VONOVIA

Company Presentation

Morgan Stanley Fixed Income Real Estate Conference

Olaf Weber, Head of Finance and Treasury Thorsten Arsan, Head of Finance - Frontoffice

Today's presenters



Olaf Weber

Head of Treasury & Finance

With Vonovia since 2013

Key responsibilities

> Treasury and Finance

Previous experience

- Head of Group Treasury at Einkaufsbüro Deutscher Eisenhändler (2 yrs)
- > Deputy Head of Group Treasury at OBI (4 yrs)
- > Deutsche Bank (13y)

Education

Master of Business Administration

Thorsten Arsan

Head of Finance - Front Office

With Vonovia since 2013

Key responsibilities

- Finance
- > DCM & ECM
- Rating

Previous experience

- Eurohypo (5 yrs)
- Moody's Investor Service (2 yrs)
- > KPMG (4 yrs)

Education

Master of Business Administration



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Highlights



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Vonovia stand-alone Excl. Buwog, Victoria Park	Operations	 Organic rent growth of 4.1% y-o-y. Operating expenses reduced by 16.8% to €110.2m as a result of eliminating the double cost structure from conwert included in H1 2017 as well as continued efficiency gains. Adj. EBITDA Operations margin (ex. maintenance) of 90.9% (+290bps y-o-y).
	FFO 1	> FFO 1 increased by 11.5% y-o-y to €510.3m in H1 2018 as a result of better EBITDA Operations and lower interest expenses and income taxes.
	Valuation	 H1 valuation comprised ca. 2/3 of portfolio (20 largest German locations plus six additional German locations and Vienna). 6.9% I-f-I value growth on revalued portfolio, of which 5.7% I-f-I valuation uplift (performance + yield compression). Total value growth of €1,765m represents 5.3% on the overall portfolio.
toria Park	Adj. NAV	 Adj. NAV grew by 10.5% to €20,634.4m in H1 2018. On a per-share basis, Adj. NAV was €39.83, up 3.5% ytd (6.8% higher NOSH).
Incl. Buwog, Victoria Park	Guidance	 2018 Guidance now includes Buwog and Victoria Park. FFO 1 guidance of €1,050m - €1,070m or €2.03 - €2.07 p.s. on the new number of 518.1m issued shares. Back-of-an-envelope calculation: Assuming Buwog and Victoria Park had fully contributed for the first six months, the pro FFO 1 per share guidance would have been €2.08 - €2.12.

KPI Growth in spite of Smaller Portfolio and Higher NOSH

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- > Rental income slightly up 0.7% on a 3% smaller but higher quality portfolio.
- > Adjusted EBITDA Operations up 4.1% because of substantially lower operating expenses and higher contribution from the Value-add Business.
- > As a result, and supported by lower interest expenses, FFO grew by 11.5% (2.5% per share due to the 8.7% increase in NOSH from the May ABB and scrip dividend).

		H1 2018	H1 2017	Delta	
Average number of residential sqm	`000	21,557	22,226	-3.0%	Portfolio reduction mainly
Average number of residential units	#	344,685	355,570	-3.1%	driven by clean-up sales
Organic rent growth (y-o-y)	%	4.1	3.7	+40 bps	
In-place rent (eop)	€/month/sqm	6.41	6.12	+4.7%	
Vacancy rate (eop)	%	2.8	2.9	-10 bps	
Rental income	€m	838.8	833.2	+0.7% +€	£5.6m
Maintenance expenses	€m	-131.6	-127.3	+3.4%	
Operating expenses	€m	-110.2	-132.4	-16.8%	conwert synergies and efficiency improvements
Adj. EBITDA Rental	€m	597.0	573.5	+4.1% +€	23.5m
Adj. EBITDA Value-add Business	€m	51.7	45.6	+13.4%	
Adj. EBITDA Operations	€m	632.6	607.6	+4.1%	25.0m
Interest expense FFO 1	€m	-114.3	-138.0	-17.2%	8.7% higher NOSH y-o-y
Current income taxes FFO 1	€m	-8.0	-11.9	-32.8%	Back-of-an-envelope
Current income taxes FFO 1	EIII	-6.0	-11.9	-32.0%	calculation: pro forma FFO 1 including full contribution from
FFO 1	€m	510.3	457.7	+11.5% +€	52.6m Buwog and Victoria
FFO 1 per share (eop NOSH)	€	0.98	0.96	+2.5%	Park in H1 would be ~€36m or
FFO 1 per share (avg. NOSH)	€	1.03	0.98	+5.8%	~7 cents higher

Rent Growth Acceleration Set to Continue



Kent Growth Ac	celeratio		Contin
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Rent growth drivers (last 12M)	H1 2018	H1 2017	Delta
Sitting tenants (incl. subsidized rents)	1.1%	1.2%	-10bps
New lettings (with no material investment)	0.4%	0.5%	-10bps
Subtotal market- driven rent growth	1.5%	1.7%	-20bps
Modernization (including new lettings with investments → Optimize Apartments)	2.5%	1.9%	+60bps
Subtotal I-f-I rent growth	4.0%	3.6%	+40bps
Space creation	0.1%	0.1%	
Subtotal organic rent growth	4.1%	3.7%	+40bps

Positive rent growth trajectory							
	2013	2014	2015	2016	2017	2018(E)	2019(E)
Market driven	1.6%	1.6%	1.7%	1.5%	1.6%	≈	≈
Modernization	0.4%	0.9%	1.2%	1.8%	2.5%	1	1
Space creation					0.1%	1	1
Organic rent growth	1.9%	2.5%	2.9%	3.3%	4.2%	~4.4%	1



Continued EBITDA Margin Expansion

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- > Adj. EBITDA Operations is up 4.1% to €632.6m.
- > EBITDA Operations margin (excl. maintenance) expanded to 90.9%.



H1 2018	H1 2017	Delta
838.8	833.2	+0.7%
-131.6	-127.3	+3.4%
-110.2	-132.4	-16.8%
597.0	573.5	+4.1%
610.4	483.8	+26.2%
88.3	80.1	+10.2%
522.1	403.7	+29.3%
-558.7	-438.2	+27.5%
51.7	45.6	+13.4%
-16.1	-11 5	+40.0%
-10.1	-11.3	T40.070
632.6	607.6	+4.1%
	838.8 -131.6 -110.2 597.0 610.4 88.3 522.1 -558.7 51.7	838.8 833.2 -131.6 -127.3 -110.2 -132.4 597.0 573.5 610.4 483.8 88.3 80.1 522.1 403.7 -558.7 -438.2 51.7 45.6 -16.1 -11.5

¹ Mainly consolidation

Continued FFO Growth

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> Driven by better operational performance and lower interest expenses, FFO1 was up 11.5% y-o-y or 2.5% per share (eop) in spite of 8.7% more issued shares.

€m (unless indicated otherwise)	H1 2018	H1 2017	Delta
Adj. EBITDA Operations	632.6	607.6	4.1%
Interest expense FFO 1	-114.3	-138.0	-17.2%
Current income taxes FFO 1	-8.0	-11.9	-32.8%
FFO 1	510.3	457.7	11.5%
of which attributable to Vonovia's shareholders	484.7	431.1	12.4%
of which attributable to Vonovia's hybrid capital investors	20.0	20.0	0.0%
of which attributable to non-controlling interests	5.6	6.6	-15.2%
Capitalized maintenance	-49.1	-30.5	61.0%
AFFO	461.2	427.2	8.0%
Adjusted EBITDA Sales	48.3	44.3	9.0%
Current income taxes FFO 2	-13.8	-20.1	-31.3%
FFO 2	544.8	481.9	13.1%
FFO 1 € / share (eop NOSH) (H1 2018: 518.1m; H1 2017: 476.5m)	0.98	0.96	2.5%
FFO 1 € / share (avg. NOSH) (H1 2018: 493.2m; H1 2017: 468.2m)	1.03	0.98	5.8%

^{8.7%} higher NOSH y-o-y

[•] Back-of-an-envelope calculation: pro forma FFO 1 including full contribution from Buwog and Victoria Park in H1 would be ~€36m or ~7 cents higher

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L-f-l Value Uplift of 5.7%

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- > Valuation portfolio comprised the 20 largest cities of our German portfolio, plus six additional German locations and Vienna, representing ca. 2/3 of the entire portfolio. All other locations and values were left unchanged and adjusted only for capitalization.
- > 6.9% I-f-I value growth on revalued portfolio, of which **5.7% I-f-I valuation uplift** (performance + yield compression).
- > Total value growth of €1,765m represents 5.3% on the overall portfolio.
- > German portfolio as of June 30, 2018, valued at €1,561/sqm, **20.5x** in-place rent multiple and **4.9% gross yield** (Dec. 31, 2017: €1,475/sqm, 19.7x in-place rent and 5.1% yield).

