

## Germany Property Refocus on Fundamentals; Initiating on German Residential Property

### Key Takeaway

**With the sector down by 20% from peak valuations in August on macro concerns, it now trades at a record-wide 470bps spread over 10-year Bunds and an even wider spread over real rates. At the same time, underlying dynamics further improve with increasing demand for affordable housing and accelerating price and rent dynamics.**

**We favor Berlin plays.** Berlin fundamentals remain strong and underlying dynamics continue to outperform other cities, providing further room for yield compression. Our top picks are therefore **DW** (Buy, PT €35) and **ADO** (Buy, PT €38). We believe the market currently underestimates their further NAV growth potential; they trade at deep discounts to forward-looking NAV and implied yields above 4.5% look conservative versus transaction multiples.

We also like **LEG** (Buy, PT €84) for its unmatched risk-return profile. The stock has been among the performance laggards this year, and is now trading at very attractive earnings yields well above the other major peers (6.6% FFO and 4.3% dividend yield as of FY 2017E). A conservative property valuation and solid balance sheet and financing make it a safe haven, in our view.

Our top pick among the opportunistic higher-yielding players is **GYC** (Buy, PT €19) based on striking valuation metrics. GYC's share price has strongly underperformed over the last 12 months, despite strong operating performance and significant NAV expansion. The stock now trades at about 25% valuation discount to the sector average earnings yield. The planned switch to the regulated market should also be a positive trigger, improving transparency.

We initiate **VNA** with a Hold (PT €32). The company needs to grow further externally in order to utilise its huge insourced service activities; with increasing transactions multiples, we see the risk of overpaying for external growth. Underlying rental growth is meagre, requiring high investments, resulting in low AFFO margins.

**Strong supply and demand dynamics underpin cash flow visibility.** Our detailed analysis shows an improving supply and demand situation in the affordable housing segment, which, combined with a large rental backlog from rent restrictions, leads to sustainable, solid earnings growth and high cash flow visibility.

### Key drivers and themes explored in detail in this report:

- Large rental growth backlog on rent restrictions (p. 13)
- Rent regulations and potential changes (p. 16 / p. 148)
- Increasing demand overhang (p. 17)
- Still high affordability levels (p. 21)
- Price and rent dynamics accelerating (p. 21)
- Modernisations and M&A as key growth drivers (p. 28)
- Berlin still the place to be (p. 36)

### Stock summary:

**DW (Buy, PT €35):** Best-quality Berlin play, with most mature portfolio.

**ADO (Buy, PT €38):** Pure Berlin play, with strongest rental growth in the sector.

**LEG (Buy, PT €84):** NRW pure play with unmatched risk-return profile.

**GYC (Buy, PT €19):** Turnaround specialist at attractive valuation.

**VNA (Hold, PT €32):** Largest residential player with the need to grow further.

**TAG (Hold, PT €12):** East Germany specialist with high stock valuation.

**ADL (Hold, PT €14):** Still in a early stage of corporate cycle; more track record needed.

**Thomas Rothaeusler \***

Equity Analyst

+49 69719187103 trothaeusler@jefferies.com

\* Jefferies International Limited

<sup>^</sup>Prior trading day's closing price unless otherwise noted.

| Company Name    | Ticker  | Mkt. Cap (MM) | Rating | Price  | Price Target | Cons. Next FY | Current FFO Estimates |       |       | Val. (P/FFO) |       |
|-----------------|---------|---------------|--------|--------|--------------|---------------|-----------------------|-------|-------|--------------|-------|
|                 |         |               |        |        |              |               | 2015                  | 2016  | 2017  | 2016         | 2017  |
| ADLER           | ADL GR  | €796.4        | HOLD   | €13.66 | €14.00       | --            | €0.28                 | €0.44 | €0.65 | 31.0x        | 21.0x |
| ADO             | ADJ GR  | €1,371.5      | BUY    | €31.10 | €38.00       | --            | €0.88                 | €1.01 | €1.37 | 29.0x        | 22.0x |
| Deutsche Wohnen | DWNI GR | €9,726.4      | BUY    | €28.82 | €35.00       | --            | €0.90                 | €1.13 | €1.29 | 29.6x        | 26.3x |
| Grand City      | GYC GR  | €2,343.1      | BUY    | €15.24 | €19.00       | --            | €0.80                 | €0.96 | €1.14 | 19.1x        | 16.6x |
| LEG Immobilien  | LEG GR  | €4,543.3      | BUY    | €71.89 | €84.00       | --            | €3.28                 | €4.16 | €4.56 | 21.3x        | 19.4x |
| TAG Immobilien  | TEG GR  | €1,733.4      | HOLD   | €11.83 | €12.00       | --            | €0.59                 | €0.65 | €0.71 | 23.1x        | 21.6x |
| Vonovia         | VNA GR  | €14,303.9     | HOLD   | €30.70 | €32.00       | --            | €1.22                 | €1.56 | €1.69 | 24.9x        | 24.0x |

## Executive Summary

Volatile external factors versus strong fundamentals

With the sector down by about 20% from peak valuations in August driven by higher interest rates, further rate hike speculation and a shift from defensives into cyclical, we believe it's time to refocus on fundamentals. The sector trades now at a record-wide 470bps spread over the 10-year Bund yield and an even wider spread over real rates. At the same time, underlying fundamentals continue to be very strong and recent data shows momentum even accelerating.

We favour best-in-class portfolio and balance sheet quality: DW and ADO

With external factors likely to remain rather volatile, we favour players with best-in-class portfolio and balance sheet quality. **DW (Buy, PT €35)** and **ADO (Buy, PT €38)** are therefore our top picks. We believe the market currently underestimates their further NAV growth potential – they trade at deep discounts to forward-looking NAV and implied yields of above 4.5% look conservative versus transaction multiples. Both are Berlin plays and we see residential dynamics there accelerating, providing further room for yield compression.

LEG with very attractive earnings yields and low-risk profile

We also like **LEG (Buy, PT €84)** for its unmatched risk-return profile. The stock has been among the performance laggards this year now trading at very attractive earnings yields well above the other major players (6.5% FFO and 4.2% dividend yield as of FY 2017E). A conservative property valuation and solid balance sheet and financing make it the safest haven among our coverage, in our view.

GYC is our pick among the opportunistic higher-yielding players

Our top pick among the opportunistic higher-yielding players is **GYC (Buy, PT €19)** based on striking valuation metrics. GYC's share price has been strongly underperforming over the last 12 months, despite strong operating performance (5.0% like-for-like rental growth FY 2016E) and significant NAV expansion (+26% NAVPS 2016E). The stock now trades at about 25% valuation discount to the sector average FFO I yield. The planned switch to the regulated market should also be a positive trigger, improving transparency.

Save haven in an unsafe world

In German residential property, a combination of a regulated rental market and strong demand overhang creates a large rental backlog, leading to sustainable, solid earnings growth and high cash flow visibility. We believe that this makes it the perfect safe-haven asset class in volatile markets.

German residential still catching-up to other European countries

Obviously, valuations have been on a strong upwards trend in recent years. However, from an underlying perspective, German residential is still in a catch-up phase as it starts from a much lower base compared with other European countries, and therefore is still characterised by relatively low house prices and high rent affordability. Furthermore, implied values are still well below replacement costs and privatisation margins continue to be well above implied book values. Recent large-cap deals like the €1.2bn Morgan Stanley-CIC / BGP deal also indicate increasing global asset allocation into German residential. With condominium price dynamics further accelerating, it all speaks for further yield compression.

Underlying macro picture rather supportive

With low real interest rates, recently moving more into the negative due to higher inflation, in combination with Germany running at a large current account surplus, the underlying macro picture is rather supportive for the sector, and we believe this is yet to fully impact real estate prices.

Most recent data shows further acceleration of underlying dynamics

Underlying residential dynamics have been moving up over the last six years and most recent data shows a further acceleration, with Berlin remaining the hottest spot. The IMX apartment price / rent index for the top-5 cities is up by 17% / 7% year-on-year as of September 2016, with Berlin up 24% / 10%, reflecting increasing yield compression. We believe Berlin remains the place to be as it still offers attractive upside to converge with other major cities – supportive for the Berlin plays DW and ADO.

Further revaluation upside for the listed sector

Condominium yields for the top cities trending below the 3.5% level and portfolio transaction yields also falling below the 4% level for recent Berlin assets suggest further revaluation upside for the listed players. We notice increasing asset allocations from

Key underlying drivers continue to remain positive

institutional investors, both domestic as well as global, into the sector (e.g. Morgan Stanley / CIC, Patrizia / local pension fund), contributing to further yield compression, in our view.

Sector switching from external to internal growth mode

The key underlying drivers for the sector, which are a widening supply / demand gap in the affordable living / rental segment and solid wage growth, remain rather positive. Germany has been in a positive net migration trend for five years, recently pushed to peak levels with the refugee influx. At the same time, new supply of affordable apartments remains rather low, which is mainly a result of low construction activity (low returns on regulated affordable housing rents), maturing social housing units and more or less full occupancy.

M&A within the listed sector to remain on the agenda

We see the sector in a transition phase from external growth to internal growth, since the right acquisition targets have become rare and strong underlying demand offers attractive returns on modernisation investments. Our key investment thesis: It's all about who has built up the right portfolio in recent years, which now offers the best rent and value upside through efficient modernisation investments over the next years. In this respect, we see the best upside for DW.

Earnings yields at record spread over bund yields

We also expect M&A within the listed sector to remain a topic and expect Vonovia to remain the major consolidator. Vonovia's German-wide portfolio and insourced service activities allow it to effectively integrate portfolios with a widespread location mix. We also see DW as a consolidator, most obviously for Berlin portfolios, but also for other metropolitan clusters.

The sector trades at 5.6% cap rate or €1,300 per sqm

On the back of the recent negative de-rating, the sector currently trades at a record 470bps spread over 10-year Bund yield, based on year-end estimates. In our view, this is a rather attractive spread given the sector's low-risk cash flow profile. We expect the sector to continue with solid earnings growth (plus 13% p.a. over the next three years), implying a further 120bps spread widening from current interest rate levels.

The sector currently trades at 11% discount to NAV 2017E, 5.5% FFO I yield 2017E and 3.8% dividend yield 2017E. This values underlying properties at a 5.6% cap rate (implied) or €1,300 per sqm (implied) as of 2016E. We forecast a further 57pbs yield compression over the next three years, driving NAVs up by 14% annually. We forecast 13% p.a. underlying earnings growth (FFO I per share) over the next three years, lifting earnings yields to 5.9% as of 2018E – at average 67% payout ratio, a 4.0% dividend yield.

## Stock Summary

Strong focus on underlying asset quality

Our investment cases are strongly based on the underlying asset quality. While we also regard corporate governance, balance sheet and financing quality as main KPIs, we see the underlying asset quality as the key valuation driver in the long term.

In order to assess the asset quality and corresponding upside, we regard the rent revisionary potential as well as underlying rental growth as particularly important.

Rent revisionary potential as key metrics for underlying asset quality

Rent regulations create a large rental backlog, which is reflected in the rent revisionary potential of each company. It basically shows the gap between current in-place rents and market rents. For example, Berlin shows the widest gap due to rather low in-place rents and strongly growing market rents. Normally, a high rent revisionary potential indicates strong location and tenant quality. In some cases (e.g. GYC), it is also a reflection of very low in-place rents of 'undermanaged' portfolios.

High underlying rental growth as key measure for portfolio quality

We also regard the underlying rental growth as a major KPI to assess portfolio quality. We define underlying rental growth as rental growth stemming from regular rent increases (based on rent index adjustments) and from re-lettings (capturing the rent revisionary potential), reflecting the underlying rent potential of a portfolio without major investment programmes. It is a key measure for rent efficiency and profitability. Among the top-3 players, DW has shown the highest underlying rental growth in recent years (DW 2.9%

Good quality locations and high revisionary potential offering best rent and valuation upside through modernisation investments

DW – high-quality portfolio offering best rental and valuation upside

ADO – less mature portfolio character offering significant rent revisionary potential

LEG – a play on earnings yields

like-for-like, LEG 2.5%, VNA 1.5% p.a. average last three years), indicating best-in-class portfolio quality.

We also believe that the better the location and tenant quality, and the higher the rent revisionary potential, the higher the potential to unlock additional rent and value upside through selective modernisation programmes. With the expected refocus of the sector from external to internal growth, we see this as becoming one of the key performance factors and expect the better quality portfolios to generate the best returns.

We regard **Deutsche Wohnen (DW)** as the best-quality Berlin play with the most mature portfolio, contributing to high property management efficiency and high transparency levels. This enables the company to show the highest underlying rental growth among the top-3 players (DW 2.9% like-for-like, LEG 2.5%, VNA 1.5%). With accelerating residential dynamics and increasing investment demand, we believe Berlin residential yields will compress further – we expect 70bps yield-shift for DW's Berlin portfolio until 2019E to 3.5% cap rate (12% CAGR NAV 2016E-2019E). We expect the recently initiated investment and new construction programme for the company's high-quality locations to unlock significant rental and revaluation potential – we estimate it to contribute additional 210bps like-for-like rental growth and about €2bn revaluations over the next five years. We also like DW for its well-balanced rental growth mix, high capital discipline and best-in-class operating margins, balance sheet and financing. Furthermore, it is a potential DAX candidate. The stock trades at 16% discount to NAV2017E and 4.5% FFO I yield 2017E, which we regard as attractive, given solid growth prospects and low-risk profile. Implied cap rate stands at 4.7% as of year-end and our price target implies a cap rate of 4.2% and a fair value per sqm of €1,850. Current transaction multiples for core+ assets are priced at 3.3%-4.0% cap rate and per sqm values well above €2,000. We initiate with a Buy and PT of €35.

**ADO Properties (ADO)** is the purest play on Berlin residential dynamics (100% Berlin) and shows the strongest rental growth in the sector (6.7% like-for-like rental growth p.a. incl. vacancy reduction over last three years). Its portfolio has a high exposure to inner-city locations (estimated 39% vs. DW's 26%), which is a positive rental and valuation driver. The company follows a more opportunistic strategy compared with its main peer DW, both with regards to internal and external growth. Its rental growth strategy is strongly focused on re-lettings through extensive modernisations of vacant apartments. It also has been rather active in acquiring further portfolios, with the most recent deal priced at 4% cap rate level – high revisionary potential and favourable funding conditions make these deals still rather accretive. ADO shows the highest rent revisionary potential (30% vs. DW's 21%), providing a good base for further rental growth. We think it can tap additional rent potential through a more active approach on modernisations and rent index adjustments. We also regard it as a takeover target, offering additional valuation upside. The stock trades at 20% discount to NAV 2017E and 4.5% FFO yield 2017E, which we regard as attractive given further NAV growth potential (14% NAV CAGR 2016E-2019E). Implied cap rate stands at 4.5% as of year-end and our price target implies 4.0% cap rate and a property valuation per sqm of €1,890 as of FY2017E. Current transaction multiples for core+ assets are priced at 3.3%-4.0% cap rate and per sqm values well above €2,000. We initiate with a Buy and PT of €38.

**LEG Immobilien (LEG)** is a North-Rhine-Westphalia (NRW) pure-play and offers one of the best risk-return profiles in the sector with high cash flow visibility due to defensive rental growth and best-in-class earnings yields, driven by high operating efficiency and higher-yielding assets. We like the company for its high capital discipline. It has been in a significant expansion mode, adding >40,000 units since its IPO through selective single portfolio acquisitions at attractive yields with low execution risks, almost no goodwill burden, highly NAV and FFO accretive. The company runs at excellent rental growth efficiency, which is reflected in best-in-class AFFO margins – one of the key drivers is its strong underlying rental growth (2.5% p.a. for the total portfolio and 3.2% p.a. for the free-financed part on average 2014/2015), which is close to DW's growth and well above Vonovia's (1.5%). LEG has recently turned to a more active modernisation approach,

GYC – unmatched valuation metrics offering significant upside

Vonovia – needs growth, but diluting NAV, low rent efficiency

TAG – positive momentum, but pricy share valuation

Adler – opportunistic, higher-yielding residential player with positive momentum, but share valuation not attractive enough

providing additional rent growth potential. Balance sheet and financing is rock solid and property valuation looks more on the conservative side with NCR yield expected at 6.7%-6.8% by year-end, also providing room for revaluations and further NAV growth. The stock has been among the performance laggards this year, now trading at very attractive earnings yields well above the other major players (6.5% FFO and 4.2% dividend yield as of FY 2017E). We initiate with a Buy and PT of €84.

The share price of **Grand City Properties (GYC)** has strongly underperformed over the last 12 months, despite a strong operating turnaround, continuing high rental growth (5.0% like-for-like in 2016E) and significant NAV expansion (+26% NAVPS 2016E). The stock now trades at about 25% valuation discount to the sector average FFO I yield, and the discount is even wider on an AFFO basis (50%). Even if external growth momentum came down this year from rather high levels in recent years, operating turnaround potential remains high (28% from rent revisions and vacancy reduction) and provides strong earnings and revaluation upside (+14% FFOPS, +22% NAVPS 2017E). The planned switch to the regulated market should also be a positive trigger, improving corporate governance. We initiate with a Buy and PT of €19.

We believe **Vonovia (VNA)** needs to grow further externally in order to utilise its huge insourced service activities and to be able to continue with major modernisation programmes, which is the key source of the company's rental growth. Underlying rental growth is just 1.5% annually, which is well below peers and indicates weaker portfolio quality. The company needs to invest much more than its peers in order to reach the same rental growth. Therefore, rent efficiency is rather low, which is also reflected in low AFFO margins. Furthermore, modernisation-driven rent increases are in the focus for further rent control, putting the returns of the company's large-scale investment programmes at risk. The strong external growth of recent years came with a high goodwill burden, diluting NAV growth and the conwert deal will probably further dilute. Vonovia has implicitly levered-up on yield compression over recent years, again a consequence of the high and pricy expansion mode. We initiate with a Hold and PT of €32.

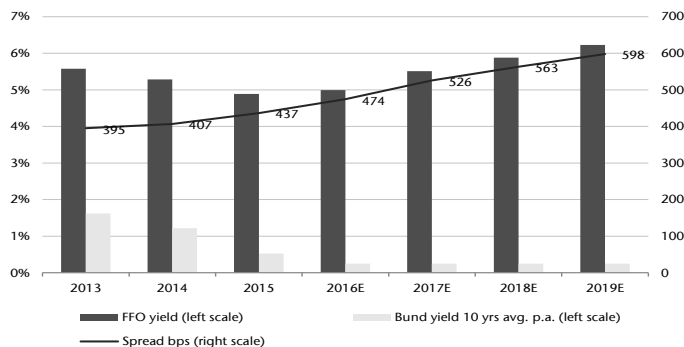
**TAG Immobilien (TAG)** is a higher-yielding residential player with a strong focus on East Germany. The company has shown positive momentum recently in respect of rental growth, mainly driven by vacancy reduction. With a high portion of shorter-term debt maturities, the company has a good chance to reduce financing costs. It also applies an active capital recycling strategy, allowing for further accretive growth. Its property valuation looks conservative and it has also improved in terms of corporate governance. However, stock valuation looks pricy and we see GYC as offering better value within the opportunistic high-yield plays. We initiate with a Hold and PT of €12.

**ADLER Real Estate (ADL)** is an opportunistic residential player with a higher-yielding portfolio focused on North and West Germany. It has built up most of its portfolio over the last three years through several portfolio deals – therefore, the company is still in a rather early stage of the corporate cycle, which is reflected in high financial leverage and high financing costs, resulting in low underlying earnings and low transparency and corporate governance levels. However, momentum is positive for most of these issues and, with the likely sale of its conwert stake to Vonovia, it should further improve, specifically in respect of de-leveraging and financing. Operating upside mainly stems from vacancy reduction and internalisation of property management. However, the company still needs to provide more track record in this respect. We also regard its subsidiary Accentro as attractive – it operates a condominium privatisation business with a focus on Berlin, a high-margin business. Overall, we like the company's turnaround progress, but stock valuation is not attractive enough to make up for transparency and corporate governance issues. We see GYC as offering better value within the opportunistic higher-yield plays. We initiate with a Hold and PT of €14.



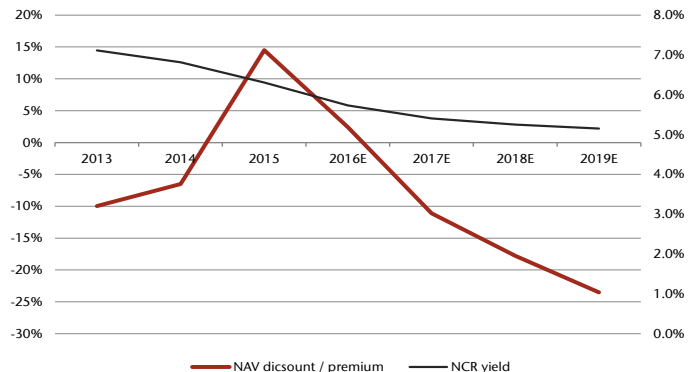
## Key investment thesis in charts

**Chart 1: Post 20% de-rating, the sector trades at 470bps record spread over the Bund yield and even wider on real rates. With higher inflation, real rates turned more negative – positive for real asset / estate prices**



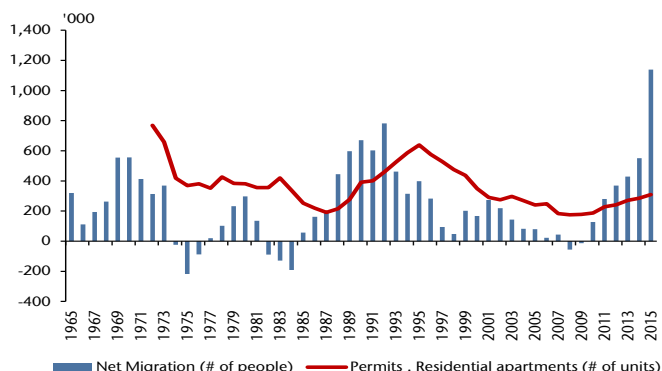
Source: Jefferies estimates

**Chart 2: The market seems sceptical about further cap rate compression / NAV growth – we believe there's further room based on accelerating underlying residential dynamics**



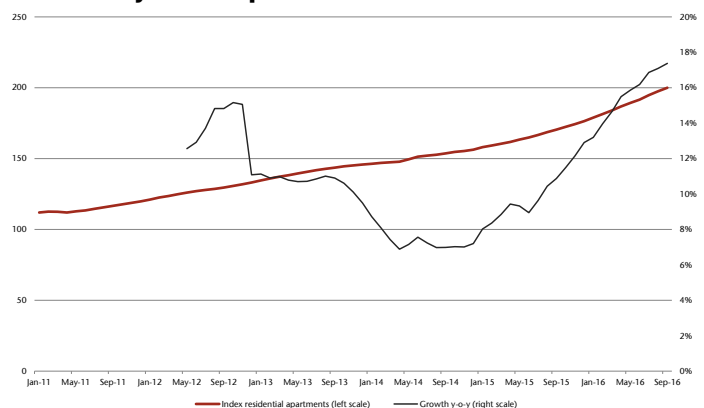
Source: Jefferies estimates

**Chart 3: Increasing demand and limited supply in the affordable housing segment as key rental growth driver, overcompensating even stricter rent controls. This trend is even more pronounced in metropolitan areas**



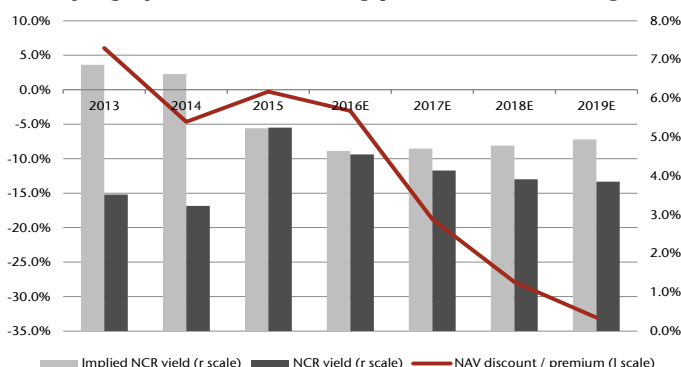
Source: Jefferies, destatis

**Chart 4: Condominium prices further accelerating – IMX top-5 city index up by 17% y-o-y as of September = peak momentum. Rent index also at peak levels. Providing room for further yield compression**



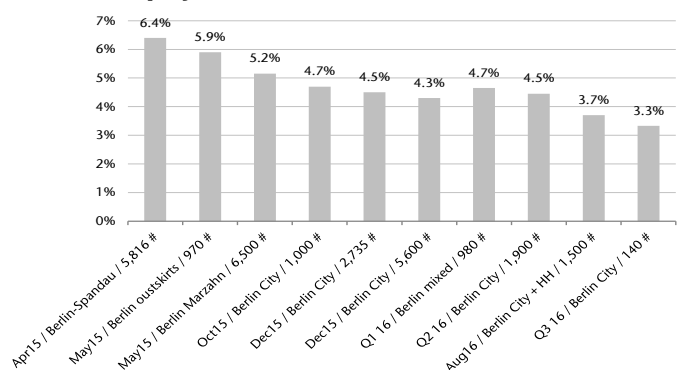
Source: Jefferies, Immobilienscout24, IMX apartment price index top5 cities

**Chart 5: Berlin: Valuations price increasing cap rates – we expect further compression on the back of strong underlying dynamics – re-rating potential if we're right**



Source: Jefferies estimates

**Chart 6: Berlin transaction multiples reaching new peak levels proving further upside for property valuations of the listed Berlin players**



Source: Jefferies, company data

## Peer group valuation

**Table 1: Peer group valuation**

| Stock rating and target price     | ADL  | ADO  | DW   | GYC  | LEG  | TAG  | VNA  | Avg top 3 | Avg all |
|-----------------------------------|------|------|------|------|------|------|------|-----------|---------|
| Recommendation                    | Hold | Buy  | Buy  | Buy  | Buy  | Hold | Hold | -         | -       |
| Price target (€)                  | 14.0 | 38.0 | 35.0 | 19.0 | 84.0 | 12.0 | 32.0 | -         | -       |
| Share price (€)                   | 14.0 | 30.6 | 28.4 | 15.2 | 70.6 | 11.8 | 30.5 | -         | -       |
| Total return incl. dividend yield | 0%   | 26%  | 26%  | 28%  | 23%  | 7%   | 8%   | 19%       | 17%     |

| Valuation                 | ADL  | ADO  | DW   | GYC  | LEG  | TAG | VNA  | Avg top 3 | Avg all |
|---------------------------|------|------|------|------|------|-----|------|-----------|---------|
| Spot NAV discount/premium | 1%   | 7%   | 17%  | -3%  | 20%  | 20% | 29%  | 22%       | 13%     |
| NAV16E discount/premium   | -7%  | -5%  | 1%   | -5%  | 6%   | 23% | 0%   | 2%        | 2%      |
| NAV17E discount/premium   | -18% | -20% | -16% | -22% | -5%  | 8%  | -12% | -11%      | -12%    |
| NAV18E discount/premium   | -23% | -31% | -23% | -33% | -12% | -3% | -18% | -18%      | -20%    |

|                 |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|
| FFO yield FY16E | 3.1% | 3.3% | 4.0% | 6.3% | 5.9% | 5.5% | 5.1% | 5.0% | 4.7% |
| FFO yield FY17E | 4.7% | 4.5% | 4.5% | 7.5% | 6.5% | 6.0% | 5.5% | 5.5% | 5.6% |
| FFO yield FY18E | 6.6% | 5.1% | 4.8% | 8.3% | 7.0% | 6.6% | 5.8% | 5.9% | 6.3% |

|                  |      |      |      |      |      |      |       |      |      |
|------------------|------|------|------|------|------|------|-------|------|------|
| AFFO yield FY16E | 0.7% | 1.8% | 2.7% | 3.7% | 4.5% | 2.8% | 0.9%  | 2.7% | 2.4% |
| AFFO yield FY17E | 2.3% | 2.3% | 1.3% | 5.3% | 4.0% | 3.2% | -0.2% | 1.7% | 2.6% |
| AFFO yield FY18E | 4.2% | 2.1% | 1.6% | 5.8% | 3.6% | 3.6% | 0.5%  | 1.9% | 3.1% |

|                      |      |      |      |      |      |      |      |      |      |
|----------------------|------|------|------|------|------|------|------|------|------|
| Dividend yield FY16E | 0.0% | 1.6% | 2.6% | 3.6% | 3.8% | 4.8% | 3.7% | 3.4% | 2.9% |
| Dividend yield FY17E | 0.0% | 2.2% | 2.9% | 4.3% | 4.2% | 5.0% | 4.1% | 3.8% | 3.3% |
| Dividend yield FY18E | 0.0% | 2.6% | 3.1% | 4.7% | 4.5% | 5.3% | 4.3% | 4.0% | 3.5% |

|   |      |       |       |      |       |      |       |       |       |
|---|------|-------|-------|------|-------|------|-------|-------|-------|
| Implied NCR yield FY16E                   | 7.0% | 4.5%  | 4.7%  | 6.7% | 6.5%  | 6.9% | 5.8%  | 5.6%  | 6.0%  |
| Implied NCR yield market rent based FY16E | 7.3% | 5.9%  | 5.7%  | 8.0% | 7.1%  | 7.3% | 6.5%  | 6.4%  | 6.8%  |
| Implied value per sqm FY16E (€)           | 783  | 1,599 | 1,576 | 884  | 1,024 | 848  | 1,289 | 1,296 | 1,143 |

|  |     |    |     |    |    |    |    |   |   |
|--|-----|----|-----|----|----|----|----|---|---|
| Potential FFO dilution from convertibles i-t-m | 10% | 0% | 10% | 0% | 8% | 0% | 0% | - | - |
|--|-----|----|-----|----|----|----|----|---|---|

| Growth                             | ADL | ADO | DW  | GYC | LEG | TAG | VNA | Avg top 3 | Avg all |
|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----------|---------|
| NAVPS growth FY16E (y-o-y)         | 22% | 34% | 28% | 26% | 13% | 8%  | 26% | 19%       | 21%     |
| NAVPS growth (CAGR 3yrs, FY15-18E) | 14% | 23% | 19% | 21% | 11% | 11% | 16% | 14%       | 16%     |

|                                    |    |     |     |     |     |     |    |     |     |
|------------------------------------|----|-----|-----|-----|-----|-----|----|-----|-----|
| FFOPS growth FY16E (y-o-y)         | 9% | 10% | 18% | 12% | 21% | 15% | 1% | 13% | 25% |
| FFOPS growth (CAGR 3yrs, FY15-18E) | -  | 15% | 20% | 26% | 13% | 8%  | 5% | 13% | 17% |

|                                  |   |     |     |      |     |    |     |     |     |
|----------------------------------|---|-----|-----|------|-----|----|-----|-----|-----|
| DPS growth FY16E (y-o-y)         | - | 31% | 36% | 120% | 20% | 4% | 19% | 22% | 26% |
| DPS growth (CAGR 3yrs, FY15-18E) | - | 27% | 18% | 42%  | 12% | 4% | 12% | 13% | 15% |

Note: Priced as at close 24 November.

Source: Jefferies estimates

## Peer group mapping

**Table 2: Basic Data**

| Company                      | ADL  | ADO  | DW   | GYC  | LEG  | TAG  | VNA  |
|------------------------------|--|--|--|--|--|--|--|
| Bloomberg                    | ADL GR   | ADJ GR   | DWNI GR  | GYC GR   | LEG GR   | TEG GR   | VNA GR   |
| Reuters                      | ADL.DE   | ADJ.DE   | DWNI.DE  | GYC.DE   | LEG.DE   | TEG.DE   | VNA.DE   |
| Market cap (€m)              | 663  | 1,363  | 9,594  | 2,353  | 4,455  | 1,708  | 14,271   |
| Free-float                   | 47%  | 63%  | 95%  | 68%  | 100%   | 81%  | 97%  |
| Free-float market cap (€m)   | 314  | 922  | 9,116  | 1,589  | 4,455  | 1,390  | 13,855   |
| Dly. trading vol (3-mth. €m) | 0.9  | 2.3  | 29.3   | 3.7  | 13.4   | 4.4  | 46.1   |
| Listing                      | Frankfurt Prime Standard                               | Frankfurt Prime Standard                       | Frankfurt Prime Standard   | Frankfurt Entry Standard   | Frankfurt Prime Standard                                 | Frankfurt Prime Standard                           | Frankfurt Prime Standard                           |
| Indices                      | SDAX, EPRA   | SDAX, EPRA                                     | MDAX, EPRA   | EPRA   | MDAX, EPRA   | MDAX, EPRA   | DAX, EPRA  |
| Web page                     | <a href="http://www.adler-ag.com">www.adler-ag.com</a> | <a href="http://www.ado.immo">www.ado.immo</a> | <a href="http://www.deutsche-wohnen.com">www.deutsche-wohnen.com</a> | <a href="http://www.grandcityproperties.com">www.grandcityproperties.com</a> | <a href="http://www.leg-wohnen.de">www.leg-wohnen.de</a> | <a href="http://www.tag-ag.com">www.tag-ag.com</a> | <a href="http://www.vonovia.de">www.vonovia.de</a> |

Source: Jefferies, company data, Factset, Bloomberg, Reuters



**Table 3: Portfolio KPIs (1)**

| Company  | ADL     | ADO     | DW                          | GYC                      | LEG                                | TAG                      | VNA                       |
|--|---------|---------|-----------------------------|--------------------------|------------------------------------|--------------------------|---------------------------|
| # units  | 47,909  | 16,706  | 158,274                     | 84,000                   | 127,941                            | 78,052                   | 337,720                   |
| Non-core / non-strategic portfolio in % of total units | 10%     | 0%      | 2%                          | 10%                      | 0%                                 | 1%                       | 5%                        |
| Top3 city locations                                    |         | Berlin  | Berlin, Hannover, Frankfurt | Berlin, Leipzig, Cologne | Dortmund, Recklinghausen, Mettmann | Berlin, Salzgitter, Gera | Dresden, Berlin, Dortmund |
| Portfolio concentration ratio                          | n/a     | 100%    | 85%                         | 60%                      | 40%                                | 42%                      | 47%                       |
| % of restricted rents                                  | n/a     | 15%     | 13%                         | 7%                       | 28%                                | 1%                       | 13%                       |
| Average rent per sqm (€)                               | 4.99    | 5.02    | 6.04                        | 5.35                     | 5.31                               | 5.08                     | 5.94                      |
| Average value per sqm (€)                              | 800     | 1,540   | 1,379                       | 900                      | 858                                | 785                      | 1,095                     |
| NCR yield  | 6.8%    | 4.7%    | 5.3%                        | 6.5%                     | 7.1%                               | 7.4%                     | 6.5%                      |
| NCR multiple (x)                                       | 14.7    | 21.3    | 19.0                        | 15.4                     | 14.0                               | 13.5                     | 15.5                      |
| Appraiser  | JLL     | CBRE    | CBRE                        | JLL                      | CBRE                               | CBRE                     | CBRE                      |
| Last property re-valuation                             | 9M 2016 | 1H 2016 | 1H 2016                     | 9M 2016                  | FY 2015                            | 9M 2016                  | FY 2015                   |
| Rent revisionary potential                             | n/a     | 30%     | 21%                         | 20%                      | 10%                                | 7%                       | n/a                       |
| Tenant fluctuation p.a.                                | c. 12%  | c. 8%   | c. 7%                       | c. 7%                    | c. 11%                             | c. 10%                   | c. 10%                    |

Source: Jefferies, company data as of 9M 2016. Please refer to chapter *German Residential Peer Group Comparison* for a detailed description of the KPIs

**Table 4: Portfolio KPIs (2)**

| Company  | ADL       | ADO       | DW                            | GYC       | LEG                     | TAG       | VNA       |
|--|-----------|-----------|-------------------------------|-----------|-------------------------|-----------|-----------|
| Average rent % deviation to index rent per sqm                     | n/a       | 3.1%      | 3.1% for the Berlin portfolio | n/a       | -4.5% for free-financed | n/a       | n/a       |
| Like-for-like rent growth, incl. vacancy change (avg. last 3 yrs)  | n/a       | 6.7%      | n/a                           | 5.0%      | n/a                     | 2.4%      | n/a       |
| Like-for-like rent growth, excl. vacancy change (avg. last 3 yrs)  | n/a       | n/a       | 3.0%                          | n/a       | 2.6%                    | n/a       | 2.4%      |
| Like-for-like rent growth, incl. vacancy change, recent            | n/a       | 5.2%      | 3.2%                          | 5.0%      | 2.8%                    | 3.8%      | n/a       |
| Like-for-like rent growth, excl. vacancy change, recent            | n/a       | 4.0%      | 3.2%                          | 2.1%      | 2.4%                    | 1.9%      | 2.8%      |
| Like-for-like rent growth target, incl. vacancy change, current FY | n/a       | 5.0%      | n/a                           | n/a       | n/a                     | n/a       | n/a       |
| Like-for-like rent growth target, excl. vacancy change, current FY | n/a       | n/a       | 2.5%                          | n/a       | 2.4%                    | n/a       | 3.0-3.2%  |
| Vacancy rate   | 11.1%     | 2.6%      | 1.8%                          | 8.1%      | 3.1%                    | 6.7%      | 2.8%      |
| Capex per sqm avg. last 3yrs (€)                                   | n/a       | 22.4      | 17.2                          | 13.9      | 14.6                    | 12.6      | 27.4      |
| o/w maintenance  | n/a       | 6.3       | 9.8                           | 5.5       | 7.2                     | 5.8       | 11.9      |
| o/w modernisation incl. capitalised maintenance                    | n/a       | 16.1      | 7.4                           | 8.4       | 7.4                     | 6.8       | 15.4      |
| Capex / expense ratio (most recent)                                | 38% / 62% | 74% / 26% | 57% / 43%                     | 70% / 30% | 51% / 49%               | 65% / 35% | 64% / 36% |
| Modernisation / Rent growth ratio (avg. last 3yrs, x)              | n/a       | 2.4       | 2.5                           | 1.7       | 2.9                     | 2.8       | 6.3       |
| Modernisation expense-to-tenant ratio                              | n/a       | 50%       | 40%                           | 50%       | 70%                     | 40%       | 70%       |
| Rental loss (non-recoverable) in % of gross rents p.a.             | n/a       | c. 1%     | 1%                            | c. 1-2%   | 1%                      | c. 2%     | c. 1%     |

