



German Listed Real Estate:

Nine Years of Growth & Counting

23 November 2017

VONOVIA

DES
Deutsche EuroShop

ADLER REAL ESTATE

TAG wohnen

VIB Vermögen AG

GRAND CITY
Properties S.A.

AROUNDTOWN SA

DEMIRE DEUTSCHE MITTELSTAND
REAL ESTATE

DIC

LEG
gewohnt gut.

hamborner
REIT
ZUKUNFT BRAUCHT SUBSTANZ

TLG
IMMOBILIEN

BUWOG
group

Deutsche
Wohnen

ACCENTRO

WCM

ADG

alstria
First German REIT

PATRIZIA
WERTE ENTSCHEIDEN



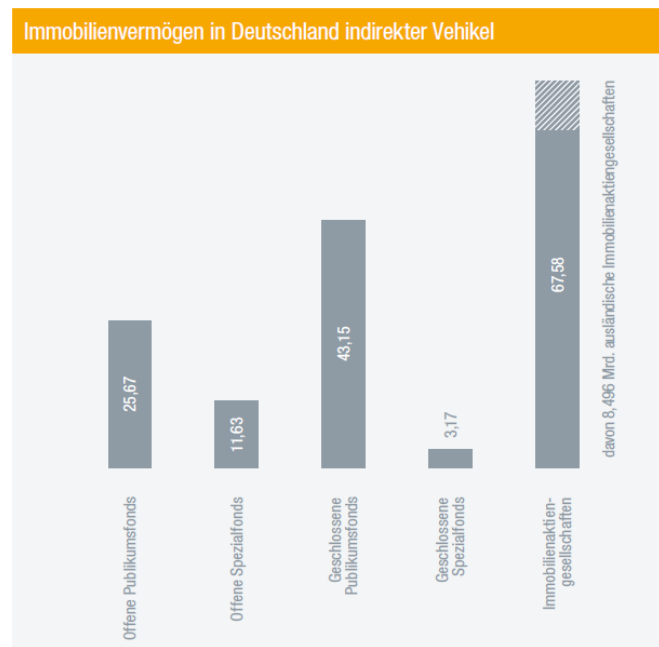
12 Research Highlights

1. Gross property value reaches €114bn (+26% yoy), exceeding €100bn for the first time
2. Market cap of German sector reaches €73bn (+ 26% yoy), exceeding the €70bn mark
3. German share of the EPRA Europe reaches 23% (up 2%p)
4. Germany strengthens position as 2nd largest EPRA region
5. Gap to UK as No.1 further reduced to €12bn (Germany remains Brexit winner)
6. German sector now larger than France and Netherlands combined
7. Growth driven by domestic residential AND commercial assets
8. German IPO engine still stuttering, two small IPOs, however
9. German share of EU real estate IPO proceeds at only 1%
10. H1 equity issuance improving but still relatively slow at €1.5bn
11. Number of listed German companies down 29% since 2011 to currently 55
12. International PropTech companies with high valuations compared to German RE companies



Why Our Research Effort?

- Our previous research notes have shown that relevance of listed real estate has been massively underestimated in Germany due to a lack of comparable data



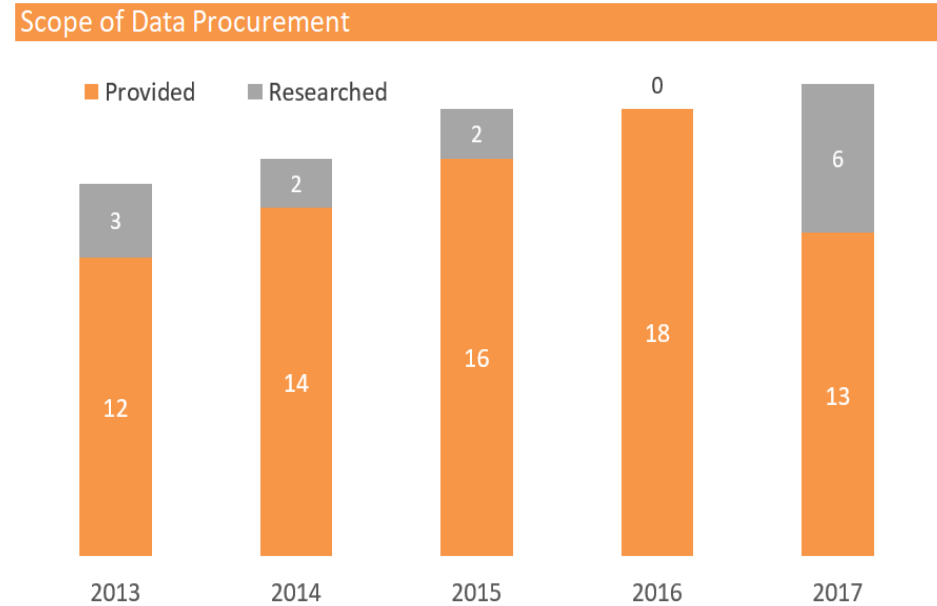
Quelle: Unternehmensangaben, ZIA, Barkow Consulting

