991. From 1998 until 2002 he advised the board of the Sächsische Landesbank. He has been the majority shareholder of publity since 2003. He is a member of the International Bankers Forum (IBF) and was co-president of the Bundesvereinigung Kreditankauf und Servicing e. V. (BKS) from 2010 until 2013.

Frederik Mehlitz, board member. Frederik has been chief investment officer and finance director since 2011. He has more than 20 years' experience in financial services, and oversees all investment and financing activities at publity. He has worked in several management positions in German and international banks.

## Supervisory board

Günther Paul Löw (chairman of the supervisory board) has 25 years' experience in the small and mid-cap segments in Frankfurt. Among other roles, he worked as a legal advisor at the Rothenberger Group, as head of investment management at Gold-Zack and was founder and board member of Impera Total Return. He has been the chairman of the supervisory board since 6 May 2014.

Norbert Kistermann (supervisory board member) has worked for more than 25 years in the banking industry. He was a board member of corporate banking at Dresdner Bank, division head of BHF Bank and board member of a medium-sized bank in Essen. Since April 2014 he has been responsible for business development, strategy, M&A and private equity at Opta Data in Essen.

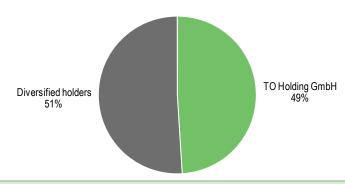
Hans-Jürgen Klumpp (supervisory board member) was with the Landesbank Sachsen, Leipzig, as board member, speaker and deputy chairman for 12 years. He held senior positions with the Stadtsparkasse in Cologne and was a board member of the Sparkasse Bielefeld. He was also a member of the DekaBank Supervisory Board, deputy chairman of the fund company SüdKA and chairman of the board to the Setis-Bank.

## Shareholders and free float

Thomas Olek has been the majority shareholder of publity since 8 April 2003. Until December 2003 it was a subsidiary of Landesbank Sachsen, when Thomas Olek acquired the remaining shares. He now has 49% via the holding company TO Holding GmbH.



**Exhibit 10: Shareholder structure** 



Source: Company data

## **Financials**

## Income statement: Profits up 92% in 2016

Net profit almost doubled in 2016 to €23.1m (+92%) and earnings per share were €3.81. The net margin also improved to 55% from 52.5% in 2015. Sales increased 75% to €41.6m from €23m in 2015 and operating profit was up 69% to €34m. There was a significant (255%) increase in AUM to €3bn and the 2017 target was raised to €5.2bn. The targeted dividend of €2.80 per share was confirmed at the recent AGM, an implied dividend yield of over 7%. The company expanded the business significantly in 2016, driven by a large increase in assets under management and the fact that publity delivered on the first disposals from the JV portfolio.

Exhibit 11: Margins

100%
80%
40%
20%
0%
2012
2013
2014
2015
2016

■Net margin

Exhibit 12: Earnings and dividends (€)

4.00
3.00
2.00
1.00
2014
2015
2016
■Reported EPS
■DPS

Source: Company data Source: Company data



| EXIIIDIC IO. I                  | inancial summ | ui y |       |      |      |       |
|---------------------------------|---------------|------|-------|------|------|-------|
| €m                              |               | 2012 | 2013  | 2014 | 2015 | 2016  |
| Year end 31 Dece                | ember         |      |       |      |      |       |
| Income Stateme                  | nt            |      |       |      |      |       |
| Revenues                        |               | 12.7 | 10.7  | 9.8  | 23.8 | 41.6  |
| Operating profit                |               | 2.7  | 3.9   | 4.7  | 20.2 | 34.2  |
| EBITDA                          |               | 2.8  | 3 4.2 | 5.0  | 20.5 | 34.3  |
| Profit Before Tax (as reported) |               | 2.6  | 3.9   | 4.6  | 19.9 | 34.4  |
| Net income (as reported)        |               | 2.   | 2.7   | 2.8  | 12.5 | 23.2  |
| EPS (as reported                | d) – (€)      | 0.38 | 0.49  | 0.51 | 2.27 | 3.84  |
| Dividend per sha                | are (€)       |      |       | 0.56 | 2.00 | 2.80  |
| Balance Sheet                   |               |      |       |      |      |       |
| Total non current assets        |               | 5.3  | 6.0   | 8.7  | 39.2 | 57.5  |
| Total current assets            |               | 6.0  | 6.5   | 3.3  | 32.0 | 44.3  |
| Total assets                    |               | 11.3 | 12.5  | 11.9 | 71.3 | 101.8 |
| Total current liabilities       |               | 1.6  | 1.9   | 2.9  | 3.4  | 2.6   |
| Total non-current liabilities   |               | 2.   | 2.3   | 0.7  | 35.2 | 34.7  |
| Total liabilities               |               | 3.7  | 4.2   | 3.6  | 38.6 | 37.3  |
| Shareholder equity              |               | 7.0  | 8.3   | 8.3  | 32.7 | 64.5  |