Source: Jefferies, company data as of 9M 2016. Please refer to chapter *German Residential Peer Group Comparison* for a detailed description of the KPIs

**Table 5: Financing KPIs**

| Company                            | ADL  | ADO       | DW        | GYC  | LEG    | TAG       | VNA  |
|------------------------------------|--|-----------|-----------|--|--------|-----------|--|
| Net LTV, recent                    | 74%  | 36%       | 42%       | 50.1% excl. hybrid equity, 39.5% incl. hybrid equity | 49%    | 56.9%     | 51% excl. hybrid = equity, 47% excl. hybrid = equity |
| LTV target                         | about 60% / 67% in 2017 our / company definition | 45% - 50% | 35% - 40% | < 45%, incl. hybrid = equity                         | < 50%  | < 60%     | mid-to low forties, incl. hybrid = equity            |
| % of debt maturing before end 2018 | 15%  | 10%       | 1%        |  | 1%     | 40%       | 18%  |
| % of debt fixed or hedged          | n/a  | c. 100%   | c. 84%    | 97%  | 92%    | 90%       | 99%  |
| Average debt maturity (yrs)        | c. 6   | c. 6      | c. 9      | c. 7   | c. 11  | c. 9      | c. 7   |
| Average financing rate             | 4.0%   | 2.1%      | 1.6%      | 1.6%   | 2.1%   | 3.2%      | 2.3%   |
| Capital market debt ratio          | 26%  | 0%        | 20%       | 64%  | 8%     | 19%       | 82%  |
| Un-encumbered asset ratio          | n/a  | 0%        | c. 15-20% | 53%  | c. 15% | c. 3%     | 56%  |
| Bullet loan ratio                  | n/a  | 50%       | 40%       | 17%  | 17%    | 24%       | 22%  |
| Corporate credit rating            | not rated  | not rated | A- / A3   | BBB+ / Baa2  | Baa1   | not rated | BBB+   |

Source: Jefferies, company data as of 9M 2016. Please refer to chapter *German Residential Peer Group Comparison* for a detailed description of the KPIs

**Table 6: Other financial KPIs**

| Company                                   | ADL | ADO       | DW  | GYC  | LEG | TAG | VNA    |
|---|-----|-----------|-----|------|-----|-----|--------|
| NOI margin, recent                        | n/a | 83%       | 79% | n/a  | 76% | 80% | n/a    |
| Adj. EBITDA rental margin, recent         | 60% | 74%       | 74% | 75%  | 70% | 62% | 69%    |
| FFO I margin, recent                      | 14% | 48%       | 57% | 47%  | 55% | 34% | 48%    |
| NAVPS growth, current FY, y-t-d           | 2%  | 14%       | 10% | 17%  | 0%  | 10% | -2%    |
| NAVPS growth CAGR FY13-16E                | 48% | n/a       | 30% | 36%  | 10% | 4%  | 11%    |
| FFOPS I growth, recent, y-o-y, avg w shrs | 95% | 6%        | 22% | 6%   | 21% | 16% | 7%     |
| FFOPS I growth CAGR FY13-16E              | n/a | 59%       | 20% | 26%  | 16% | 15% | 17%    |
| DPS growth current FY y-o-y               | n/a | 31%       | 36% | 120% | 20% | 4%  | 19%    |
| DPS growth CAGR FY13-16E                  | n/a | n/a       | 29% | n/a  | 16% | 18% | 17%    |
| Payout ratio (recent) in % of FFO I       | 0%  | 44%       | 60% | 28%  | 69% | 87% | 72%    |
| Payout ratio (targeted) in % of FFO I     | 0%  | up to 50% | 65% | 50%  | 65% | 84% | c. 70% |

Source: Jefferies, company data as of 9M 2016. Please refer to chapter *German Residential Peer Group Comparison* for a detailed description of the KPIs

Accelerating price and rent dynamics, excellent supply/demand, affordability still attractive

Rent regulations create a large rental backlog, providing room for further steady growth

Rent regulations create rental backlog – we estimate 15% revisionary potential for the sector

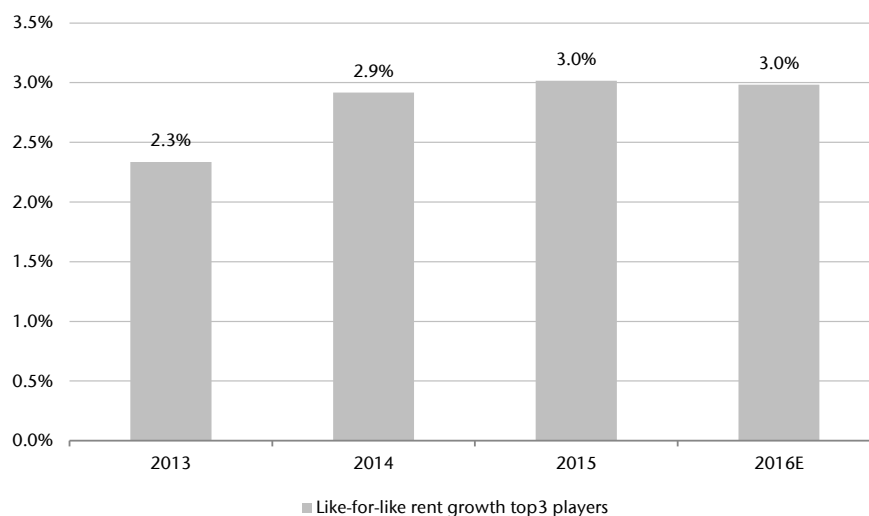
## Sector Key Investment Thesis

Our assessment of the underlying sector drivers confirms ongoing strong dynamics, with most recent data for house prices and rents even suggesting higher momentum. We explain the key benefits of rent regulations and also show potential risks that might arise from new regulation initiatives. We also take a detailed look at the supply/demand situation in the affordable rental segment, which remains rather favourable for rental markets. Furthermore, we check German residential prices relative to those of other countries and come to the conclusion that Germany is still 'behind the curve'. Affordability levels are still attractive, also supported by solid wage growth.

### Rent regulation with benefits

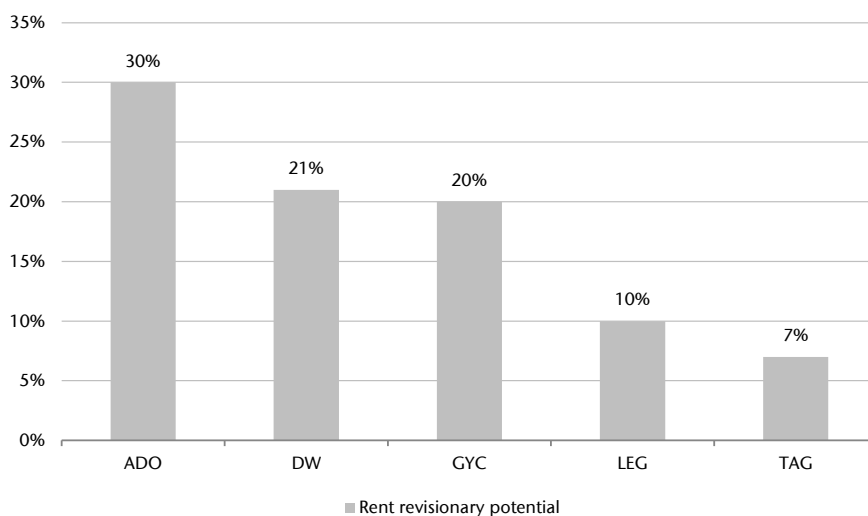
The German residential rental market is highly regulated (see Appendix), which at first glance seems to be a negative, however also comes with benefits. Rent regulations create a large rental backlog, providing ample room for further steady growth, which besides high occupancy levels is one of the main reasons for the sector's low cash flow volatility. The sector's rental growth was about 3% p.a. over the last three years, showing that market forces (demand overhang) compensated for regulations, which leads to a large rental backlog, providing ample room for further steady growth.

**Chart 7: Solid rental growth despite rent regulation**



**Source: Jefferies estimates, company data, VNA, DW, LEG, TAG, ADO, GYC like-for-like rent growth excluding like-for-like vacancy change**

Furthermore, rent regulations lead to a significant pile of rent revisionary potential within the portfolios, providing a solid base for future rental growth. We estimate the sector's rent revisionary potential at about 15%. The rent revisionary potential stems from the gap between lower-regulated re-letting rents for new tenants (wasn't regulated at all until the rental cap, 'Mietpreisbremse') and higher regulated in-place rents for existing tenants, and basically comes on top of regular and modernisation-driven rent increases.

**Chart 8: Significant rent revisionary potential**


**Source: Jefferies, company data as of 9M 2016, LEG as of FY 2015. Revisionary potential defined as gap between in-place-rent per sqm/month and market / re-letting rent per sqm/month**

Rent revisionary potential to be realised only in the long term

High investment demand + low regulated rents = yield compression

Solid rental growth despite tighter rent regulations

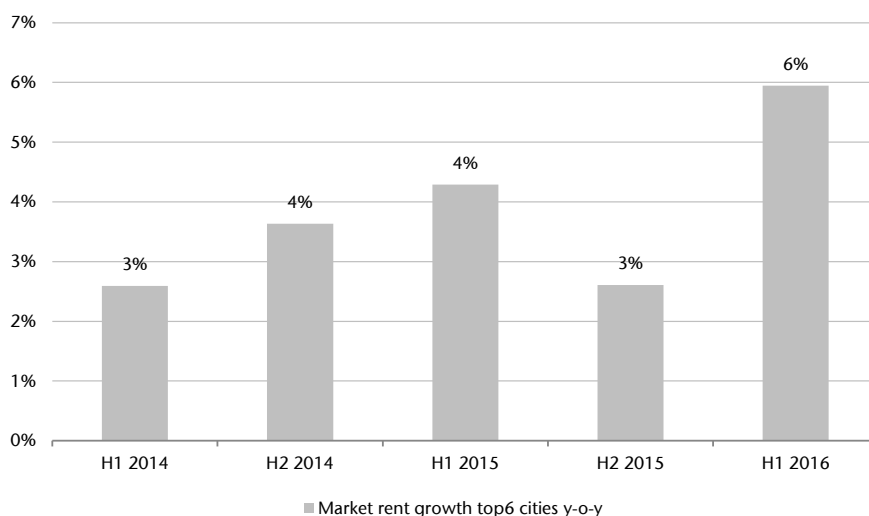
The rent revisionary potential can be realised only in the longer term (currently nine to 14 years), since it depends on the annual tenant turnover (7%-11%). It is also not a static number – the numbers reported by the companies refer to the rent revisionary potential as of now, but it can significantly change, mainly depending on market rent dynamics, apartment upgrades lifting them into higher rent index clusters etc. DW, for example, has been able to keep its revisionary potential at rather high levels (>20%) over recent years despite realising high rental growth and rather low modernisation investments. Overall, we regard the rent revisionary potential as a key performance indicator.

Another positive impact of rent regulations is on valuations, since yield compression is the variable parameter if strong investment demand meets low (regulated) rent levels. Austria is a good example, since it is characterised by a high residential regulation level (even higher than that of Germany) and also solid investment demand. BUWOG, a residential player with portfolios in Germany as well as in Austria, shows its Vienna portfolio valued at 3.5% NCR yield versus its Berlin portfolio at 5.2% based on most recent property valuations.

With increasing rent dynamics and the fact that the German residential market is still dominated by rentals (home ownership rate below 50%), affordable housing has become increasingly a political topic, and rent regulations were tightened in recent years. The most prominent new measure was the introduction of a rental cap on re-lets, called the 'Mietpreisbremse', in June 2015. Until then, re-lets weren't regulated at all. However, first evidence shows that the measure didn't have a negative impact on rental growth – we think, again, proof that market forces are just strong enough to compensate for regulation. Furthermore, the law allows various exemptions to increase rents above rent-cap levels (e.g. 'extensive modernisations', furnished apartments) and it also doesn't contain a sanction mechanism if a landlord charges a higher rent.



**Chart 9: Higher rent growth despite rent cap law introduced in June 2015**



**Source: Jefferies; Jones Lang LaSalle (JLL) City Profiles; top6 cities: Berlin, Cologne, Dusseldorf, Frankfurt, Hamburg, Munich**

New rent regulations on the agenda, potentially become effective law only in 2-3 years from now

A further adjustment of residential rent regulations is on the political agenda and the major parties have already positioned themselves on the topic for the federal election campaign. Political topics that are not on the priority list – as is the case with rent regulations, in our view – typically take up to two years from the election date to become effective law. For example, the rental cap, which was part of the federal election in autumn 2013, only became effective law in June 2015. We therefore expect potential new rent regulations to become effective law only in 2018/2019.

New regulation proposal focusing on three issues

The new regulation proposals basically focus on three issues: a) setting up a new survey methodology for rent indices, mainly by extending the reference period; b) limiting the portion of modernisation expenses that the landlord can charge to the tenant; and c) a further tightening of the rental cap, mainly by closing some loopholes.

New rent index system might have most impact

In our view, the adjustment of rent index methodology would have the most impact, since rent indices are the main instrument to adjust rents of existing leases in Germany. However, it is also the issue where political positions diverge rather widely (Social Democrats pro, Christian Democrats contra).

Broad consensus on tighter rent-cap regulations, also limitation of modernisation-driven rent increases likely

Broad consensus predominates on the closing of loopholes of the rental cap. We therefore see the implementation as rather likely. However, we estimate the impact on rental growth as limited, as long as the exemption of ‘extensive modernisations’ remains unchanged. Recent proposals mainly concentrate on the obligation for landlords to disclose the previous rent, which in our view wouldn’t have much impact on the listed players. We also see some likelihood for the limitation of modernisation allocations to tenants, but also here the overall impact on the sector’s rental growth should be limited.

**Table 7: New rent regulation proposals (by the Social Democrats) and potential impacts**

| Key measure   | Description   | Position Christ Democrats | Potential impact   |
|---|---|---------------------------|--|
| Adjustment of rent index ('Mietspiegel') methodology by extending the reference period from four to eight years   | The rent index ('Mietspiegel') is the most relevant instrument for measuring the 'local comparable rent'; theoretically it reflects market rent dynamics of the last four years (statistical reference period), however, the final outcome is the result of negotiations between tenant and landlord associations and local politicians | Decline                   | Most relevant measure with potentially negative impact on the sector's rental growth as the rent index ('Mietspiegel') is the most relevant instrument for increasing rents; the later it becomes effective law, the lower the potential negative impact, since it then captures fewer years with lower rental growth; rental growth dynamics started to pick-up from 2010; furthermore, the shorter the reference period, the lower the negative impact, as rent momentum accelerated over the last six years; the initial draft considered the extension of the reference period to 10 years |
| Tightening of the so-called 'Kappungsgrenze' by extending the rent increase maximum of 15%/20% over a three-year period to four years   | Regular rent increases are capped by the so-called 'Kappungsgrenze': Currently, they can be raised by no more than 15%/20% over a three-year period; the lower 15% cap can be applied by municipalities with 'tight' housing markets  | Not yet commented         | Limited impact since average rent increases of the listed players are typically below the '15%/20% over four years' level  |
| Tightening of the 'Modernisierungsumlage' by limiting the portion of modernisation expenses that the landlord can charge to the tenant from a maximum of 11% to not more than 8% and implementing a hard cap of €3 per sqm over eight years | Rent increases are capped at a maximum of 11% of the modernisation expenses on an annual base   | Not yet commented         | Limited negative impact on the sector's rental growth; Potential negative impact for players focusing on modernisation-driven rental growth (e.g. Vonovia), as it theoretically reduces the return on investment by almost one third; we expect the 'hard cap' rule to have a limited impact, since most of the modernisation projects remain below the €3 per sqm hurdle  |
| Specifying the so-called 'Härtefallregelung' by capping the rent increase to not more than 40% of the household income  | The so called 'Härtefallregelung', a hardship ruling, which applies when the rent increase is significant, so far, the ruling is rather vague and needs to be agreed on an individual base  | Not yet commented         | This would have a further negative impact on modernisation returns; however the magnitude of the impact is unknown   |
| Adjustment of the rent cap ('Mietpreisbremse') by obligate the landlord to disclose the previous rent   | Re-lets are protected against cuts below the rent level of the previous lease and so far, there is no obligation for the landlord to disclose the previous rent, this is widely seen as the main reason for the low efficiency of the rent cap  | Agree                     | Limited impact for the listed players, as we assume them not to actively bypass the rent cap through this loophole; however, anecdotal evidence shows this to be a common practice among smaller residential players and amateur landlords.  |

Source: Jefferies

Social Democrats focus on rent restrictions, Christ Democrats on incentivising new supply

Key arguments Social Democrats

Key arguments Christ Democrats

Rent regulations to remain on the political agenda

While the Social Democrats focus their housing topic mainly on rent restrictions, the Christ Democrats' key position is to incentivise social housing construction. So, both positions are rather conflicting, since rent limitations limit further supply.

The key arguments of the SPD for further tightening: Strong rent dynamics lead to gentrification. Modernisation investments are intended to increase tenant turnover, as some can't afford the rent anymore, enabling the landlord to realise re-let reversionary potential.

Key arguments from the CDU against further tightening of rent regulations: It prevents investments in modernisation and construction, which is counter-productive as there is strong demand overhang in affordable living.

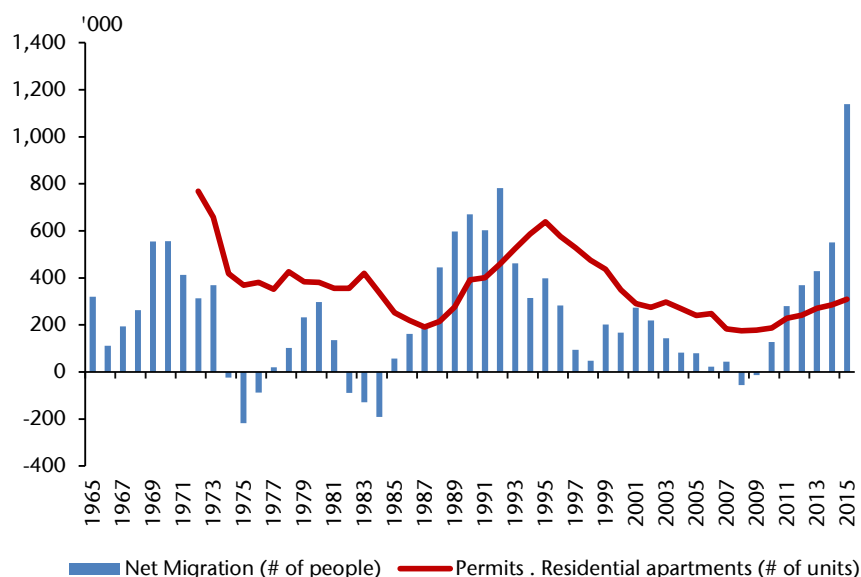
With increasing rent dynamics, we expect the tightening of rent regulations to remain on the political agenda. However, with the federal election in autumn next year, the outcome is rather vague. Recent local elections in Germany (e.g. Berlin, Mecklenburg-Vorpommern) showed a left-wing-trend, which might be seen as an early indicator for more rent regulations.

Continuing favourable supply / demand for affordable housing

## Strong demand overhang

The affordable housing segment, where all listed players operate, is characterised by a favourable supply/demand situation. Demand is mainly driven by positive net migration and urbanisation trends. On the other hand, the supply side is negatively impacted by low construction activity, a declining social housing stock and close-to-zero vacancy.

**Chart 10: Housing supply shortage / demand overhang – the gap is widening**



Source: Jefferies, destatis

Strong net migration trends

Demographics in Germany have been on a strong upwards trend since 2010, with almost 3m net migration (net of move-in and move out) and 1.8m net population growth (net of net migration, birth and mortality rate). Net migration was 1.2m in 2015, roughly double the rate of 2014, due to the refugee influx. The number of additional refugees is estimated at about 0.3m in 2016.

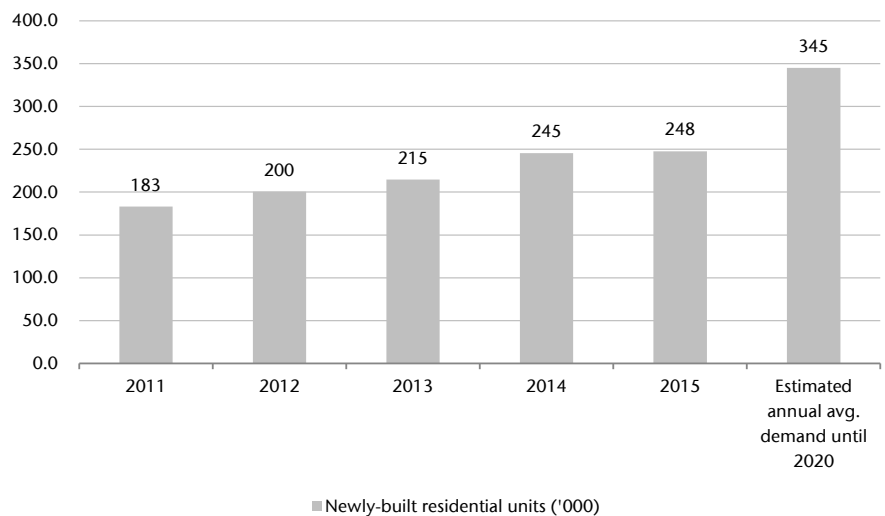
New construction activity mainly in the upper-quality condominium segment

In the same period, 1m new residential units were constructed. Typically, the exercise is done to compare population or household growth with the number of newly-built apartments in order to measure the supply/demand situation. However, we think this doesn't really make sense, since the major bulk of housing demand from new inhabitants refers to the affordable rental segment, while most of the new supply refers to the upper-quality condominium segment.

Housing supply shortage / demand overhang of 24%-52%

There are various sources that estimate German housing demand for the coming years. We regard data from the BBSR (Federal Institute for Research on Building, Urban Affairs and Social Development), as well as from the Institute of German Economy, as most reliable. The latter considers the most recent demographic picture including the refugee influx. It estimates the new construction demand between 310,000 and 380,000 units p.a. until 2020, a 24%-52% demand gap compared with the current construction run-rate of about 250,000 units p.a. Out of the 250,000 newly-built in 2015, only 105,000 are multi-family units, most of these in the upper-quality segment. Therefore, we believe the demand overhang for affordable rental apartments is likely much higher.

**Chart 11: Supply shortage in German housing**

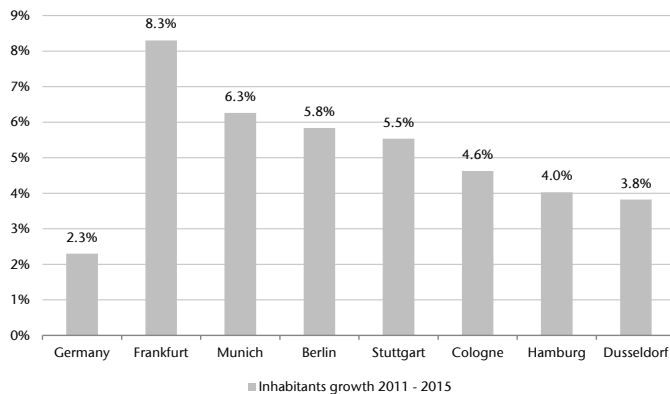


Source: Jefferies, Destatis. Institute of German Economy estimates demand of 310,000 - 380,000 units p.a. until 2020

Demand overhang much stronger in metropolitan areas

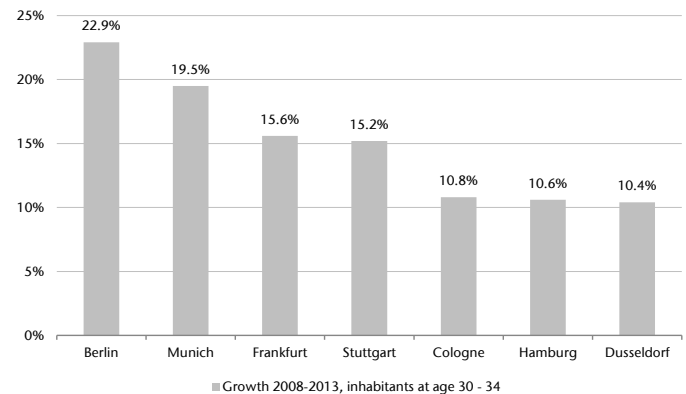
Due to strong urbanisation trends, demand is strongest in key metropolitan areas. Population growth in the key cities was about 2.3x the growth rate of Germany overall. What is even more pronounced is the growth rate of young people in metropolitan areas. The number of young inhabitants (year of birth 1973-1993) has more than doubled from 2008 to 2013 in the top-30 key metropolitan areas, according to GdW and Empirica.

**Chart 12: Key cities with stronger population growth**



Source: Jefferies, JLL, Federal Statistical Office, Census 2011 based. Extrapolation of the number of population as of 2011

**Chart 13: Key cities attracting young people**



Source: Jefferies, empirica, Report 'Schwarmstaedte in Deutschland', 2015

Low affordable housing rents and high construction costs burden returns in this segment

The main reason for the sluggish construction activity in the affordable housing segment, in our view, is the combination of rent and construction regulations, which burden construction returns due to low 'regulated' rent levels in the affordable housing segment and high 'regulated' construction costs. Therefore, replacement costs are rather high and returns are rather low, compared with the existing stock.

We see only municipal housing companies active in affordable housing construction, and only through subsidies

We believe affordable housing construction can only be profitable through subsidies. There is currently a kind of indirect subsidy for affordable housing, since residential developers are often obliged by municipalities (no federal law) to provide a fixed social

High construction and land costs compress newly-built yields

Still better yields for existing stock

New housing supply also up, but still below long-term average

Our rough estimate is that less than 10% of newly-built refers to affordable housing

Supply constraints from de facto zero vacancy in key cities

housing quota on multi-family constructions – this quota is typically 20%. However, we don't see this to have a meaningful impact on housing supply.

Replacement costs remain well above the valuation of the existing stock and the latter still offers more attractive yields. We take a Berlin inner-city location as an example: The construction costs for an average multi-family apartment in a metropolitan area are currently about €3,200 per sqm (excl. land), according to the GdW, the largest residential company association in Germany. We assume the land at €800 per sqm living space, adding to total construction costs of €4,000 per sqm. This also the level of development costs, which BUWOG, a major listed residential developer, applies in its 'built-to-sell' calculations. The average newly-built rent in Berlin is currently €12.8 per sqm/month, according to JLL, resulting in a yield of 3.8%.

This compares with yields of the existing stock of 4.5%-5.1%. For this purpose, we look at DW. Based on the current value of €1,700 per sqm and €6.4 in-place-rent for its average Berlin 'hot spot' location, the yield is 4.5%. Assuming the same apartment to be modernised (€700m investment per sqm), causing about a 60% rent-uplift to €10.3 per sqm/month, results in a 5.1% yield.

Condominiums currently yield the lowest return with a rental yield of only 3.5%, based on JLL data.

**Table 8: Rental yields of the listed sector still attractive vs. newly-built and condo**

|   | Construction costs / value<br>incl. land per sqm (€) | Avg. rent per<br>sqm/month (€) | Rental<br>yield |
|---|--|--------------------------------|-----------------|
| Newly-built, Berlin                                   | 4,000  | 12.8                           | 3.8%            |
| DW Berlin, existing stock, 'hot spot', existing lease | 1,716  | 6.4                            | 4.5%            |
| DW Berlin, existing stock, 'hot spot', re-letting     | 2,416  | 10.3                           | 5.1%            |
| Condominium, existing stock, Berlin                   | 3,320  | 9.6                            | 3.5%            |

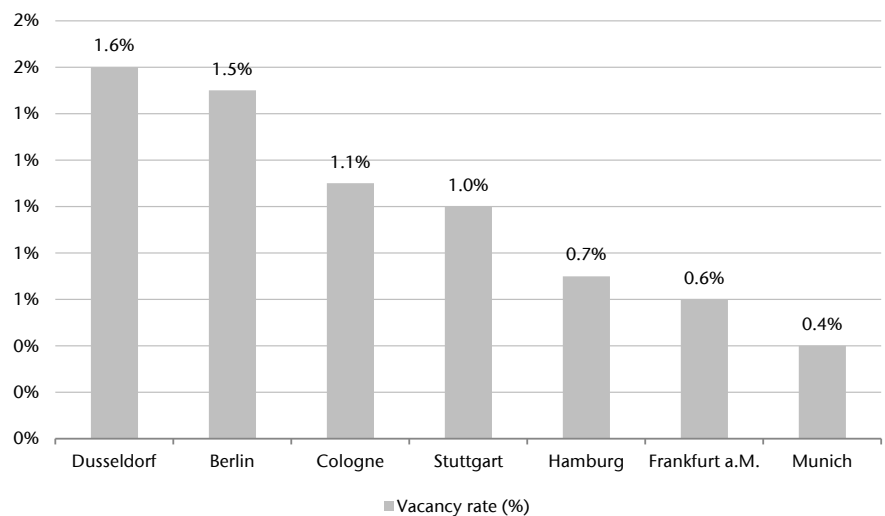
Source: Jefferies, DW, JLL, BUWOG

While there is also a positive development of the supply side – new residential construction activity has significantly recovered over the last five years with permits plus 11% p.a. and constructions plus 9% p.a. – the absolute level is still well below the average of the last 40 years. We also believe that most of this new supply refers to the higher-quality product (e.g. condominiums) beyond the affordable housing segment, as discussed above.

Unfortunately, statistical data doesn't provide a split of newly-built quality clusters (e.g. social housing units). However, we believe the lower-quality product (affordable housing) represents a rather small portion of new construction. Residential developers are often obliged by municipalities (no federal law) to provide a fixed social housing quota on multi-family constructions – this quota is typically 20%. Multi-family accounts for roughly half of new constructions. We see municipal housing companies (e.g. the Berlin players) as rare investors in affordable living constructions. Our rough estimate is that less than 10% of newly-built (below 25,000 units) refers to affordable housing.

There are also supply constraints from record low vacancy levels. The key cities in Germany run at de facto zero residential vacancy. Furthermore, the lower-end quality cluster is characterized by a small portion of de-constructions every year, with appraiser estimates ranging between 1% and 2% of the housing stock. We assume most of this gets converted into higher-quality condominiums again.

**Chart 14: Vacancy rates in major cities close to zero**

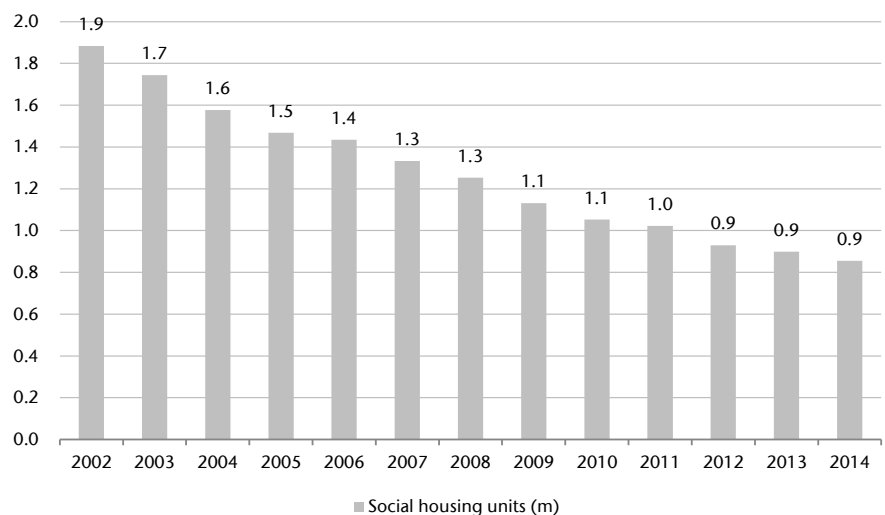


Source: Jefferies, CBRE Housing Market Report Berlin 2016. Vacancies in apartment buildings on the active market; vacancy rate as of 2014.

Declining social housing stock also constraining the supply side in affordable living

Another factor constraining the supply side is a declining social housing stock, as the large-scale social housing programmes from the 70/80ies reach their maturity. The corresponding restricted/subsidised rents turn into freehold. According to GDW, the number of social housing units declined by about 1m from 2002 until 2014 – this corresponds roughly to the current number of residential units owned by the listed players, or about 2.4% of total residential units in Germany.

**Chart 15: Declining social housing stock**



Source: Jefferies; Bundesverband deutscher Wohnungs-und Immobilienunternehmen (GdW)

We expect continuing supply shortage in the affordable housing segment

We currently struggle to see any trigger for a meaningful pick-up of construction activity in the affordable housing segment. There has been an initiative by the Christian Democrats this summer to incentivise construction through tax benefits. However, no consensus was found on this among the coalition partners. The draft considered increased tax deductibility on construction costs, with a cap on construction costs in order



Municipal housing companies as the only players to build affordable housing

Vonovia and DW both unlocking existing land bank potential through new constructions – but limited impact on the supply side

German residential still in a catch-up mode

German residential still behind the curve of other countries

to keep it in the affordable housing segment. It didn't consider a cap on rents, which was the main criticism by the Social Democrats. Overall, the draft wasn't expected to change the supply side in a meaningful scale.

There are also selected residential construction activities from municipal players as well as from the listed players. For example, Berlin municipal housing companies have the vague plan to build more than 50,000 new residential units until 2025, or about 5,000 p.a., corresponding to roughly half of the current number of newly-built apartments in Berlin – widely seen as a rather ambitious plan, given limited land and increasing construction costs.

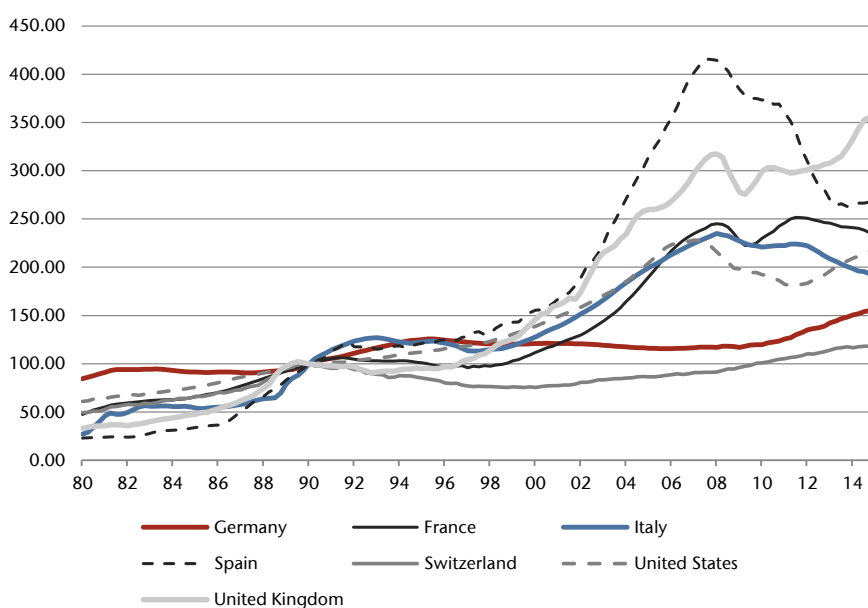
Both Vonovia and DW have announced they will use the existing land bank to build new residential units, allowing for up to 10,000 units each. However, these initiatives can only be realised over the mid- to long term (we estimate about 1,000-1,500 units p.a.) due to the permission bottleneck, and therefore it shouldn't have a meaningful impact on housing supply. Furthermore, we expect rent levels of these apartments to be above the affordable segment.

## High affordability and accelerating residential dynamics

Despite the recent upswing, we see German residential still in a catch-up phase as it starts from a much lower base compared with other European countries and therefore it is still characterized by relatively low house prices and high affordability levels. Solid wage growth is also rather supportive.