- 5th edition emphasizes the growing importance of listed real estate in Germany



- 19 leading German real estate companies included in research effort and have provided data
- 13 companies have provided detailed data points

Scope of Data Procurement					
Company	2013	2014	2015	2016	2017
Accentro	n/a	n/a	n/a	n/a	Provided
Aroundtown	n/a	n/a	n/a	n/a	Researched
Adler Real Estate	n/a	n/a	Researched	Provided	Provided
ADO Properties	n/a	n/a	n/a	Provided	Researched
Alstria	Provided	Provided	Provided	Provided	Provided
Buwog	n/a	Researched	Provided	Provided	Provided
Vonovia	Provided	Provided	Provided	Provided	Provided
Dt. Euroshop	Provided	Provided	Provided	Provided	Provided
Dt. Office	Researched	Provided	Provided	n/a	n/a
Dt. Wohnen	Provided	Provided	Provided	Provided	Provided
DIC Asset	Provided	Provided	Provided	Provided	Provided
Fair Value	Provided	Provided	Provided	Provided	n/a
DEMIRE	n/a	n/a	n/a	Provided	Researched
Grand City Properties	n/a	Researched	Researched	Provided	Researched
GSW	Provided	n/a	n/a	n/a	n/a
Hamborner	Provided	Provided	Provided	Provided	Provided
LEG	Provided	Provided	Provided	Provided	Provided
Patrizia	Provided	Provided	Provided	Provided	Researched
Polis	Provided	Provided	Provided	n/a	n/a
TAG	Researched	Provided	Provided	Provided	Researched
TLG	n/a	n/a	Provided	Provided	Provided
VIB	Researched	Provided	Provided	Provided	Provided
WCM	n/a	n/a	Provided	Provided	Provided
Provided	12	14	16	18	13
Researched	3	2	2	0	6



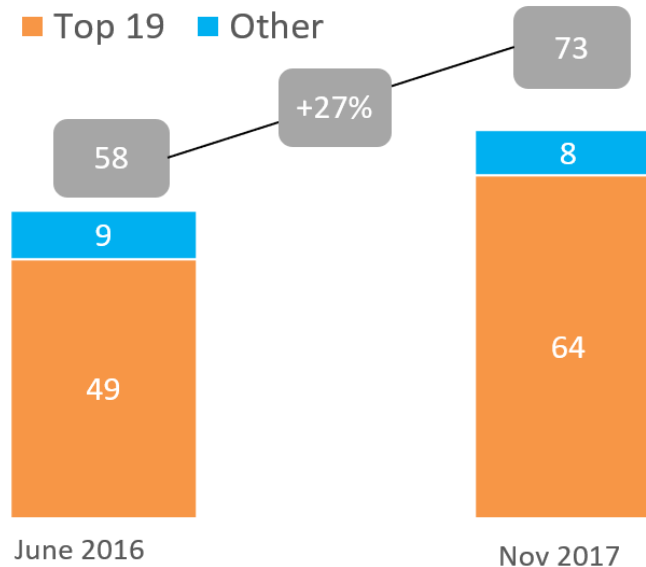
Source: Company data, ZIA/Barkow Consulting



Development of Market Capitilisation

- Top 19 represent 88% of sector
- Market cap reaches €73bn increasing by 27% and ...
- ... superceding €70bn threshold for the first time!