Source: Company accounts

#### **Balance sheet**

publity's balance sheet strengthened significantly in FY16, as total gearing fell to below 47%, from over 90% in 2015. Net gearing was even lower at 35%, despite a reduction in the cash balance to €7m. The main driver was the boost to shareholder's equity from the significant improvement in retained earnings. Shareholder's equity nearly doubled to €65m. Debt was slightly lower at €30m, comprising the company's convertible bond, which was listed in November 2015 and has a coupon of 3.5%. The bonds are convertible up to November 2020 at a price of €47 per share.

Exhibit 14: Debt and gearing (€m) 70 120% 60 100% 50 80% 40 60% 30 40% 20 20% 10 0 2012 2013 2014 2015 2016 Total debt Equity Gearing

Source: Company data, Edison Investment research

# 2017 guidance

Due to the positive outlook and performance of the business during the first few months of 2017, publity expects sales and profits to rise further during 2017. As a result of further property sale negotiations already carried out in the year to date, publity has secured significant revenue and profit for 2017. This year's earnings are set to benefit from further disposals (JV disposals already completed) and the proceeds from the work-out of a €2.4bn NPL portfolio. Guidance for assets under management as at the end of December 2017 was raised to €5.2bn, up from the previous guidance of €5bn, after almost doubling to €3bn during 2016, with AUM of €7bn expected by the end of 2018.

publity also secured further asset management mandates in addition to existing partnerships with institutional investors, including one of over €1bn with a South American investor. Therefore, in

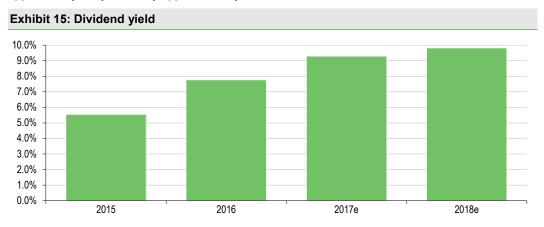
9 publity | 3 July 2017



addition to profit from property acquisitions, recurring income from the expected increase in AUM should also increase significantly.

# Valuation: Discount to peers despite the yield

In our view the most appropriate valuation method for publity is the price to earnings ratio, as it is not a property fund, but an asset manager, which focuses on generating earnings rather than NAV growth. It is currently trading on 5.4x this year's earnings, down from over 9x for 2016, due to the consensus forecast earnings growth of 76% in 2017. Earnings growth is expected to slow to just 6% in 2018, so the P/E falls further to just 5.1x one year out. This attractive valuation is despite the steadily rising dividend yield, which is forecast to increase to over 9% this year and further to nearly 10% in 2018. This is a very attractive yield in a low-interest, low-return environment, which it appears may not yet be fully appreciated by the market.



Source: Company data, Bloomberg consensus forecasts

## Relative valuations looks very attractive

We have compared publity to its German real estate fund management peers. It is clear from the table below that publity trades at a wide discount to its peers on a P/E basis, despite the lower than average valuation of the other outlier WCM Beteiligungs. The sector average is 16.5x for this year and 13.9x for FY18. publity's discount to the sector average for this year is 67% and for 2018 it reduces slightly to 63%. This is despite having by far the highest forecast dividend yield in the peer group. There are no real outliers to the yield average of 2.9% for this year and 3.5% in FY18, but even if we excluded Patrizia from the average, publity's yield is so far above its other peers that it would make no difference. The yield is more than 3x the average for this year and 178% of the sector in 2018.