Performance	268
Rental development	228
Investments	40
Investments	347
Investments (within valuation portfolio)	240
Investments (outside of valuation portfolio)	107
Yield compression	1,150
Total value uplift	1,765

Bridge to P&L H1 (€m)				
Total value uplift	1,765			
Investments	-363			
Benefit VTS craftsmen organization	-15			
Cash out	-348			
Other	-25			
Net income from fair value adjustments of investment properties	1,377			

In-place Valuation vs. Fair Value Uplift



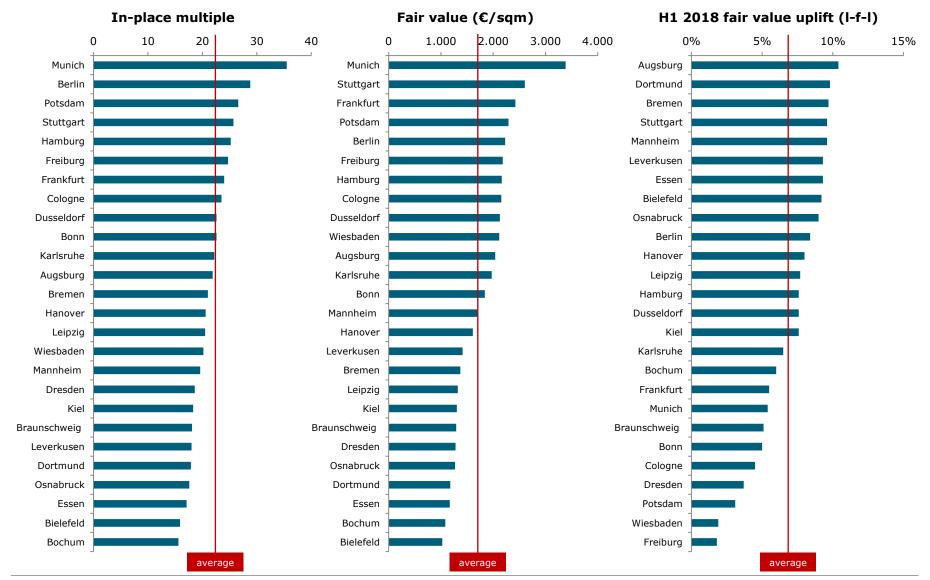
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Invest Cluster Offers Long-Term Organic Growth Potential

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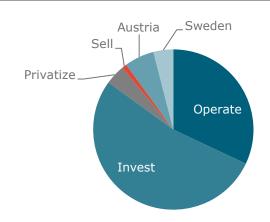
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- > 53% of portfolio in Invest Cluster and earmarked for value-enhancing investments in the next years
- Non-core sales almost completed
- > 10% of portfolio outside of Germany



June 30, 2018	Residential	In-place rent	Vacancy rate	Fair value	1
	units	(€/sqm/month)	(%)	(€bn)	% of total
Operate	126,039	6.54	2.6	13.0	32%
Invest	217,270	6.35	2.6	21.4	53%
Subtotal Strategic Clusters	343,309	6.42	2.6	34.4	85%
Privatize	13,183	6.22	4.1	1.5	4%
Sell	10,167	5.34	5.1	0.6	1%
Total Germany	366,659	6.38	2.7	36.5	90%
Austria	23,215	4.56	4.2	2.5	6%
Sweden	14,052	8.83	1.4	1.6	4%

Note: In-place rents in Austria and Sweden are not fully comparable to Germany, as Sweden, for example, includes certain ancillary costs. The table above shows the rental level unadjusted to the German definition.

¹Fair value of the developed land excluding € 1,205.4 million, of which € 344.5 million for undeveloped land and inheritable building rights granted, € 251.9 million for assets under construction, € 461.7 million for development and € 147.3 million for other.

Continued NAV Growth



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Adj. NAV is up 10.5% ytd or 3.5% per share in spite of 6.8% more issued shares.

€m (unless indicated otherwise)	Jun 30, 2018	Dec 31, 2017
Equity attributable to Vonovia's shareholders	16,916.2	15,080.8
Deferred taxes on investment properties and assets held for sale	7,253.8	6,185.7
Fair value of derivative financial instruments ¹	93.4	26.9
Deferred taxes on derivative financial instruments	-25.1	-8.8
EPRA NAV	24,238.3	21,284.6
Goodwill	-3,603.9	-2,613.5
Adj. NAV	20,634.4	18,671.1
EPRA NAV €/share	46.79	43.88
Adj. NAV €/share	39.83	38.49

Is Adj. NAV a good proxy for the value of a diverse operating business?

By definition, the Adj. NAV

- > reflects the brick and mortar value of the buildings
- applies market terms and assumes the properties are owned by "anyone"

This approach ignores

- > the Value-add Business
- the cost advantage and operating platform of a professional owner
- > the development business
- > the cash flow from privatization

¹ Adjusted for effects from cross currency swaps.

LTV Remains in Comfort Zone



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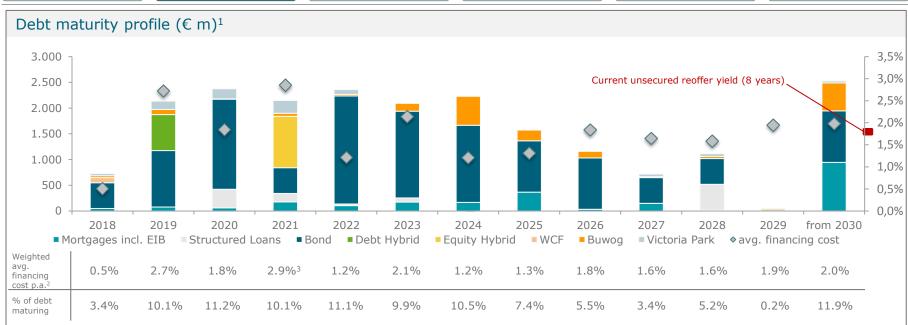
- > LTV as of June 30, 2018 was 43.9%.
- Current pro forma LTV, including 2nd offer period for Buwog and €500m bond issued in July, is ~45%.
- > Against the background of the stable cash flows and the strong fundamentals in our portfolio locations we see continued upside potential for our property values, and we do not see material long-term downside risks.
- > We therefore continue to believe that the LTV target range of 40% 45% is adequate for our low risk portfolio, and we feel comfortable with this range.
- > Based on our internal LTV projections, an extremely bearish scenario with no yield compression in H2 2018 would result in an LTV of ~45%, so any yield compression will bring the LTV even deeper into our comfort zone (€500m of yield compression reduce the LTV level by ca. 50 bps).