The German residential market awakened only in 2010 after decades of no growth triggered by tax-incentivised oversupply post-reunification. During this period, other countries like the UK and Spain experienced rather high growth. Rebased as of 1990, German residential prices significantly underperformed those of most other European countries, as well as the US.

**Chart 16: German house prices still behind the curve of other countries**

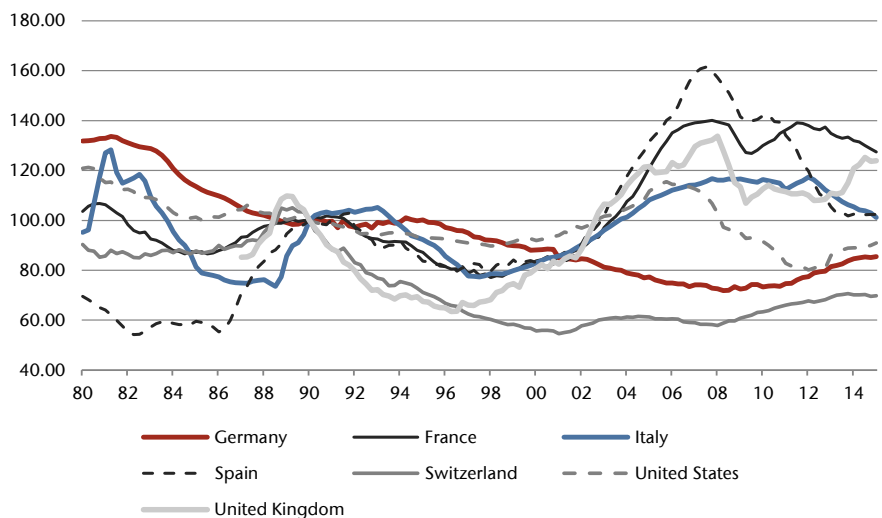


Source: Jefferies, OECD, house price index

Low house price to income ratio in Germany

Also, the price-to-income ratio (house prices relative to income) in Germany is still inexpensive relative to other countries, therefore affordability is high.

**Chart 17: German house prices to income – high affordability**

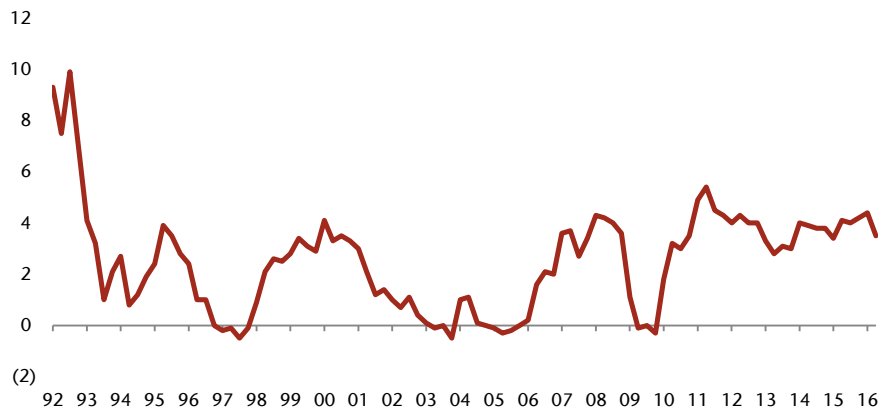


Source: Jefferies, OECD, house price / income index

Solid wage growth supportive for high affordability

A supportive factor for the high affordability levels has also been the solid wage growth in Germany in recent years, with growth rates of about 4% during the last five years. Overall, we regard wage growth as one of the key drivers for the affordable rental models of the listed sector.

**Chart 18: Solid wage growth in Germany**



Source: Jefferies, Bloomberg

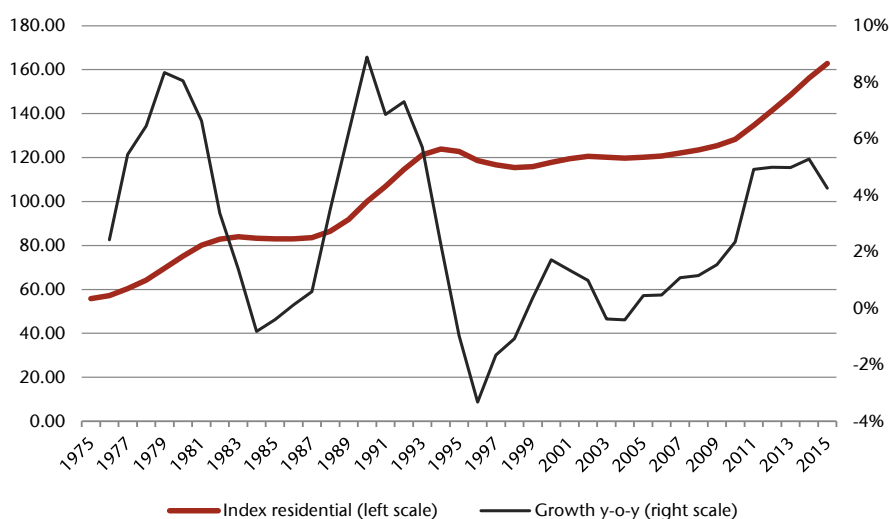
OECD data to measure relative residential performance

While we use OECD data to measure the relative price and rent level versus other countries, we look at three Germany-specific house priced indices to track the absolute dynamics:

BulwienGesa residential index

A) **BulwienGesa house price index:** This captures the development of prices for new condominiums, terraced houses and properties for single-family homes, therefore providing a broad base for housing market dynamics. It is the one with the longest history, dating back until 1975. It is released annually.

**Chart 19: BulwienGesa house price index up 27% since 2010**

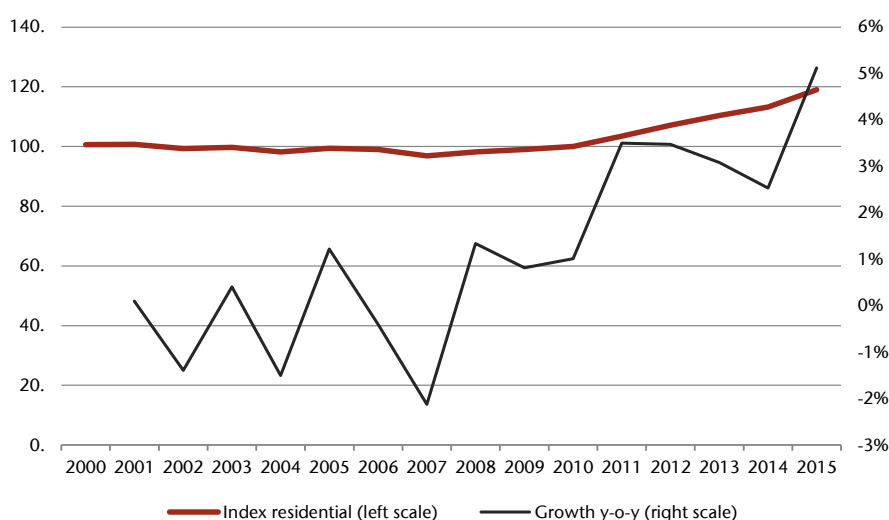


Source: Jefferies, bulwiengesa AG; rebased 1990=100; until 1990 West Germany

Federal Statistical Office house price index

**B) House price index of the Federal Statistical Office:** This is based on the findings of the valuation committees in the federal states. It covers all transactions that include land. It doesn't consider transactions that exclude land. It also gives a broad picture of housing market dynamics. It is released quarterly, however with some time lag.

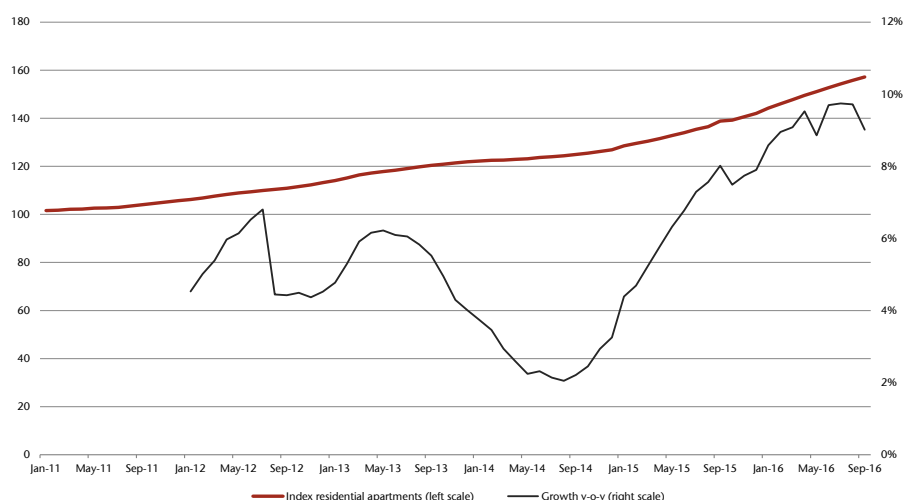
**Chart 20: Federal Statistical Office house price index up 19% since 2010**



Source: Jefferies, Destatis

IMX house price index showing most recent dynamics

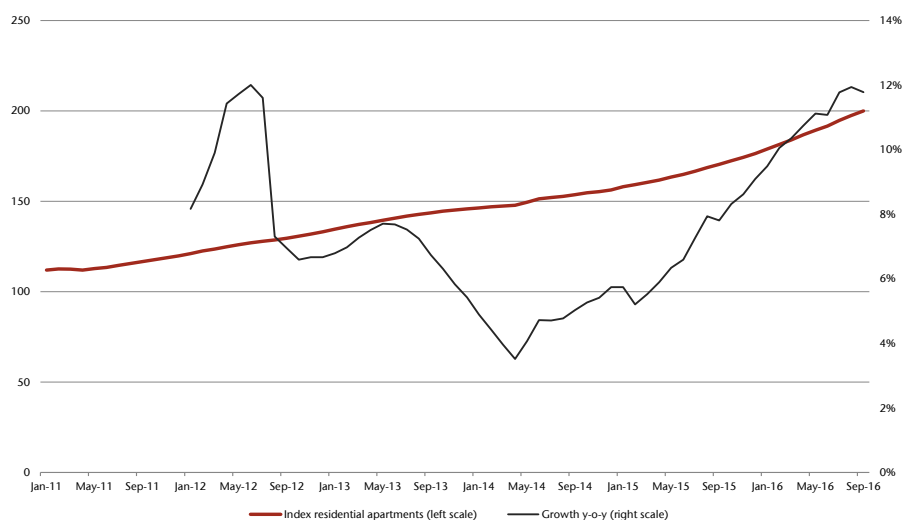
**C) IMX house price index:** This is based on asking prices of the major German property portal 'ImmobilienScout24' and is released on a monthly base. Asking prices are typically above transaction prices, which is why the index probably overshoots real prices. We also have the impression that it has a stronger spin to metropolitan areas. It is a relatively new index, dating back only until 2007. It also tracks price developments of the five biggest cities in Germany and provides a split into existing and newly-built, as well as apartments and single-family homes.

**Chart 21: IMX house price index for apartments up 49% from 2010 to 2015**


Source: Jefferies, immobilien Scout24

BulwienGesa and Federal Statistical Office indices broader based, IMX with strong focus on apartments in metropolitan areas

The two broader, transaction-price-based indices show an increase of residential prices of 19%-27% from end-2010 to end-2015. During this period, the IMX residential price index for apartments is up 49% for Germany and up 58% for the top-5 cities (Berlin +76%, Hamburg +49%, Cologne +54%, Frankfurt +50%, Munich +58%). We think the high deviation of the dynamics of the broader-based indices and the IMX is a good reflection of the gap between the dynamics in metropolitan areas versus those in Germany overall.

**Chart 22: IMX house price index for the top-5 cities up 58% from 2010 to 2015**


Source: Jefferies, immobilien Scout24

JLL data providing condominium and market rent data on a per sqm base

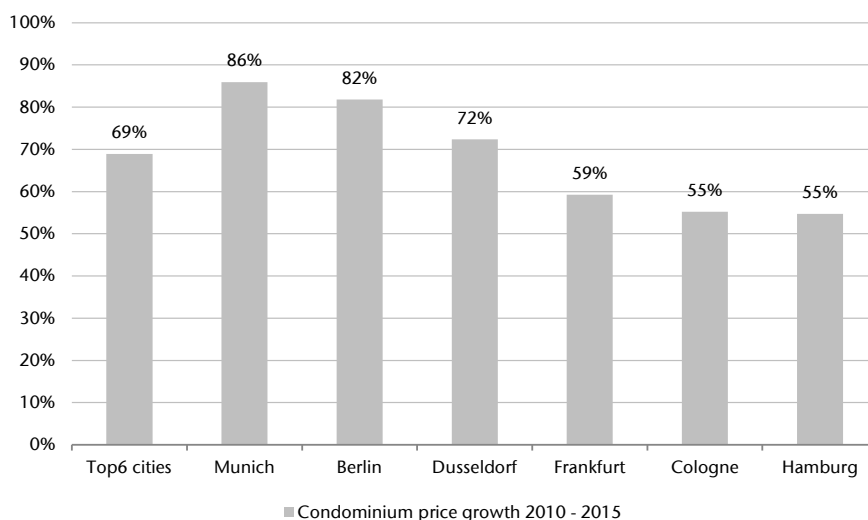
We also use Jones Lang LaSalle's (JLL) City Profile data in order to track house and rent price dynamics for the key cities. As with the IMX, it is based on asking prices, but on a broader base as it covers data of various property portals (not only that of Immobilien Scout 24) and also includes newly-built as well as single-family homes. The advantage of the data is that it is not only index-based, but calculates average prices and rents per sqm. It is published semi-annually in August and February, and represents half-

JLL data also showing ongoing high momentum

year average numbers, therefore providing more smoothed growth rates versus the monthly-based IMX. Please refer to the appendix for the JLL key data.

The Jones Lang LaSalle data shows condominium prices for the top-6 cities up by 69% from 2010 to 2015, with the strongest growth rates for Munich and Berlin. While growth rates for Munich and Berlin have been close, the gap between absolute rent levels is huge, with Munich at €6,500 per sqm and Berlin at €3,300.

**Chart 23: JLL condominium prices up by 69% from 2010 to 2015 for the top-6 cities**

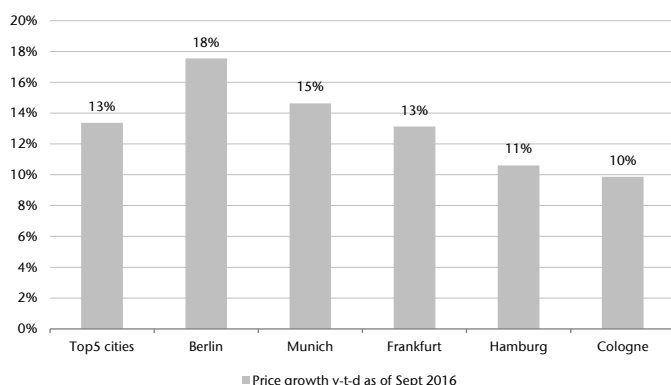


Source: Jefferies, JLL; based on 2H 2015 vs. 2H 2010

IMX showing recent dynamics to accelerate

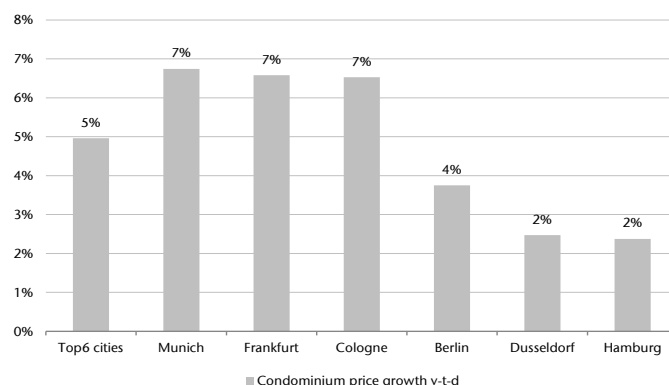
The IMX shows an accelerating momentum of house price growth this year, with the index for apartments in the top-5 cities up by 12% year-to-date as of September. The JLL data shows lower momentum, however it captures dynamics only until June and is also based on half-year average numbers. Therefore, the IMX data suggests that house price dynamics accelerated recently.

**Chart 24: IMX apartment price index strongly up ytd**



Source: Jefferies, immobilienscout24, ytd as of Sept 2016

**Chart 25: JLL data at lower momentum**



Source: Jefferies, JLL, 1H 2016 vs. 2H 2015

Tracking rental growth on market rents

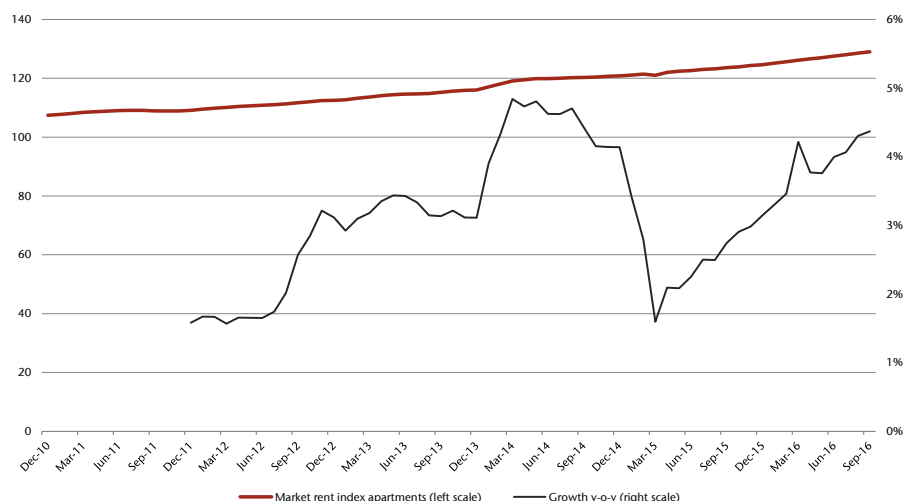
We also track rental growth dynamics on the basis of market rents. It is important to differentiate between in-place rents and market/asking (re-letting) rents. Due to the fact that in-place rents are subject to high rent control (rent index etc.) and asking rents are

We track market rent dynamics based on IMX rent index and JLL data

only partly regulated (rent cap since 2015), there is typically a huge gap, both in terms of absolute levels (re-lets up to 50% above in-place-rents) as well as growth (e.g. Berlin re-let growth 3x that of in-place rent growth).

We track rental growth dynamics based on the IMX rent index, which provides data for Germany overall (again, we see a high weighting of metropolitan areas) as well as for the top-5 cities. We also look at the Jones Lang LaSalle City Profiles, which provide data for the top-6 cities. Both sources are based on market/asking rents (re-letting rents) – therefore, these dynamics basically feed the rent revisionary potential of the sector.

**Chart 26: IMX rent index up by 14% from 2010 to 2015**

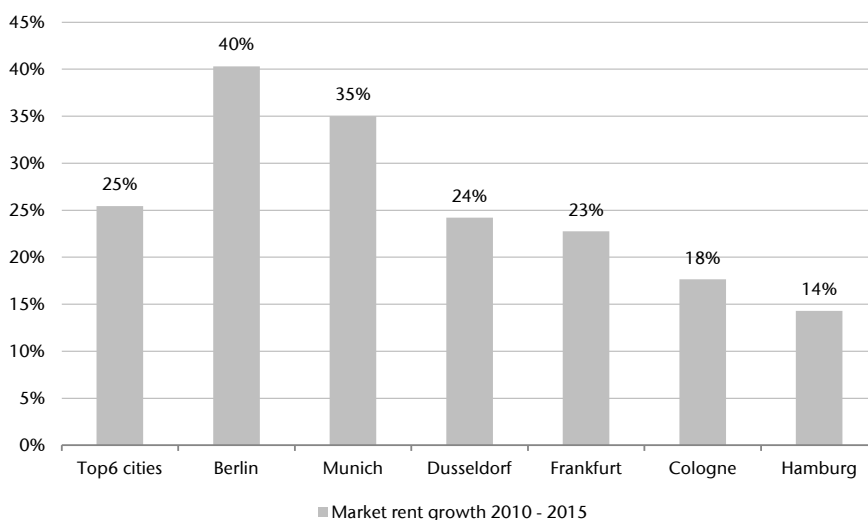


Source: Jefferies, immobilienscout24. Index: market rent apartments Germany

Market rents up by 14%-25% from 2010 to 2015

The IMX for rental apartments shows average asking rents in Germany up by 14% from 2010 to 2015, and plus 17% for the top-5 cities. In our view, the fact that there is only a small deviation between these numbers indicates the index's high weighting of metropolitan areas. The Jones Lang LaSalle data shows rental growth of 25% from 2010 to 2015 for the top-6 cities.

**JLL market rents up by 25% from 2010 to 2015 for the top-6 cities**



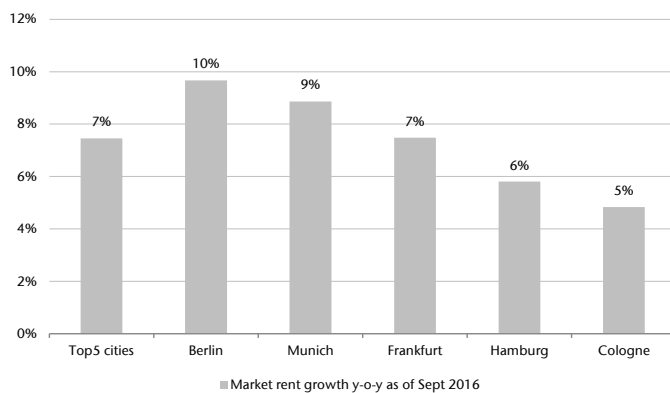
Source: Jefferies; JLL, based on 2H 2015 vs. 2H 2010



Recent data shows accelerating market rent momentum

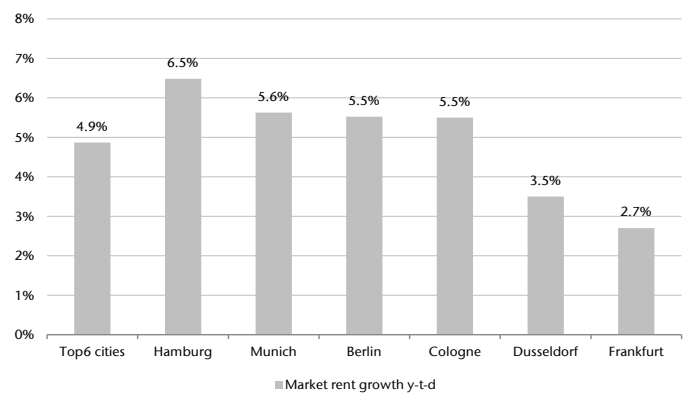
Most recent data shows accelerating market rent momentum, with the IMX rent index for apartments in the top-5 cities up by 6% year-to-date as of September 2016. Also, JLL data shows market rents up by 5% year-to-date as of 1H 2016 for the top-6 cities.

**Chart 27: IMX rent growth ytd for the top-5 cities**



Source: Jefferies, immobilienscout24, ytd as of Sept 2016

**Chart 28: JLL rent growth ytd for the top-6 cities**

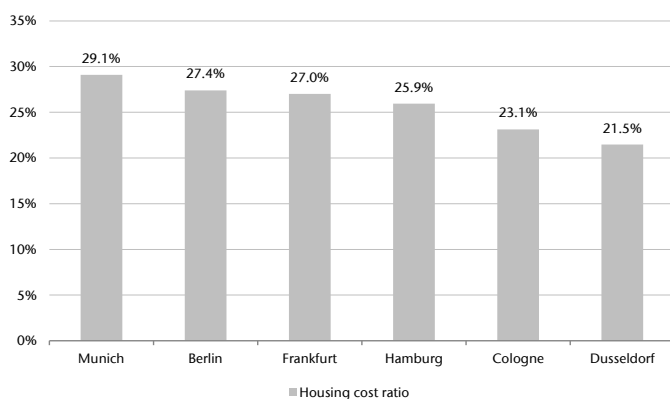


Source: Jefferies, Jones Lang LaSalle (JLL), ytd as of 1H 2016

Affordability remains attractive despite high market rent growth in recent years

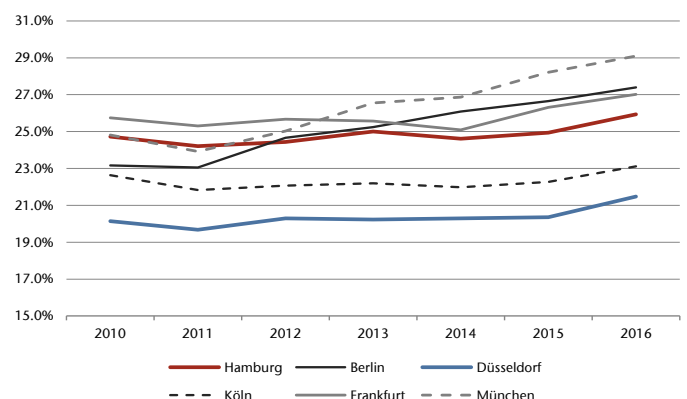
While market rents grew by 14%-25% from 2010 to 2015 in the key cities, housing cost ratios increased by only 5%, reflecting solid wage growth in recent years and underpinning high rent affordability. The average housing cost ratio based on market-rents (re-lets) in the key German cities ranges between 21% and 29%, with Munich ranking at the top, followed by Berlin. Housing cost ratios in Munich and Berlin moved up the most significantly in recent years, reflecting strong market rent dynamics. If this exercise were to be based on average in-place rents, Berlin would likely rank far below the other cities due to its low average rents (roughly 40% below market rents).

**Chart 29: Housing cost ratios key cities / market-rent based**



Source: Jefferies; JLL, housing cost ratio: rent incl. ancillary costs in % of net household income

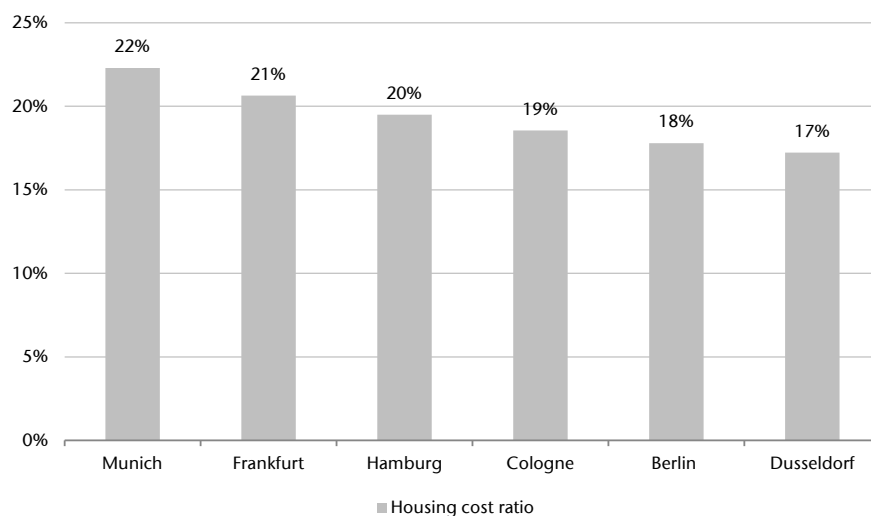
**Chart 30: Housing cost ratios up most in Munich and Berlin**



Source: Jefferies; JLL, housing cost ratio: rent incl. ancillary costs in % of net household income

Based on in-place-rents affordability is even more attractive – specifically in Berlin

If we base the housing cost ratio on in-place-rents, instead of market rents, Berlin's housing cost ratio significantly moves down to one of the lowest levels among the key cities. This is due to the low Berlin average rent level, which currently stands at €5.8 per sqm/month based on the average index rent (40% below the current market rent level of €9.6).

**Chart 31: Housing cost ratios much lower on in-place-rents**

Source: Jefferies, JLL, CBRE, calculation: Applying the in-place rent / market rent gap to housing cost ratios market-rent based.

## Modernisation investments and M&A key growth drivers

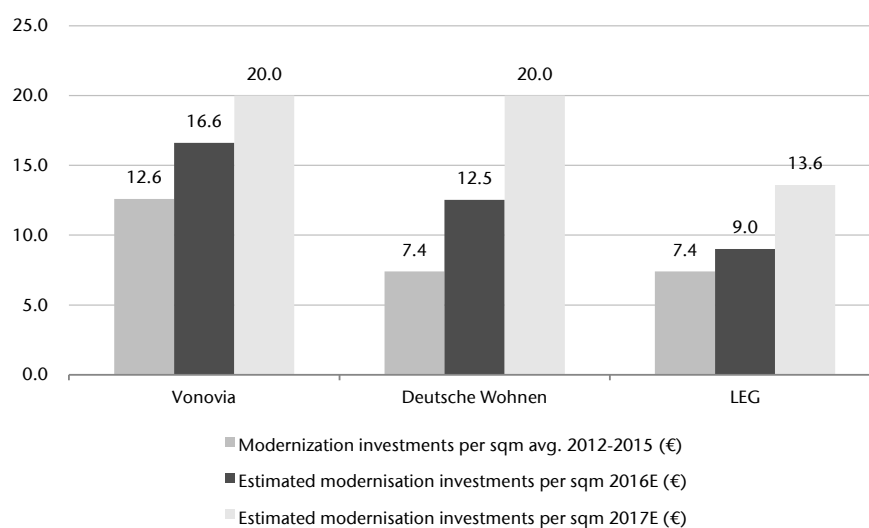
Internal growth and M&A are major drivers

The listed residential sector has been characterised by high external growth activity in recent years, through portfolio acquisitions as well as M&A among the listed players. With portfolio acquisitions becoming rarer due to the scarcity of assets and high pricing, we expect internal growth through modernisation investments to become the major source of growth. We also expect further consolidation among the listed players to remain on the agenda.

Modernisation investments significantly up

Most of the listed players have increased their modernisation investments over recent years and plan to further raise their budgets. Modernisation investments of the top-3 players are expected to increase by about 40% 2016E versus the average of 2012-2015 on a per sqm base, and are expected to increase by another 40% in 2017E.

**Chart 32: Modernisation investments significantly up**



**Source: Jefferies estimates, company data, adjusted for new construction investments**

## Modernisation strategies depending on portfolio characteristics

Modernisation investments and the corresponding returns are a complex issue to assess. There are various strategies, some focus on §559 modernisations (11% can be charged to the tenant; please refer to the Appendix *Residential rent regulations in Germany*), some on realising the re-letting upside and some on vacancy reduction. Also, new construction becomes a topic meanwhile. In our view, rental growth strategies mainly depend on specific portfolio characteristics. For example, companies with major rent revisionary potential, like ADO, focus on re-letting-driven modernisations, while companies with a more mature, broader portfolio, like Vonovia, focus on conventional modernisation investments (called 'Modernisierungsumlage' acc. to §559 of the German civil code). Regulation issues also play a major role, as do tenant quality and affordability. We have summarised the topic in the following table (Table 9: *Modernisation focus*).

**Table 9: Modernisation focus**

|   | ADLER   | ADO   | Deutsche Wohnen  | Grand City  | LEG  | TAG  | Vonovia  |
|---|---|---|--|---|--|--|--|
| Portfolio characteristics                         | Widely-spread German-wide residential portfolio in the lower-end quality cluster of affordable housing; low tenant quality with low rent affordability, major revisionary potential mainly from vacancy reduction | Pure Berlin portfolio with high revisionary potential; Portfolio has been expanded significantly in recent years, allowing for further operating upside; Roughly half of the portfolio are inner-city locations; roughly one third of the portfolio is the smaller-scale 'Altbau' buildings | Mature, well-maintained portfolio with >70% Berlin exposure and high revisionary potential; roughly half of the portfolio has been held by DW already in the very long-term; Portfolio size roughly doubled over last four years with major expansion steps in 2012 and 2013 | Opportunistic portfolio focused on six metropolitan areas in B/C locations with weaker asset quality and significant turnaround potential; portfolio size more than doubled over the last two years | Pure NRW portfolio with medium revisionary potential; 28% restricted rents, of which 1%-2%ppt mature every year, Portfolio expansion by more than 40% since the IPO in 2013, offering further operating upside | Higher yielding residential portfolio with a regional focus on Eastern Germany (56% of value) and the Northern part of Germany (44% of value); within these regions, the portfolio is more widely-spread | Large German-wide portfolio widely spread over more than 700 locations throughout all federal states, North Rhine-Westphalia represents the largest sub-portfolio; Portfolio size roughly doubled since the IPO in 2013 with acquisition of Gagfah in 2015 as the largest expansion step |
| Modernisation / investment focus                  | Focus on vacancy reduction and regular rent adjustments based on rent index, low tenant affordability levels do not allow for major modernisation programmes  | On realizing the maximum re-letting upside through investments in empty apartments, vacancy reduction   | \$559 modernisations and re-letting investments; 2015 split: 59% modernisation / 41% re-letting; new construction with focus on Berlin   | Focus on vacancy reduction / re-letting; about 50% of modernisation investments refer to vacancy reduction (apartments) and 50% to buildings  | \$559 modernisations, e.g. in 2016E: 41% apartment, 59% building focused; partly vacancy reduction   | Focus on vacancy reduction; in 2015 about 70% of modernisation investments were targeted for vacancy reduction   | \$559 modernisations on building and apartment level; New construction initiative; e.g. in 2016E: 22% optimise apartments, 47% upgrade buildings, rest new initiatives and space creation  |
| Modernisation volumes                             |   | 2013-2015: Average €10.1 per sqm; 2015: €9.9 per sqm; 2016 target: To remain at long-term average   | 2013-2015: Average €7.4 per sqm; 2015: €96m / €10.5 per sqm; 2016 target: 'up' / €1.5bn modernisation budget 2017-2021E  | 2013-2015: Average €8.4 per sqm; 2015: €8.7 per sqm; 2016 target: Slight increase   | 2013-2015: Average €7.4 per sqm; 2015: €60m / €8.4 per sqm; 2016 target: c. €9 per sqm   | 2013-2015: Average €6.8 per sqm; 2015: €40m / €9.0 per sqm; 2016 target: unchanged at c. €9 per sqm  | 2013-2015: Average €12.6 per sqm; 2015: €356m / €17 per sqm; 2016 target: €470-500m / est'ed €22 per sqm   |
| Regulation  | With the main focus on vacancy reduction, rent regulation risks are limited; partly regular rent index adjustments  | With the strong focus on re-letting, the rental cap is the most relevant regulation measure for the company; highly dependent from the rent cap exemption of 'extensively modernised' apartments  | Depending on the Berlin rent index and the rental cap, with increasing \$559 modernisations, also new regulations on this issue become more relevant, regulations on newly-built   | With the main focus on vacancy reduction, rent regulation risks are limited; partly regular rent index adjustments  | The main focus is on capturing rent index ('Mietspiegel') adjustments, therefore regular rent index adjustments are most relevant, partly vacancy reduction  | With the main focus on vacancy reduction, rent regulation risks are limited  | Regulations on \$559 modernisations are most relevant, but also rent index regulations ('Mietspiegel')   |
| Rent revisionary potential / Tenant affordability | Limited rent revisionary potential for the total portfolio; rental growth through vacancy reduction more relevant   | Overall, high rent potential for the total portfolio (30%), highest for inner-city locations (57%)  | High rent potential for the Berlin high-quality inner-city locations, limited rent potential for the large-scale product   | High; the company states 28% revisionary potential of which about two thirds refer to rent potential and the rest to vacancy reduction  | Overall, medium rent potential for the total portfolio (10%); 'High Growth Markets' 15%, 'Stable Markets' 8%, 'Higher Yielding Markets' 6%   | Limited rent revisionary potential of 7% for the total portfolio; rental growth through vacancy reduction more relevant  | Not stated; we assume medium rent potential of about 10% for the total portfolio   |
| Return target / definition                        | Roughly 2% like-for-like growth, both from vacancy reduction as well as from in-place-rent growth   | Focus on like-for-like rental growth of 5% p.a.; >15% un-levered return on re-letting investments   | Focus on >50% margin on fair value uplift in the mid-term  | 28% operating revisionary potential; the company does not state like-for-like or return on investment targets; it focuses on NOI yield targets for its acquisitions                                 | Like-for-like rental growth target of 2.4-2.6% this year and 3.0-3.3% (incl. subsidized) next year; un-levered IRR target of 6% on modernisation investments   | Like-for-like rental growth target of 3-3.5% p.a. in the next three years  | 7% un-levered yield on investment: Incremental rental income over total investment amount  |
| Rental growth focus                               | Mainly from vacancy reduction and partly from regular rent adjustments  | Mainly from higher re-letting rents and vacancy reduction   | Mainly from higher re-letting rents and Berlin rent index adjustments and new constructions  | Mainly from vacancy reduction / re-letting and partly from regular rent adjustments   | Mainly from rent index adjustments; partly from re-letting   | Mainly from vacancy reduction and partly from regular rent adjustments   | Mainly from \$559 modernisations and rent index adjustments  |
| Valuation upside                                  | Medium, based on rental growth; limited yield compression in its key locations  | High due to above average rental growth, strong location mix, and yield compression, especially on the smaller-scale inner-city buildings   | High due to capex investments in top quality locations, above average rental growth and yield compression, especially in Berlin  | High to medium mainly driven by strong operating turnaround; however, recent revaluations already experienced major yield compression   | Medium, based on solid rental growth; limited yield compression in NRW   | Medium, based on solid rental growth; limited yield compression in its key locations   | Medium to high, based on solid rental growth and significant capex spending; limited yield compression on overall portfolio; high yield compression in top city locations  |

Source: Jefferies, company data

Various definitions of return on modernisation investments

As shown in the modernisation matrix, there are various definitions of 'return on modernisation investments'. For example, Vonovia refers to un-levered yield on investments, while LEG refers to an un-levered IRR, which also considers investment maturity. DW argues that modernisation returns only materialise in the long term are hard to allocate to a specific year. Furthermore, it argues that valuation uplifts are an even more relevant return measure.