| Exhibit 16: Peer group comparison |                                |   |   |   |  |  |  |  |
|-----------------------------------|--------------------------------|---|---|---|--|--|--|--|
|                                   |                                | PE (x)  |   | Dividend yield (%)  |  |  |  |  |
| Price (€)                         | Market cap<br>(€m)             | 2017e   | 2018e   | 2017e   | 2018e  |  |  |  |
| 16.73                             | 1,405                          | 23.2  | 18.2  | 1.8   | 3.1  |  |  |  |
| 45.0                              | 612                            | 19.0  | 15.6  | 3.7   | 4.5  |  |  |  |
| 20.95                             | 578                            | 13.0  | 11.3  | 2.8   | 3.1  |  |  |  |
| 3.18                              | 420                            | 10.6  | 10.6  | 3.1   | 3.5  |  |  |  |
|                                   | 3,015                          | 16.5  | 13.9  | 2.9   | 3.5  |  |  |  |
| 36.1                              | 220                            | 5.4   | 5.1   | 9.3   | 9.8  |  |  |  |
|                                   |                                | (67%)   | (63%)   | 225   | 178  |  |  |  |
|                                   | 16.73<br>45.0<br>20.95<br>3.18 | (€m) 16.73 1,405 45.0 612 20.95 578 3.18 420 3,015 36.1 220 | Price (€)         Market cap (€m)         2017e           16.73         1,405         23.2           45.0         612         19.0           20.95         578         13.0           3.18         420         10.6           3,015         16.5           36.1         220         5.4 | (€m)       16.73     1,405     23.2     18.2       45.0     612     19.0     15.6       20.95     578     13.0     11.3       3.18     420     10.6     10.6       3,015     16.5     13.9       36.1     220     5.4     5.1       (67%)     (63%) | Price (€)         Market cap (€m)         2017e         2018e         2017e           16.73         1,405         23.2         18.2         1.8           45.0         612         19.0         15.6         3.7           20.95         578         13.0         11.3         2.8           3.18         420         10.6         10.6         3.1           3,015         16.5         13.9         2.9           36.1         220         5.4         5.1         9.3           (67%)         (63%)         225 |  |  |  |

# Sensitivities: Macro and sector exposure

The main sensitivities are macro and sector related, although there are company-specific and regulatory issues to consider as well:

- Macro risks: the economy in Germany has been strong and is expected to continue to see growth, low inflation and falling unemployment, but this could be affected by various global uncertainties, including the interest rate cycle, trade and commodity prices. This could in turn take the shine off what has been a strongly performing real estate sector, driven by a favourable interest rate and demographic backdrop.
- Sector exposure: although publity is not a real estate developer, fund or company, it is exposed to the sector via its funds and holdings, so is sensitive to movements in property market sentiment, both on the upside and downside.
- Regulatory issues: responding to regulatory change in the investment industry is a constant challenge, which could become more complicated as the group grows.
- Company specific: the company has a relatively small management team, has been growing
  fast and has ambitious further growth plans, which could stretch the resources of the existing
  team.



Edison is an investment research and advisory company, with offices in North America, Europe, the Middle East and AsiaPac. The heart of Edison is our world renowned equity research platform and deep multi-sector expertise. At Edison Investment Research, our research is widely read by international investors, advisors and stakeholders. Edison Advisors leverages our core research platform to provide differentiated services including investor relations and strategic consulting. Edison is authorised and regulated by the Financial Conduct Authority. Edison Investment Research (NZ) Limited (Edison NZ) is the New Zealand subsidiary of Edison. Edison NZ is registered on the New Zealand Financial Service Providers Register (FSP number 247505) and is registered to provide wholesale and/or generic financial adviser services only. Edison Investment Research Inc (Edison US) is the US subsidiary of Edison and is regulated by the Securities and Exchange Commission. Edison Investment Research Limited (Edison Aus) [46085869] is the Australian subsidiary of Edison and is not regulated by the Australian Securities and Investment Commission. Edison Germany is a branch entity of Edison Investment Research Limited [4794244]. <a href="https://www.edisongroup.com">www.edisongroup.com</a>

#### DISCLAIMER

Any Information, data, analysis and opinions contained in this report do not constitute investment advice by Deutsche Börse AG or the Frankfurter Wertpapierbörse. Any investment decision should be solely based on a securities offering document or another document containing all information required to make such an investment decision, including risk factors.

Copyright 2017 Edison Investment Research Limited. All rights reserved. This report has been commissioned by Deutsche Börse AG and prepared and issued by Edison for publication globally. All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report. Opinions contained in this report represent those of the research department of Edison at the time of publication. The securities described in the Investment Research may not be eligible for sale in all jurisdictions or to certain categories of investors. This research is issued in Australia by Edison Aus and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act. The Investment Research is distributed in the United States by Edison US to major US institutional investors only. Edison US is registered as an investment adviser with the Securities and Exchange Commission. Edison US relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a)(11) of the Investment Advisers Act of 1940 and corresponding state securities laws. As such, Edison does not offer or provide personalised advice. We publish information about companies in which we believe our readers may be interested and this information retrieved the construed by any subscriber or prospective subscriber as Edison's Solicitation to effect, or attempt to effect, any transaction in a security. The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections \$5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement business and, accordingly, does not itself hold any positions in the securities mentioned for in the top