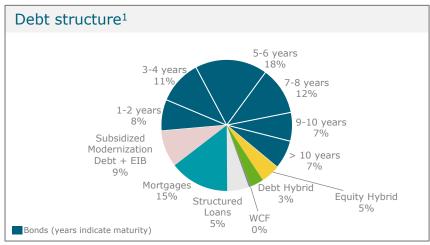
€m (unless indicated otherwise)	Jun 30, 2018	Mar 31, 2018	Dec 31, 2017
Non-derivative financial liabilities	19,774.6	18,887.0	14,060.5
Foreign exchange rate effects	-29.6	-17.8	-23.5
Cash and cash equivalents	-865.8	-829.3	-266.2
Net debt	18,879.2	18,039.9	13,770.8
Sales receivables	-239.8	-232.4	-201.2
Adj. net debt	18,639.4	17,807.5	13,569.6
Fair value of real estate portfolio	41,732.3	38,485.6	33,436.3
Shares in other real estate companies	734.5	666.6	642.2
Adj. fair value of real estate portfolio	42,466.8	39,152.2	34,078.5
LTV	43.9%	45.5%	39.8%

Smooth Maturity Profile with Diverse Funding Mix



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KPIs	June 30, 2018	Target
LTV ⁵	43.9%	Mid-to low forties
Unencumbered Assets / Unsecured Debt	212%	>125%
ICR (LTM) ⁶	5.1x	>1.8x
Fixed/hedged debt ratio ⁴	96%	Ongoing
Average cost of debt ⁴	1.8%	optimization with most
Weighted avg. maturity ⁴	8.1 years	economic funding
Corporate Rating (S&P)	BBB+	_

¹ incl. July 2018 Bond, which is not included in KPIs. ² Average financing cost of debt maturing in the relevant year. ³ Weighted avg. financing costs excl. Equity Hybrid. Including Equity Hybrid, avg. interest rate of debt maturing in 2021 is 3.4%.⁴ excl. Equity Hybrid. ⁵ excl. ^{2nd} offer period of Buwog. ⁶ excl. Buwog and Victoria Park.

Growing Contribution from Value-add Business

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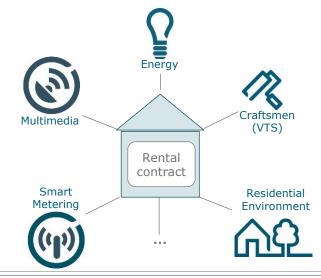
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Concept

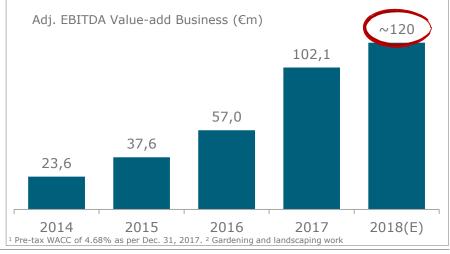
- > Expansion of core business to extend the value chain by offering additional services and products that are directly linked to our customers and/or the properties and offer the same cash flow stability as the rental business.
- > Insourcing of services to ensure maximum process management and cost control.
- > Two types of Value-add Business
 - 1. External income (e.g. multimedia, smart metering)
 - 2. Internal savings (e.g. craftsmen, resi environment)
- > New initiatives always follow same low risk pattern of
 - > Prototype development
 - > Proof of concept in pilot phase
 - > Roll-out across portfolio



Economics

- > NAV does not account for Vonovia's Value-add Business.
- Applying the impairment test WACC¹ to the 2018E Adj. EBITDA Value-add Business translates into an additional value of ~€5.0 per share (~12% on top of H1 Adj. NAV).

Penetration				
Multimedia	ca. 80%			
Smart metering	ca. 23%			
Residential environment ²	ca. 30%			
Energy	~1%			
Craftsmen VTS	ca. 70% (maintenance) ca. 40% (modernization) target is around 70% to allow for enough flexibility in the volumes and to enable continuous benchmarking to market prices			



Sales – Steady Cash Flow at Attractive Margins

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- > Total sales volume in H1 2018 was **6,115 residential units** (prior-year period: 4,484), of which **1,030 from Privatization**portfolio (prior-year period: 1,160) and **5,085 from Sell portfolio** (prior-year period: 3,324).
- In spite of value growth of the portfolio, privatization fair value step-ups still came out to 30.5% for H1 2018.
- > The sell portfolio disposals saw a record fair value step-up of 15.4% in H1 2018, driven largely by two block sales, as we are utilizing the high market liquidity to profitably dispose of our Sell Portfolio.
- > The income and fair value figures of the Sell Portfolio for the prior-year period include a substantial amount of commercial property sales.

	PRIVATIZA	PRIVATIZATION		SELL PORTFOLIO		=
€m (unless indicated otherwise)	H1 2018	H1 2017	H1 2018	H1 2017	H1 2018	H1 2017
Income from disposal	124.2	142.7	230.0	559.2	354.2	701.9
Fair value of disposal	-95.2	-108.7	-199.3	-536.1	-294.5	-644.8
Adj. profit from disposal	29.0	34.0	30.7	23.1	59.7	57.1
Fair value step-up (%)	30.5%	31.3%	15.4%	4.3%		
Selling costs					11.4	-12.8
Adj. EBITDA Sales					48.3	44.3

€1bn Investment Program on Track

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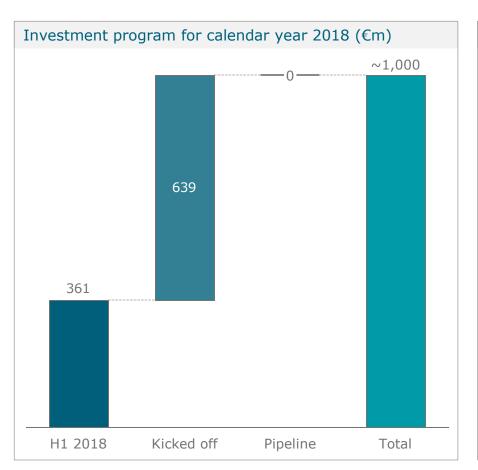
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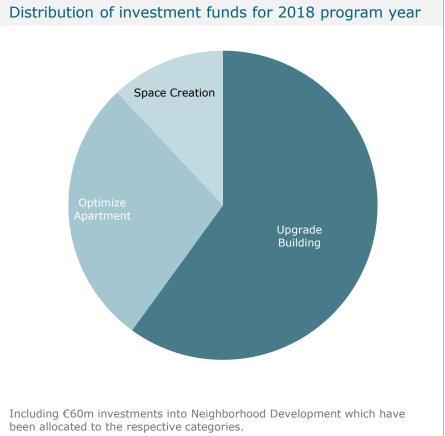
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- > 2018 investment program well underway.
- > All investment projects kicked-off or already completed.





Note: Numbers include projects kicked off in 2017.

New Construction Update

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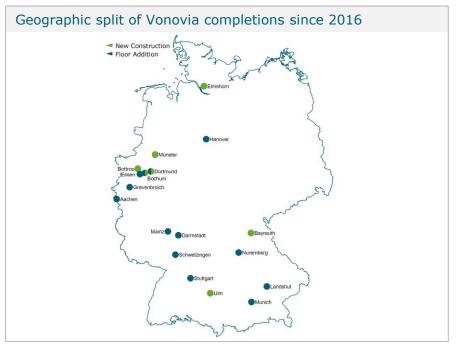
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Commentary

- > The obstacle to higher construction volumes remains building permits, which continue to take very long in most cities.
- > In aggregate, the Vonovia Space Creation plus the Buwog Development Business are expected to deliver ca. 2,800 completions next year.