Tough to assess long-term sustainability

We also want to stress that capex measures, on the one hand, can be done quite opportunistically in order to maximise the short-term return and, on the other hand, spent to improve long-term sustainability of a building, yielding lower short-term returns, however safeguarding longer-term portfolio quality. The assessment of this issue from an external perspective is tough.

Re-letting investments with highest returns

Obviously, re-letting investment currently yields the highest returns, as it allows capturing the typically wide gap between in-place rents and re-letting rents. DW and ADO, both players with high rent revisionary potential, currently reach above 15% average return on re-letting investments. However, this exercise also has its limitations, since it depends on tenant turnover (7%-8% p.a. in Berlin) and the rental cap ('Mietpreisbremse'). The rental cap currently seems to be no major hurdle, since re-lets after 'extensive modernisations' are not subject to the cap (please refer to the chapter 'rent regulations').

Modernisation-driven rent increases, so-called 'Modernisierungsumlage' according to §559 of the German civil code

Modernisation investments according to §559 of the German civil code, the so-called 'Modernisierungsumlage', allow companies to charge up to 11% of the costs to the tenant on an annual basis. There is currently no hard cap on these rent increases (please refer to section on 'rent regulations'). Not all modernisation expenses can be charged to the tenant (e.g. the project's financing costs, administrative costs, loss of rent due to vacancy etc. cannot be allocated). Depending on the type of modernisation (e.g. building or apartment), the ratio ranges between 40% and 70%. Therefore, for example, Vonovia's return on these investments is not the full 11%, but more like 7%. These kinds of modernisation investments are mainly limited by the tenant's affordability level. It typically leads to the side effect of increasing tenant turnover (as some tenants can't afford the higher rent), allowing the landlord to capture also the re-letting upside.

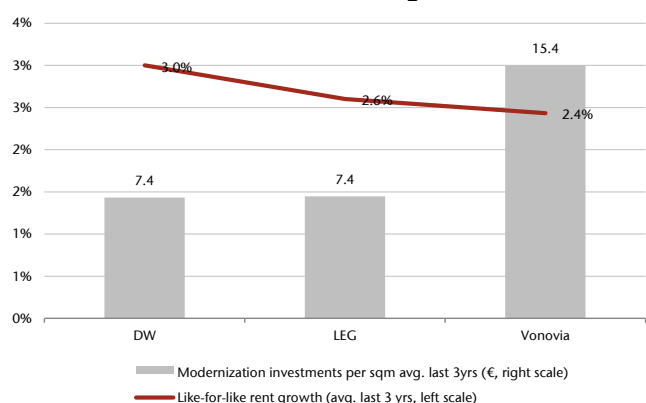
Modernisation returns reflected in rental growth and revaluations

We measure modernisation returns in terms of rent growth efficiency (rental growth / modernisation investments), which is also well reflected in AFFO margins, as well as in terms of property revaluations.

Rent growth efficiency and AFFO reflecting modernisation returns

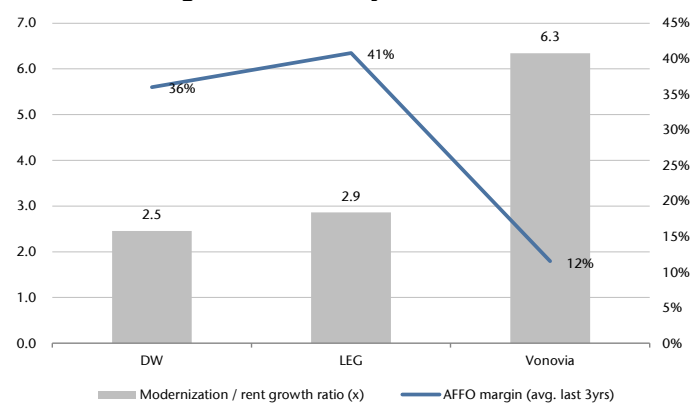
We measure the rent growth efficiency by looking at the longer-term like-for-like rental growth compared with the longer-term average modernisation investments. The higher the rental growth and the lower the modernisation investments, the better the profitability. The 'modernisation / rent growth ratio' shows the efficiency of rental growth by calculating the return (like-for-like rent growth, avg. last three years) on investments (modernisation per sqm avg. last three years). The lower the ratio, the more efficient the company's rental growth or the higher the return on modernisation investments. Just looking at rental growth doesn't make sense, since it doesn't consider the cost for rental growth. This is also well reflected in the AFFO, since it is calculated based on underlying earnings deducted by modernisation investments. Therefore, AFFO margins are also a good measure for modernisation returns and efficiency. The weak spot of these measures is that they ignore the impact from modernisation investments on property revaluations.

**Chart 33: Modernisation vs. rental growth**



Source: Jefferies. Pure modernisation investments excl. capitalised maintenance

**Chart 34: Rent growth efficiency measures**



Source: Jefferies. Pure modernisation investments excl. capitalised maintenance, AFFO margin: AFFO / gross rents

DW and LEG with high rent growth efficiency reflected in high AFFO margins

The key finding of the exercise: Deutsche Wohnen and LEG both have increased rents rather efficiently, by spending limited capex. Vonovia's capex need was relatively high, in order to reach the 3% rent growth level. This is also reflected in the company's underlying rental growth, which we define as rental growth from regular rent increases (based on rent index adjustments) and from re-lettings (capturing the rent revisionary potential), reflecting the underlying rent potential of a portfolio without major investments. Among the top-3 players, DW has shown the highest underlying rental growth in recent years (DW 2.9% like-for-like, LEG 2.5%, VNA 1.5% p.a. avg. last three years), indicating to best-in-class portfolio quality.

Modernisation returns in terms of re-valuation returns

Measuring modernisation returns in terms of revaluation uplift has been less in the focus so far as it requires more detailed information about the investment programmes with a breakdown of investments on a per unit / per sqm base. So far, only DW provides these details and guides on a valuation uplift return. This again has to be seen with respect to its portfolio character (as described in the modernisation matrix above), which is characterized by a high rent revisionary potential. The modernisation programme is targeted to realise the revisionary potential faster and create additional rental upside by lifting-up the modernised apartments into higher-quality clusters. This strategy is focused on high-quality locations with a higher-quality tenant structure as the expected rent increases require corresponding affordability levels. For example, DW expects to double its rent revisionary potential by investing about €630 per sqm on average (44% of current value per sqm), realising an expected revaluation return on investment of about 56% in the mid-term post capitalised capex. Please also refer to DW company part for more details on their investment programme.

**Table 10: DW – Revaluation return on modernisations**

|                           | Year-end 2016E | Capex | Post capex, post 30% rent-revision | Current market value / market rent post capex | Mid-term market value / market rent post capex | Mid-term re-valuation return |
|---------------------------|----------------|-------|------------------------------------|---|--|------------------------------|
| Value per sqm (€)         | 1,650          | 630   | 2,280                              | 2,500   | 3,200  | 68%                          |
| In-place rent per sqm (€) | 5.9            |       | 7.7                                | 9.0   | 9.9  | 68%                          |
| NCR yield                 | 4.3%           |       | 4.1%                               | 4.3%  | 3.7%   | -58bps yield compression     |

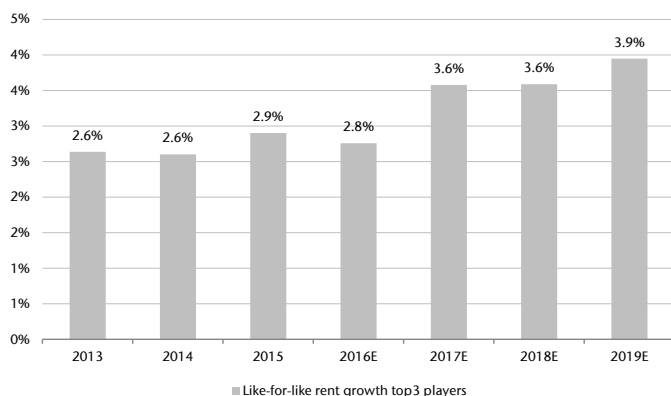
Source: Jefferies, company data as of 9M 2016



Higher rental growth on increased modernisation investments

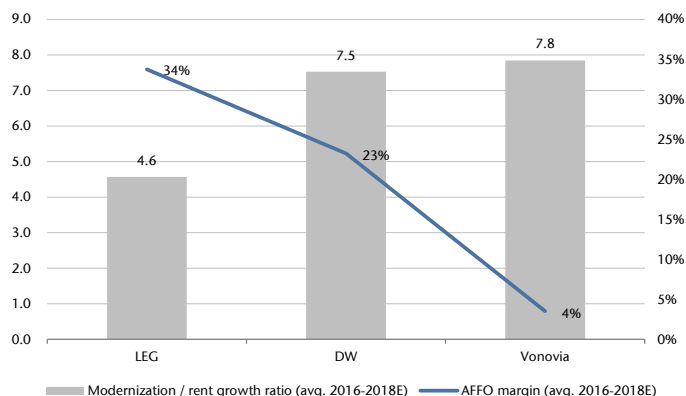
With a stronger focus on internal growth through modernisation programmes, we expect the sector's rental growth momentum to pick-up in the coming years. Our rental growth estimates for the sector consider continuing strong underlying residential dynamics as well as unchanged rent regulations until 2018/2019. We regard our estimates for sector rental growth as conservative, since we have applied more cautious return assumptions on modernisation investments, implying lower rental growth efficiency. With the recently announced additional modernisation programmes, our forecasts imply lower rental growth efficiency – however, DW and LEG are still well above the efficiency levels of Vonovia. Please also refer to the company sections for more details on company-specific modernisation programmes.

**Chart 35: Increasing rent growth momentum**



Source: Jefferies estimates. Average like-for-like rental growth excl. vacancy change of VNA, DW and LEG

**Chart 36: LEG with highest rent growth efficiency**



Source: Jefferies estimates. Pure modernisation investments excl. capitalised maintenance, AFFO margin: AFFO / gross rents

M&A within the listed players to remain on the agenda

Besides the modernisation-driven internal growth, we also expect M&A among the listed players to remain a major topic as there are still many players around, basically running the same business. We expect Vonovia to remain the major consolidator. Its German-wide portfolio and insourced service activities allow it to effectively integrate portfolios with a widespread location mix. We also see DW as a consolidator, most obviously for Berlin assets, but also for other metropolitan clusters. We also see DW-ADO as a natural fit, even if this currently looks rather challenging given the fact that DW is reluctant to go for the next listed target after the two last failed deals (conwert and LEG), plus ADO's valuation premium, as well as the 'Carlos' pill.

Typically high goodwill burden, but funding through shares also attractive

The sector's relatively high valuation level might be seen on the one hand as a hurdle for M&A deals, as it triggers high goodwill, making NAV accretion challenging. But on the other hand, it also provides a strong currency for the consolidator, which, in combination with record low financing costs, is rather supportive for M&A, assuming payment through shares.

**Table 11: M&A deals in the listed sector (examples)**

| Buyer   | Target          | Deal status | Date      | Pricing  | Deal structure                            | Key rationale  | Synergies (initially expected) | Synergy costs          | Transaction costs         | Goodwill                         |
|---------|-----------------|-------------|-----------|--|---|--|--------------------------------|------------------------|---------------------------|----------------------------------|
| Vonovia | Conwert         | pending     | currently | €1.8bn, NAV premium 3% for cash offer, 12% for share offer, 5.5% NCR yield for share offer | both, full cash and share offer           | Strong overlap of German residential portfolios allowing for scale benefits / operating synergies; financing synergies | €12m, 16% of CWI FFO           | €83m / c. 7x synergies | c. €20m, 1% of deal value | est'ed €400m, 22% of deal value  |
| Vonovia | Deutsche Wohnen | failed      | 2015/16   | €9.9bn, 40% NAV premium; 4.6% NCR yield  | combined cash (30%) and share (70%) offer | Preventing DW-LEG merger; more balanced portfolio mix leading to a more diversified risk profile                       | €84m, 25% of DW FFO            | €80m / c. 1x synergies | €200m, 2% of deal value   | est'ed €3.9bn, 40% of deal value |

**Table 11: M&A deals in the listed sector (examples)**

| Buyer           | Target  | Deal status | Date | Pricing                                  | Deal structure                            | Key rationale   | Synergies (initially expected)              | Synergy costs             | Transaction costs         | Goodwill                         |
|-----------------|---------|-------------|------|--|---|---|---|---------------------------|---------------------------|----------------------------------|
| Deutsche Wohnen | LEG     | failed      | 2015 | €5.1bn, 55% NAV premium; 5.6% NCR yield  | all share offer                           | Combining DW's strong NAV growth with LEG's high earnings yields  | €35m, 15% of LEG FFO                        | €30m / c. 1x synergies    | €30m, 0.6% of deal value  | est'ed €2.3bn, 45% of deal value |
| Deutsche Wohnen | Conwert | failed      | 2015 | €1.2bn, 21% NAV discount, 7.1% NCR yield | all cash offer                            | Portfolio expansion in attractive metropolitan areas, operating and financing synergies                             | 'significant synergy potential', not stated | not stated                | not stated                | est'ed badwill                   |
| Vonovia         | Gagfah  | closed      | 2014 | €4.2bn, 26% NAV premium, 6.3% NCR yield  | combined cash (50%) and share (50%) offer | Creation of the German-wide residential player of European Scale, scale benefits, operating and financial synergies | €84m, 45% of Gagfah FFO                     | €310m / c. 3.7x synergies | €180m, 4.3% of deal value | €2.3bn, 55% of deal value        |
| Deutsche Wohnen | GSW     | closed      | 2013 | €1.8bn, 19% NAV premium, 5.8% NCR yield  | all share offer                           | Full overlap of Berlin residential portfolio / operating synergies  | €25m, 33% of GSW FFO                        | €25m / c. 1x synergies    | €25m, 1.4% of deal value  | €335m, 30% of deal value         |

Source: Jefferies estimates, company data

Portfolio overlap, financing and valuation benefits as key rationale

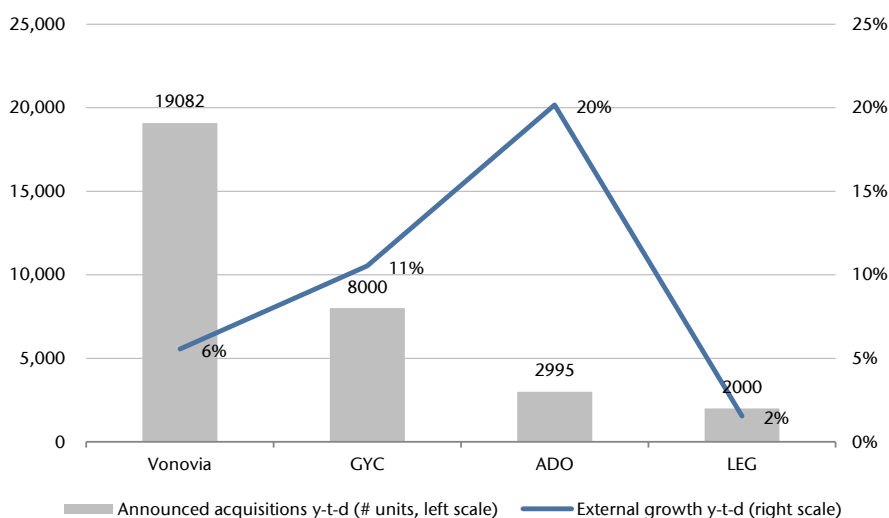
We see most of the smaller players as potential targets

Lower acquisition activity so far in the listed sector

As seen with the M&A deals in recent years (see table above), the key rationale were a) strong portfolio overlap with high cost efficiency benefits (DW-GSW), b) financing cost benefits as the target benefits from the acquirer's better financing situation (VNA-Gagfah and conwert), c) wide valuation gaps (VNA and DW-conwert) and size (VNA-Gagfah).

We basically see the smaller sector players as potential takeover targets, with the above mentioned rationale as main driver. We regard LEG and Grand City Properties less as takeover targets, since both operate in their respective niches – LEG as NRW pure play with critical mass and GYC as opportunistic high yield player. GYC might divest parts of its portfolio at some point of time, most likely the assets that have been fully turned around.

Acquisition activity in the listed sector declined in the course of this year from rather high levels in previous years – scarcity of the right assets as well as high pricing are obviously the main reasons. Within the listed sector, the Vonovia-conwert bid represents the largest deal with about 19,000 German residential units. Also GYC and ADO continued with high acquisition activity, GYC added 8,000 units (plus 10%), ADO 3,100 units (plus 19% y-t-d).

**Chart 37: Lower acquisition activity this year**


Source: Jefferies. Number of signed German residential units

Institutional investment funds as major buyers of portfolios

Institutional investment funds have been rather active recently buying major residential portfolios, which we see as a further driver for yield compression. The largest deal was the €1.2bn acquisition of BGP through an investment vehicle of Morgan Stanley, backed by CIC, the Chinese sovereign wealth fund. Also Patrizia Immobilien has recently bought a 3,500 units portfolio for a mid-three-digit €m amount. German Special Fund issuer Deutsche Investment has bought 1,500 residential units in Berlin and Hamburg from Austrian listed player S IMMO. Aberdeen announced recently a European Residential Fund with €1.5-2.0bn targeted investment volume. Listed housing landlord Industria Wohnen has announced plans to launch a new opened-ended special alternative investment fund (AIF) for residential investments in German cities.

**Table 12: Institutional funds buying German residential portfolios**

| Date   | Buyer                     | Seller | Value (€m)        | # units | Key locations              |
|--------|---------------------------|--------|-------------------|---------|----------------------------|
| Nov-16 | Patrizia / German insurer | n/a    | 'mid-three-digit' | 3,500   | NRW, Lower Saxony, Bavaria |
| Oct-16 | Morgan Stanley / CIC      | BGP    | 1,200             | 16,000  | Berlin, West-North Germany |
| Aug-16 | Deutsche Investment       | S Immo | 140               | 1,500   | Berlin, Hamburg            |

Source: Jefferies, company data

GBW currently the only major portfolio potentially up for sale

After the sale of BGP, we see only one remaining larger non-listed portfolio for a potential sale, which is GBW. According to press articles (German daily Handelsblatt 2015 and German weekly Focus from June 2015), GBW is regarded as a potential trade sale. GBW (<https://www.gbw-gruppe.de>) had been acquired by a Patrizia-led consortium of institutional investors from Bayern LB (state bank of Bavaria) in 2013. GBW comprises about 30,000 residential units, of which about 85% are located in the metropolitan areas of Munich, Nuremberg/Erlangen/Fuerth, Regensburg and Wuerzburg. About one-third of the rents are restricted. Back in 2013, the GBW deal was valued at about €2.5bn.

SÜDEWO sale may serve as a template

We see some likelihood for a trade sale of the GBW portfolio, since the investor consortium would realise a significant one-off profit. The key incentives for Patrizia, on the other side, are significant performance fees and a potential relocation of the assets under management to another product, again generating sourcing fees. The SÜDEWO deal might serve as a role model, as it was the same deal structure as GBW and has been sold to Vonovia for €1.9bn (5.6% NCR yield) in 2015, generating about €200m one-off profit (estimated) for the investor consortium and c.€100m performance fee for Patrizia. Patrizia states the IRR of the SÜDEWO deal at 27% (realised); that of GBW currently at 31% (implied value).

Vonovia and DW as potential buyers of GBW

In the case of a trade sale of GBW, we see Vonovia and DW as potential buyers. For VNA it would be the expansion of its SÜDEWO portfolio in Baden-Wuerttemberg (South Germany) – the fact that one board member of GBW has formerly worked for Gagfah, might be helpful for Vonovia – as it was the case with the conwert deal. For DW, the strategic rationale would be the portfolio expansion by another high-quality hub.

New discussions about RETT blockers may speed-up transactions

Most of the residential transactions in recent years were based on share deal structures, which allow avoiding the payment of real estate transfer taxes (RETT), so called RETT blockers. The RETT rates range between 3.5% (e.g. Bavaria) and 6.5% (e.g. Berlin) depending on the federal state. Therefore, RETTs are a rather relevant factor for transaction pricing. There has been an initiative recently by the finance minister of the federal state of Hesse to close the RETT blocker loophole. The issue will be on the political agenda in the coming months – we will closely watch. These discussions might potentially speed-up the one or other transaction in the sector.

Berlin is by far the largest rental market among German cities

Berlin in a strong economic catch-up phase

Berlin with strongest residential dynamics

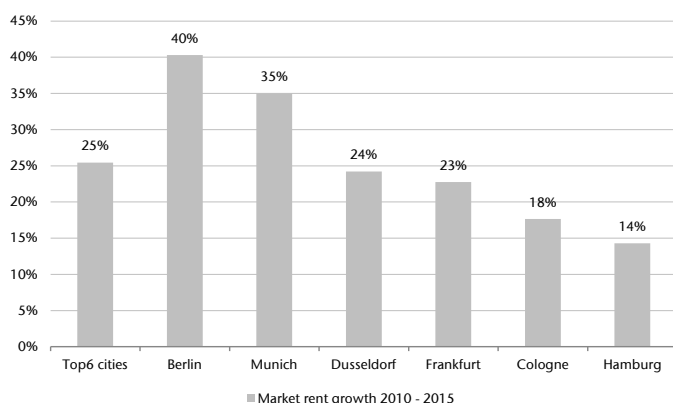
## Berlin still the place to be

Berlin, with about 3.5m inhabitants, about 1.9m residential units and a home ownership rate of only 15%, is by far the largest rental market in Germany. The city has been in a strong economic catch-up phase in recent years as it comes from a much lower base – a delayed consequence of the pre-unification period.

While the capital's key economic indicators are still below the German average, growth dynamics are strong and business climate indices at peak levels indicate ongoing strong momentum. Berlin employment growth for 2016 is expected at 1.8% versus 1.1% for Germany. Berlin GDP growth in 2015 was 2.2% versus 1.7% in Germany. The city's economic growth is strongly driven by the service industry, particularly tourism, as well as by the start-up and tech sector.

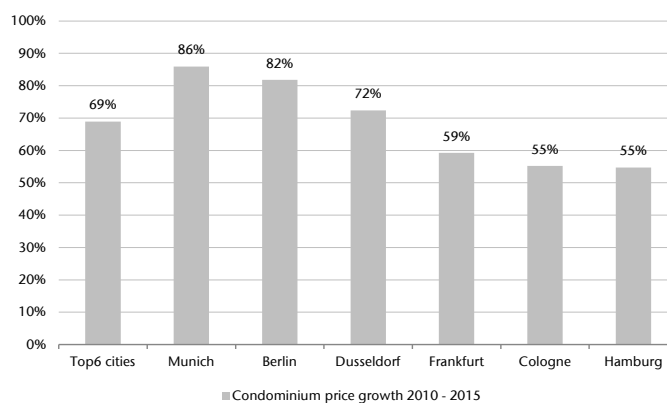
Along with Berlin's economic recovery, the residential market has been growing significantly in recent years with the strongest dynamics among the key cities, despite the highest level of rent regulations, underpinning very strong market forces.

**Chart 38: Berlin with strongest rental growth**



Source: Jefferies, JLL as of 1H 2016

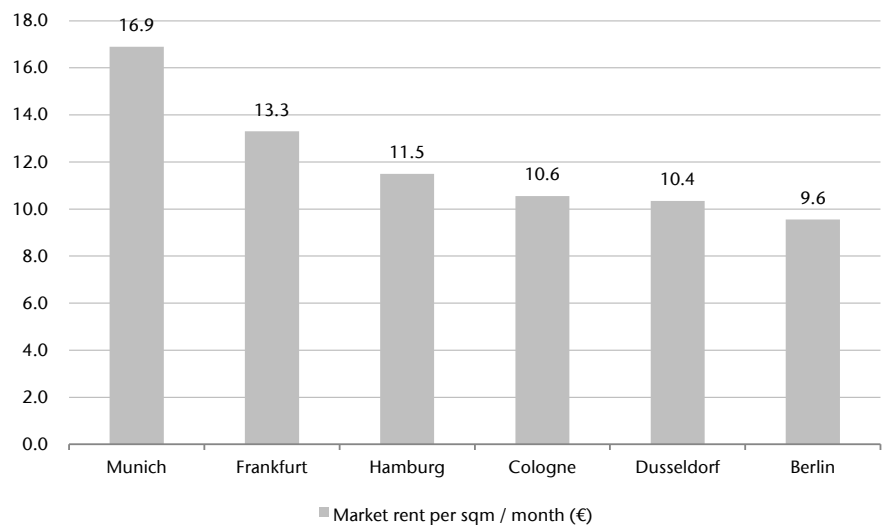
**Chart 39: Berlin with strong condominium price growth**



Source: Jefferies, JLL as of 1H 2016

Despite strong growth, still cheapest absolute rent levels

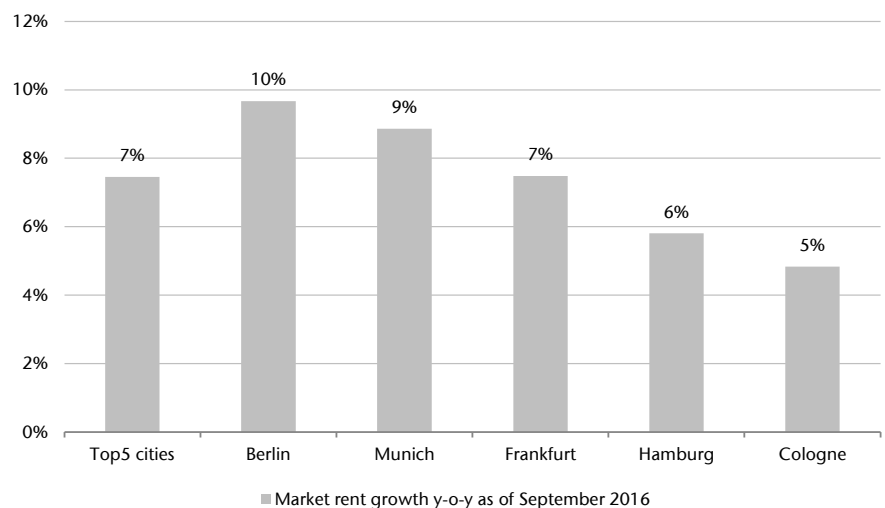
Berlin residential market rents have grown by 8% annually over the last six years according to data from JLL, the strongest increase among all major German cities. However, Berlin rents are still the cheapest of the major cities on an absolute level.

**Chart 40: Berlin rents still the cheapest**


Source: Jefferies, JLL as of 1H 2016

### Accelerating rental growth recently

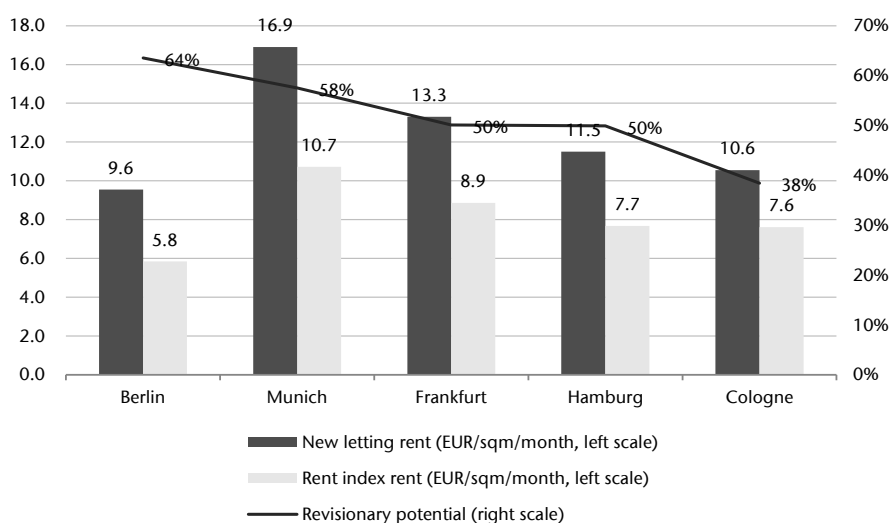
The IMX rent price index shows Berlin market rent dynamics further accelerating, with the index up by 10% year-on-year as of August, and particularly high momentum in recent months. This should be supportive for the new Berlin rent index, which will be published in May 2017. It also further feeds the rent revisionary potential in Berlin.

**Chart 41: Accelerating rental growth – still highest growth in Berlin**


Source: Jefferies, Immobilienscout24

### Berlin rents with highest revisionary potential

Comparing market rents (re-letting rents) with average in-place-rents (rent index average), Berlin has by far the highest rent revisionary potential at more than 50%. This is due to the rather low level of Berlin average in-place rents, a consequence of state-controlled rents of the pre-unification period as well as high current rent regulation levels, as well as the strong market rent dynamics.

**Chart 42: Berlin rents with highest revisionary potential**


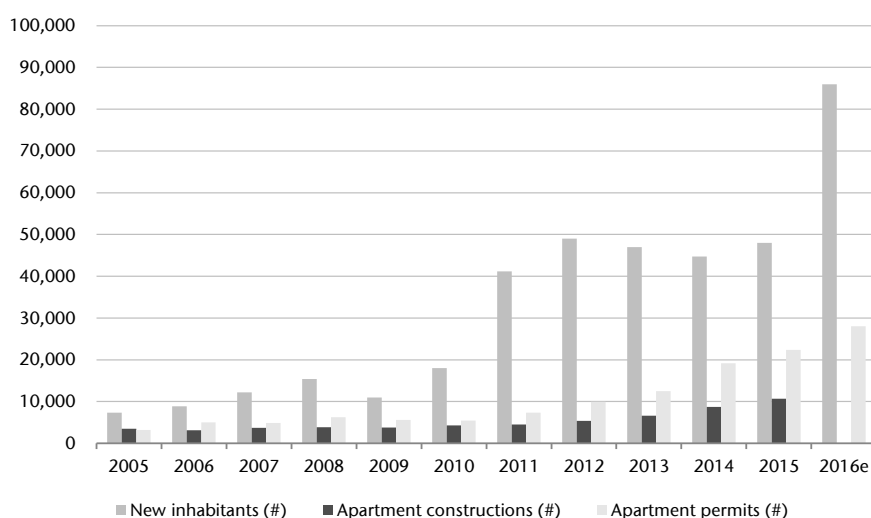
Source: Jefferies, JLL, Deutsche Wohnen AG, rent index, bulwiengesa AG, RIWIS, CBRE

Berlin, where strongest market forces meet highest rent regulations

Berlin residential is the perfect example of ‘strongest market forces meeting strongest rent regulations’. In our view, Berlin has one of the tightest rent regulations. It was among the first cities to apply more strict rules on regular rent adjustments in a ‘tight housing market’ (the limitation of regular rent increases to not more than 15% from 20% over three years). Furthermore, it was the first major city to apply the rent-cap law (‘Mietpreisbremse’). And it applies the ‘Milieuschutz’-rule rather actively, limiting privatisation, modernisation and re-letting activity in classified areas. The recent federal elections in September showed a left-wing trend, which might indicate the likelihood of a further tightening of rent regulations.

Strong demographics driving demand for affordable housing

The city’s strong market forces are mainly a function of supply shortage and demand overhang in combination with a strong catch-up potential from a rather low base. Berlin’s population has been on a steady upwards trend over the last five years, with 40,000-50,000 new inhabitants p.a. mainly driven by net migration. The momentum strongly picked up this year with almost 43,000 new inhabitants in the first half alone. This was mainly driven by a registration catch-up effect from the strong refugee influx of last year.

**Chart 43: Berlin with high supply shortage / demand overhang**


Source: Jefferies, Statistical Office Berlin-Brandenburg

Construction activity mainly in the upper-end quality segment

Also, residential construction has been strongly recovering in recent years. However, a large part of this is condominiums (c.40% over the last four years), and we believe most of the newly-built rental units are higher-quality apartments, which also doesn't match the strong demand for affordable housing. Some might argue that there will also be overspill effects (people who buy, leaving rental apartments), but we assume this not to be a game-changer. Typically, these apartments get re-let at (currently high) market rents, therefore not being relevant for the affordable housing segment.

Wide supply / demand gap

A total of 10,700 residential units were built in 2015 in Berlin, of which 4,500 were condominiums and 7,000 multi-family. The annual demand is currently estimated at 20,000 residential units – a rather wide supply/demand gap, even considering an increasing number of new construction permits (plus 16% in 2015, plus 10% in 1H 2016).

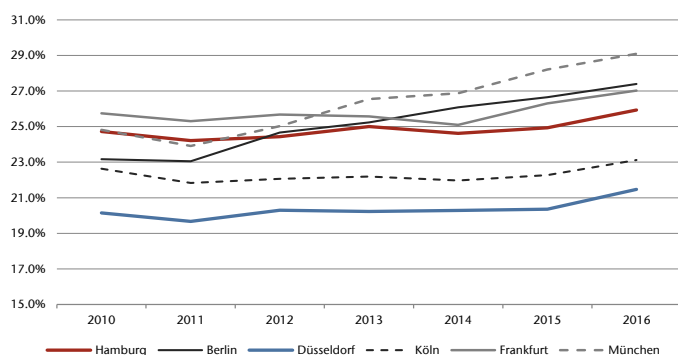
Construction incentives for affordable housing – but impact expected to be limited

Berlin has presented a city development plan last year, called 'Stadtentwicklungsplan Wohnen 2025', which targets the construction of above 50,000 residential units in the affordable housing segment until 2025 through various initiatives (e.g. transferring land to the municipal housing companies, subsidised loans etc.). This translates into about 5,000 units annually, corresponding to about half of the current number of new apartments – widely seen as a rather ambitious plan, given limited land and increasing construction costs.

Still attractive affordability levels

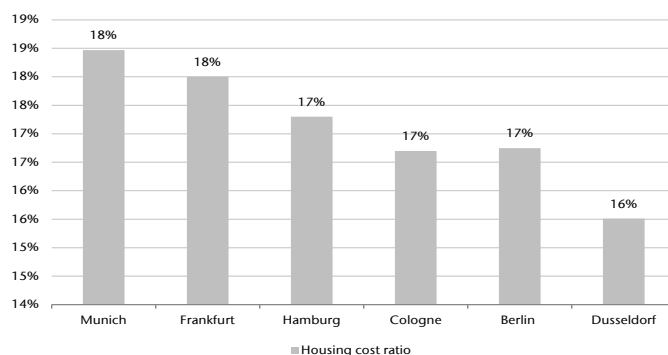
Based on the high Berlin market rent dynamics, affordability levels have also declined (higher housing cost ratio). However, we would like to stress that this is based on market rents or re-lets, which only refers to a small portion of the rents (avg. 8% tenant fluctuation). Based on the still rather low in-place rent levels in Berlin, overall affordability remains very high and well above that of other key German cities.

**Chart 44: Housing cost ratios up market rent based**



Source: Jefferies

**Chart 45: Berlin still rather cheap in-place-rent based**



Source: Jefferies

Berlin rather cheap vs. other European capitals

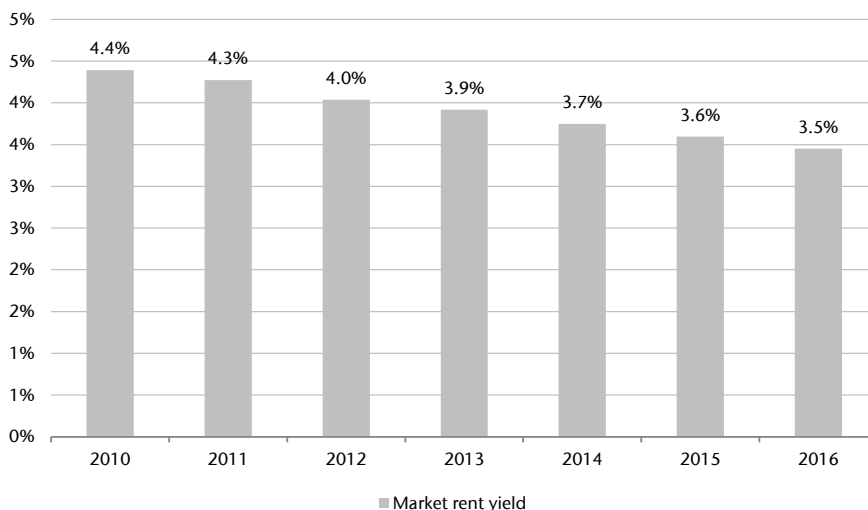
The high affordability level / low housing cost ratio of Berlin residential becomes even more pronounced if compared with other European capitals. CBRE has run a comparison of housing cost ratios for European capitals that shows Berlin, at a 20% housing cost ratio, as the cheapest (together with Vienna at 19%), versus London at 37%.