Listed Real Estate: Development of Market Cap*



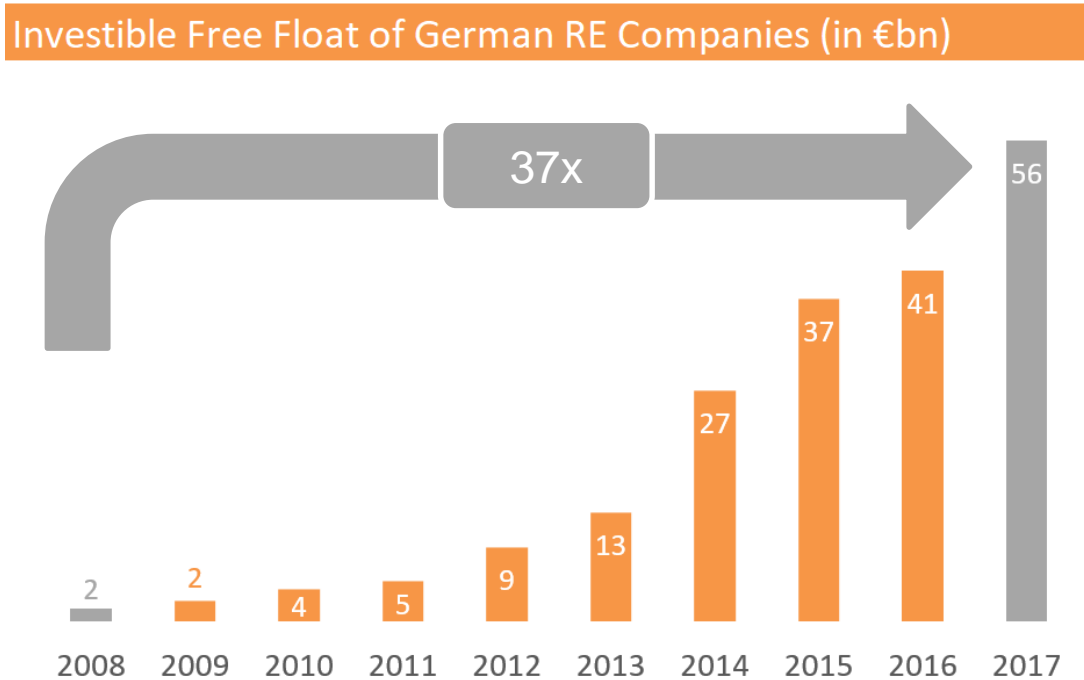
*) including Buwog & Aroundtown

Source: Company data, Bloomberg, Ellwanger & Geiger, ZIA/Barkow Consulting



Development of Investible Free Float over the Long Run

- Free Float up from €1.5bn in 2008 yoy to €56bn in 2017
- Sector growth 2017 benefiting from Aroundtown listing

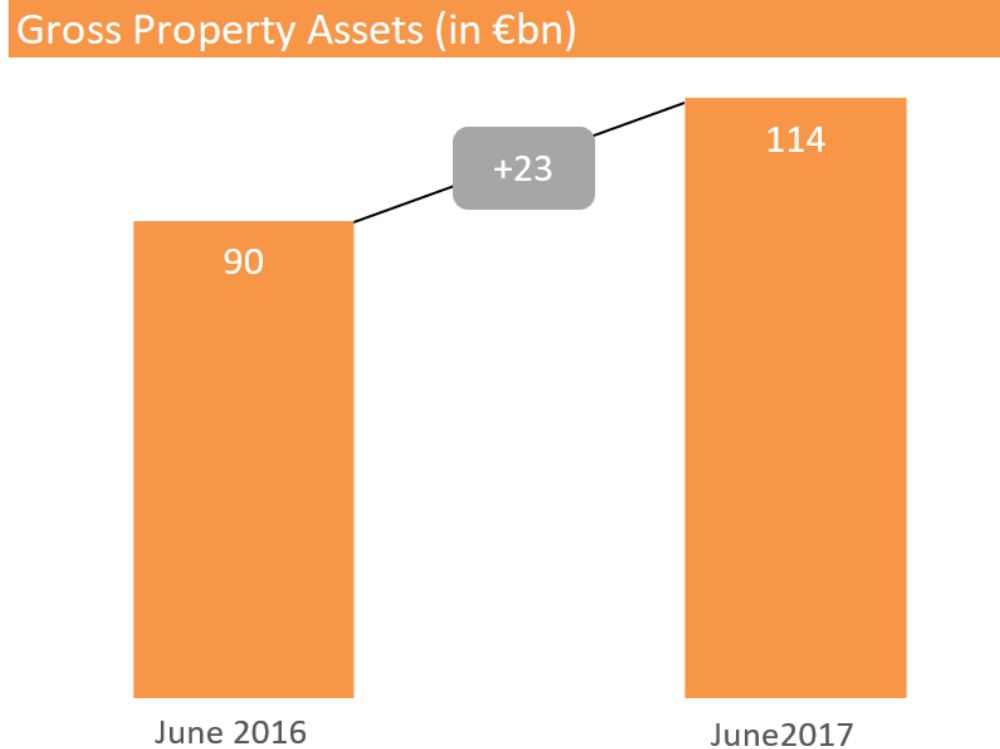


Source: Company data, Bloomberg, ZIA/Barkow Consulting



Development of Gross Property Value

- Gross Property Value increases to €114bn (up 26% or €23bn yoy)
- Surpassing the €100bn mark for the first time



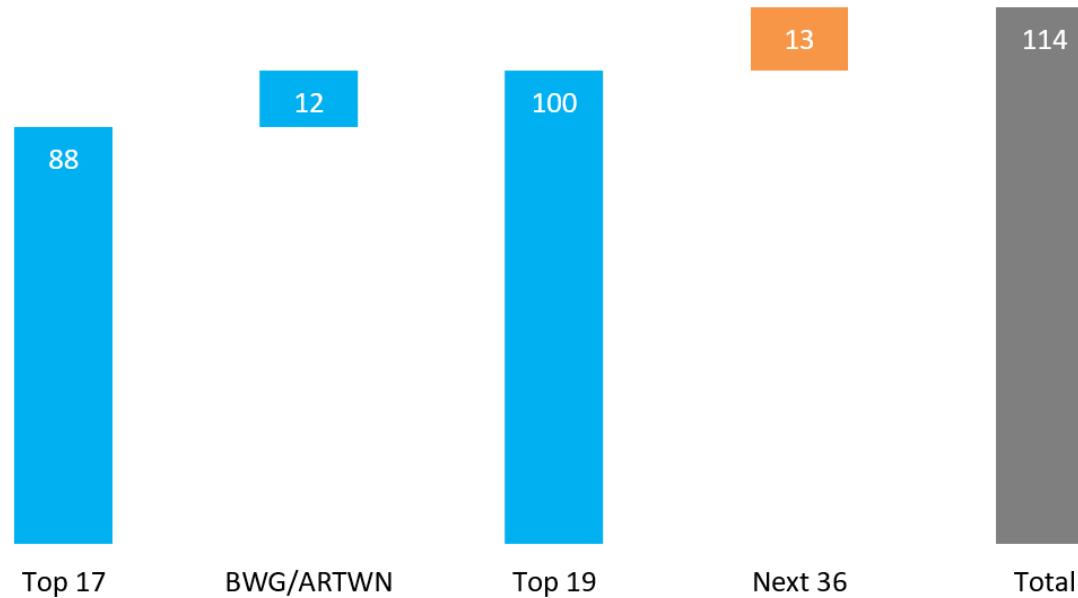
Source: Company data, Bloomberg, Ellwanger & Geiger, ZIA/Barkow Consulting