Buwog Development Projects Approved since Takeover



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Location	Project	Completion (est.)	Investment volume	Hold vs. sell (est.)
Berlin	"Kompasshäuser" (50 resi units) "Haus an der Dahme" (33 resi units) (Part of 52° Nord Project with a total of 1,019 residential units of which 216 have been completed)	05/2020	ca. €30m	■Hold ■Sell
Vienna	Marina Tower (486 resi units, 7 commercial units) Marina Plaza (409 resi units, Rezoning required)	3/2021 10/2023	ca. €114m ca. €140m	■Hold ■Sell
Vienna	ERnteLAA (191 resi units, 3 commercial units)	05/2020	Ca. €36m	■Hold ■Sell

Update on BUWOG & Victoria Park; European Activities



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	BUWOG	Victoria Park
Current Vonovia stake	> 90.7% voting rights	> 61.4% voting rights (including call options)
Impact in 2018	> Starting with Q2	> Starting with Q3
Integration	 Operational integration of German operating business fully on track and expected to be completed by the end of 2018. Synergy realization expected from 2019 onwards. 	 Victoria Park management and staff remain largely in place, as Victoria Park continues to run its business broadly unchanged. Feasibility of joint purchasing, modernization work
Next steps	 Buwog EGM to resolve on the Squeeze-out scheduled for Oct. 2. Cash compensation for minority shareholders of €29.05 per share. 	 and refinancing opportunities being reviewed. No integration planned as Victoria Park serves as the platform for Vonovia's potential growth in Sweden.

Comments

- > European activities enhance accretive acquisition opportunities.
- Similar to Germany, we closely monitor these clearly defined geographies for opportunities, applying the same acquisition criteria:
 - Austria run combined Buwog and conwert portfolio as scalable business. Disposals more prominent in Austrian business model because of low exit yields
 - > **Sweden** build on Victoria Park platform and consolidate Swedish residential market
 - France largest long-term opportunity. Not material at this point and only a viable long-term option to the extent legislation changes and allows the payout of economic dividends from social housing
 - > **Netherlands** attractive market but no opportunities or viable partner at this point
- > Other countries are not in our focus due to fundamentals, (lack of) regulation or similar related issues.

Increased Guidance Suggests ca. 8% FFO per share Growth



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	2017 Actuals	Initial (Nov. 2017) <u>Excl</u> . Buwog & Victoria Park	2018 Guidance Update (May 2018) Excl. Buwog & Victoria Park	Update (Aug. 2018) <u>Incl</u> . Buwog & Victoria Park ¹
Organic rent growth (eop)	4.2%	4.6% - 4.8%	4.6% - 4.8%	~4.4%²
Vacancy (eop)	2.5%	<2.5%	<2.5%	<2.5%
Rental Income (€m)	1,667.9	1,660 - 1,680	1,670 - 1,690	1,890 - 1,910
FFO1 (€m)	920.8	960 - 980	1,000 - 1,020 (VNA stand-alone)	1,050 - 1,070
FFO 1 (€/share, eop)	1.90	1.98 - 2.02	2.06 - 2.10 (VNA stand-alone)	2.03 - 2.07
Maintenance (€m)	346.2	~360	~360	~410
Modernization & Investments (€m)	778.6	~1,000	~1,000	~1,000
Privatization (number of units)	2,608	~2,300	~2,300	~2,800
FV step-up (Privatization)	32.7%	~30%	~30%	30% - 35%
Sell portfolio disposals (number of units)	11,780	opportunistic	opportunistic	up to 14,000
FV step-up (Sell Portfolio)	7.9%	>0%	~5%	10% - 15%
Dividend/share	€1.32	~70% of FFO1	~70% of FFO1	~70% of FFO1
Underlying number of shares	485.1	485.1	485.1	518.1

¹ Buwog contribution for 9 months and without synergies and Victoria Park contribution for 6 months and without synergies.

² Adjustment to ~4.4% is purely timing-related and driven by (i) lower-than-anticipated new construction volume as a result of building permits taking too long and (ii) a small share of the rent growth from the modernization investments getting pushed into early 2019, as some projects cannot be fully settled by September, which is the deadline for including the projects in the 2018 organic rent growth. This slight delay is caused by poor weather conditions in the beginning of the year as well as limited craftsmen availability for carrying out the work on time and on budget.



Strong operating performance with continued margin expansion.



Market conditions remain supportive as evidenced by H1 2018 valuation.



Guidance 2018 compelling but does not reflect full potential of Buwog and Victoria Park acquisitions, which will materialize starting 2019.



Outlook for 9M Reporting on December 6: New integrated reporting format in addition to and beyond the traditional FFO 1 logic to properly account for the different earnings contributors.

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€m (unless indicated otherwise) H1 2018 H1 2017 Delta

Expenses for maintenance	131.6	127.3	3.4%
Capitalized maintenance	50.5	31.5	60.3%
Total	182.1	158.8	14.7%
Maintenance capitalization ratio	28%	20%	4,0%



¹ All numbers stand-alone Vonovia, excluding Buwog and Victoria Park.

German Resi: Capitalized Expenses ≠ Modernization Investments



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> Capex is a maintenance expense that is capitalized on the balance sheet because it has a value-enhancing element. Modernization is not > In contrast to modernization investments, capex does not result in rent capex growth. > Capex is not discretionary. > Our annual €1bn modernization program does not require new equity. > The equity portion comes from the FFO 1 funds that are not paid out as dividends. > The remainder is funded with debt (often specific debt facilities dedicated to Modernization is NAV modernization work and at very favorable terms). accretive > The value rerating following the modernization work renders the investment program LTV neutral. > Modernization investment leads to rent growth and increases performance (and dividend potential).

Fixed Income Real Estate Conference

In terms of cash,

modernization is similar

to an acquisition

> Equity or organic cash flow is invested (usually supplemented with debt) for a

> The yield on that investment contributes to future rent growth / cash flows.

Maintenance ≠ Capitalized Expenses ≠ Modernization Investments



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		Description	Relevant for FFO and P&L	Relevar AFF		Relevant for cash flow	Comes with a yield and generates rent growth	Capitalized on the balance sheet	German Civil Code Regulation
shable Resi	Maintenance expenses	Required to broadly maintain the property value					8	8	SEEO
y distinguishable in German Resi	Capitalized expenses	Protect future EBITDAs Reactive, non- discretionary	8				8		§558
Three clearly dicates in (Modernization investments	Changes character of a building or flat Enhance future EBITDAs Pro-active, discretionary	8	E)				§559



Note: "Modernization investments" on this page also includes space creation investments.

- Disclosure differs within German Resi Sector, as capitalized expenses and modernization investments are often disclosed as one even though German Civil Code Regulation allows for and even requires separate treatment of capitalized expenses and modernization investments.
- > Subtracting modernization investment in Vonovia's AFFO is questionable, as modernization investments are, similar to an acquisition,
 - > partly debt-financed
 - discretionary
- > Impact of modernization investments on rent growth is similar to an acquisition, hence the inclusion in organic rent growth.

Cyclicality of Debt Instruments Requires Diversification



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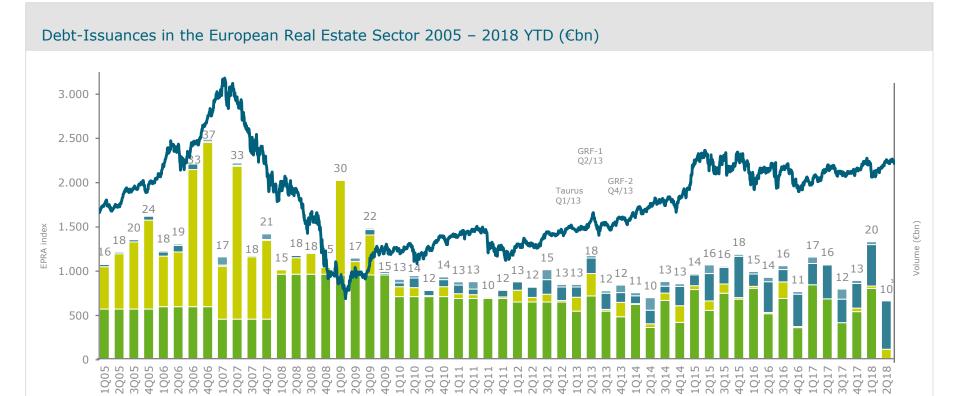
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Source: Dealogic, Bloomberg, Broker research, Deutsche Bundesbank, Verband deutscher Pfandbriefbanken (VdP), FactSet.