**Chart 46: Berlin has high housing affordability vs. European capitals**


Source: Jefferies, CBRE EMEA Residential Market Report 2016. Average asking rent for a 70sqm apartment / average purchasing power per household

Berlin condominium yields compressing

Berlin residential prices have been significantly outperforming rent growth in recent years, compressing yields to record lows. Berlin condominium prices have increased by 12% annually over the last six years, compressing market rental yields to 3.5%.

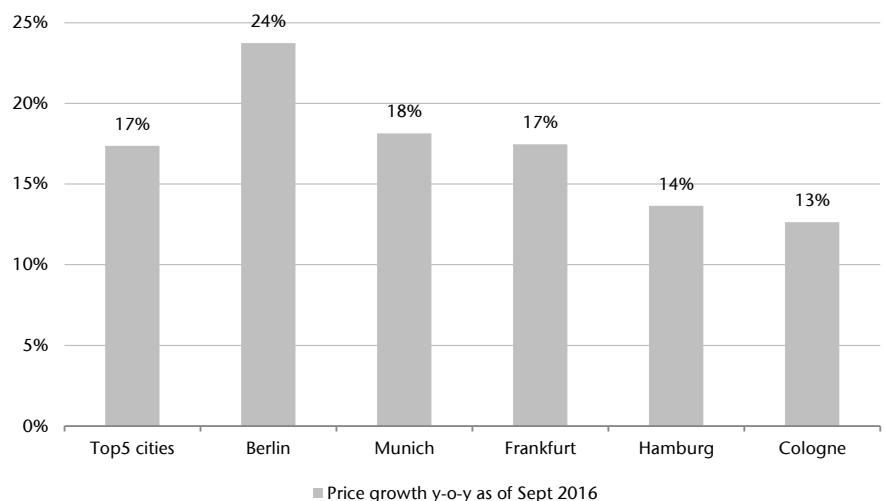
**Chart 47: Berlin condominium yields compressing**


Source: Jefferies, JLL as of 1H 2016. Market (asking) rent per sqm / condominium price per sqm

Berlin with accelerating house price dynamics recently

The average Berlin condominium price stands at €3,320 as of 1H 2016. The IMX house price index (for existing apartments) shows Berlin condominium dynamics further accelerating, with the index up by 24% year-on-year as of September, and particularly high momentum in recent months. This should be supportive for the appraiser values of the listed players.

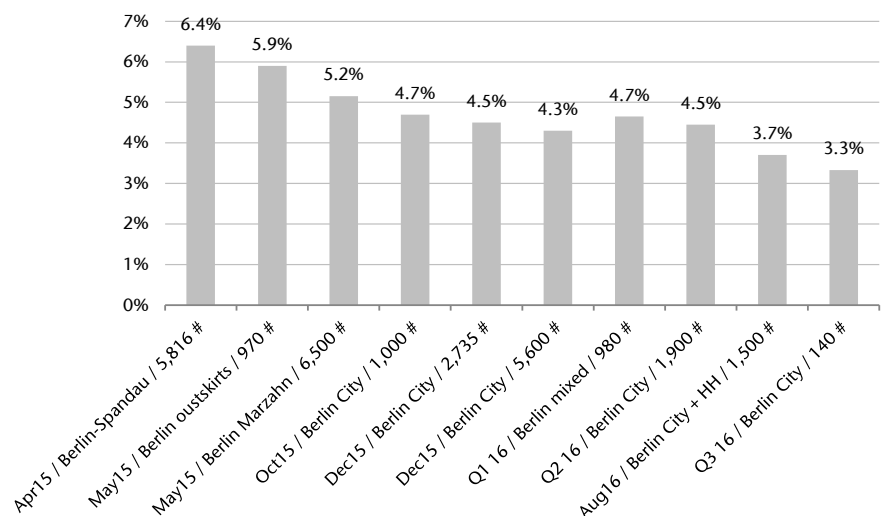


**Chart 48: Accelerating price dynamics recently – Berlin highest**


Source: Jefferies, Immobilienscout24, IMX data as of Sept 2016

Berlin portfolio deals with strong yield compression

Portfolio transaction prices have moved up as well, with the first deals being priced below the 4% NIY yield level (e.g. Slmmo 1,500 units Berlin/Hamburg portfolio at 3.7% NIY, ADO with a 140 units Berlin portfolio at 3.3% NIY).

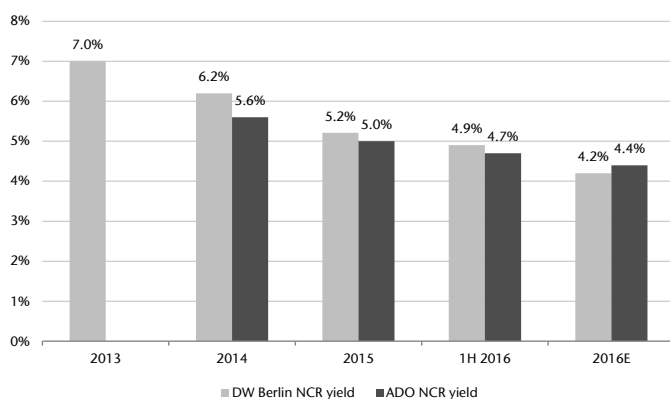
**Chart 49: Berlin portfolio deal NIYs compressing**


Source: Jefferies, company data

Appraiser values also on the way up for the Berlin players

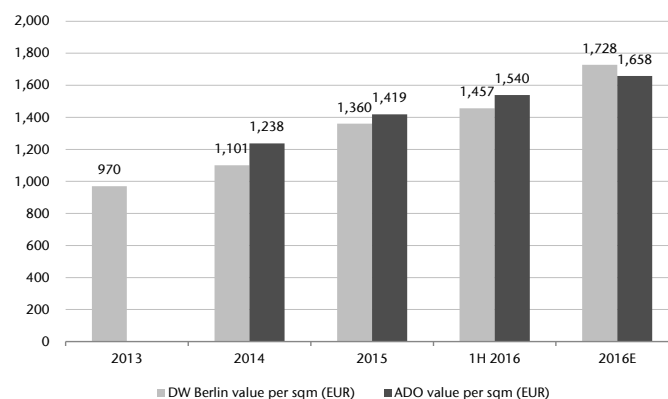
Appraiser values for Berlin portfolios have also moved up significantly over the last three years. DW has recently guided 4.2% NCR yield for its Berlin portfolio by year-end, reflecting 100bps yield shift year-on-year. ADO hasn't guided for year-end valuation – we forecast 4.4% NCR yield or 60bps yield shift year-on-year. As shown above, recent condominium price and rent momentum (IMX index), as well as portfolio transactions, indicate further yield compression. We model a further 70bps yield shift until 2019E for the Berlin portfolios. Please also refer to the DW and ADO company sections for more details.

**Chart 50: Berlin players NCR yields well down**



Source: Jefferies estimates, company data, NCR = net cold rent

**Chart 51: Values per sqm well up**



Source: Jefferies estimates, company data

Sector with high interest rate sensitivity

Yield spread between risk-free rates and earnings yields as key valuation driver

Any deterioration of the favourable underlying macro environment might negatively impact valuations

Further tightening of rent regulations as a potential negative

Any deterioration of supply / demand situation in the affordable rental segment as a potential negative

## Sector-specific risks

The German residential rental models, with their low cash flow volatility and sustainable, solid earnings growth, are regarded as a close proxy to risk-free asset classes and therefore have been a key beneficiary of a low interest rate environment. Increasing interest rates might negatively impact sector valuations.

With the sector as a 'yield play', valuations significantly depend on the spread between risk-free rates (e.g. Bund yields) and earnings yields. With the 10-year Bund yield at 30bps and the sector's earnings yield at 500bps (FFO I yield 2016E), the spread is currently 470bps, which is historically the widest. We expect the sector to grow earnings on average by 13% p.a. until 2018E, which increases the spread by another 120bps, assuming interest rates remain unchanged. Increasing interest rates narrow this spread and therefore are usually a negative for sector valuations. Looking at historical sector performance patterns in times of increasing interest rates obviously shows a negative sector performance. There have been two major Bund yield hikes of up to 100bps (10 years) over the last three years, from May to September 2013 and from April to June 2015. In both periods, the sector's relative underperformance was 6%-13%. With the recent Bund yield hike since July, the sector underperformed by 13%-20% in relative terms (see *German residential peer group performance comparison*).

With the German economy running a large current account surplus at the same time as real rates are negative is a rather favourable macro environment for real asset / estate prices. Any deterioration of this environment, specifically deflation trends, might negatively impact real estate valuations.

German residential rents are highly regulated. While this comes with benefits, as shown in the chapter 'rent regulations with benefits', it also implies risks. A further tightening of residential rent regulations might negatively impact the sector's rental growth rates. Since the major rent regulations are federal law, the parliamentary elections in Germany next year in autumn will be in the focus. Recent federal elections showed a left-wing trend, indicating a possible further tightening of rent regulations. The Social Democrats have already published their key ideas on rent regulations for their election campaign, which we have discussed in the chapter 'Regulations with benefits'.

The German affordable housing rental market is characterised by a rather favourable supply-demand situation, as shown in the chapter 'Supply-demand'. Any meaningful recovery of construction activity in the affordable housing segment might negatively impact rental growth. In this respect, we see major state subsidies for affordable housing construction as the main risk. Any meaningful decline of net migration in Germany and/or

Slowing wage growth as a potential negative

the key cities might also negatively impact rental growth. Historically, net migration trends have been rather cyclical.

Potential corporate tax changes as a negative

We also regard wage growth as a key driver for the residential rental models, as shown in the chapter 'Affordability'. Any meaningful decline of wage growth might have a negative impact on rental growth.

Change of RETT blocker rule is a potential negative

The German-listed residential players benefit from relatively low corporate tax rates, despite the fact that they are non-REITs, since the German REIT law prevents residential rental models from being REITs. The effective cash tax rate is well below 5% for most of the players. Any changes of tax rulings might negatively impact post-tax earnings.

EU Mortgage Credit Directive as a potential negative

Most of the transactions of the listed residential players in recent years were based on share deal structures, which allow avoiding the payment of real estate transfer taxes (RETT), so called RETT blockers. Any changes of tax rulings might negatively impact transaction costs and make transactions more expensive. We have discussed the topic in the chapter *Modernisation investments and M&A key growth drivers*.

New draft law for tighter private mortgage requirements with potentially negative impact on real estate prices

The new EU 'Mortgage Credit Directive' became effective in March this year. It aims to create an EU-wide mortgage credit market with a high level of consumer protection. The law, called 'Wohnimmobilienkreditrichtlinie' in Germany, increases the requirements for a private mortgage. Specifically, elderly people and families are reported to have a bigger challenge to get a mortgage. Non-EU citizens seem not to get any mortgage loan at all anymore, since the new directive requires mortgage banks to hedge the currency risk. The new law might negatively impact the demand for condominiums, which might negatively impact housing prices.

A new draft law for tighter private mortgage requirements has recently been initiated by the ministry of finance. The draft, which hasn't been officially published yet, provides the Federal Financial Supervisory Authority with the option to intervene in the case of an 'overheating' of private mortgage lending through tighter mortgage requirements. The assessment of 'overheating' will be based on analysis and evaluations of the Bundesbank. The intervention instruments comprise a leverage cap, fixed redemption schedules and an income-linked debt service cap. It considers various exemptions like micro credits, refinancing / follow-up financing and social housing. Private mortgage loan volumes went up strongly by 22% in 2015, and August 2016 annualized levels remain at high levels. If the draft becomes effective law, it might negatively impact the demand for condominiums, which might negatively impact housing prices.

## German residential peer group comparison

Homogenous sector characteristics allow peer group comparison

The German-listed residential sector is rather homogenous as the main players basically run the same business model, which is focused on affordable letting. We have therefore set up a comprehensive peer group comparison with all relevant measures segmented into portfolio, financing and operating KPIs, allowing an assessment of each player relative to the other. Please refer to the tables in the chapter 'Peer group mapping' at the beginning of this report.

### German residential peer KPIs

Portfolio quality KPIs

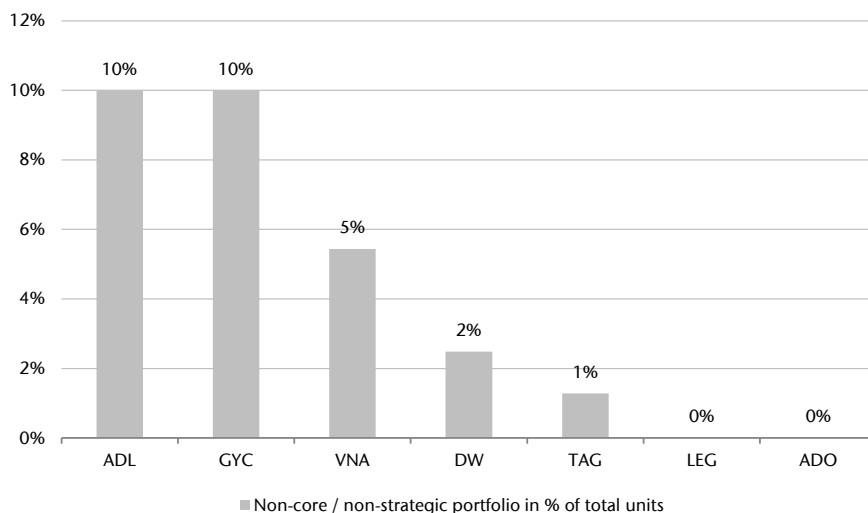
Due to the many specifics of our portfolio quality measures for the German residential sector, we discuss some of the KPIs in more detail:

Non-core portfolio exposure

**None-core / non-strategic portfolio in % of total:** We think this is an important measure to assess the maturity and efficiency of a residential portfolio. In general, the lower the portion of non-core assets, the better the portfolio quality and operating

efficiency. Players with a high recent acquisition activity often have a high portion of non-core assets, as these assets were part of portfolio acquisitions. Strong investment markets, such as we are currently experiencing, are favourable to dispose non-core assets at attractive pricing.

**Chart 52: Non-core / non-strategic portfolio exposure**

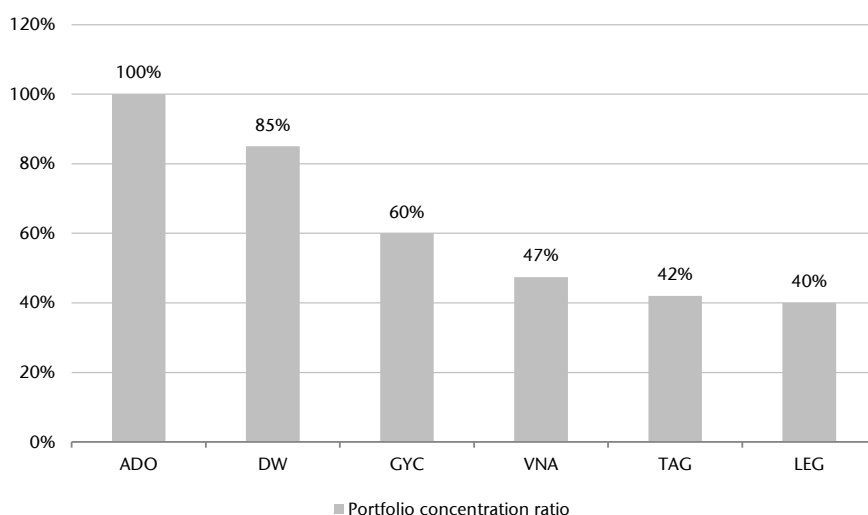


Source: Jefferies, company data as of 9M 2016. Non-core / non-strategic units in % of total units

## Portfolio concentration ratio

**Portfolio concentration ratio:** This shows the degree of portfolio concentration calculated on the basis of # of units in the top-10 city locations in % of total units. We think the higher the portfolio concentration, the more efficiently it can be managed, resulting in better operating margins. Obviously, ADO has the highest portfolio concentration as a pure Berlin player.

**Chart 53: Portfolio concentration ratio**



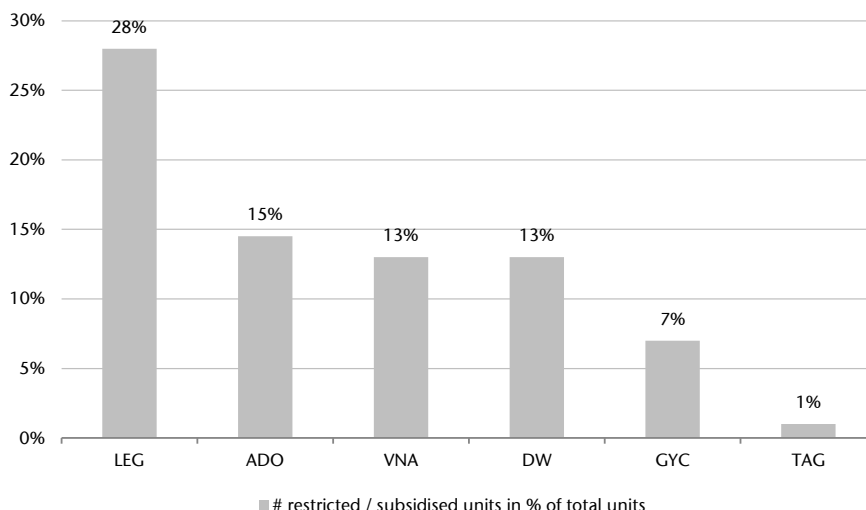
Source: Jefferies, company data as of 9M 2016. Top10 city locations (# units) in % of total units

## Restricted rent exposure

**Restricted rent exposure:** The ratio shows what portion of leases are restricted or subsidised. Restricted or subsidised rents have their origin in the large-scale social housing programmes of the 60ies / 70ies, where the construction of social housing was subsidised by cheap loans with the obligation of the landlord to offer affordable rents. These rents are subject to a defined rent adjustment schedule. For example, LEG's restricted rents get

adjusted every three years. Since the rent restrictions were fixed for a certain period of time (typically 20-30 years), they mature over time. For example, about 1%-2% of LEG's restricted units mature every year, ending up as free-financed apartments. In general, the higher the portion of restricted units, the more limited the rental growth.

**Chart 54: Restricted rent exposure**

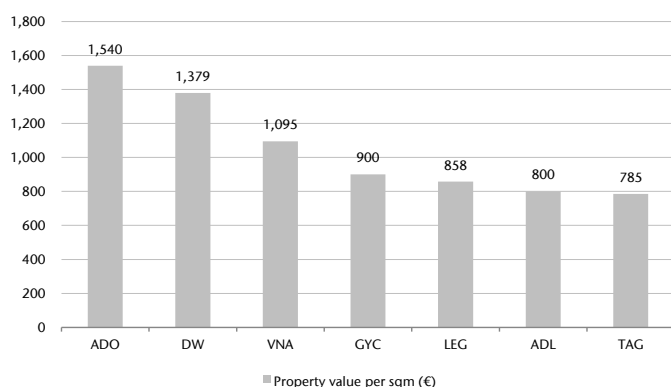


Source: Jefferies, company data as of 9M 2016. # restricted / subsidised units in % of total units

### Property valuation

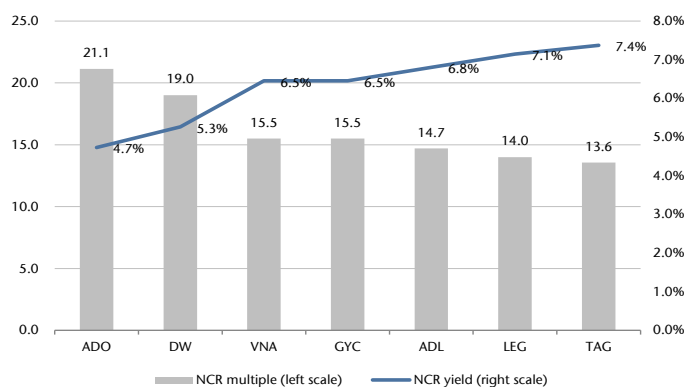
**Average value per sqm (€), NCR yield and multiple:** To assess and compare these measures, it is important to look at the timing of the 'last property revaluation', since in times of meaningful yield compression there might be a major valuation difference if the reference date of the valuation is not the same. Typically, a comprehensive property valuation is done on an annual basis. However, some players like DW and ADO have recently switched to a semi-annual valuation, referring to the high yield shift dynamics in the Berlin market. GYC does its property valuation on a quarterly basis. TAG's valuation is done annually, but with reference data as of end of September.

**Chart 55: Property value per sqm (€)**



Source: Jefferies, company data as of 9M 2016

**Chart 56: NCR multiple and yield**



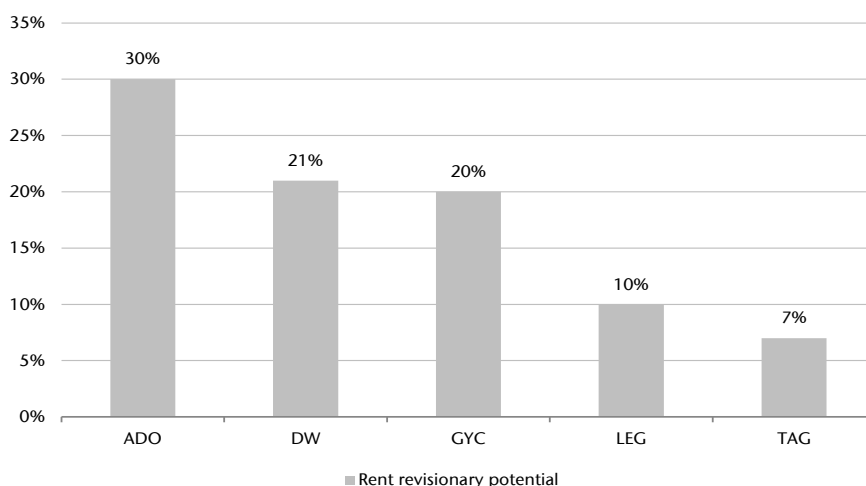
Source: Jefferies, company data as of 9M 2016

### Rent revisionary potential

**Rent revisionary potential:** As discussed in this report, we regard the measure as key to assess the portfolio quality and location mix. The higher the rent revisionary potential, the higher the ability to grow rents efficiently (see our modernisation / rent growth ratio). Tenant fluctuation determines how long it takes to realise the full revisionary potential, since it can only be captured through re-lettings. At current turnover rates of 7%-11%, it takes 9-14 years. It is also important to stress that the rent revisionary potential usually is stated as of today and the future potential mainly depend on market rent developments.

For example, DW's rent revisionary potential remained above the 20% level despite high like-for-like rental growth in recent years. Also major re-letting investments determine the future revisionary potential, since these investments lift the apartment into higher rent index / quality clusters. On the other hand, these investments are also necessary in the meantime, in order to get exempted from the rent-cap limitations, which again is key to realise the full revisionary potential. There are also various definitions of the rent revisionary potential: Some define it as average re-letting rent (their own re-letting rents) versus current in-place rents (ADO, DW); some define it as upside to average market-rents (LEG). VNA doesn't disclose the number.

**Chart 57: Rent revisionary potential**

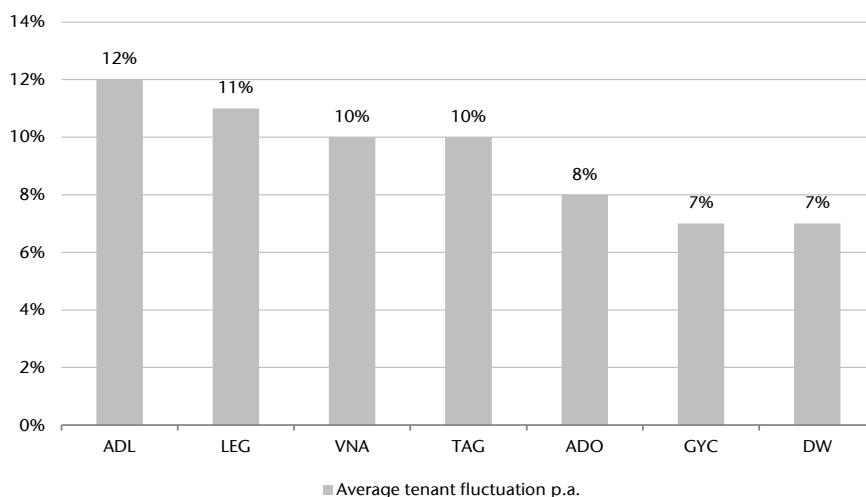


Source: Jefferies, company data, as of 9M 2016

#### Average tenant fluctuation p.a.

**Average tenant fluctuation p.a.:** As stressed above, this number basically determines how long it takes to capture the full rent revisionary potential. The reciprocal value of the number shows the theoretical average lease length, currently 9-14 years. In residential markets with a strong demand overhang / supply shortage like Berlin, fluctuation tends to be lower since tenants stick to their 'cheap' existing lease and are not willing to move for an 'expensive' re-let lease. It will be interesting to see how low fluctuation rates in 'hot' residential market can go – the 7%-8% level of DW and ADO in Berlin are already historical lows. Typically, the longer vacancy rates are low in a specific market, the lower the tenant fluctuation.

**Chart 58: Average tenant fluctuation**



Source: Jefferies, company data as of 9M 2016

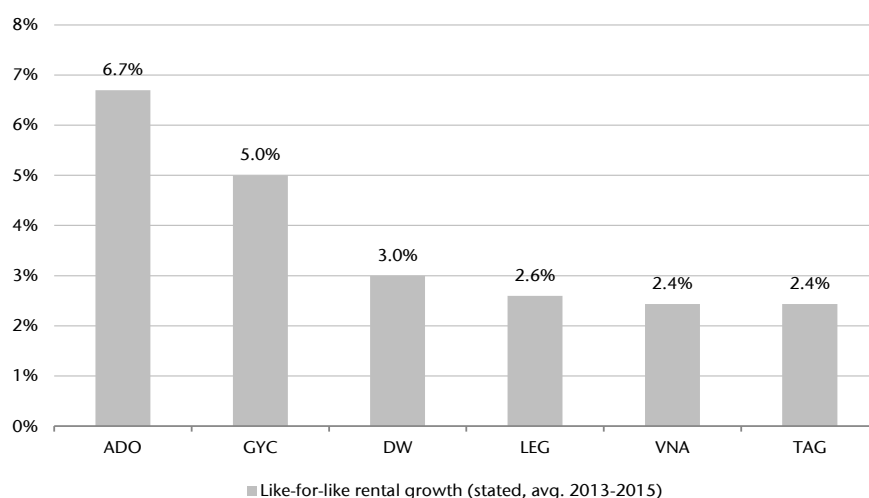
## Avg. rent vs. rent index

**Average rent % deviation to index rent per sqm:** This number gives also an indication for rent revisionary potential through adjustments to the rent index ('Mietspiegel') level. DW's and ADO's average in-place-rent in Berlin is already slightly above the rent index average, while LEG's in-place-rent is still 4.5% below the rent index level. The number gives only a rough idea about the rent upside of existing leases, since this strongly depends on portfolio quality clusters. Furthermore, the number isn't widely published.

## Like-for-like rental growth

**Like-for-like rent growth:** We regard this as a key performance measure for portfolio quality and location mix. It is the key driver for underlying top-line growth and property valuation. However, it needs to be assessed relative to capex levels in order to get a fair picture of return (like-for-like rent growth) on investments (capex). For this purpose we look at the 'modernisation / rent growth ratio' as described below. We think also AFFO (underlying earnings minus capex) captures these issues best.

**Chart 59: Stated like-for-like rental growth avg. last 3yrs**



Source: Jefferies, company data as of 9M 2016. See definitions below

## Like-for-like rental growth definition

There is also a wide range of definitions for like-for-like rent growth. For example, some include like-for-like vacancy, some not. Most are based on rents per sqm as of a reference date, but there are also exemptions like ADO, which calculates it cash-flow based in order to capture the full re-letting upside including vacancy reduction. We have shown the key definition of each player in the table below:

**Table 13: Like-for-like rental growth definition**

| Company | Definition  |
|---------|---|
| ADO     | Change in y-o-y total rental cash flow for the I-f-I portfolio which includes vacancy change  |
| DW      | In-place rent per sqm of same-store rented space at reference date 12 months y-o-y, excluding like-for-like vacancy change  |
| GYC     | In-place rent per sqm of same-store rented space at reference date 12 months y-o-y, including like-for-like vacancy change  |
| LEG     | In-place rent per sqm of same-store rented space at reference date 12 months y-o-y, adjusted for re-lets of vacant units from the previous year, excluding like-for-like vacancy change |
| TAG     | In-place rent per sqm of same-store rented space at reference date 12 months y-o-y, including like-for-like vacancy change  |

**Table 13: Like-for-like rental growth definition**

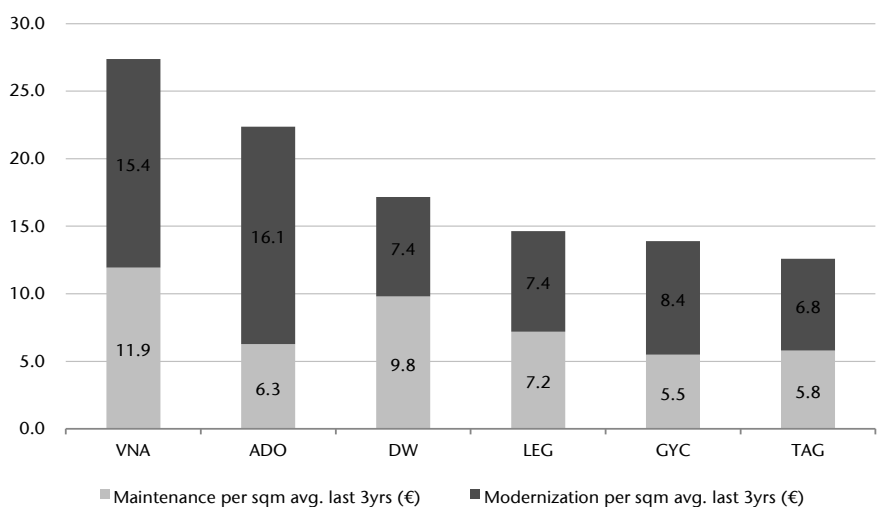
| Company | Definition   |
|---------|--|
| VNA     | In-place rent per sqm of same-store rented space at reference date 12 months y-o-y, excluding like-for-like vacancy change |

Source: Jefferies, company data

## Average capex

**Capex per sqm avg. last 3yrs (€):** This shows the longer-term average total modernisation and maintenance per sqm, allowing for a direct peer comparison. As discussed above, we always put modernisation measures in a relative perspective to the like-for-like rent growth. Typically, modernisation is capitalised and maintenance expensed. Some players also capitalise part of maintenance. We split into all capitalised and all expensed measures, which is reflected in the 'Capex / expense ratio'. A high capex ratio (like ADO) is favourable for operating margins.

**Chart 60: Maintenance costs & Modernisation investments**



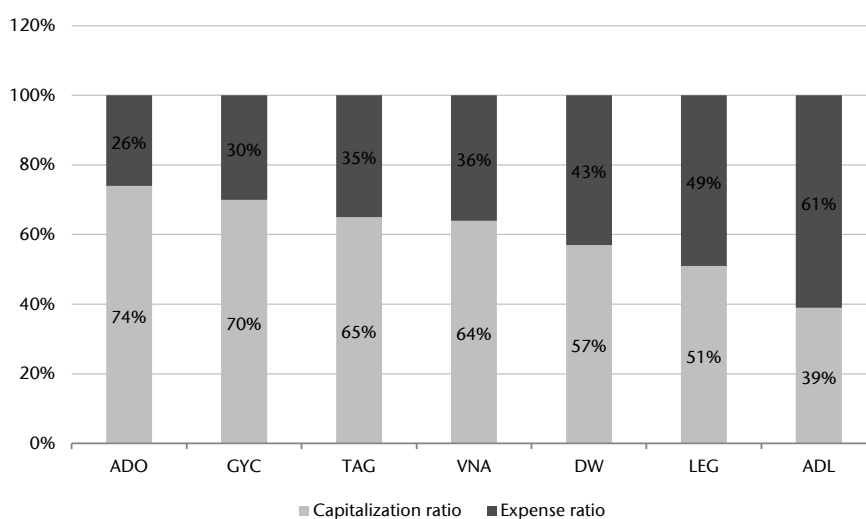
Source: Jefferies, company data, as of 9M 2016, capitalised maintenance allocated to modernisation

## Capex / expense ratio

**Capex / expense ratio:** This shows what portion of total maintenance and modernisation is capitalised (Capex, reflected in the cash flow) and what portion is expensed (in the P&L). Companies like ADO and Grand City Properties have a rather high capitalisation rate, which is supportive for their operating margins, since the expense rate is rather low. High capitalisation, low expense ratios indicate low maintenance levels. It also indicates towards a more 'opportunistic', return-driven investment approach. Some players (Vonovia and ADO) also capitalise part of their maintenance, which we classify as capitalised capex reflected in the cash flow.



**Chart 61: Capitalisation / expense ratio**

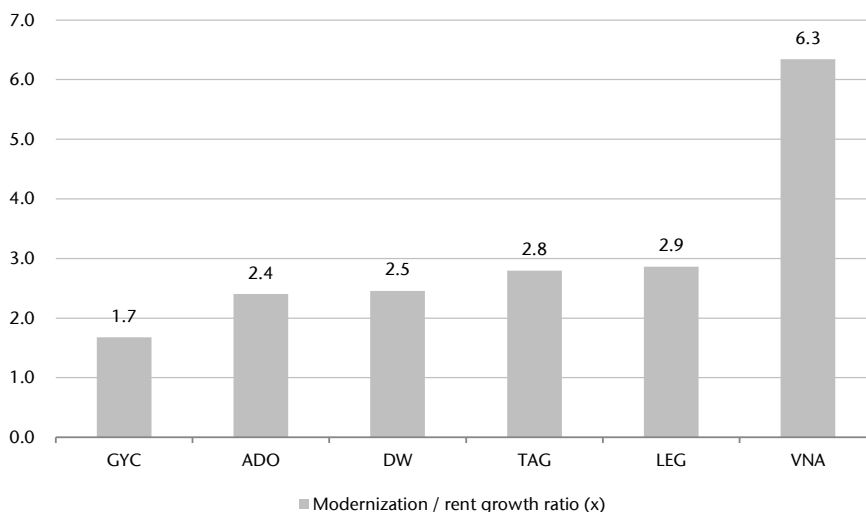


Source: Jefferies, company data as of 9M 2016. Capitalised = modernisation investments + capitalised maintenance, expensed = maintenance

## Rent growth efficiency ratio

**Modernisation / rent growth ratio:** This ratio basically shows the efficiency of rental growth by calculating the return (like-for-like rent growth, avg. last three years) on investments (modernisation per sqm avg. last three years). The lower the ratio, the more efficient the company's rental growth or the higher the return on modernisation investments.

**Chart 62: Rent growth efficiency – the lower, the more efficient**

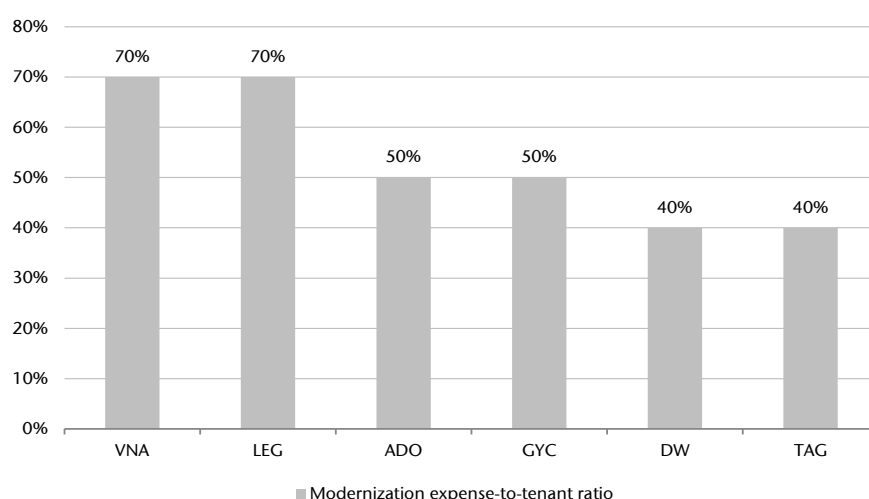


Source: Jefferies, company data as of 9M 2016. Modernisation investments per sqm avg. last 3yrs / stated rental growth avg. last 3yrs

## Modernisation expense-to-tenant ratio

**Modernisation expense-to-tenant ratio:** This is the portion of the so-called 'Modernisierungsumlage' that can be charged to the tenant. The rent increases after modernisations is one key instrument under German rent regulations (§559 of the German civil code) to increase rents. It allows to charge up to 11% of modernisation costs to the tenant (11% on the annual rent). Typically, only a portion of 40%-70% of the modernisation costs can be charged to the tenant. The higher the portion, the higher the return on modernisation investment. Insulation programmes, for example, allow a rather high portion to be charged to the tenant.