Development of Gross Property Value

- Top 19 companies hold properties valued at €100bn precisely

Gross Property Investments of the listed sector (in €bn)



Source: Company data, Bloomberg, Bankhaus Ellwanger & Geiger, ZIA/Barkow Consulting

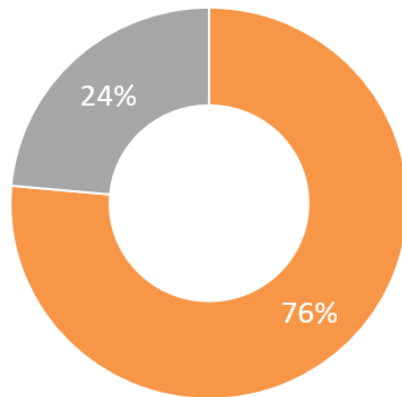


Gross Property Assets

- Share of commercial real estate assets up by 3%p yoy to now 24%
- Share of international assets up 1%p yoy to 4%

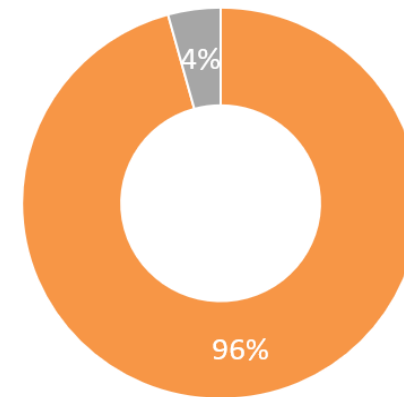
Property Assets by Sector

Residential Commercial



Property Assets by Region

Germany International



Source: Company data, Bloomberg, Ellwanger & Geiger, ZIA/Barkow Consulting

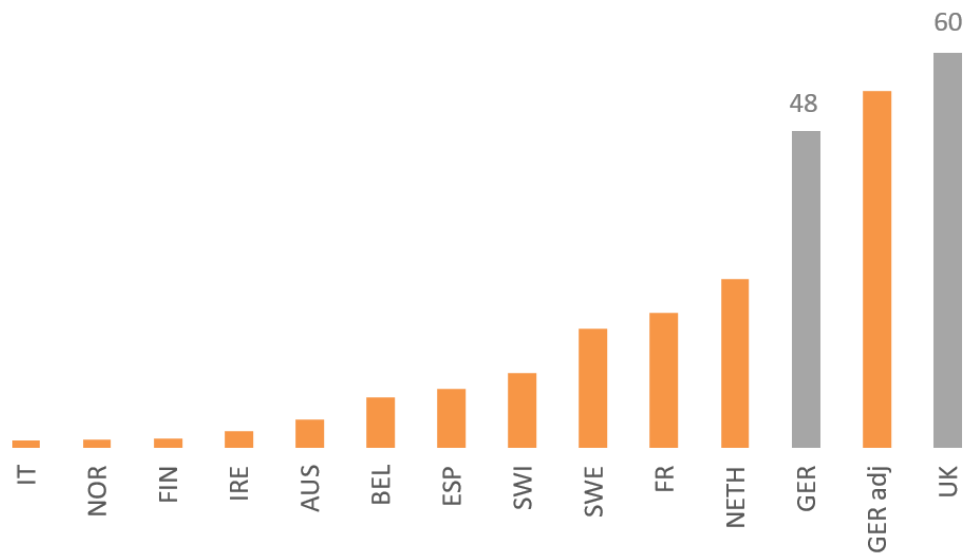
Source: Company data, Bloomberg, Ellwanger & Geiger, ZIA/Barkow Consulting



Development in European Context

- Germany strengthens position as 2nd largest European country
- Gap to UK significantly narrowed again, to currently €12bn (last year €17bn)
- Buwog and Aroundtown not even included
- Germany larger than France and Netherlands combined

Free Float Cap by Country (EPRA Members, in €m)