2009

Mortgage Pfandbriefe1

2011

2012

2013

Corporate bonds²

2014

2015

2016

Convertible bonds

2017

2018

2010

2008

2006

2007

EPRA Developed

2005

¹ Quarterly Mortgage Pfandbrief issuances for 2005-2012 based on equal distribution of annual issuances based on VdP data; 2013 -3Q2017 figures based on Deutsche Bundesbank

² Corporate bond issuance volume includes senior unsecured and hybrid bonds ≥ €50m, issued in EUR in Western Europe

³ Excludes Mortgage Pfandbriefe in Q2 2018 as data not yet available.

Vonovia's House of Debt Financing

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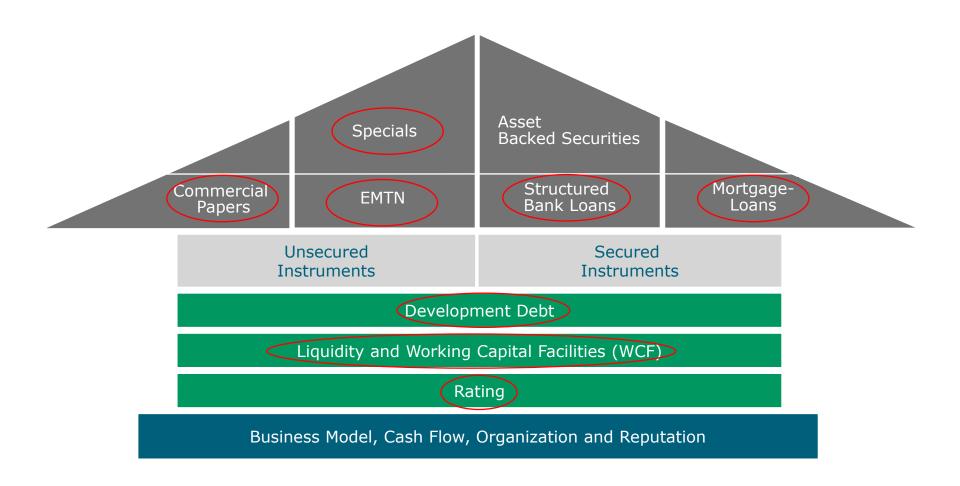
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Currently used by Vonovia

Decision Tree Financing Sources

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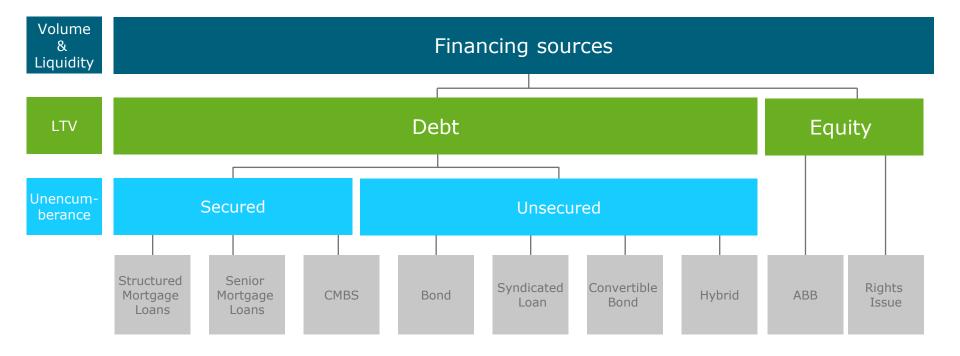
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Covenants and KPIs (June 30, 2018)



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> Bond KPIs

Covenant	Level	Jun 30, 2018
LTV	<60%	41%
Total Debt / Total Assets	< 60 %	41%
Secured LTV	<45%	12%
Secured Debt / Total Assets	<43%	12%
ICR ¹	>1.80x	5.1x
Last 12M EBITDA / Last 12M Interest Expense	>1.00X	5.11
Unencumbered Assets	>125%	212%
Unencumbered Assets / Unsecured Debt	>125%	212%

> Rating KPIs

Covenant	Level (BBB+)
Debt to Capital	<600/c
Total Debt / Total Equity + Total Debt	<60%
ICR	> 1 00v
Last 12M EBITDA / Last 12M Interest Expense	>1.80x

Bonds / Rating

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Corporate Investment grade rating

Rating agency	Rating	Outlook	Last Update
Standard & Poor's	BBB+	Stable	02 Aug 2018

Senior Bonds (EUR and USD)

Name	Tenor & Coupon	ISIN	Amount	Issue price	Coupon	Final Maturity Date	Rating
Bond 002 (EUR-Bond)	6 years 3.125%	DE000A1HNW52	€ 600m	99.935%	3.125%	25 July 2019	BBB+
Bond 004 (USD-Bond)	10 years 5.000%	US25155FAB22	USD 250m	98.993%	4.580% ¹	02 Oct 2023	BBB+
Bond 005 (EMTN)	8 years 3.625%	DE000A1HRVD5	€ 500m	99.843%	3.625%	08 Oct 2021	BBB+
Bond 007 (EMTN)	8 years 2.125%	DE000A1ZLUN1	€ 500m	99.412%	2.125%	09 July 2022	BBB+
Bond 009A (EMTN)	5 years 0.875%	DE000A1ZY971	€ 500m	99.263%	0.875%	30 Mar 2020	BBB+
Bond 009B (EMTN)	10 years 1.500%	DE000A1ZY989	€ 500m	98.455%	1.5000%	31 Mar 2025	BBB+
Bond 010B (EMTN)	5 years 1.625%	DE000A18V138	€ 1,250m	99.852%	1.625%	15 Dec 2020	BBB+
Bond 010C (EMTN)	8 years 2.250%	DE000A18V146	€ 1,000m	99.085%	2.2500%	15 Dec 2023	BBB+
Bond 011A (EMTN)	6 years 0.875%	DE000A182VS4	€ 500m	99.530%	0.875%	10 Jun 2022	BBB+
Bond 011B (EMTN)	10 years 1.500%	DE000A182VT2	€ 500m	99.165%	1.5000%	10 Jun 2026	BBB+
Bond 012 (EMTN)	2 years 3M EURIBOR+0.380%	DE000A185WC9	€ 500m	100.000%	0.140% hedged	13 Sep 2018	BBB+
Bond 013 (EMTN)	8 years 1.250%	DE000A189ZX0	€ 1,000m	99.037%	1.250%	06 Dec 2024	BBB+
Bond 014A (EMTN)	5 years 0.750%	DE000A19B8D4	€ 500m	99.863%	0.750%	25 Jan 2022	BBB+
Bond 014B (EMTN)	10 years 1.750%	DE000A19B8E2	€ 500m	99.266%	1.750%	25 Jan 2027	BBB+
Bond 015 (EMTN)	8 years 1.125%	DE000A19NS93	€ 500m	99.386%	1.125%	08 Sep 2025	BBB+
Bond 016 (EMTN)	2 years 3M EURIBOR+0.350%	DE000A19SE11	€ 500m	100.448%	3M EURIBOR+0.350%	20 Nov 2019	BBB+
Bond 017A (EMTN)	6 years 0.750%	DE000A19UR61	€ 500m	99.330%	0.750%	15 Jan 2024	BBB+
Bond 017B (EMTN)	10 years 1.500%	DE000A19UR79	€ 500m	100.805%	1.500%	14 Jan 2028	BBB+
Bond 018A (EMTN)	4.75 years 3M EURIBOR+0.450%	DE000A19X793	€ 600m	100.000%	0.793% hedged	22 Dec 2022	BBB+
Bond 018B (EMTN)	8 years 1.500%	DE000A19X8A4	€ 500m	99.188%	1.500%	22 Mar 2026	BBB+
Bond 018C (EMTN)	12 years 2.125%	DE000A19X8B2	€ 500m	98.967%	2.125%	22 Mar 2030	BBB+
Bond 018D (EMTN)	20 years 2.750%	DE000A19X8C0	€ 500m	97.896%	2.750%	22 Mar 2038	BBB+
Bond 019 (EMTN)	5 years 0.875%	DE000A192ZH7	€ 500m	99.437%	0.875%	03 Jul 2023	BBB+