**Chart 63: Modernisation investment portion to be charged to tenants**



Source: Jefferies, company data as of 9M 2016. Portion of the so-called 'Modernisierungsumlage' which can be charged to the tenant

## Rental loss ratio

**Rental loss in % of gross rents p.a.:** This ratio refers to the portion of rent not paid by the tenant (non-recoverable) in % of total gross rents annually. It typically ranges at 1%-2%, and is a reflection of tenant quality.

## Homogenous models allow for peer group valuation

NAV, FFO, AFFO, DPS and implied cap rates and values are our key valuation measures

## FFO post minorities, hybrid coupon adjusted, post-tax

## Implied cap rates

## Implied value per sqm

## Our models assume full investment of current fire power

## German residential peer group valuation

Due to the homogeneous business models and similar risk-return profiles, at least in respect of cash flows, we also think a peer group valuation makes much sense.

We focus on the key real estate valuation measures NAV, FFO, AFFO, dividend and implied cap rates. Furthermore, we also look at implied values per sqm, since it is a handy measure to compare with condominium offer prices. Our NAVPS is based on the EPRA NAV definition, considering shareholders' equity post minorities, treating perpetual hybrids not as equity but as debt, deducting goodwill and calculating it on a fully-diluted basis in the case convertibles are in-the-money.

Our FFO definition very much follows the company definition, but also deducting minorities and considering hybrid coupons as financing costs. It is also calculated post-tax, which is the industry standard. Our AFFO definition is based on the FFO deducting modernisation and capitalised maintenance.

Our implied cap rates are based on annualised net cold rents (NCR) relative to the implied investment property value. The 'implied' element represents the value of the NAV premium/discount. The same applies to our implied market rent based cap rates. This measure basically captures the rent revisionary potential and is based on the theoretical assumption of a full realisation of the rent revisionary potential as of today (annualised net cold rents + full rent revision).

Our implied value per sqm is based on the implied investment property value divided by the estimated total space (sqm). The 'implied' element represents the value of the NAV premium/discount.

Our financial models consider current acquisition fire power (at maximum targeted LTV levels) to be fully invested over a period of 12 months. We assume longer-term retained earnings to be used for de-leveraging. Please refer to the following table for our peer group valuation.

**Table 14: Peer group valuation**

| Stock rating and target price                  | ADL  | ADO   | DW    | GYC  | LEG   | TAG  | VNA   | Avg top 3 | Avg all |
|--|------|-------|-------|------|-------|------|-------|-----------|---------|
| Recommendation                                 | Hold | Buy   | Buy   | Buy  | Buy   | Hold | Hold  | -         | -       |
| Price target (€)                               | 14.0 | 38.0  | 35.0  | 19.0 | 84.0  | 12.0 | 32.0  | -         | -       |
| Share price (€)                                | 14.0 | 30.6  | 28.4  | 15.2 | 70.6  | 11.8 | 30.5  | -         | -       |
| Total return incl. dividend yield              | 0%   | 26%   | 26%   | 28%  | 23%   | 7%   | 8%    | 19%       | 17%     |
| Valuation                                      | ADL  | ADO   | DW    | GYC  | LEG   | TAG  | VNA   | Avg top 3 | Avg all |
| Spot NAV discount/premium                      | 1%   | 7%    | 17%   | -3%  | 20%   | 20%  | 29%   | 22%       | 13%     |
| NAV16E discount/premium                        | -7%  | -5%   | 1%    | -5%  | 6%    | 23%  | 0%    | 2%        | 2%      |
| NAV17E discount/premium                        | -18% | -20%  | -16%  | -22% | -5%   | 8%   | -12%  | -11%      | -12%    |
| NAV18E discount/premium                        | -23% | -31%  | -23%  | -33% | -12%  | -3%  | -18%  | -18%      | -20%    |
| FFO yield FY16E                                | 3.1% | 3.3%  | 4.0%  | 6.3% | 5.9%  | 5.5% | 5.1%  | 5.0%      | 4.7%    |
| FFO yield FY17E                                | 4.7% | 4.5%  | 4.5%  | 7.5% | 6.5%  | 6.0% | 5.5%  | 5.5%      | 5.6%    |
| FFO yield FY18E                                | 6.6% | 5.1%  | 4.8%  | 8.3% | 7.0%  | 6.6% | 5.8%  | 5.9%      | 6.3%    |
| AFFO yield FY16E                               | 0.7% | 1.8%  | 2.7%  | 3.7% | 4.5%  | 2.8% | 0.9%  | 2.7%      | 2.4%    |
| AFFO yield FY17E                               | 2.3% | 2.3%  | 1.3%  | 5.3% | 4.0%  | 3.2% | -0.2% | 1.7%      | 2.6%    |
| AFFO yield FY18E                               | 4.2% | 2.1%  | 1.6%  | 5.8% | 3.6%  | 3.6% | 0.5%  | 1.9%      | 3.1%    |
| Dividend yield FY16E                           | 0.0% | 1.6%  | 2.6%  | 3.6% | 3.8%  | 4.8% | 3.7%  | 3.4%      | 2.9%    |
| Dividend yield FY17E                           | 0.0% | 2.2%  | 2.9%  | 4.3% | 4.2%  | 5.0% | 4.1%  | 3.8%      | 3.3%    |
| Dividend yield FY18E                           | 0.0% | 2.6%  | 3.1%  | 4.7% | 4.5%  | 5.3% | 4.3%  | 4.0%      | 3.5%    |
| Implied NCR yield FY16E                        | 7.0% | 4.5%  | 4.7%  | 6.7% | 6.5%  | 6.9% | 5.8%  | 5.6%      | 6.0%    |
| Implied NCR yield market rent based FY16E      | 7.3% | 5.9%  | 5.7%  | 8.0% | 7.1%  | 7.3% | 6.5%  | 6.4%      | 6.8%    |
| Implied value per sqm FY16E (€)                | 783  | 1,599 | 1,576 | 884  | 1,024 | 848  | 1,289 | 1,296     | 1,143   |
| Potential FFO dilution from convertibles i-t-m | 10%  | 0%    | 10%   | 0%   | 8%    | 0%   | 0%    | -         | -       |
| Growth   | ADL  | ADO   | DW    | GYC  | LEG   | TAG  | VNA   | Avg top 3 | Avg all |
| NAVPS growth FY16E (y-o-y)                     | 22%  | 34%   | 28%   | 26%  | 13%   | 8%   | 26%   | 19%       | 21%     |
| NAVPS growth (CAGR 3yrs, FY15-18E)             | 14%  | 23%   | 19%   | 21%  | 11%   | 11%  | 16%   | 14%       | 16%     |
| FFOPS growth FY16E (y-o-y)                     | 9%   | 10%   | 18%   | 12%  | 21%   | 15%  | 1%    | 13%       | 25%     |
| FFOPS growth (CAGR 3yrs, FY15-18E)             | -    | 15%   | 20%   | 26%  | 13%   | 8%   | 5%    | 13%       | 17%     |
| DPS growth FY16E (y-o-y)                       | -    | 31%   | 36%   | 120% | 20%   | 4%   | 19%   | 22%       | 26%     |
| DPS growth (CAGR 3yrs, FY15-18E)               | -    | 27%   | 18%   | 42%  | 12%   | 4%   | 12%   | 13%       | 15%     |

Note: Priced as at close 24 November.

Source: Jefferies estimates

The sector trades at 5.6% cap rate or €1,300 per sqm

### Recent valuation patterns

### Balance sheet and financing as key metrics for rate sensitivity

The sector currently trades at 11% discount to NAV 2017E, 5.5% FFO I yield 2017E and 3.8% dividend yield 2017E. This values underlying properties at a 5.6% cap rate (implied) or €1,300 per sqm (implied) as of 2016E. We forecast a further 57pbs yield compression over the next three years, driving NAVs up by 14% annually. We forecast 13% p.a. underlying earnings growth (FFO I per share) over the next three years, lifting earnings yields to 5.9% as of 2018E – at average 67% payout ratio, a 4.0% dividend yield.

Looking at valuation patterns over the last two years, the sector can be divided into three camps:

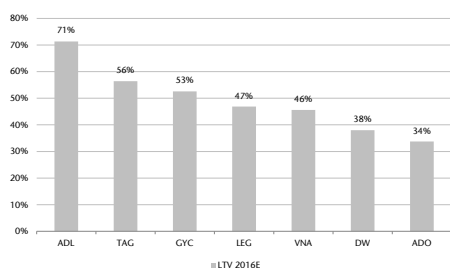
A) The high NAV growth players like DW and ADO, which have been benefiting from strong rental growth and yield compression in the Berlin market.

B) The high earnings yield players like LEG, TAG, ADL, which operate higher yielding portfolios and have experienced subdued property revaluations so far.

C) The others like Vonovia and GYC. Vonovia, as the closest proxy to the German residential market due to its huge, German-wide portfolio, with valuation metrics in between the (A) and (B) players. GYC, as an opportunistic turnaround play with strong earnings yields as well as high NAV growth, driven by a strong operating turnaround performance as well as yield compression in its key markets.

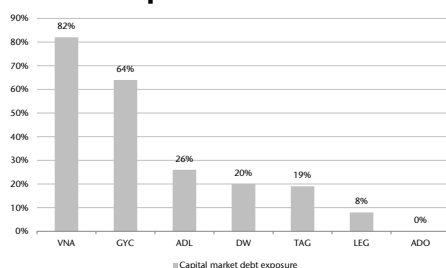
With the 10-year Bund yield up by 50bps since record lows in August and further rate hike speculation, interest rate sensitivities have moved into investors' focus again. In general, the higher a player's financial leverage, the higher the interest rate sensitivity. Adler and TAG are the highest levered players; DW and ADO the lowest. With regards to debt capital market exposure, Vonovia has the highest, followed by GYC, and LEG has the lowest. Overall, we see a slightly higher risk profile for capital markets debt versus mortgage lending, specifically in 'risk-off' markets. Same with debt maturity: the longer the term, the lower the risk profile.

**Chart 64: LTV**



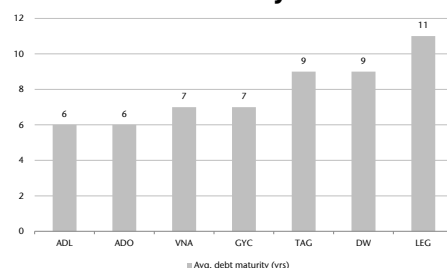
Source: Jefferies, company data 9M16

**Chart 65: Capital markets debt**



Source: Jefferies company data 9M16

**Chart 66: Debt maturity**

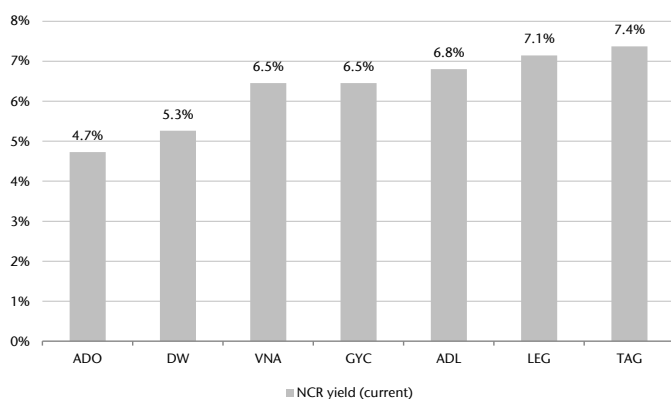


Source: Jefferies company data 9M16

### Cap rates and corporate governance also key metrics for risk assessment

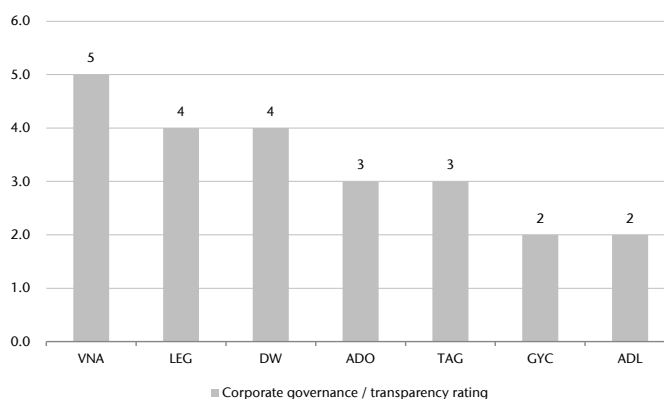
We think property yields are a further driver for rate sensitivity with lower yielding assets regarded more as a safe haven. However, it can also be interpreted the other way around, arguing that higher yields offer more safety cushion in a yield expansion environment. Also corporate governance and transparency play a key role for the market's risk perception. In this respect, we see GYC and Adler on the weaker side.

**Chart 67: Cap rates**



Source: Jefferies, company data as of 9M 2016

**Chart 68: Corporate governance ranking**



Source: Jefferies, 5 = maximum score, 1 = minimum score

### NAV sensitivity on cap rates

The NAV sensitivity of our universe on a 100bps cap rate shift amounts to 26%-34%, based on our 2017E estimates. Our 'base case' valuation for the universe is 5.4% NCR yield in 2017E, reflecting 90bps yield compression versus 2015 and 33bps versus 2016E.

**Table 15: Universe NAV sensitivity on cap rates**

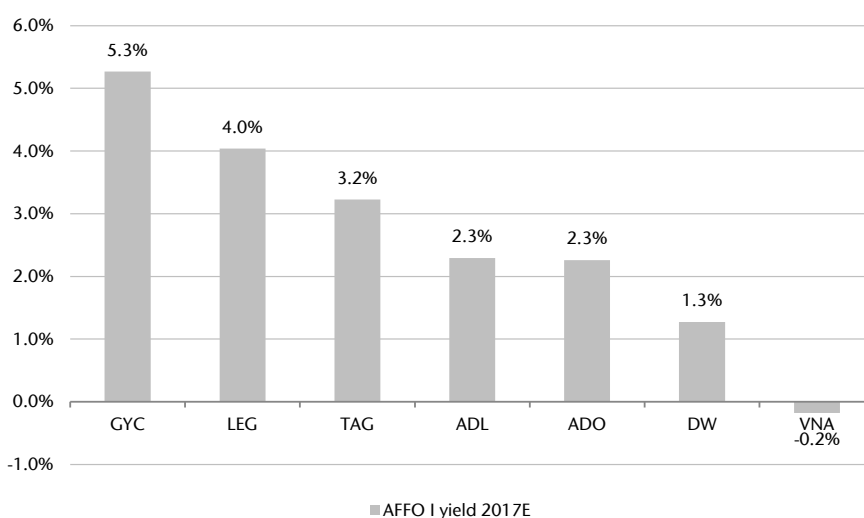
|                       | Yield compression |      |      | Base case |      |      |      | Yield expansion |      |
|-----------------------|-------------------|------|------|-----------|------|------|------|-----------------|------|
| NCR yield             | 4.4%              | 4.7% | 4.9% | 5.2%      | 5.4% | 5.7% | 5.9% | 6.2%            | 6.4% |
| % change to base case | 34%               | 24%  | 15%  | 7%        | 0%   | -7%  | -14% | -20%            | -26% |

Source: Jefferies estimates. Base case as of 2017E, avg. top3 players VNA, DW and LEG

### Market pays little attention on AFFO yields

We've stressed the relevance of AFFO as one measure for rental growth efficiency, since it deducts modernisation investments from underlying earnings and therefore is a close proxy to free cash flow and dividend capacity. However, from a valuation perspective, the market seems to put less attention on it. For example, Vonovia generates a rather low AFFO due to high modernisation investments relative to its rental growth, which would suggest valuations well below current levels. Also DW's AFFO yields will come down on the back of higher investments. As discussed in the chapter 'Modernisations and M&A', we argue that AFFO is a good measure for rent growth efficiency and modernisation returns. However, it neglects revaluations as a further return component.

**Chart 69: Market seems to pay little attention to AFFO**

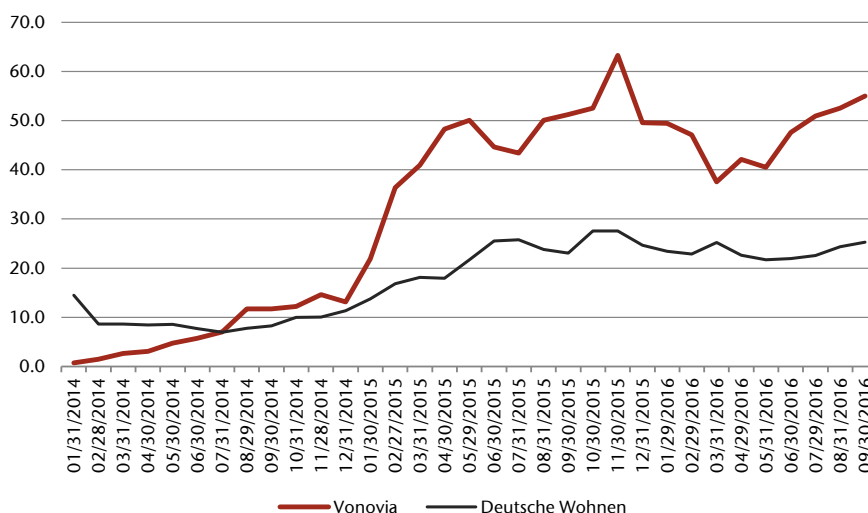


Source: Jefferies estimates. AFFO I = FFO I minus modernisation investments and capitalised maintenance

Stock market liquidity as valuation driver

Vonovia is also a pretty good example for the relevance of stock market liquidity on valuation. With increasing liquidity, the stock's relative valuation to peers improved significantly. The major steps towards better stock market liquidity have been done with the Gagfah takeover in Q1 2015 and the DAX inclusion in Q3 2015, which have significantly improved stock market liquidity and triggered a major re-rating.

**Chart 70: VNA's stock market liquidity up**

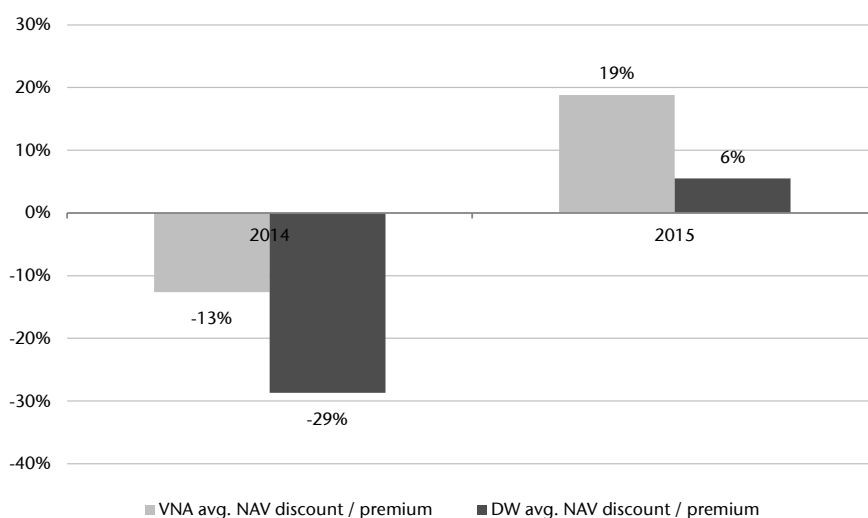


Source: Jefferies, Factset. Average daily turnover 3-months (€m)

VNA with significant re-rating on the back of higher liquidity

The stock traded at an average 13% NAV discount in 2014, which turned into a 19% NAV premium in 2015, despite rather weak NAVPS growth of just 2% year-on-year due to Gagfah goodwill. In relative terms to the second largest player, DW, VNA's NAV valuation improved from a 8ppt average discount in 2014 to a 13ppt premium in 2015. DW is currently regarded as a potential DAX candidate, based on the Deutsche Boerse replacement rule, which applies when one of the current DAX members gets excluded due to market cap and liquidity hurdle shortfall.

**Chart 71: Valuation benefits from stock market liquidity**

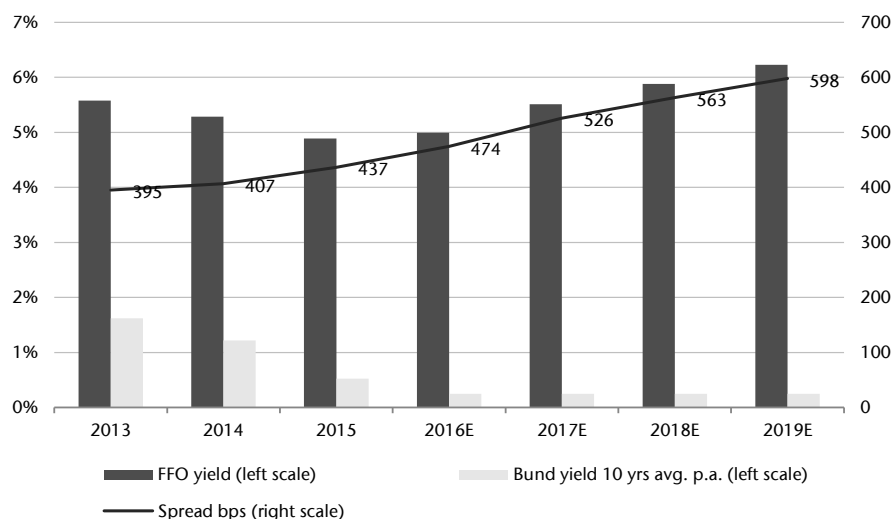


Source: Jefferies, Factset, company data

## Earnings yields at record wide spread over Bund

With declining bund yields and strong earnings growth, the sector's earnings yield spread (FFO) over the bund has been widening over years, and with the recent negative sector performance has reached peak levels of 480bps, based on year-end estimates – in our view a rather wide spread, given the sector's low-risk cash flow profile. We expect the sector to continue with solid earnings growth (plus 13% p.a. over the next three years), implying a further 120bps spread widening from current interest rate levels.

**Chart 72: Sector's earnings yields at record wide spreads over Bund**

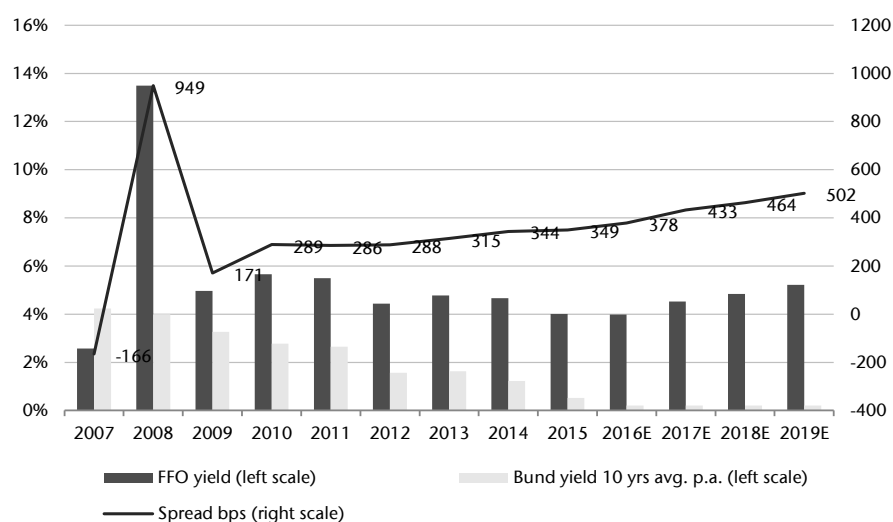


Source: Jefferies. Avg. FFO yield top3 players (VNA, DW, LEG), historical FFO yields based on annual average share price / year-end FFOPS I

## DW with longest history

DW is the player with the longest history. Looking at its FFO yields versus the Bund shows the significant yield spread expansion in recent years. It also shows the valuation revaluation in the course of the financial crisis, with the stock trading at negative yield spreads in 2007 turning into wide positive spreads in 2008.

**Chart 73: DW's historical yield spread over Bund**

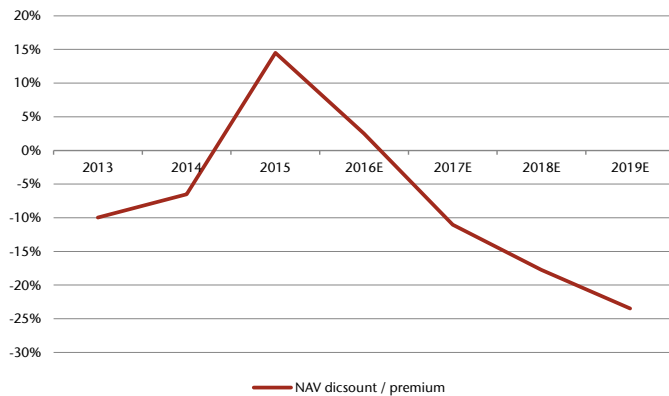


Source: Jefferies estimates, company data. Historical FFO yields based on annual average share price / year-end FFOPS I

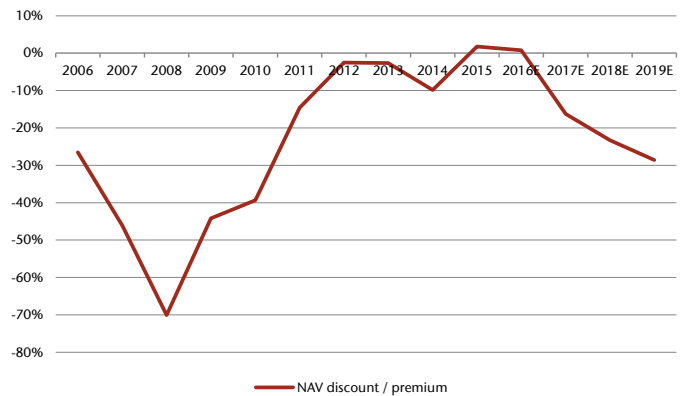
Sector's historical NAV valuation  
from 70% discount to 15% premium

The sector's historical valuation doesn't date back long, since two of the top-3 players were IPOed only in 2013. Therefore, only DW allows a longer-term valuation pattern. In respect of NAV valuation, the top-3 players traded at peak levels last year at about 15% NAV premium, which came down recently due to increasing NAVs (specifically VNA and DW with recent revaluation guidance for 2016) and lower stock valuations. DW's historical NAV valuation shows the wide range of valuation levels.

**Chart 74: Sector's NAV valuation**



**Chart 74: DW's NAV valuation**



Source: Jefferies estimates, company data. Avg. NAV discount / premium top-3 players (VNA, DW, LEG), based on annual average share price

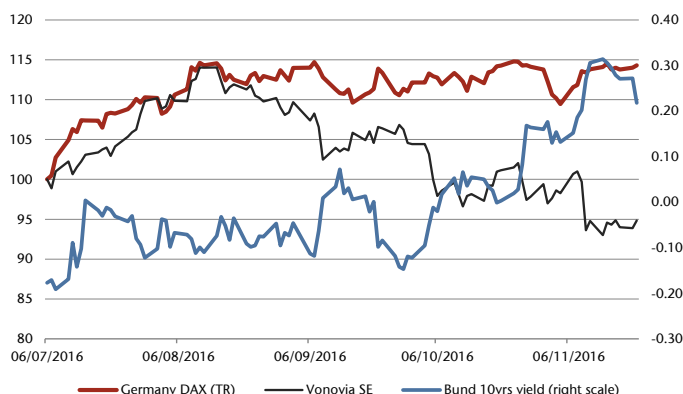
Source: Jefferies estimates, company data. Based on annual average share price

## German residential peer group performance comparison

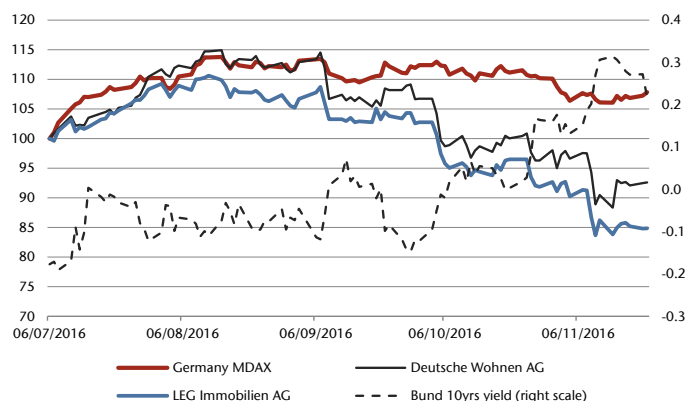
Sector down by 20% since August peaks

With the 10-year Bund yield up by 50bps since its record lows in July and further rate hike speculation, the sector is down by about 20% from peak valuations in August. Looking at the relative performance of the top-3 players, DW and LEG have underperformed the MDAX by 13% and 20%, respectively, and VNA has underperformed the DAX by 17%. This is a more pronounced sector de-rating compared with performance patterns in the past when Bund yields moved up significantly. We've seen two major Bund yield hikes by up to 100bps in recent years, from May to September 2013 and from April to June 2015, with the sector relatively underperforming by 13% and 6%, respectively.

**Chart 76: VNA 17% down on rising rates**



**Chart 77: DW, LEG down by 19/23% from peaks**

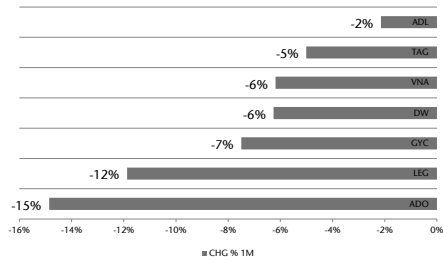


Source: Jefferies, Factset

Source: Jefferies, Factset

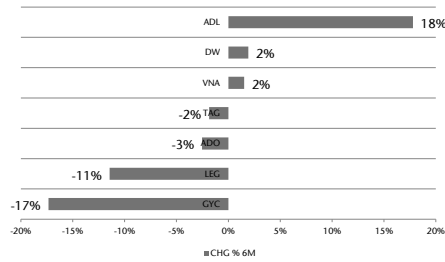


**Chart 78: Absolute performance 1M**



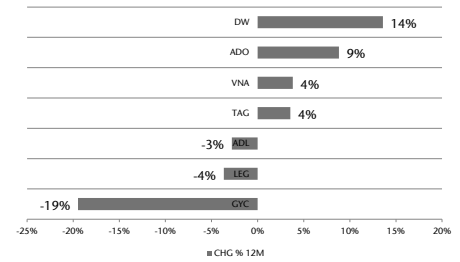
Source: Jefferies, Factset

**Chart 79: Absolute performance 6M**



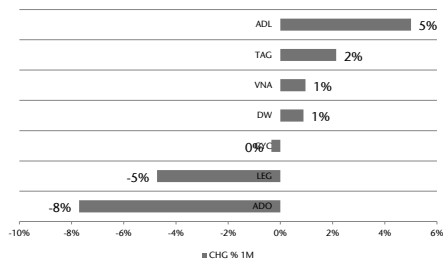
Source: Jefferies, Factset

**Chart 80: Absolute performance 12M**



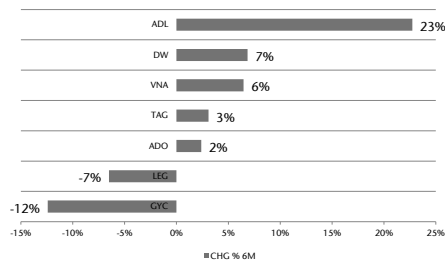
Source: Jefferies, Factset

**Chart 81: Relative performance 1M**



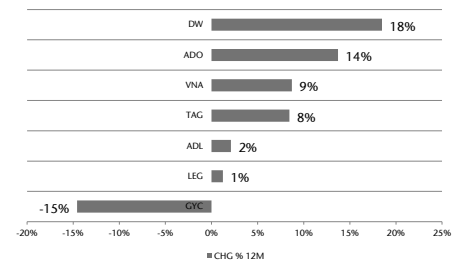
Source: Jefferies, Factset. Rel. perf. vs. FTSE EPRA/NAREIT Euro Zone

**Chart 82: Relative performance 6M**



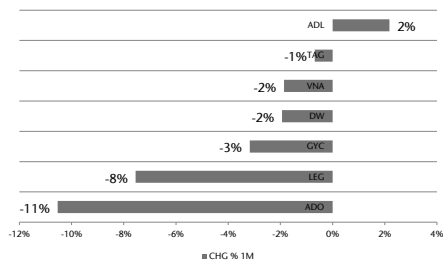
Source: Jefferies, Factset. Rel. perf. vs. FTSE EPRA/NAREIT Euro Zone

**Chart 83: Relative performance 12M**



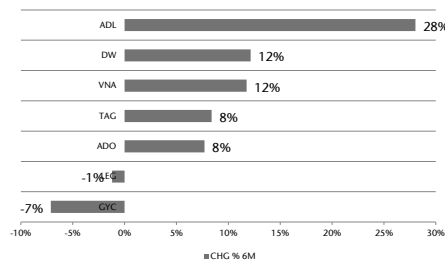
Source: Jefferies, Factset. Rel. perf. vs. FTSE EPRA/NAREIT Euro Zone

**Chart 84: Relative performance 1M**



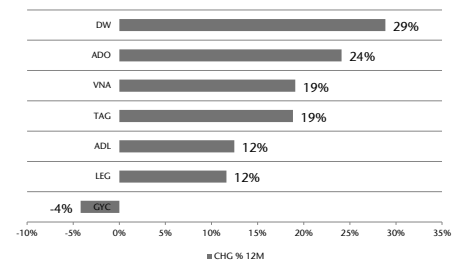
Source: Jefferies, Factset. Rel. perf. vs. FTSE EPRA/NAREIT Developed Europe

**Chart 85: Relative performance 6M**



Source: Jefferies, Factset. Rel. perf. vs. FTSE EPRA/NAREIT Developed Europe

**Chart 86: Relative performance 12M**



Source: Jefferies, Factset. Rel. perf. vs. FTSE EPRA/NAREIT Developed Europe

Strong focus on underlying asset quality

Rent revisionary potential as key metrics for underlying asset quality

High underlying rental growth as key measure for portfolio quality

Good quality locations and high revisionary potential offering best rent and valuation upside through modernisation investments

DW – high-quality portfolio offering best rental and valuation upside

ADO – less mature portfolio character offering significant rent revisionary potential

## Company Key Investment Thesis

Our investment cases are strongly based on the underlying asset quality. While we also regard corporate governance, balance sheet and financing quality as main KPIs, we see the underlying asset quality as the key valuation driver in the long term.

In order to assess the asset quality and corresponding upside, we regard the rent revisionary potential as well as underlying rental growth as particularly important.

Rent regulations create a large rental backlog, which is reflected in the rent revisionary potential of each company. It basically shows the gap between current in-place rents and market rents. For example, Berlin shows the widest gap due to rather low in-place rents and strongly growing market rents. Normally, a high rent revisionary potential indicates strong location and tenant quality. In some cases (e.g. GYC), it is also a reflection of very low in-place rents of ‘undermanaged’ portfolios.

We also regard the underlying rental growth as a major KPI to assess portfolio quality. We define underlying rental growth as rental growth stemming from regular rent increases (based on rent index adjustments) and from re-lettings (capturing the rent revisionary potential), reflecting the underlying rent potential of a portfolio without major investment programmes. It is a key measure for rent efficiency and profitability. Among the top-3 players, DW has shown the highest underlying rental growth in recent years (DW 2.9% like-for-like, LEG 2.5%, VNA 1.5% p.a. average last three years), indicating best-in-class portfolio quality.

We also believe that the better the location and tenant quality, and the higher the rent revisionary potential, the higher the potential to unlock additional rent and value upside through selective modernisation programmes. With the expected refocus of the sector from external to internal growth, we see this as becoming one of the key performance factors and expect the better quality portfolios to generate the best returns.

We regard **Deutsche Wohnen (DW)** as the best-quality Berlin play with the most mature portfolio, contributing to high property management efficiency and high transparency levels. This enables the company to show the highest underlying rental growth among the top-3 players (DW 2.9% like-for-like, LEG 2.5%, VNA 1.5%). With accelerating residential dynamics and increasing investment demand, we believe Berlin residential yields will compress further – we expect 70bps yield-shift for DW’s Berlin portfolio until 2019E to 3.5% cap rate (12% CAGR NAV 2016E-2019E). We expect the recently initiated investment and new construction programme for the company’s high-quality locations to unlock significant rental and revaluation potential – we estimate it to contribute additional 210bps like-for-like rental growth and about €2bn revaluations over the next five years. We also like DW for its well-balanced rental growth mix, high capital discipline and best-in-class operating margins, balance sheet and financing. Furthermore, it is a potential DAX candidate. The stock trades at 16% discount to NAV2017E and 4.5% FFO I yield 2017E, which we regard as attractive, given solid growth prospects and low-risk profile. Implied cap rate stands at 4.7% as of year-end and our price target implies a cap rate of 4.2% and a fair value per sqm of €1,850. Current transaction multiples for core+ assets are priced at 3.3%-4.0% cap rate and per sqm values well above €2,000. We initiate with a Buy and PT of €35.