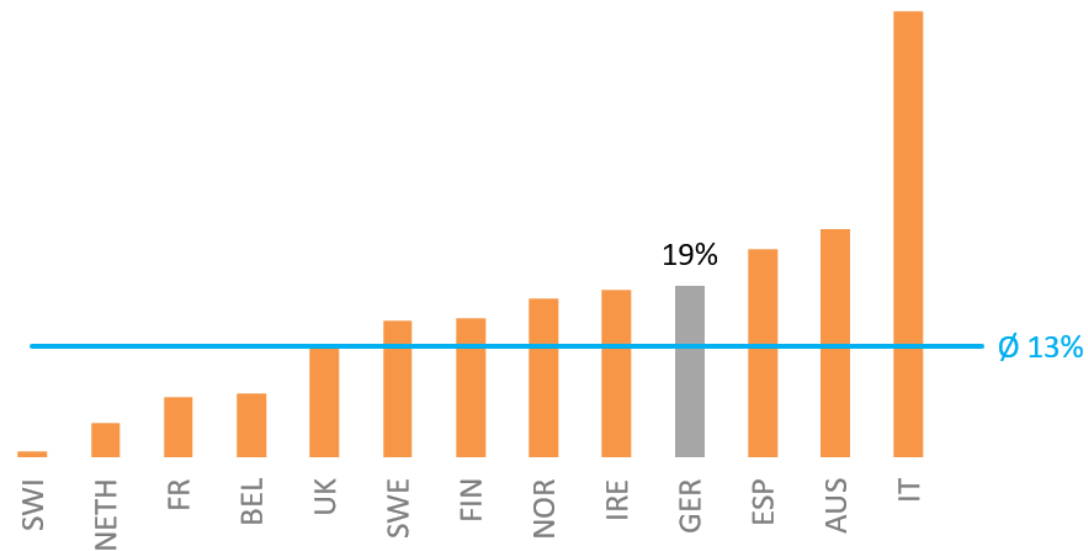
Source: EPRA, ZIA/Barkow Consulting



Share Price Performance in European Context

- Germany among top performing EU countries
- German performance leads other large countries by a wide margin

Total Return by Country (yoy)