¹ EUR-equivalent Coupon

Hybrid Bonds

Name	Tenor & Coupon	ISIN	Amount	Issue price	Coupon	Final Maturity Date	Rating
Bond 006 (Hybrid)	60 years 4.625%	XS1028959671	€ 700m	99.782%	4.625%	08 Apr 2074	BBB-
Bond 008 (Hybrid)	perpetual 4.000%	XS1117300837	€ 1,000m	100.000%	4.000%	perpetual	BBB-

Acquisitions – Opportunistic but Disciplined

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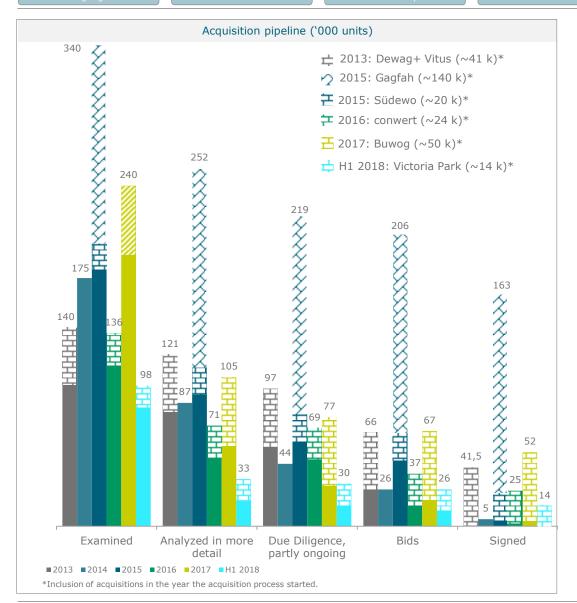
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Acquisition criteria

- > No quantitative acquisition target.
- No management incentive for external growth.
- Any potential acquisition must meet all four stringent acquisition criteria assuming a 50/50 equity/debt financing.



4+1 Strategy Has Evolved into 4+2 Strategy

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Reputation & Customer Satisfaction

Systematic optimization of operating **Traditional** performance and core business productivity through leveraging scaling effects **Property Management** > High degree of standardization and industrialization throughout the entire organization Ensure well-balanced financing mix and maturity profile with low financing costs, investment grade credit rating and adequate liquidity at all Financing times > Fast and unfettered access to equity and debt capital markets at all times Portfolio optimization by way of tactical acquisitions and non-core/non-strategic disposals to ensure exposure to strong local markets Portfolio Management > Pro-active development of the portfolio through investments to offer the right products in the right markets and on a long-term basis Expansion of core business to extend the value Innovative chain by offering additional services and products that are directly linked to our Value-add Business customers and/or the properties > Insourcing of services to ensure maximum process management and cost control Core Strategies

Mergers & Acquisitions

- Continuous review of onand off-market opportunities to lever economies of scale and apply strategic pillars 1-4 to a growing portfolio
- All acquisitions must meet the stringent acquisition criteria

- 6 European Activities
 - Building on existing German operations
 - > Measured approach
 - > Excellent partners for cooperation
 - Leveraging know how, experience and best practices

Opportunistic Strategies

Robust business modell delivers growing cash-flows.

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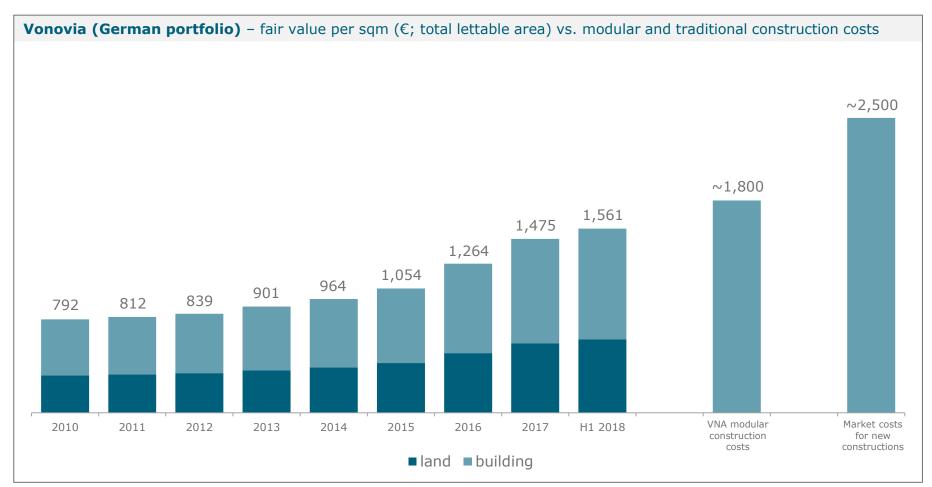


Conservative Valuation Levels



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In-place values are still way below replacement values, in spite of accelerating valuation growth in recent years.



Note: VNA 2010 - 2014 refers to Deutsche Annington Portfolio at the time; construction costs excluding land. The land value refers to share of total fair value allocated to land. Source for market costs: Arbeitsgemeinschaft für zeitgemäßes Bauen e.V.

Substantial Reduction of Portfolio Locations

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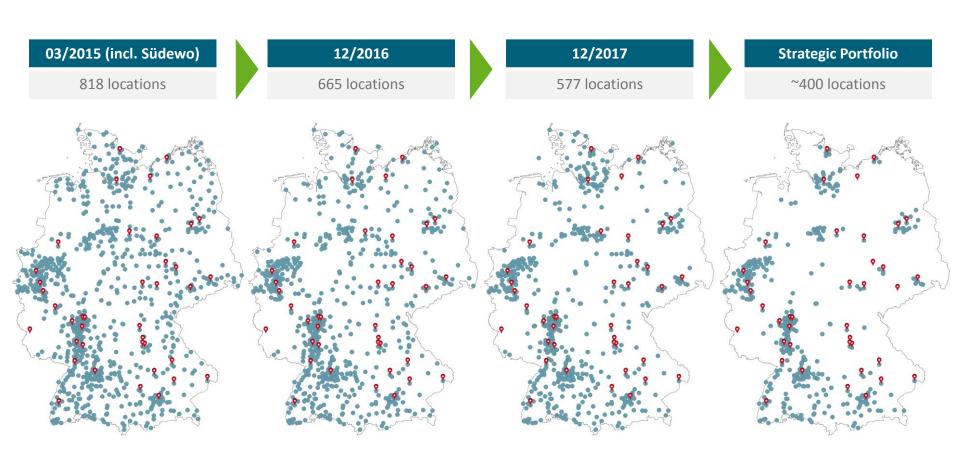
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- Vonovia location
- High-influx cities ("Schwarmstädte"). For more information: http://investoren.vonovia.de/websites/vonovia/English/4050/financial-reports-_-presentations.html

Liquid Large-cap Stock

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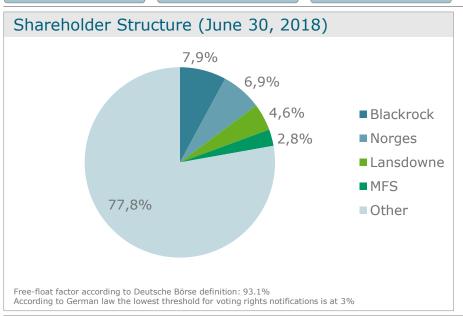
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Share Information	
First day of trading	July 11, 2013
Number of shares outstanding	518.1 million
Free float based on Deutsche Börse definition	93.1%
ISIN	DE000A1ML7J1
Ticker symbol	VNA
Share class	Registered shares with no par value
Main listing	Frankfurt Stock Exchange
Market segment	Regulated Market, Prime Standard
Major indices and weight (as of June 30, 2018)	DAX 1.8% Stoxx Europe 600 0.2% MSCI Germany 1.7% GPR 250 World 1.7% FTSE EPRA/NAREIT Europe 9.0%