**ADO Properties (ADO)** is the purest play on Berlin residential dynamics (100% Berlin) and shows the strongest rental growth in the sector (6.7% like-for-like rental growth p.a. incl. vacancy reduction over last three years). Its portfolio has a high exposure to inner-city locations (estimated 39% vs. DW’s 26%), which is a positive rental and valuation driver. The company follows a more opportunistic strategy compared with its main peer DW, both with regards to internal and external growth. Its rental growth strategy is strongly focused on re-lettings through extensive modernisations of vacant apartments. It also has been rather active in acquiring further portfolios, with the most recent deal priced at 4% cap rate level – high revisionary potential and favourable funding conditions make these deals still rather accretive. ADO shows the highest rent revisionary potential (30% vs.

### LEG – a play on earnings yields

DW's 21%), providing a good base for further rental growth. We think it can tap additional rent potential through a more active approach on modernisations and rent index adjustments. We also regard it as a takeover target, offering additional valuation upside. The stock trades at 20% discount to NAV 2017E and 4.5% FFO yield 2017E, which we regard as attractive given further NAV growth potential (14% NAV CAGR 2016E-2019E). Implied cap rate stands at 4.5% as of year-end and our price target implies 4.0% cap rate and a property valuation per sqm of €1,890 as of FY2017E. Current transaction multiples for core+ assets are priced at 3.3%-4.0% cap rate and per sqm values well above €2,000. We initiate with a Buy and PT of €38.

**LEG Immobilien (LEG)** is a North-Rhine-Westphalia (NRW) pure-play and offers one of the best risk-return profiles in the sector with high cash flow visibility due to defensive rental growth and best-in-class earnings yields, driven by high operating efficiency and higher-yielding assets. We like the company for its high capital discipline. It has been in a significant expansion mode, adding >40,000 units since its IPO through selective single portfolio acquisitions at attractive yields with low execution risks, almost no goodwill burden, highly NAV and FFO accretive. The company runs at excellent rental growth efficiency, which is reflected in best-in-class AFFO margins – one of the key drivers is its strong underlying rental growth (2.5% p.a. for the total portfolio and 3.2% p.a. for the free-financed part on average 2014/2015), which is close to DW's growth and well above Vonovia's (1.5%). LEG has recently turned to a more active modernisation approach, providing additional rent growth potential. Balance sheet and financing is rock solid and property valuation looks more on the conservative side with NCR yield expected at 6.7%-6.8% by year-end, also providing room for revaluations and further NAV growth. The stock has been among the performance laggards this year, now trading at very attractive earnings yields well above the other major players (6.5% FFO and 4.2% dividend yield as of FY 2017E). We initiate with a Buy and PT of €84.

### GYC – unmatched valuation metrics offering significant upside

The share price of **Grand City Properties (GYC)** has strongly underperformed over the last 12 months, despite a strong operating turnaround, continuing high rental growth (5.0% like-for-like in 2016E) and significant NAV expansion (+26% NAVPS 2016E). The stock now trades at about 25% valuation discount to the sector average FFO I yield, and the discount is even wider on an AFFO basis (50%). Even if external growth momentum came down this year from rather high levels in recent years, operating turnaround potential remains high (28% from rent revisions and vacancy reduction) and provides strong earnings and revaluation upside (+14% FFOPS, +22% NAVPS 2017E). The planned switch to the regulated market should also be a positive trigger, improving corporate governance. We initiate with a Buy and PT of €19.

### Vonovia – needs growth, but diluting NAV, low rent efficiency

We believe **Vonovia (VNA)** needs to grow further externally in order to utilise its huge insourced service activities and to be able to continue with major modernisation programmes, which is the key source of the company's rental growth. Underlying rental growth is just 1.5% annually, which is well below peers and indicates weaker portfolio quality. The company needs to invest much more than its peers in order to reach the same rental growth. Therefore, rent efficiency is rather low, which is also reflected in low AFFO margins. Furthermore, modernisation-driven rent increases are in the focus for further rent control, putting the returns of the company's large-scale investment programmes at risk. The strong external growth of recent years came with a high goodwill burden, diluting NAV growth and the convert deal will probably further dilute. Vonovia has implicitly levered-up on yield compression over recent years, again a consequence of the high and pricy expansion mode. We initiate with a Hold and PT of €32.

### TAG – positive momentum, but pricy share valuation

**TAG Immobilien (TAG)** is a higher-yielding residential player with a strong focus on East Germany. The company has shown positive momentum recently in respect of rental growth, mainly driven by vacancy reduction. With a high portion of shorter-term debt maturities, the company has a good chance to reduce financing costs. It also applies an active capital recycling strategy, allowing for further accretive growth. Its property valuation looks conservative and it has also improved in terms of corporate governance.

Adler – opportunistic, higher-yielding residential player with positive momentum, but share valuation not attractive enough

However, stock valuation looks pricy and we see GYC as offering better value within the opportunistic high-yield plays. We initiate with a Hold and PT of €12.

**ADLER Real Estate (ADL)** is an opportunistic residential player with a higher-yielding portfolio focused on North and West Germany. It has built up most of its portfolio over the last three years through several portfolio deals – therefore, the company is still in a rather early stage of the corporate cycle, which is reflected in high financial leverage and high financing costs, resulting in low underlying earnings and low transparency and corporate governance levels. However, momentum is positive for most of these issues and, with the likely sale of its convert stake to Vonovia, it should further improve, specifically in respect of de-leveraging and financing. Operating upside mainly stems from vacancy reduction and internalisation of property management. However, the company still needs to provide more track record in this respect. We also regard its subsidiary Accentro as attractive – it operates a condominium privatisation business with a focus on Berlin, a high-margin business. Overall, we like the company's turnaround progress, but stock valuation is not attractive enough to make up for transparency and corporate governance issues. We see GYC as offering better value within the opportunistic higher-yield plays. We initiate with a Hold and PT of €14.

## Deutsche Wohnen (DW) – Buy, €35 PT

### Best-in-class portfolio providing above-average rental growth and highest valuation upside

DW – high-quality portfolio offering best rental and valuation upside

We regard DW as the best-quality Berlin play with the most mature portfolio, contributing to high property management efficiency and high transparency levels. This enables the company to show the highest underlying rental growth among the top-3 players (DW 2.9% like-for-like, LEG 2.5%, VNA 1.5%). With accelerating residential dynamics and increasing investment demand, we believe Berlin residential yields will compress further – we expect 70bps yield-shift for DW's Berlin portfolio until 2019E to 3.5% cap rate (12% CAGR NAV 2016E-2019E). We expect the recently initiated investment and new construction programme for the company's high-quality locations to unlock significant rental and revaluation potential – we estimate it to contribute additional 210bps like-for-like rental growth and about €2bn revaluations over the next five years. We also like DW for its well-balanced rental growth mix, high capital discipline and best-in-class operating margins, balance sheet and financing. Furthermore, it is a potential DAX candidate. The stock trades at 16% discount to NAV2017E and 4.5% FFO I yield, which we regard as attractive, given solid growth prospects and low-risk profile. Implied cap rate stands at 4.7% as of year-end and our price target implies a cap rate of 4.2% and a fair value per sqm of €1,850. Current transaction multiples for core+ assets are priced at 3.3%-4.0% cap rate and per sqm values well above €2,000. We initiate with a Buy and PT of €35.

DW with 73% Berlin exposure

DW owns by far the largest Berlin residential portfolio among the listed players. It currently owns more than 100,000 units in the capital, representing about 73% of the company's property value. We estimate about one-quarter of the Berlin units are located in inner-city locations. About half of the company's residential portfolio has been held for more than five years, according to our estimate, reflecting the mature character and contributing to high portfolio management efficiency and transparency.

Chart 87: DW – high Berlin exposure

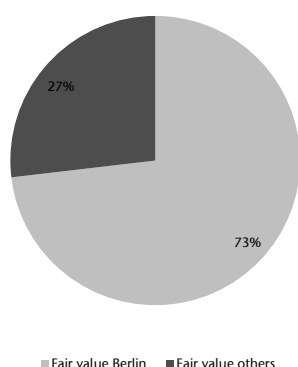
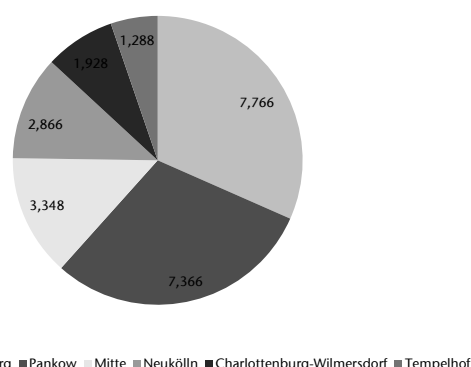


Chart 88: Estimated 25,000 units in inner-city locations



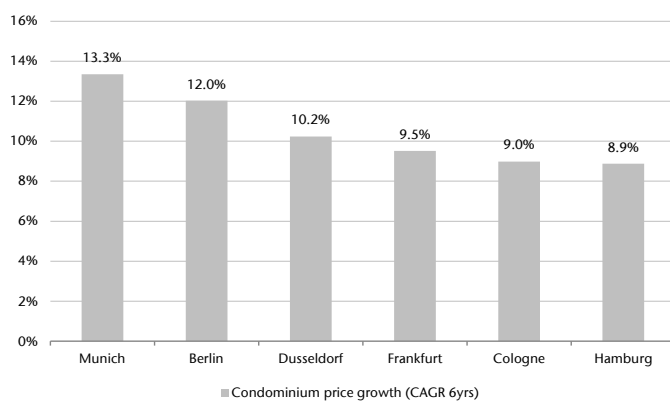
Source: Jefferies, company data; as of 9M 2016

Source: Jefferies, company data, as of 9M 2016, based on estimated inner-city portion of each central district

Berlin with strongest residential dynamics further catching-up

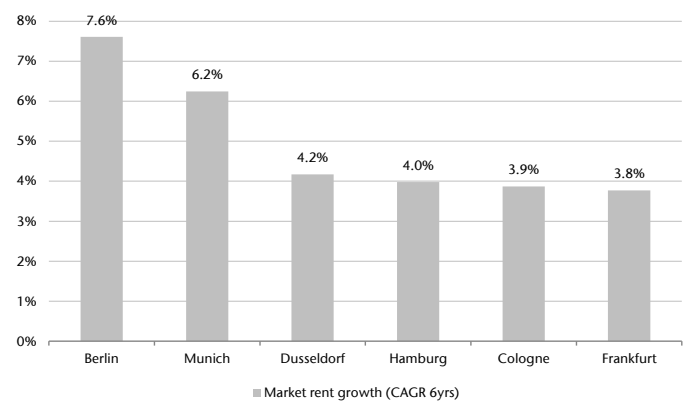
Berlin has been in a strong catch-up mode in recent years with residential dynamics significantly outperforming most of the other German cities. Berlin condominium price and market rents grew by 12% / 8% annually over the last six years, according to data from JLL, well above the 9%-12% / 4%-6% growth rate of other cities, and most recent data shows accelerating momentum (IMX Berlin price index up by 24% year-on-year, rent index up by 10% year-on-year in September).

**Chart 89: Berlin has high condominium price dynamics...**



Source: Jefferies, JLL, CAGR from 1H 2010 to 1H 2016

**Chart 90: ... and high market rent growth**

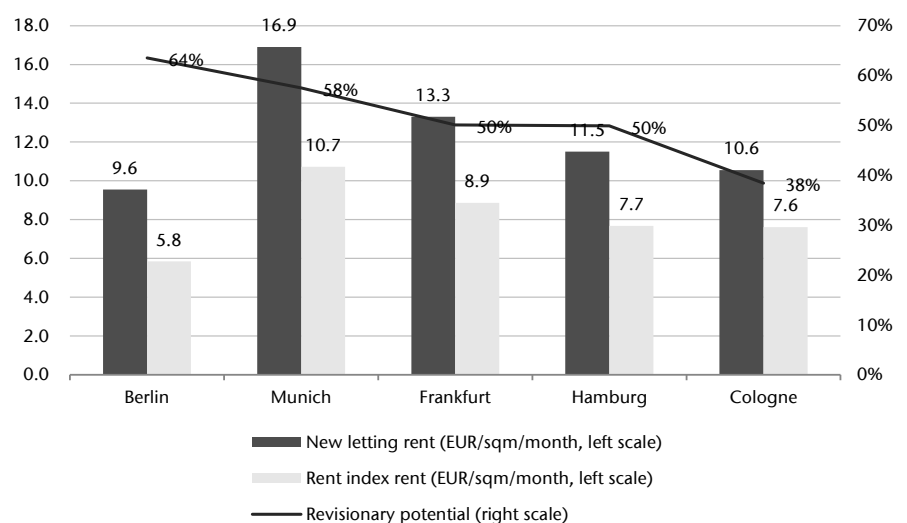


Source: Jefferies, JLL, CAGR from 1H 2010 to 1H 2016

Berlin with highest rent revisionary potential

Nevertheless, absolute rent levels in Berlin are still the lowest (10%-40% below other key cities) and rent revisionary potential is by far the highest at about 35% (vs. 20%-24% in other key cities). Rent affordability is still very high due to low average in-place rent levels (average index rent 23%-46% below other key cities). The high affordability is even more pronounced compared with other European capitals, where Berlin ranks at the lowest end in terms of housing cost ratios, according to CBRE.

**Chart 91: Berlin rents with highest revisionary potential**

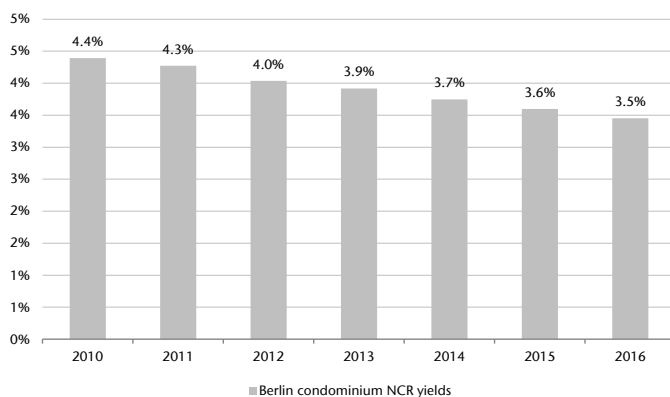


Source: Jefferies, JLL, Deutsche Wohnen AG, rent index, bulwiengesa AG, RIWIS, CBRE

Continuing yield compression

Most recent data indicates further yield compression. DW's Berlin portfolio is expected to be valued at 4.2% NCR yield by year-end and recent portfolio transactions in the average location and asset quality cluster are priced at the 4% level or below. The average NCR yield for Berlin condominiums was 3.5% based on recent JLL data, which refers to average numbers of the first six months this year. Most recent market data for Berlin (IMX as of Sept) shows accelerating dynamics, suggesting accelerating yield compression.

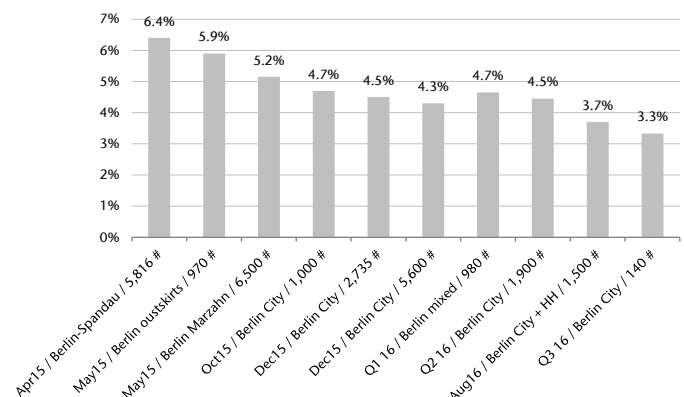
**Chart 92: Berlin condominium yields on the way down**



Source: Jefferies, JLL

Further revaluation upside for DW's Berlin portfolio

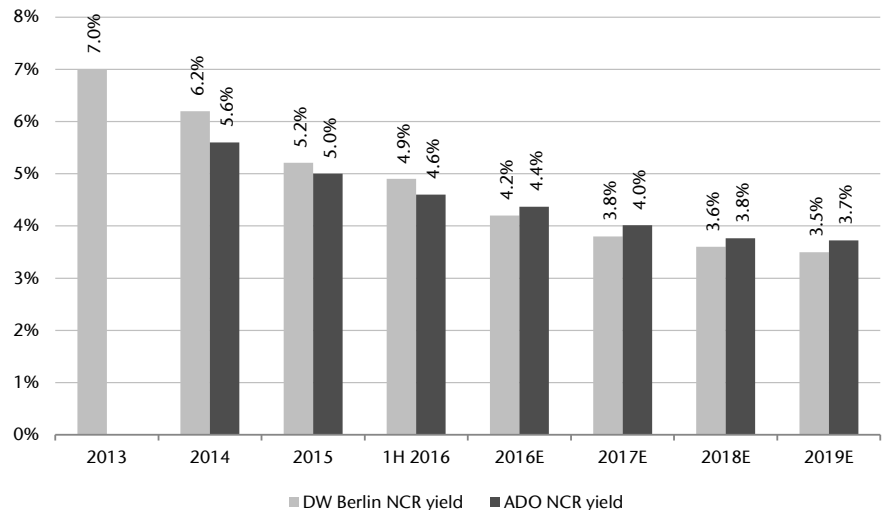
**Chart 93: Berlin portfolio transaction yields compressing**



Source: Jefferies, company data

We therefore see further re-valuation upside for DW's high-quality Berlin portfolio – our model assumes further 70bps yield shift to 3.5% NCR yield in 2019E from the guided 4.2% level in 2016E. We expect DW's Berlin portfolio to experience slightly stronger yield compression than that of main peer ADO, mainly due to DW's more active modernisation approach, which should unlock additional value (see 'Berlin modernisation programme' further below). Specifically for inner-city locations, we see room for further valuation upside, since CBRE seems to have applied a rather conservative valuation approach on these assets, according to DW and ADO. For example, ADO shows a c. 30% gap between their re-lets and CBRE market rents in inner-city locations.

**Chart 94: We expect further yield compression for DW's Berlin assets**



Source: Jefferies estimates, company data. ADO 2014 corresponding to Q1 2015, which is the first set of disclosed numbers

Initiated major €1.5bn investment programme

Focus on unlocking long-term rental and valuation upside

DW has recently initiated a major investment programme focusing on modernisations and new construction predominantly in high-quality Berlin city locations. The programme comprises about €1.5bn total investments from 2017 to 2021 and targets to unlock rent revisionary and valuation potential on the back of the city's continuing strong residential dynamics.

The modernisation programme is focused on crystallising mid-to-long-term rental and revaluation uplift, rather than short-term rental growth – the company guides for only 3.5% average return on investments, but more than 50% margin on fair value uplift. It is

based on comprehensive building and apartment modernisations in order to lift the product into much higher quality clusters, improving tenant quality and allowing for much higher rent levels in the longer term (through increased rent revisionary potential).

**Table 16: DW's investment programme focused on top micro locations**

| Location cluster | # units | Targeted capex (€m) | Rent revisionary potential pre-capex | Rent revisionary potential post-capex | Value per sqm pre capex (€) | Capex per sqm (€) | Mid-term value potential per sqm post capex (€) |
|------------------|---------|---------------------|--------------------------------------|---------------------------------------|-----------------------------|-------------------|---|
| Hot spot         | 13,000  | 450                 | 29%                                  | 65%                                   | 1,580                       | 640               | 3,500   |
| Growth           | 14,500  | 500                 | 23%                                  | 44%                                   | 1,410                       | 640               | 3,000   |
| Stable           | 2,500   | 70                  | 24%                                  | 32%                                   | 1,000                       | 490               | 2,400   |
| Total            | 30,000  | 1,020               | 26%                                  | 52%                                   | 1,440                       | 630               | 3,200   |

Source: Jefferies, company data

Modernisation programme focused on Berlin's top locations

The programme considers €1bn total investments over the next five years predominantly in Berlin high-quality city locations. It comprises about 30,000 residential units (22% of core+ units, 28% of Berlin city units). The average modernisation investment amounts to €630 per sqm and the company expects about 52% rent revisionary potential for re-lets and a mid-term revaluation potential from currently €1,440/sqm to €3,200/sqm, corresponding to about €2.0bn revaluation potential, roughly 20% above the current valuation of Berlin assets.

**Table 17: DW's €1bn investment programme**

|  |        |
|--|--------|
| Targeted units (#)                                       | 30,000 |
| Targeted capex (€m)                                      | 1,000  |
| Targeted capex per sqm (€)                               | 630    |
| Mid-term market value expectation per sqm (€)            | 3,200  |
| Avg. size per unit (sqm, estimated)                      | 60     |
| Total size (sqm m)                                       | 1.8    |
| Mid-term market value expectation total pre-capex (€m)   | 5,760  |
| Mid-term market value expectation total post-capex (€m)  | 4,760  |
| Current value per sqm (€)                                | 1,440  |
| Current value total (€m)                                 | 2,592  |
| Revaluation uplift total (€m)                            | 2,168  |
| Revaluation uplift total Berlin (€m, assumed 90% Berlin) | 1,951  |
| Current value Berlin (€m)                                | 9,855  |
| Revaluation uplift (capex adjusted)                      | 20%    |
| Revaluation uplift (capex unadjusted)                    | 30%    |

Source: Jefferies estimates, company data

Capturing more re-letting upside

These kind of investment programmes mainly focus on rent increases through \$559 modernisations, the so called 'Modernisierungsumlage'. They are characterised by significant construction activity on a building level and also can lead to strong rent increases (see chapter 'Rent regulations'), which typically increases tenant fluctuation by 2x, allowing capture of the full rent revisionary potential. Re-lettings usually yield a return of above 15% on investments.

A new construction programme

The company has also initiated a new construction and roof extension programme focusing on re-densification (using existing land bank) in Berlin (80%) and Frankfurt (20%), comprising 2,200 units and €450m total investments until 2020 with a long-term potential of about 10,000 units and €2,000m total investments. The company expects construction costs of €2,500 per sqm and a rent level of €12.2 per sqm / month, implying a rent multiple of 17x corresponding to about 8% FFO yield at 50% leverage and allowing for about 60% margin on fair value. We estimate the programme to contribute about 0.9%-points like-for-like rental growth from 2019.



**Table 18: DW's new construction programme**

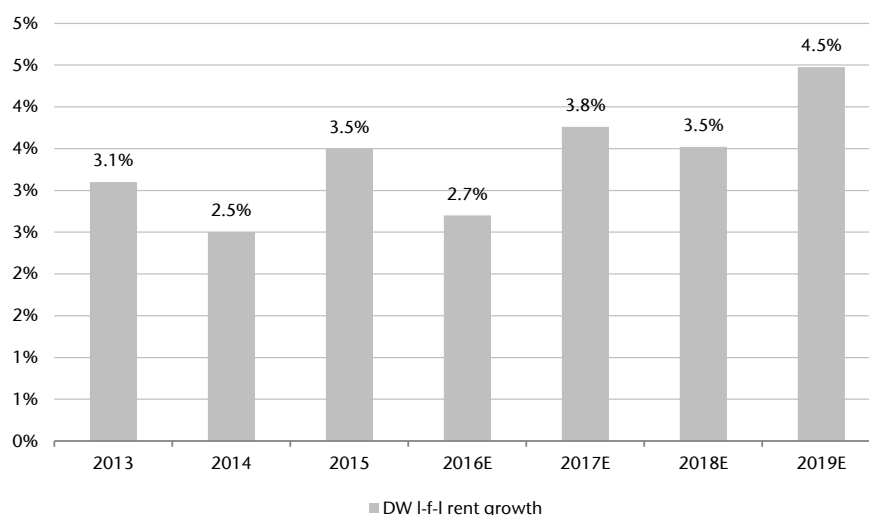
| Initiative                | # units | Total investment (€m) | Construction costs per sqm (€) | Market value per sqm (€) | Market rent per sqm (€) | Rent (€m) | Rent multiple on costs | Rent multiple on market value |
|---------------------------|---------|-----------------------|--------------------------------|--------------------------|-------------------------|-----------|------------------------|-------------------------------|
| New construction          | 1800    | 380                   | 2500                           | 4000                     | 12.0                    | 21        | 17x                    | 28x                           |
| Roof extension / addition | 400     | 70                    | 2400                           | 4300                     | 13.0                    | 4         | 15x                    | 27x                           |
| Total mid-term (by 2020)  | 2200    | 450                   | 2500                           | 4000                     | 12.2                    | 25        | 17x                    | 28x                           |
| Mid-to long-term pipeline | 10000   | 2000                  |                                |                          |                         | 100       |                        |                               |

Source: Jefferies, company data

We see positive surprise potential for rental growth

We expect the investment programmes to lift the company's underlying like-for-like rental growth by up to 200bps in the longer term. The company's underlying long-term rent growth guidance is 3% p.a., which we view as rather conservative (management is usually on the very conservative side) – it considers a rather comfortable safety cushion for potentially tighter rent regulations, which we believe will only become effective law from 2018/19 (potentially). Overall, we see positive surprise potential for rental growth.

**Chart 95: We see positive surprise potential for DW's rental growth**

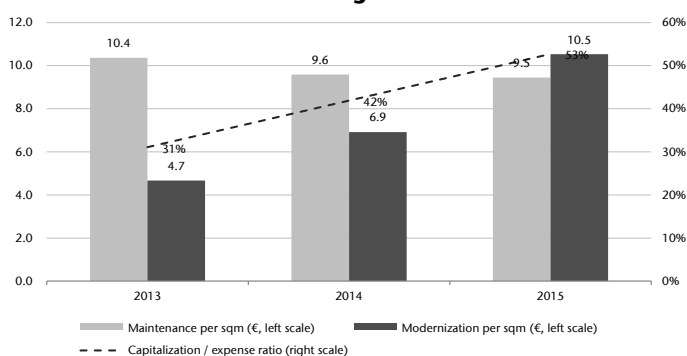


Source: Jefferies estimates, company data, including rents from new constructions

Well-balanced capex programme targeted to produce long-term rent and valuation upside

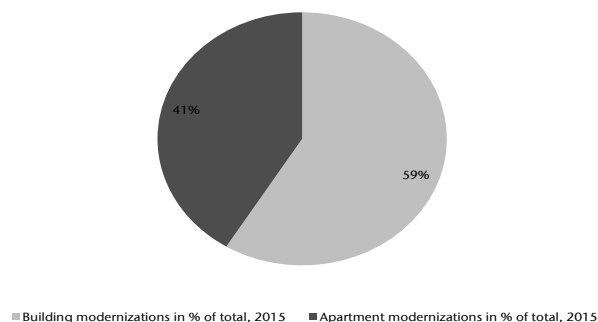
DW has been running a well-balanced capex programme in recent years, targeted to produce long-term rent and valuation upside. It has shown sustainable above-average maintenance levels (26% above peer average over last three years) and also has a well-balanced split between apartment and building investments of roughly 50%. We believe DW runs the portfolio with the highest underlying (building substance) asset quality and regard this as a relevant valuation driver.

**Chart 96: DW – sustainable high maintenance level**



Source: Jefferies, company data

**Chart 97: Well-balanced modernisation investments**



Source: Jefferies, company data

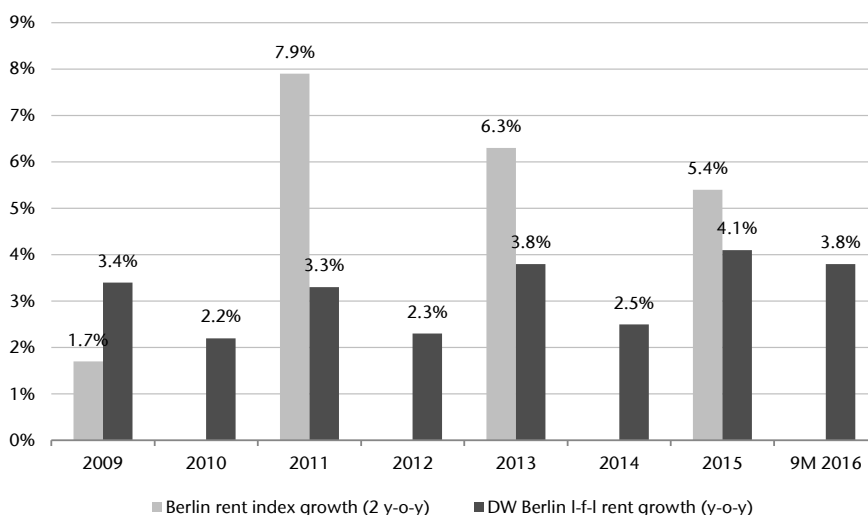
Berlin rent index as major rental driver

The Berlin rent index is one of the company's main rent growth drivers. It usually contributes about two-thirds of the rental growth in those years when the new index gets published. Next time it will be published in May 2017 and strong market rent dynamics in recent years, with a further pick-up recently, should be rather supportive. However, we refrain from forecasting rent index outcomes, since these are politically influenced and do not necessarily reflect recent market rent dynamics. For more details on the rent index system, please refer to the appendix 'Rent regulations'.

DW with increasing Berlin rental growth rates

Tracking DW's rental growth performance in Berlin versus index growth shows DW capturing an increasing portion of the index growth and recent outperformance. For example, DW's like-for-like rental growth in Berlin was 4.1% in 2015, therefore capturing already most of the 5.4% index growth. This is also driven by re-lets, which account for almost half of the company's rental growth.

**Chart 98: DW – increasing Berlin rental growth**



Source: Jefferies, company data, CBRE

DW has best-in-class portfolio quality

We regard DW's portfolio as best-in-class quality, which is reflected in various measures: highest rent per sqm level at lowest vacancy, best-in-class underlying rental growth in recent years (DW 2.9% like-for-like, LEG 2.5%, VNA 1.5%) despite limited modernisation investments, reflecting high rental growth efficiency, continuing high rent revisionary potential (still >20%), despite strong rental growth in recent years. The mature character of the portfolio and well-balanced capex programmes are further measures indicating

Well-balanced rental growth mix  
reducing regulation risks

High level of capital discipline – main  
acquisition activity in attractive  
vintage years

Nursing home as add-on business  
with stable cash flows

above-average portfolio quality. The disposal of the Carlos (mainly Spandau) portfolio in 2015 to main peer ADO and the reinvestment of the proceeds into a 6,000 unit portfolio (mainly Marzahn) was also regarded as a quality improvement measure – the company referred to capex backlog at Carlos and the Marzahn portfolio being fully modernised.

DW's rental growth mix is also well-balanced between regular rent increases, re-lettings and modernisation-driven rent adjustments, reducing regulatory risks. While the Berlin rent index is still a major driver, particularly in years of index adjustments, we expect modernisation-driven rent increases to contribute a higher portion on the back of the company's more active modernisation approach.

**Table 19: DW – well-balanced rental growth mix**

|                           | 2013 | 2014 | 2015 | 2016E | 2017E | 2018E | 2019E |
|---------------------------|------|------|------|-------|-------|-------|-------|
| Total I-f-I rent growth   | 3.1% | 2.5% | 3.5% | 2.7%  | 3.8%  | 3.5%  | 4.5%  |
| o/w new lettings          | 1.0% | 1.2% | 1.2% | 1.2%  | 1.2%  | 1.2%  | 0.9%  |
| o/w regular rent increase | 2.0% | 1.2% | 2.2% | 1.3%  | 2.1%  | 1.2%  | 1.7%  |
| o/w modernisation         | 0.1% | 0.1% | 0.1% | 0.2%  | 0.5%  | 0.9%  | 0.9%  |
| o/w new construction      | 0.0% | 0.0% | 0.0% | 0.0%  | 0.0%  | 0.3%  | 0.9%  |

Source: Jefferies estimates, company data

We like the company also for its capital discipline. With most of the portfolio expansions done in 2012-2014, the company was rather early in the residential cycle, benefiting from attractive acquisition yields (5.8%-7.7% cap rate). The acquisition track record of recent years confirms the disciplined approach – all deals were based on rather conservative synergy assumptions with corresponding thin takeover premiums. Therefore, some deals failed. However, those that worked were priced at attractive yields. The company has also refrained from some of the recent Berlin portfolio transactions, referring to a quality / pricing mismatch to its acquisition hurdles (e.g. Neukölln portfolio, which was bought by ADO recently at 4.5% NCR yield).

**Table 20: DW acquisition track record (largest deals)**

| Year | Portfolio / Key locations                          | # units | NCR yield |
|------|--|---------|-----------|
| 2012 | Baubecon portfolio / Berlin, Hanover, Braunschweig | 23,500  | 7.7%      |
| 2012 | Brunswick, Dresden, Leipzig                        | 5,100   | 7.5%      |
| 2013 | Berlin   | 5,200   | 7.7%      |
| 2013 | Blackstone portfolio / Berlin                      | 7,800   | 7.2%      |
| 2013 | Berlin, Potsdam, Dresden                           | 2,900   | 6.9%      |
| 2013 | GSW / Berlin                                       | 60,000  | 5.8%      |
| 2015 | Berlin Marzahn                                     | 6,500   | 5.2%      |
| 2015 | Harald/Olaf portfolio / Berlin, Kiel, Rhine Main   | 15,200  | 5.3%      |

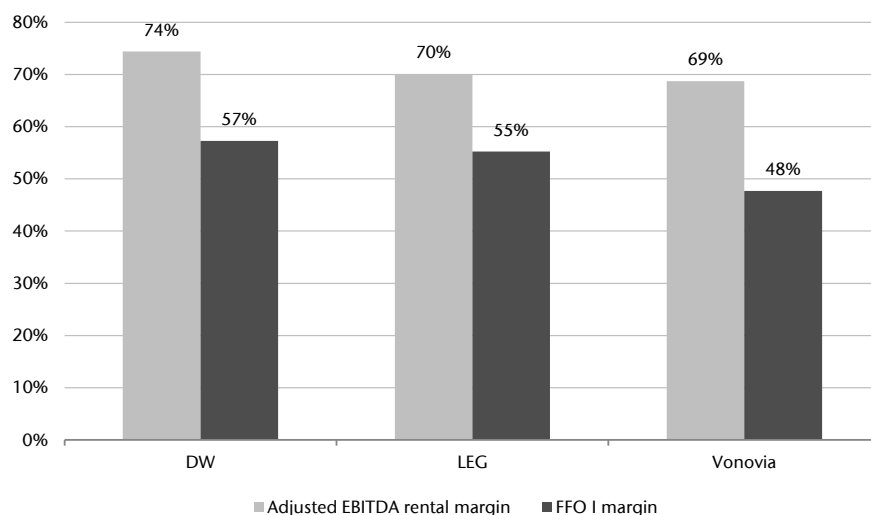
Source: Jefferies, company data

DW is also active in the nursing home business, which we regard as a stable cash flow contributor. The company currently seems keen on expanding the business further but to no more than 15% of group profits (currently about 7% pro-forma recent nursing deal). The nursing business is characterised by lower rental growth (CPI indexed rents) and higher valuation yields (mid-to-high single digit) versus the traditional residential product. DW runs a portfolio of about 6,000 units, of which about one-third is operated through its subsidiary 'Katharinenhof' and two-thirds through third-party operators, mainly on the base of triple-net leases. DW has recently expanded the business by a c.€420m acquisition at 6.5% NCR yield.

DW running at best-in-class operating margins

DW runs at best-in-class operating margins – we regard its high portfolio concentration on Berlin and the mature character of the portfolio as the key drivers. Its adjusted rental EBITDA margin currently stands at 74% versus that of the other large players LEG at 72% and Vonovia at 69%. Also DW's FFO I margin is best-in-class. We expect DW's operating profit margins to remain above the others.

**Chart 99: DW – best-in-class operating margins**



Source: Jefferies, company data as of 9H 2016. EBITDA rental / gross rents, DW EBITDA rental w/o nursing business

DW with best-in-class balance sheet and financing

The company has also best-in-class balance sheet and financing. Net LTV currently stands at about 42% and we expect it to come down to 38% by the end of the year, considering the guided revaluation. The company has levered-down by 4ppt since 2013 on an underlying base, considering property revaluations, which we appreciate, as it provides a good safety cushion at current yield levels. Furthermore, the company's financing situation is excellent with best-in-class credit rating (A- / A3) and one of the lowest financing rates (about 1.6%), despite most of the debt mortgage loans (74%) and a rather long-term debt maturity of about nine years.

DW as potential DAX candidate – liquidity is a major valuation driver

DW is also a potential DAX candidate based on the Deutsche Boerse replacement rule, which applies when one of the current DAX members gets excluded due to market cap and liquidity hurdle shortfall. As seen with the DAX entry of main peer Vonovia last year, stock market liquidity is a major valuation driver. With increasing liquidity, the stock's relative valuation to peers improved significantly (see chapter 'Peer group valuation' for more details)

### Risks

Besides macro and sector-specific risks described in the chapter 'Sector Key Investment Thesis', DW is exposed to the following company-specific risks:

Bulk risk due to high single-city exposure to Berlin

With Berlin accounting for 73% of total property value and 70% of total number of residential units, DW has a high exposure to the German capital, implying corresponding portfolio bulk risks. Therefore, any decline of Berlin residential dynamics (demographics, supply/demand, wages and salaries) might negatively impact rental growth and valuations. Berlin is also characterised by one of the highest residential rent regulation levels among the German key cities. Any further tightening of regulations might negatively impact rental growth and valuations.