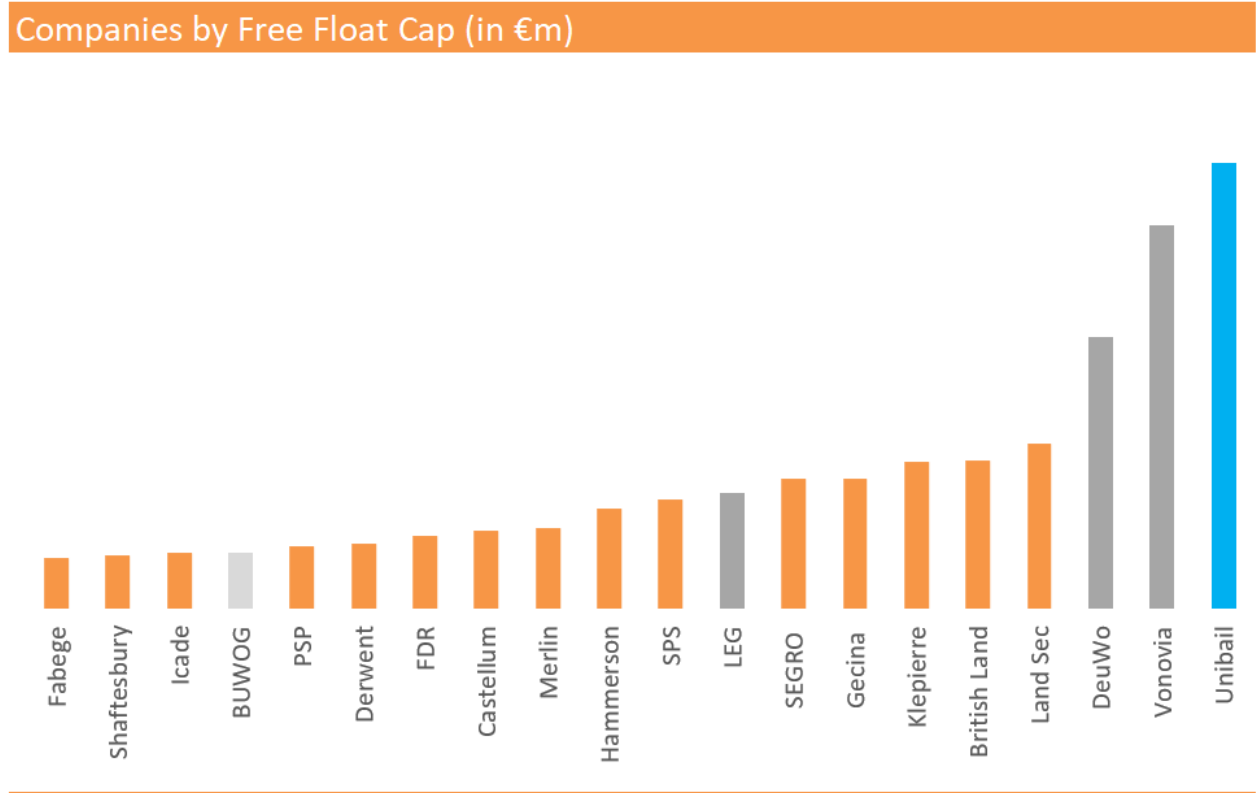


Source: EPRA, ZIA/Barkow Consulting



German companies in European Context

- Vonovia at No.2, gap to Unibail narrowing
- Dt Wohnen at No.3
- LEG at No. 9



Source: EPRA, ZIA/Barkow Consulting

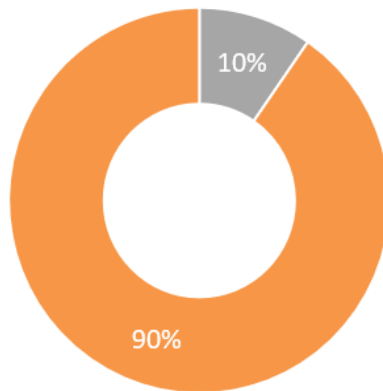


Germany increases share in EPRA Developed Europe Index

- German share currently at 23%, up 2% yoy
- German share more than doubled since 2013
- Germany continues to be a Brexit winner

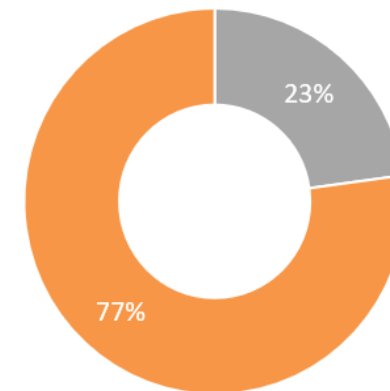
German Share of EPRA Developed Europe Index 2013

■ Germany ■ RoE



German Share of EPRA Developed Europe Index 2016

■ Germany ■ RoE



Source: EPRA, ZIA/Barkow Consulting

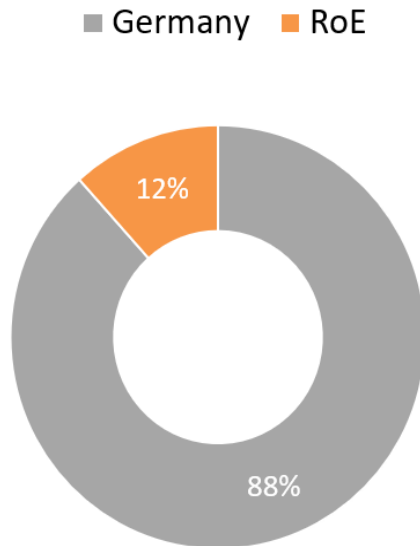
Source: EPRA, ZIA/Barkow Consulting



European Sector Weights

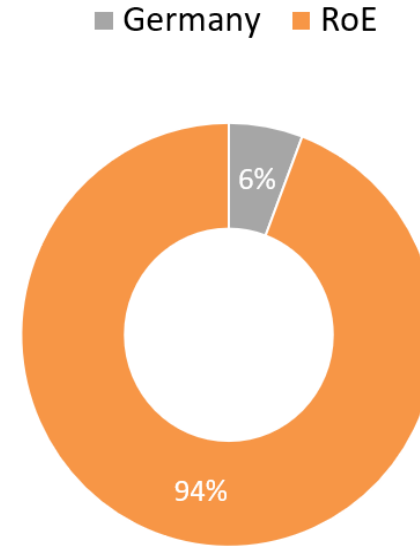
- German Resi dominates European residential sector
- Germany's weight in the European commercial sector doubles to 6%, but sector still negligible

European Residential Sector



Source: EPRA, ZIA/Barkow Consulting

European Commercial Sector



Source: EPRA, ZIA/Barkow Consulting

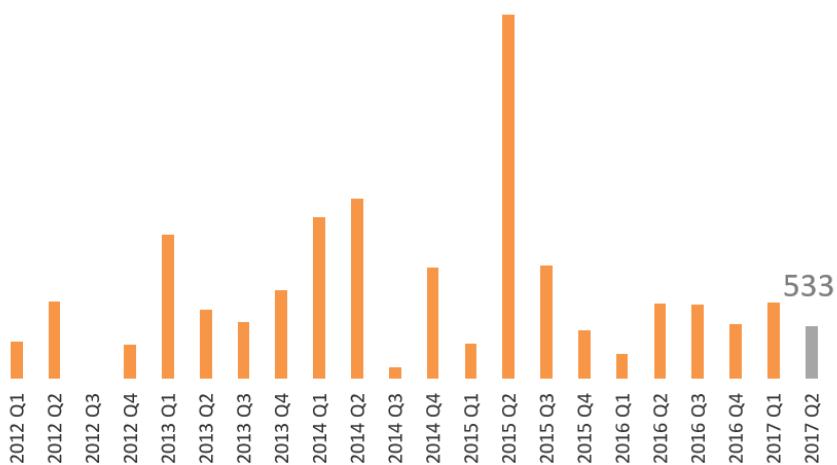


Development of Equity Issuance

- Improved, but still slow: €1.5bn issued in H1 2017 (up 47% yoy)
- Very lively convertible issuance in 2017
- Two IPOs (Consus, Noratis)