VNA share price performance since IPO vs. DAX and EPRA Europe Index 240 220 200 180 + 51% 160 **SDAX** 140 inclusion 120 Jul-13 Jan-14 Jul-14 Jan-15 Jul-15 Jan-16 Jul-16 Jan-17 Jul-17 Jan-18 Jun-18 FTSE EPRA/NAREIT Dev. Europe Vonovia Source: Factset

Vonovia History

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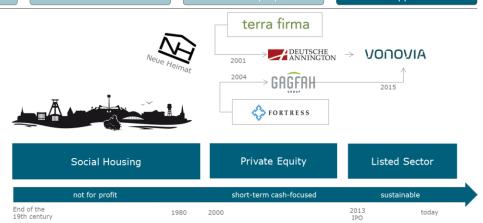
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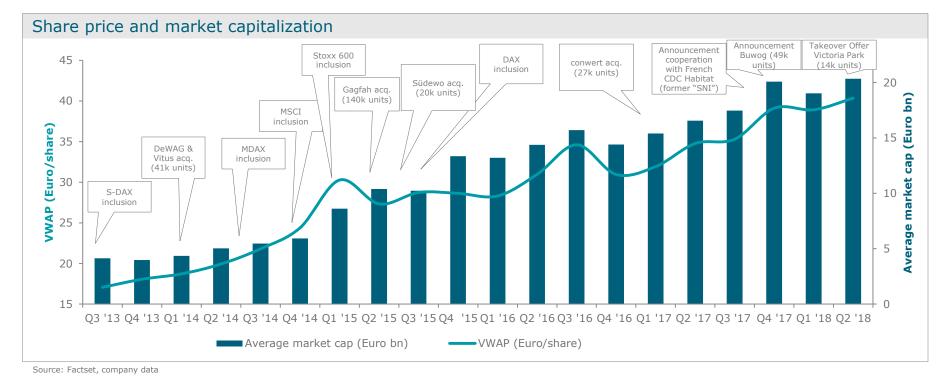
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> Seed portfolios of today's Vonovia have origin in public housing provided by government, large employers and similar landlords with a view towards offering affordable housing.

- At beginning of last decade, private equity invested in German residential on a large scale including into what is Vonovia today (mainly Deutsche Annington and Gagfah then).
- > IPO in 2013.
- > Final exit of private equity in 2014.





Sustainability at a Glance



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Integrated element of Vonovia's business model

- > With almost 400,000 apartments throughout Germany, Vonovia is the country's leading residential real estate company. This role in the housing landscape imposes on us a particular responsibility to actively shape the development of the housing industry.
- > We aim to live up to the responsibility by pursuing a continuous dialogue with our stakeholder groups, and by considering social and ecological issues in our core activities. A key priority for us is to use our business model and our holistic approach to help resolve the most urgent challenges in the housing industry and make a positive contribution to social development.

Sustainability reporting at Vonovia

- > Separate Sustainability Reporting Unit at Vonovia.
- > Started Sustainability Reporting in 2015 with our first sustainability report published in 2016, based on GRI G4 guidelines.
- > Publication of third Sustainability Report in 2018, in accordance with the core option of the GRI standards, including the voluntary sector-specific disclosures for "Constriction and Real Estate". The report is available at: http://reports.vonovia.de/2017/sustainability-report/
- > Vonovia received the EPRA Silver Award for the 2016 Sustainability Report.
- > Sustainability Report for 2018 to be published in April 2019.

Sustainability Report 2017



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Achievements since last report

- ✓ Expansion of the key figures base
- ✓ Clearer definition of boundaries for CO2 calculation
- ✓ Adaptation of the structure to the requirements of the CSR guidelines implementation law
- ✓ Online only: Sustainability Report only available online

Highlights

- ✓ Vonovia achieves renovation ratio of 5%
- ✓ Achieved energy savings of more than 45% for refurbished buildings
- ✓ Annual CO2 savings of approx. 50,000 tons
- ✓ Quarters development supports good neighborhood
- ✓ Company strengthens diversity
- ✓ Trainee rate of 5.5% emphasizes high significance

Facing Climate Change / Vonovia achieves renovation ratio of 5%



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"The most important thing we can do as the housing sector to tackle climate change is to upgrade our portfolio," Rolf Buch, CEO Vonovia.



~5%

Modernization ratio 2017

ratio above the annual goal of 3%



206
Photovoltaic plants in 2017
+47 against 2016



2,900 metric tons

- ✓ In 2017, Vonovia invested >€1 bn in its properties, including maintenance. Volume of modernization ~€779 m, almost 65% above 2016.
- ✓ Vonovia exceeded the German government's targets for the energy efficient renovation of housing stock: 3 % of apartments are to be modernized p.a., Vonovia has hit 5 %. Nationwide, this rate is around 1 %.
- ✓ For new constructions, Vonovia considers feasibility of photovoltaics; within 2 years, volume of electricity generated by our own photovoltaic systems has grown from 0 to a total of 5,510 MWh, resulting in an annual saving of 2,900 metric tons of carbon dioxide.
- We are currently working on equipping existing units with photovoltaic systems and explore further possibilities: e.g. additional use of battery storage systems, cogeneration units and corresponding e-mobility concepts for tenants. The first charging stations for e-cars are to be built on Vonovia premises before the end of 2018.

Achieved Energy Savings of > 45% for Refurbished Buildings



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- ✓ One of the focus points of our modernization efforts has been the Ruhr area, in particular Dortmund and Essen.
- ✓ In 2017 alone, CO2 emissions were reduced by around 23,000 metric tons due to energy efficient modernization. This corresponds to calculated energy savings of more than 45% for refurbished buildings, depending on the individual consumption (Determination of these values is based on the standards of the international Greenhouse Gas Protocol).
- ✓ The company explicitly supports the goals of the Paris Climate Protection Agreement and the German Federal Government's Climate Protection Plan housing stock should be almost climate-neutral by 2050.
- ✓ The related energy savings also result in significant benefits for the tenants through lower heating costs.

"It is our social responsibility to act sustainably in order to support requirements by the German federal government. However, we also see declining acceptance for modernization measures, in particular in cities with a shortage in housing. That is why, with our projects, we have to pay even greater attention to ensuring that there is no displacement and that people can stay in their homes. We want to provide security to our tenants."

German Residential – Safe Harbor and Low Risk



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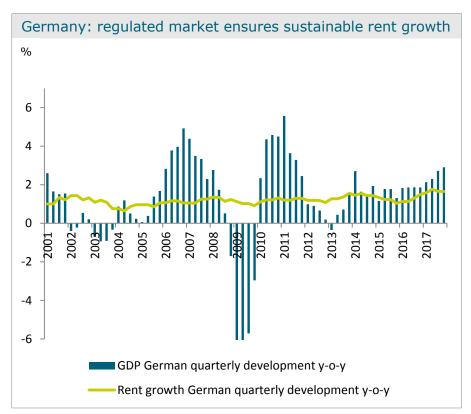
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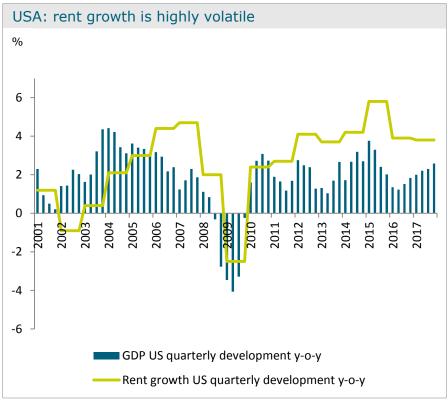
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Rental regulation safeguards high degree of stability

- > Contrary to most other jurisdictions such as the USA, rental growth in Germany is regulated and not directly linked to CPI, GDP development etc.
- > Rents are regulated via "Mietspiegel" (city-specific rent indices), which look at the asking rents of the previous four years to determine a rent growth level for existing tenants for the next two years.





Sources: Federal Statistics Office, GdW (German Association of Professional Homeowners), REIS, BofA Merrill Lynch Global Research, OECD. Note: Due to lack of q-o-q US rent growth data, the annual rent growth for a year is assumed to also be the q-o-q rent growth of that year.

German Residential – Landlords Benefit from Structural Imbalance between Supply and Demand



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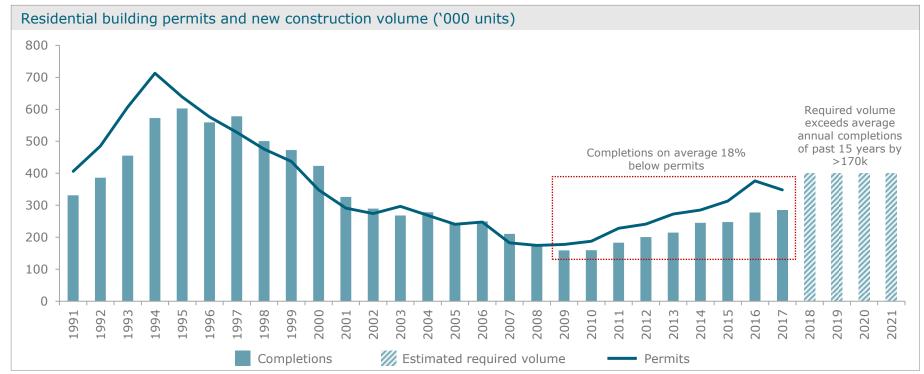
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New supply falls short of demand

- > Consensus estimates see a current shortage of around 1 million apartments in urban areas. Three main constraints stand in the way of material changes in the short and even medium term:
 - > Building permits often take several years because city administrations lack qualified personnel.
 - > Severe shortage of building capacity after years of downsizing.
 - > Substantial gap between in-place values and market replacement cost render construction in affordable segment economically unfeasible.



Sources: Federal Statistics Office, IW Köln, GdW (German Association of Professional Homeowners)

German Residential - Favorable Fundamentals



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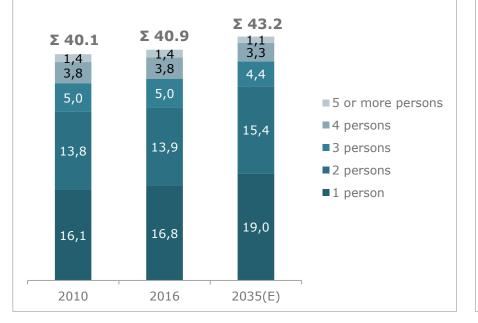
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Growing number of smaller households

- > While the overall population in Germany is expected to slightly decline, the number of households is forecast to grow until at least 2035 with a clear trend towards smaller households.
- The household growth is driven by various demographic and social trends including divorce rates, employment mobility etc.

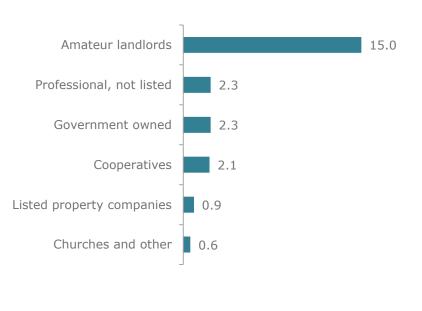
Distribution of household sizes (million)



Fragmented ownership structure

- Germany is the largest housing market in Europe with ~42m housing units, of which ~23m are rental units.
- Ownership structure is highly fragmented and majority of owners are non-professional landlords.
- > Listed sector represents ~4% of total rental market.

Ownership structure (million units)



Sources: German Federal Statistics Office, GdW (German Association of Professional Homeowners). 2035(E) household numbers are based on trend scenario of the German Federal Statistics Office.

No Correlation between Interest Rates and Asset Yields



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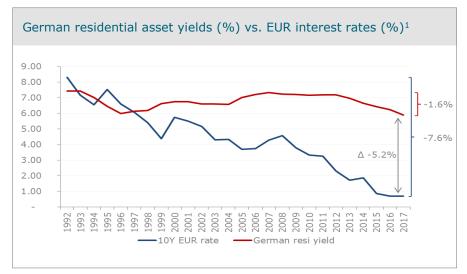
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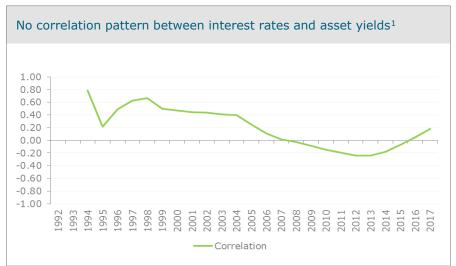
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Valuation methodology for German residential properties is primarily based on market prices for assets – not on interest rates

- > While market prices are affected by general interest rate levels, there is **no significant correlation**.
- > Other factors such as supply/demand imbalance, rental regulation, market rent growth, location of assets etc.

 outweigh the impact of interest rates when it comes to pricing residential real estate.
- > The **steep decline in interest rates** (down by 760bps since 1992) is **not mirrored by asset yields** (down by 160bps since 1992).
- > Asset yields outperformed interest rates by ca. 240bps on average since 1992 and 520bps in June 2016.





¹ Yearly asset yields vs. rolling 200d average of 10y interest rates Sources: Thomson Reuters, bulwiengesa

Three Valuation Layers with Different Volatilities

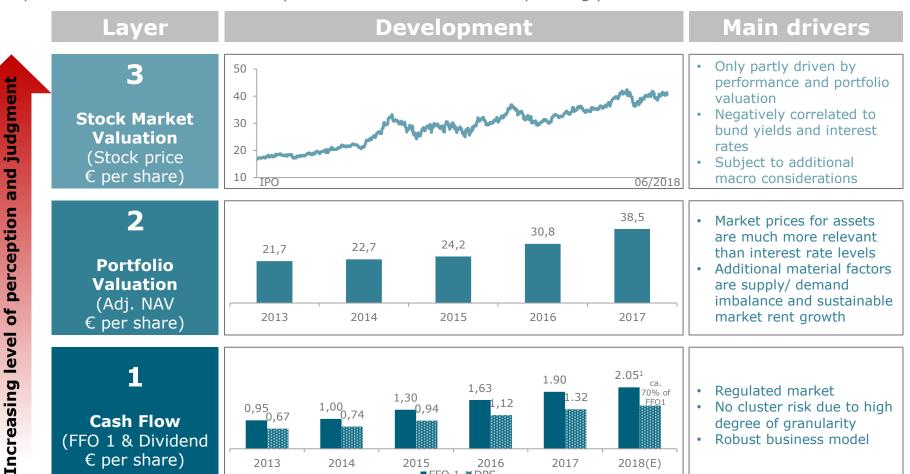
2013

2014

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High degree of stability and predictability of underlying business (layer 1) and portfolio valuation (layer 2) is not reflected in share price development (layer 3), as equity markets appear to apply valuation parameters that are substantially less material for Vonovia's operating performance.



■FFO 1 ■DPS

2016

2017

2018(E)

2015

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Optimize Apartment

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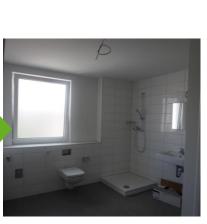




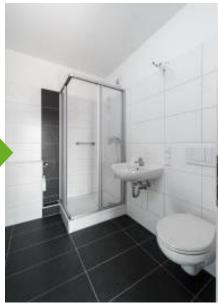














Upgrade Building

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1. Hiahliahts

2. H1 2018 Results

3. Business Update

4. Guidance

5. Wrap-up

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