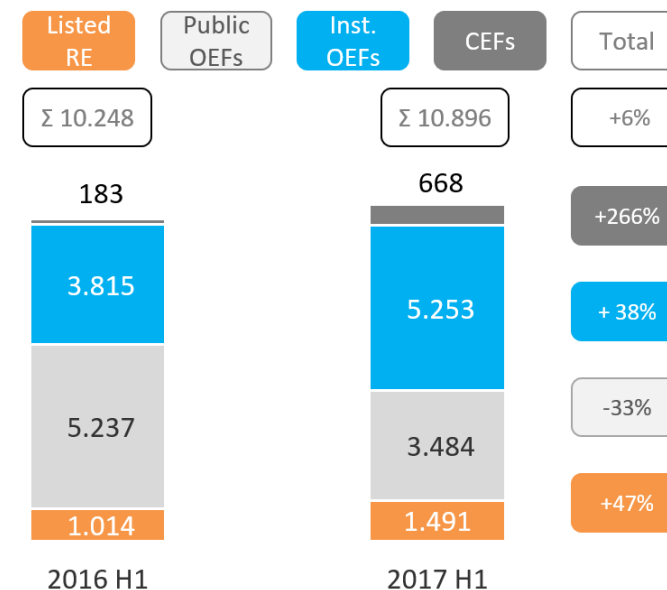
Listed RE: Slow Again

Listed RE equity placements
(in €m)



No New Record in H1

Net capital flows of indirect RE investment vehicles
(Closed end funds not available, in €m)



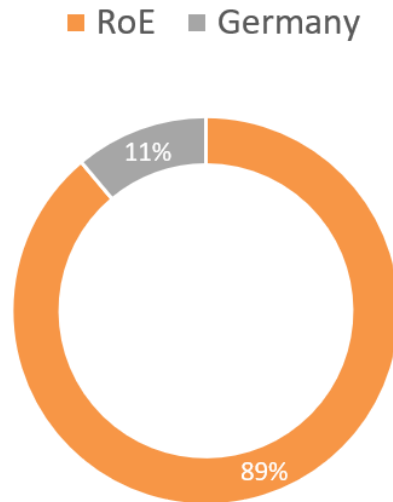
Source: Deutsche Bundesbank, Barkow Consulting 'German RE Capital Markets Database'



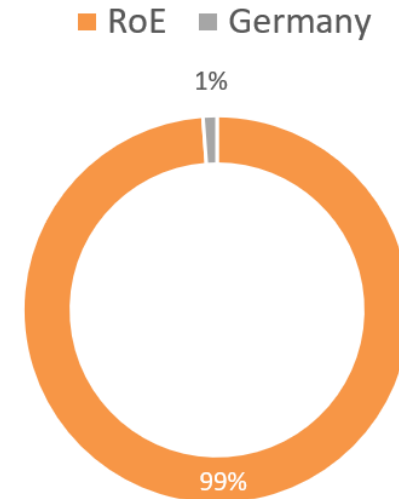
European Equity Issuance and IPOs 2017

- 18 European IPOs until Q3, of which two in Germany
- Germany with 1% IPO proceeds share until Q3

German Share of European IPOs 2017



German Share of European IPO Proceeds 2017



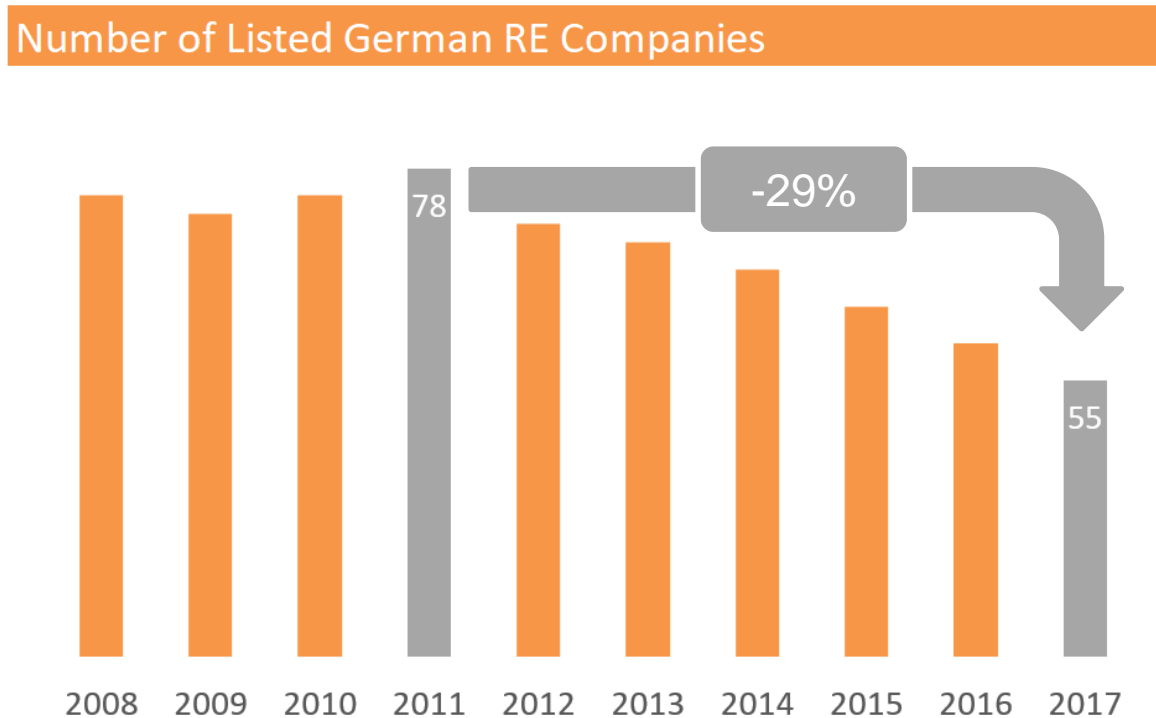
Source: EPRA, ZIA, Barkow Consulting

Source: EPRA, ZIA, Barkow Consulting



German Real Estate: A shrinking sector?

- Number of German real estate stocks down by almost 30% since 2011



Source: Ellwanger & Geiger, ZIA/Barkow Consulting



All data points at new highs

German Listed Sector: Property Data

in EURbn @ Period End	Jun 16	Jun 17	Delta ¹⁶⁻¹⁷	Delta ¹⁶⁻¹⁷	Comment
Total Property on Balance Sheet (total assets)	90	114	23	26%	Record No 1
<i>By Sector</i>					
Residential	72	87	15	21%	Record No 2
Commercial	18	27	8	45%	Record No 3
<i>By Geography</i>					
Germany	88	106	19	21%	Record No 4
International	3	5	2	82%	Record No 5

German Listed Sector: Capital Markets Data

in EURbn @ Period End	Jun 16	Nov 17	Delta ¹⁶⁻¹⁷	Delta ¹⁶⁻¹⁷	Comment
Total Market Cap	58	73	15	26%	Record No 6
Top 19 Market Cap	49	64	16	32%	Record No 7
Top 19 Free Float	43	56	13	31%	Record No 8
EPRA Europe ex UK German Share	30%	32%	2%	7%	Record No 9
EPRA Europe German Share	21%	23%	2%	10%	Record No 10

Source: Company data, EPRA, Ellwanger & Geiger, Bloomberg, ZIA, Barkow Consulting



Can the trend continue?

- Hard to see how positive drivers can get better still
 - Long term interest rates have started to increase again
 - Large companies very well capitalised
 - Large portfolios still hard to find

- Future growth will depend on
 - Growth momentum in commercial sector
 - Extent of interest rate increases

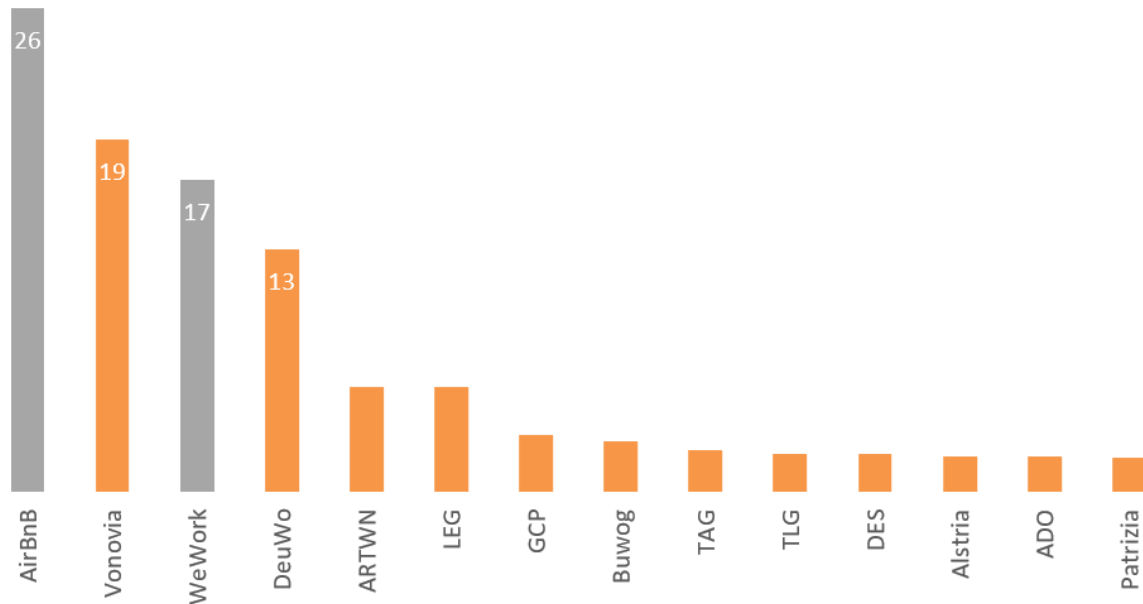


Bricks vs. Clicks

- PropTech companies with very high valuations



Bricks vs. Clicks: Valuation (in €bn)



Source: Press, ZIA/Barkow Consulting



BARKOW
C o n s u l t i n g

Nine Years of Growth & Counting

 **ZIA**
Initiative Immobilien-Aktie

Thank You For Your Attention