Berlin rent index as relevant rental growth driver

Berlin rent index adjustments have been a key driver for DW's rental growth in recent years. While we think other rent growth sources (e.g. from modernisation and re-letting)

**Low-yielding property portfolio  
sensitive on rate changes**

will become more relevant in the future, the Berlin rent index will remain an important driver. Any meaningful decline of Berlin rent index growth might negatively impact the company's rental growth.

On the back of strong Berlin rent and housing price dynamics, DW's property valuation has been marked-up by 170bps since end 2013 and now stands at 5.3% NCR yield (9M 2016) and the company has guided for 4.7% NCR yield by the year-end, one of the highest valuation levels among its peers. Therefore, interest rate sensitivity could be particularly high. Any meaningful increase of interest rates might negatively impact property and stock valuations.

**Investment programme execution  
risks**

The company has recently initiated a major investment programme including extensive modernisation measures and new constructions, requiring corresponding craftsmen capacity, implying execution risks.

**Corporate governance**

DW has often been criticised for its corporate governance. This criticism has peaked last year with the failed LEG takeover approach and the departure of the former CFO Andreas Segal. The main points of criticism are power structures within the management board with CEO Michael Zahn regarded as a dominant ruler, also backed by the rather dominant supervisory board head Mr. Flach. This board structure dates back to 2006, when DW became the Berlin player through the Oaktree-led merger with GEHAG. Another point of criticism refers to variable management compensations, which are regarded as less efficiently incentivised. Corporate governance issues might negatively impact share price valuations.

### DW valuation

### Valuation and sensitivity

Our price target of €35 implies a total return of 26%. It values DW at 3% target premium on NAV17E and 3.7% target FFO I yield FY17E and implies a target value per sqm of €1,850 at 4.2% target NCR yield. Current transaction multiples for core+ assets are priced at 3.3%-4.0% cap rate and per sqm values above €2,000 (see in the chapter 'Berlin'). Berlin average condominium prices and rents are currently at €3,300 per sqm and €9.6 per sqm/month, implying 3.5% yield.

**Table 21: DW – Valuation**

| Total return     | 2013 | 2014 | 2015 | 2016E | 2017E | 2018E | 2019E |
|------------------|------|------|------|-------|-------|-------|-------|
| Price target (€) | -    | -    | -    | 35.0  | 35.0  | 35.0  | 35.0  |
| Share price (€)  | -    | -    | -    | 28.4  | 28.4  | 28.4  | 28.4  |
| Deviation        | -    | -    | -    | 23%   | 23%   | 23%   | 23%   |
| Dividend yield   | -    | -    | -    | 2.6%  | 2.9%  | 3.1%  | 3.4%  |
| Total return     | -    | -    | -    | 26%   | 26%   | 26%   | 27%   |

### Current stock valuation

|                           |      |       |       |       |       |       |       |
|---------------------------|------|-------|-------|-------|-------|-------|-------|
| NAV premium               | 6%   | -5%   | 6%    | 1%    | -16%  | -23%  | -29%  |
| FFO 1 yield               | 2.9% | 4.6%  | 3.8%  | 4.0%  | 4.5%  | 4.8%  | 5.2%  |
| AFFO 1 yield              | 2.2% | 3.2%  | 2.6%  | 2.7%  | 1.3%  | 1.6%  | 2.0%  |
| Dividend yield            | 2.5% | 2.7%  | 2.3%  | 2.6%  | 2.9%  | 3.1%  | 3.4%  |
| Implied NCR yield         | 6.9% | 6.6%  | 5.3%  | 4.7%  | 4.8%  | 4.9%  | 5.0%  |
| Implied value per sqm (€) | 971  | 1,030 | 1,395 | 1,576 | 1,604 | 1,646 | 1,674 |

### Target price based valuation

|                           |   |   |   |       |       |       |       |
|---------------------------|---|---|---|-------|-------|-------|-------|
| NAV premium               | - | - | - | 24%   | 3%    | -6%   | -12%  |
| FFO 1 yield               | - | - | - | 3.2%  | 3.7%  | 3.9%  | 4.2%  |
| AFFO 1 yield              | - | - | - | 2.2%  | 1.0%  | 1.3%  | 1.6%  |
| Dividend yield            | - | - | - | 2.1%  | 2.4%  | 2.6%  | 2.8%  |
| Implied NCR yield         | - | - | - | 4.1%  | 4.2%  | 4.2%  | 4.4%  |
| Implied value per sqm (€) | - | - | - | 1,821 | 1,850 | 1,892 | 1,920 |

### Cap rates and values per sqm

|                                      |      |       |       |       |       |       |       |
|--------------------------------------|------|-------|-------|-------|-------|-------|-------|
| NCR yield                            | 7.0% | 6.5%  | 5.5%  | 4.7%  | 4.3%  | 4.1%  | 4.0%  |
| Implied NCR yield                    | 6.9% | 6.6%  | 5.3%  | 4.7%  | 4.8%  | 4.9%  | 5.0%  |
| Target price based NCR yield         | -    | -     | -     | 4.1%  | 4.2%  | 4.2%  | 4.4%  |
| Value per sqm (€)                    | 944  | 1,062 | 1,282 | 1,522 | 1,756 | 1,910 | 2,035 |
| Implied value per sqm (€)            | 971  | 1,030 | 1,395 | 1,576 | 1,604 | 1,646 | 1,674 |
| Target price based value per sqm (€) | -    | -     | -     | 1,821 | 1,850 | 1,892 | 1,920 |

Source: Jefferies estimates

**Table 22: DW – NAV sensitivity**

|                       | Yield compression |      | Base case |      |      |      | Yield expansion |      |      |
|-----------------------|-------------------|------|-----------|------|------|------|-----------------|------|------|
| NCR yield             | 3.3%              | 3.5% | 3.8%      | 4.0% | 4.3% | 4.3% | 4.5%            | 4.8% | 5.0% |
| NAVPS (€)             | 47.8              | 43.6 | 40.0      | 36.8 | 33.9 | 31.1 | 28.5            | 26.3 | 24.2 |
| % change to base case | 41%               | 29%  | 18%       | 8%   | 0%   | -8%  | -16%            | -23% | -29% |

Source: Jefferies estimates

**Key financials**
**Table 23: DW – key financials (1)**

| Key data                 | 2013 | 2014 | 2015 | 2016E | 2017E | 2018E | 2019E |
|--------------------------|------|------|------|-------|-------|-------|-------|
| Gross rental income (€m) | 373  | 626  | 634  | 707   | 776   | 800   | 834   |
| EBITDA adj. (€m)         | 234  | 407  | 439  | 511   | 576   | 608   | 642   |
| FFO I (€m)               | 115  | 218  | 303  | 382   | 434   | 464   | 501   |
| AFFO I (€m)              | 88   | 154  | 207  | 257   | 122   | 151   | 188   |
| NAVPS (€)                | 12.9 | 16.9 | 22.1 | 28.2  | 33.9  | 37.1  | 39.8  |
| FFOPS I (€)              | 0.40 | 0.74 | 0.90 | 1.13  | 1.29  | 1.37  | 1.48  |
| AFFOPS I (€)             | 0.31 | 0.52 | 0.61 | 0.76  | 0.36  | 0.45  | 0.56  |
| DPS (€)                  | 0.34 | 0.44 | 0.54 | 0.74  | 0.84  | 0.89  | 0.96  |
| NAV premium              | 6%   | -5%  | 6%   | 1%    | -16%  | -23%  | -29%  |
| FFO I yield              | 2.9% | 4.6% | 3.8% | 4.0%  | 4.5%  | 4.8%  | 5.2%  |
| AFFO I yield             | 2.2% | 3.2% | 2.6% | 2.7%  | 1.3%  | 1.6%  | 2.0%  |
| Dividend yield           | 2.5% | 2.7% | 2.3% | 2.6%  | 2.9%  | 3.1%  | 3.4%  |
| Net LTV                  | 57%  | 51%  | 38%  | 38%   | 35%   | 33%   | 33%   |
| Gearing (x)              | 1.4  | 1.1  | 0.8  | 0.8   | 0.7   | 0.6   | 0.6   |

**Key assumptions**

|                                   |      |       |       |       |       |       |       |
|-----------------------------------|------|-------|-------|-------|-------|-------|-------|
| Like-for-like rent growth (y-o-y) | 3.3% | 2.5%  | 3.1%  | 2.7%  | 3.8%  | 3.5%  | 4.5%  |
| Vacancy rate                      | 2.5% | 2.2%  | 1.8%  | 1.6%  | 1.5%  | 1.5%  | 1.5%  |
| NCR yield                         | 7.0% | 6.5%  | 5.5%  | 4.7%  | 4.3%  | 4.1%  | 4.0%  |
| NCR multiplier (x)                | 14.2 | 15.5  | 18.1  | 21.1  | 23.4  | 24.6  | 25.1  |
| Value per sqm (€)                 | 944  | 1,062 | 1,282 | 1,522 | 1,756 | 1,910 | 2,035 |

**Per share data (€)**

|                                   |      |      |      |      |      |      |      |
|-----------------------------------|------|------|------|------|------|------|------|
| Number of shares, outstanding (m) | 286  | 294  | 337  | 338  | 338  | 338  | 338  |
| NAVPS                             | 12.9 | 16.9 | 22.1 | 28.2 | 33.9 | 37.1 | 39.8 |
| NAVPS growth (y-o-y)              | 3%   | 31%  | 31%  | 28%  | 20%  | 9%   | 7%   |
| NAVPS growth (CAGR 3yrs)          | 3%   | 14%  | 21%  | 30%  | 26%  | 19%  | 12%  |
| FFOPS I                           | 0.40 | 0.74 | 0.90 | 1.13 | 1.29 | 1.37 | 1.48 |
| FFOPS II                          | 0.48 | 0.92 | 1.10 | 1.29 | 1.41 | 1.47 | 1.55 |
| AFFOPS I                          | 0.31 | 0.52 | 0.61 | 0.76 | 0.36 | 0.45 | 0.56 |
| AFFOPS II                         | 0.39 | 0.70 | 0.82 | 0.92 | 0.49 | 0.54 | 0.62 |
| EPS                               | 0.74 | 3.02 | 3.58 | 4.82 | 4.76 | 3.17 | 2.65 |

**Valuation**

|  |      |       |       |       |       |       |       |
|--|------|-------|-------|-------|-------|-------|-------|
| NAV premium                                | 6%   | -5%   | 6%    | 1%    | -16%  | -23%  | -29%  |
| FFO I yield                                | 2.9% | 4.6%  | 3.8%  | 4.0%  | 4.5%  | 4.8%  | 5.2%  |
| FFO II yield                               | 3.5% | 5.7%  | 4.7%  | 4.5%  | 5.0%  | 5.2%  | 5.5%  |
| AFFO I yield                               | 2.2% | 3.2%  | 2.6%  | 2.7%  | 1.3%  | 1.6%  | 2.0%  |
| AFFO II yield                              | 2.8% | 4.3%  | 3.5%  | 3.2%  | 1.7%  | 1.9%  | 2.2%  |
| Dividend yield                             | 2.5% | 2.7%  | 2.3%  | 2.6%  | 2.9%  | 3.1%  | 3.4%  |
| Payout ratio (% of FFO I)                  | 85%  | 60%   | 60%   | 65%   | 65%   | 65%   | 65%   |
| Total return (NAV growth + dividend yield) | 5.7% | 34.2% | 32.9% | 30.3% | 23.2% | 12.4% | 10.7% |
| Implied NCR yield                          | 6.9% | 6.6%  | 5.3%  | 4.7%  | 4.8%  | 4.9%  | 5.0%  |
| Implied value per sqm (€)                  | 971  | 1,030 | 1,395 | 1,576 | 1,604 | 1,646 | 1,674 |

Source: Company data, Jefferies estimates

**Table 24: DW – key financials (2)**

| <b>Key income data and ratios</b> | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016E</b> | <b>2017E</b> | <b>2018E</b> | <b>2019E</b> |
|-----------------------------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Gross rental income (€m)          | 373         | 626         | 634         | 707          | 776          | 800          | 834          |
| Net operating income (€m)         | 264         | 461         | 475         | 545          | 605          | 624          | 651          |
| EBITDA adj. (€m)                  | 234         | 407         | 439         | 511          | 576          | 608          | 642          |
| Valuation result (€m)             | 101         | 953         | 1,734       | 2,182        | 2,093        | 1,269        | 978          |
| Disposal result (€m)              | 23          | 52          | 69          | 55           | 35           | 25           | 15           |
| Net financing costs (€m)          | 133         | 185         | 126         | 132          | 137          | 142          | 148          |
| PBT (€)                           | 218         | 1,022       | 1,787       | 2,411        | 2,382        | 1,584        | 1,323        |
| Net profit (€m)                   | 213         | 889         | 1,207       | 1,628        | 1,608        | 1,069        | 893          |
| FFO I (€m)                        | 115         | 218         | 303         | 382          | 434          | 464          | 501          |
| FFO II (€m)                       | 138         | 270         | 372         | 434          | 477          | 496          | 523          |
| AFFO I (€m)                       | 88          | 154         | 207         | 257          | 122          | 151          | 188          |
| AFFO II (€m)                      | 111         | 206         | 276         | 309          | 164          | 184          | 210          |
| NOI margin                        | 71%         | 74%         | 75%         | 77%          | 78%          | 78%          | 78%          |
| EBITDA adj. margin                | 63%         | 65%         | 69%         | 72%          | 74%          | 76%          | 77%          |
| FFO I margin                      | 31%         | 35%         | 48%         | 54%          | 56%          | 58%          | 60%          |

**Key balance sheet data and ratios**

|                           |       |        |        |        |        |        |        |
|---------------------------|-------|--------|--------|--------|--------|--------|--------|
| Investment property (€m)  | 9,103 | 10,062 | 12,064 | 16,061 | 18,466 | 19,907 | 21,198 |
| Cash and equivalents (€m) | 196   | 396    | 662    | 442    | 310    | 199    | 119    |
| Shareholders' equity (€m) | 3,778 | 4,693  | 6,653  | 8,923  | 11,047 | 12,206 | 13,216 |
| NAV (€m)                  | 4,153 | 5,326  | 7,762  | 10,032 | 12,156 | 13,315 | 14,325 |
| Net debt (€m)             | 5,126 | 5,369  | 5,410  | 7,139  | 7,420  | 7,701  | 7,982  |
| Net LTV (%)               | 57%   | 51%    | 38%    | 38%    | 35%    | 33%    | 33%    |
| Gearing (x)               | 1.4   | 1.1    | 0.8    | 0.8    | 0.7    | 0.6    | 0.6    |

**Key cash flow data and ratios**

|                                  |      |     |     |       |      |      |      |
|----------------------------------|------|-----|-----|-------|------|------|------|
| CF operating (€m)                | 61   | 189 | 220 | 247   | 148  | 202  | 253  |
| CF investing (€m)                | -655 | 37  | -64 | -1006 | -313 | -312 | -312 |
| CF financing (€m)                | 700  | -27 | 110 | 540   | 33   | -1   | -20  |
| Net cash flow (€m)               | 106  | 200 | 265 | -220  | -132 | -111 | -80  |
| Cash at beginning of period (€m) | 91   | 196 | 396 | 662   | 442  | 310  | 199  |
| Cash at the end of period (€m)   | 196  | 396 | 662 | 442   | 310  | 199  | 119  |

Source: Company data, Jefferies estimates



DW with 73% Berlin exposure

### Company description

DW runs a c.160,000 units residential portfolio with a hold-to-let strategy in the affordable housing segment. It has a strong Berlin focus with about 73% exposure to the capital in terms of value. A small part of its business is 'nursing and assisted living'. The company has roughly doubled its portfolio size over the last four years, most of it in 2012-2014. The acquisition of its listed peer GSW in 2013 was the largest single expansion step. It is characterised by above-average rent and NAV growth with strong balance sheet and financing. It is the second largest player among the listed peers, listed in the MDAX segment of the Deutsche Boerse and regarded as a potential DAX candidate. Its shareholder structure is characterised by real estate specialist investors. It is an active consolidation player, even though the last two listed M&A deals failed (conwert and LEG as takeover targets). With the Vonovia bid last year, it has become an acquisition target itself, however the deal also failed. Within the management board, CEO Michael Zahn has been playing a rather dominant role over the last decade. We regard him as residential expert with very deep sector know-how.

Frankfurt are second largest portfolio

### Portfolio

The company currently owns almost 160,000 residential units, of which Berlin accounts for 70% in terms of units and 73% in terms of fair value. Behind Berlin, the Rhine-Main portfolio (Frankfurt area) is the second largest, accounting for 8% of the fair value. The portfolio is rather focused and concentrated with a non-core portion of only 2% of the fair value. The best quality cluster 'Core+' accounts for 89% of the fair value.

**Table 25: DW's portfolio structure**

|                             | Residential units<br># | in % of<br>total | Fair value<br>(€m) | in % of<br>total |
|-----------------------------|------------------------|------------------|--------------------|------------------|
| Core +                      | 134,996                | 85%              | 12,070             | 89%              |
| Greater Berlin              | 110,776                | 70%              | 9872               | 73%              |
| Rhine-Main                  | 9,642                  | 6%               | 1047               | 8%               |
| Rhineland                   | 5,014                  | 3%               | 382                | 3%               |
| Mannheim / Ludwigshafen     | 4,966                  | 3%               | 332                | 2%               |
| Dresden                     | 3,161                  | 2%               | 261                | 2%               |
| Other Core +                | 1,437                  | 1%               | 176                | 1%               |
| Core                        | 19,347                 | 12%              | 1,189              | 9%               |
| Hanover / Brunswick         | 9,168                  | 6%               | 595                | 4%               |
| Kiel / Lübeck               | 5,224                  | 3%               | 313                | 2%               |
| Core cities Eastern Germany | 4,955                  | 3%               | 281                | 2%               |
| Non-Core                    | 3,931                  | 2%               | 238                | 2%               |
| Total                       | 158,274                | 100%             | 13,497             | 100%             |

Source: Jefferies, company data, residential units as of 9M 2016, fair value as of 1H 2016

Last comprehensive appraiser value as of 1H 2016

The portfolio is currently valued (1H 2016) at 5.2% NCR yield or €1,372 per sqm with Berlin at the lowest yield (4.9% NCR yield). Rhine-Main is the highest valued in terms of per sqm value at €1,702, well above that of Berlin at 1,457.

**Table 26: DW's portfolio valuation**

|                                | Fair value<br>(€m) | Fair value per sqm<br>(€) | NCR multiple<br>(x) | NCR yield |
|--------------------------------|--------------------|---------------------------|---------------------|-----------|
| Core +                         | 12,070             | 1,453                     | 19.8                | 5.1%      |
| Greater Berlin                 | 9872               | 1,457                     | 20.3                | 4.9%      |
| Rhine-Main                     | 1047               | 1,702                     | 19.3                | 5.2%      |
| Rhineland                      | 382                | 1,199                     | 15.7                | 6.4%      |
| Mannheim / Ludwigshafen        | 332                | 1,036                     | 15.0                | 6.7%      |
| Dresden                        | 261                | 1,204                     | 18.8                | 5.3%      |
| Other Core +                   | 176                | 2,976                     | 24.8                | 4.0%      |
| Core                           | 1,189              | 984                       | 14.8                | 6.8%      |
| Hanover / Brunswick            | 595                | 972                       | 14.4                | 6.9%      |
| Kiel / Lübeck                  | 313                | 1,057                     | 15.9                | 6.3%      |
| Core cities Eastern<br>Germany | 281                | 936                       | 14.6                | 6.8%      |
| Non-Core                       | 238                | 740                       | 12.6                | 7.9%      |
| Total                          | 13,497             | 1,372                     | 19.1                | 5.2%      |

Source: Jefferies, company data as of 1H 2016

More detailed Berlin portfolio  
clustering

The company has recently started publishing Berlin portfolio clusters in more detail. It has clustered the portfolio into the following three sub-segments: 'Hot spots': City centre, trendy northeast and wealthy southwest, fastest and strongest growing areas, strategy is to create new product and re-densification; 'Growth': The green city edge areas, continuously growing areas, further rent development upside, strategy is focused modernisation; 'Stable': The big outskirt settlements, moderate rent development, stable cash generation, strategy is to invest only necessary maintenance and modernisation.

**Table 27: DW's Berlin portfolio clustering**

| Subcluster        | # units | in % of total<br>Berlin | Fair value per<br>sqm (€) | NCR multiple<br>(x) | NCR yield |
|-------------------|---------|-------------------------|---------------------------|---------------------|-----------|
| Hot spot          | 34,046  | 32%                     | 1,716                     | 22.2                | 4.5%      |
| Growth            | 44,141  | 41%                     | 1,443                     | 20.0                | 5.0%      |
| Stable            | 28,837  | 27%                     | 1,231                     | 18.7                | 5.3%      |
| Berlin City total | 107,024 | 100%                    | 1,469                     | 20.4                | 4.9%      |

Source: Jefferies, company data as of 1H 2016

Berlin assets showing the highest  
rent revisionary potential

As discussed in the DW investment case, the average rent revisionary potential of DW's portfolio is above 20%, with Berlin assets showing the highest upside. The company has provided a detailed numbers on portfolio level with 1H 2016 results. The rent revisionary potential moved further up per 9M 2016 with 21% upside for the total portfolio and 25% upside for Berlin. The range of revisionary potential within the Berlin clusters is relatively narrow – a key difference compared the main peer ADO, where there is a rather wide range of rent revisionary potential within the inner-city locations and the outskirts. The more mature nature of DW's Berlin portfolio vs. that of ADO might be a reason.

**Table 28: DW portfolio rent potential**

|                                | NCR yield in-place<br>rent | NCR yield market<br>rent | Rent revisionary<br>potential |
|--------------------------------|----------------------------|--------------------------|-------------------------------|
| Core +                         | 5.1%                       | 6.1%                     | 21%                           |
| Greater Berlin                 | 4.9%                       | 6.0%                     | 22%                           |
| Berlin City                    | 4.9%                       | 6.0%                     | 22%                           |
| Hot spots                      | 4.5%                       | 5.5%                     | 23%                           |
| Growth                         | 5.0%                       | 6.1%                     | 22%                           |
| Stable                         | 5.3%                       | 6.5%                     | 21%                           |
| Rhine-Main                     | 5.2%                       | 6.2%                     | 19%                           |
| Rhineland                      | 6.4%                       | 7.1%                     | 11%                           |
| Mannheim /<br>Ludwigshafen     | 6.7%                       | 7.3%                     | 9%                            |
| Dresden                        | 5.3%                       | 6.3%                     | 19%                           |
| Other Core +                   | 4.0%                       | 4.7%                     | 16%                           |
| Core                           | 6.8%                       | 7.6%                     | 13%                           |
| Hanover / Brunswick            | 6.9%                       | 7.9%                     | 14%                           |
| Kiel / Lübeck                  | 6.3%                       | 7.1%                     | 13%                           |
| Core cities Eastern<br>Germany | 6.8%                       | 7.5%                     | 10%                           |
| Non-Core                       | 7.9%                       | 9.1%                     | 15%                           |
| Total                          | 5.2%                       | 6.3%                     | 20%                           |

Source: Jefferies, company data as of 1H 2016

### Strong like-for-like rental growth

DW has recently shown like-for-like rent growth of 3.8% for the total portfolio, with 4.6% for the Berlin portfolio. The high growth rate for Berlin is positively impacted by rent index adjustments, which typically become effective only from the second half of the year of adjustment (2015). Therefore, the year-on-year comparison is overstated due to lower base of the previous year. The high growth rate of 1H 2016 should level out by the end of the year – DW's like-for-like rent growth guidance for 2016 is only 2.5%.

**Table 29: DW's portfolio like-for-like rent and vacancy change**

|                                | In-place rent<br>per<br>sqm/month (€) | Like-for-<br>like rent<br>growth | Like-for-like<br>vacancy change<br>(ppt) | Vacancy<br>rate |
|--------------------------------|---------------------------------------|----------------------------------|--|-----------------|
| Letting portfolio              | 6.05                                  | 3.2%                             | -0.2                                     | 1.5%            |
| Core +                         | 6.11                                  | 3.5%                             | -0.1                                     | 1.5%            |
| Greater Berlin                 | 6.04                                  | 3.8%                             | -0.2                                     | 1.5%            |
| Rhine-Main                     | 7.48                                  | 2.3%                             | 0.2                                      | 0.6%            |
| Mannheim /<br>Ludwigshafen     | 5.73                                  | 1.0%                             | -0.5                                     | 1.0%            |
| Rhineland                      | 6.01                                  | 2.5%                             | -0.2                                     | 2.6%            |
| Dresden                        | 5.29                                  | 2.5%                             | 0.3                                      | 1.9%            |
| Core                           | 5.55                                  | 1.4%                             | -0.4                                     | 1.8%            |
| Hanover / Brunswick            | 5.61                                  | 1.4%                             | -0.2                                     | 2.0%            |
| Core cities Eastern<br>Germany | 5.45                                  | 1.2%                             | -0.8                                     | 2.0%            |
| Kiel / Lübeck                  | 5.44                                  | 1.7%                             | -1.4                                     | 1.5%            |
| Total                          | 6.05                                  | 3.2%                             | -0.2                                     | 1.8%            |

Source: Jefferies, company data as of 9M 2016

**High portfolio concentration**

Thanks to its high Berlin City exposure, the company's portfolio concentration is rather high. The top-10 city locations account for about 84% of total units. The higher the portfolio concentration, the more efficient a portfolio can be managed. We think this is one reason for DW's best-in-class operating margins.

**Table 30: DW with high portfolio concentration**

|              | # units | in % of total |
|--------------|---------|---------------|
| Berlin       | 102,731 | 70%           |
| Hanover      | 4,023   | 3%            |
| Frankfurt    | 3,909   | 3%            |
| Braunschweig | 3,458   | 2%            |
| Dresden      | 2,612   | 2%            |
| Magdeburg    | 2,365   | 2%            |
| Potsdam      | 1,925   | 1%            |
| Kiel         | 954     | 1%            |
| Mainz        | 890     | 1%            |
| Laatzen      | 862     | 1%            |
| Top 10       | 123,729 | 84%           |
| Total        | 146,999 | 100%          |

Source: Jefferies, company data as of FY 2015

## ADO – Buy, €38 PT

**The purest play on Berlin residential dynamics with strongest rental growth and a good chance for a takeover premium**

ADO – less mature portfolio character offering significant rent revisionary potential

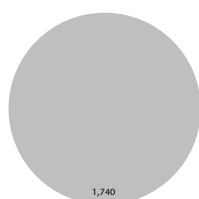
### Investment Case

ADO is the purest play on Berlin residential dynamics (100% Berlin) and shows the strongest rental growth in the sector (6.7% like-for-like rental growth p.a. incl. vacancy reduction over last three years). Its portfolio has a high exposure to inner-city locations (estimated 39% vs. DW's 26%), which is a positive rental and valuation driver. The company follows a more opportunistic strategy compared with its main peer DW, both with regards to internal and external growth. Its rental growth strategy is strongly focused on re-lettings through extensive modernisations of vacant apartments. It also has been rather active in acquiring further portfolios, with the most recent deal priced at 4% cap rate level – high revisionary potential and favourable funding conditions make these deals still rather accretive. ADO shows the highest rent revisionary potential (30% vs. DW's 21%), providing a good base for further rental growth. We think it can tap additional rent potential through a more active approach on modernisations and rent index adjustments. We also regard it as a takeover target, offering additional valuation upside. The stock trades at 20% discount to NAV 2017E and 4.5% FFO yield 2017E, which we regard as attractive given further NAV growth potential (14% NAV CAGR 2016E-2019E). Implied cap rate stands at 4.5% as of year-end and our price target implies 4.0% cap rate and a property valuation per sqm of €1,890 as of FY2017E. Current transaction multiples for core+ assets are priced at 3.3%-4.0% cap rate and per sqm values well above €2,000. We initiate with a Buy and PT of €38.

Benefitting most from strong Berlin residential dynamics

ADO is the only listed Berlin pure play residential player, benefiting at full scale from the city's strong residential dynamics and further growth potential, as shown in DW's investment case as well as in the chapter 'Berlin – still the place to be'.

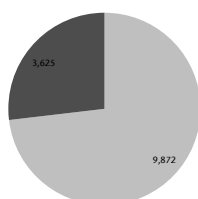
**Chart 100: ADO 100% Berlin**



■ Fair value Berlin (€m)

Source: Jefferies, company data 9M16

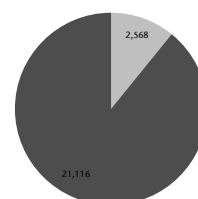
**Chart 101: DW 73% Berlin exposure**



■ Fair value Berlin (€m) ■ Fair value others (€m)

Source: Jefferies, company data 1H16

**Chart 102: VNA 11% Berlin exposure**



■ Fair value Berlin (€m) ■ Fair value others (€m)

Source: Jefferies, company data 1H16

Best-in-class rental growth

The company has outperformed its peers in respect of rental growth, with like-for-like 6.7% average p.a. over the last three years, and it guides 5% growth for this and next year, which is also well above peers. We see the major reason for the strong rental growth in a less mature portfolio as well as a slightly better location mix, providing strong rent revisionary potential of 30%, which is above that of main peer DW at 20%.

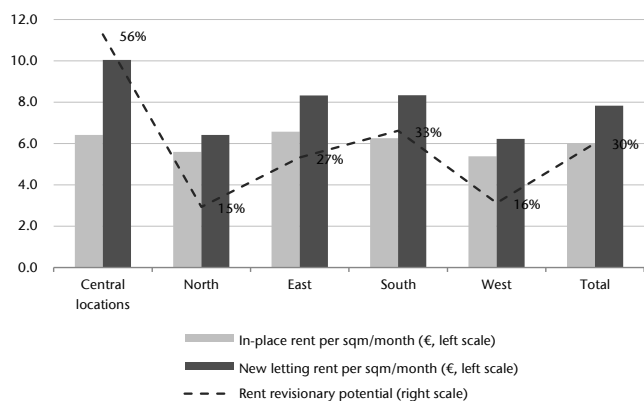
Rental growth also considers re-letting driven vacancy reduction

The higher rental growth is also partly explained by the company's rent growth definition, which, contrary to most peers, also considers vacancy reduction. We regard this as a fair definition for ADO as it captures re-letting driven vacancy reduction, which is the company's key rental growth driver. If DW would apply ADO's rental growth definition, we estimate its rental growth would improve by about 30bps – the lower impact stems from the lower relevance of re-lets.

### Further revaluation potential for inner-city locations

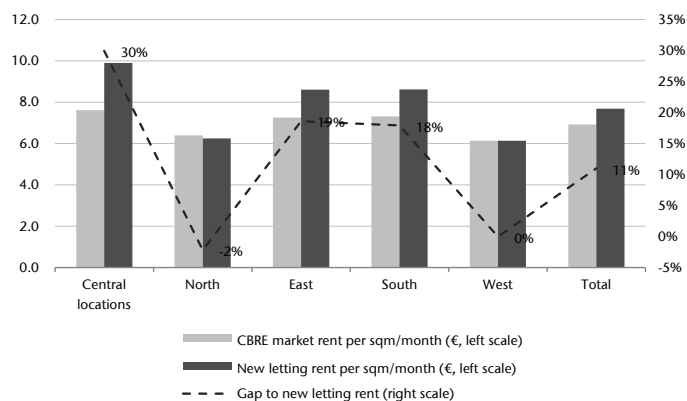
ADO compares its re-letting rents with the market rents of its appraiser CBRE, showing a wide gap specifically for its central locations. This pattern (not the magnitude) is also confirmed by main peer DW, which indicates towards further revaluation upside. We see two reasons for the differential: first, CBRE's valuation approach is based more on district level rather than on asset levels and second, ADO follows a rather opportunistic re-letting approach, positively impacting re-letting rents.

**Chart 103: ADO with significant rent revisionary upside**



Source: Jefferies, company data as of 9M 2016

**ADO's re-lets well above market rents**

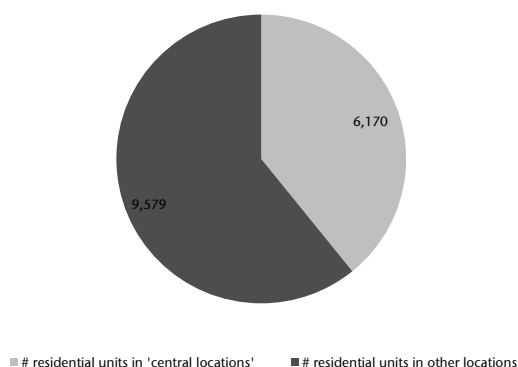


Source: Jefferies, company data as of 1H 2016

### ADO with high Berlin inner-city exposure

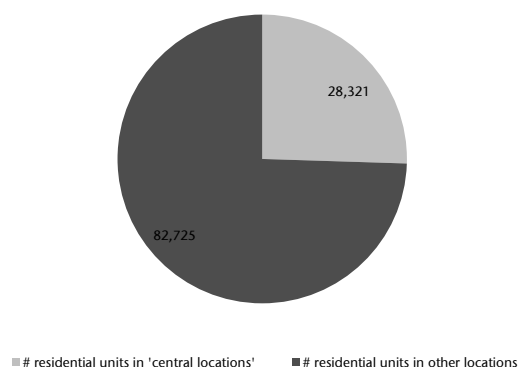
The company's central locations account for about 40% of total residential units, based on the company's definition of 'central locations'. We calculate DW's inner-city exposure at about 25% of total Berlin residential units. ADO's centrality number might be slightly overstated relative to DW's, but even adjusted for this it should be above that of DW.

**Chart 104: ADO with about 39% inner-city exposure**



Source: Jefferies estimates, company data

**Chart 105: DW with about 26% inner-city exposure**



Source: Jefferies estimates, company data

### Rental growth mainly from re-letting

The company's rental growth strategy is strongly focused on realising rent revisionary potential through modernisation investments in vacant apartments. It follows a rather opportunistic approach of 'extensive modernisations' in order to get exempted from the rental cap (see chapter 'Rent regulations'). This has contributed to about 66% of the like-for-like rental growth over the last three years and is reflected in the company's disclosed rental drivers 'new lettings' and 'modernisations'.

**Table 31: ADO's rent growth driven by re-letting / modernisations**

|                           | 2013 | 2014 | 2015 | 2016E | 2017E | 2018E | 2019E |
|---------------------------|------|------|------|-------|-------|-------|-------|
| Total                     | 4.7% | 8.0% | 7.3% | 5.0%  | 5.0%  | 4.5%  | 4.0%  |
| o/w new lettings          | 1.0% | 1.6% | 2.7% | 1.5%  | 1.8%  | 0.8%  | 0.8%  |
| o/w regular rent increase | 2.4% | 3.1% | 0.8% | 1.5%  | 1.2%  | 1.5%  | 1.1%  |
| o/w modernisation         | 1.3% | 3.3% | 3.8% | 2.0%  | 2.0%  | 2.2%  | 2.1%  |

Source: Jefferies estimates, company data

We expect rental growth to remain above peer levels

We believe the company can reach its rental growth guidance of 5% p.a. next year, despite dilutive effects from the Carlos and White City portfolios. We expect new rent regulations to become potentially effective only in 2018/2019, which should allow the company to continue with its opportunistic re-letting strategy for the next 2-3 years.

Additional rent potential through more active regular rent adjustments

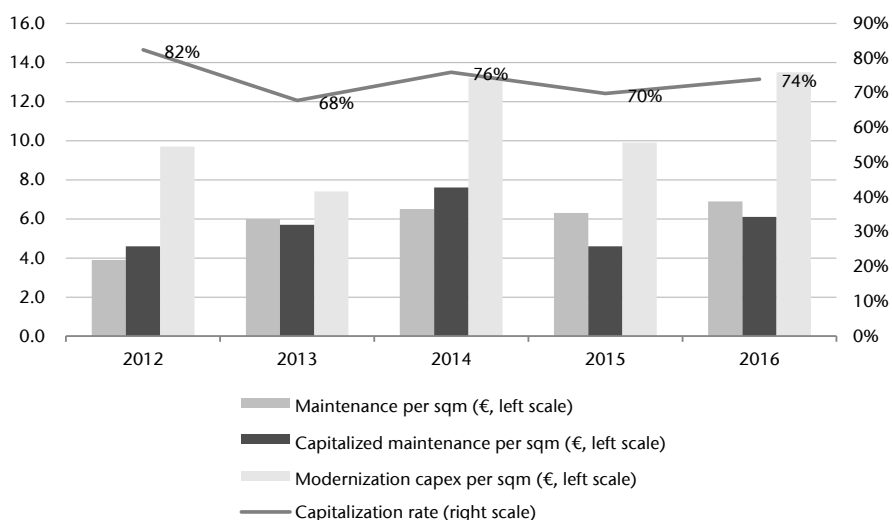
We see additional rent potential for ADO through a more active approach on regular rent increases. We believe the company currently pays little attention for rent index adjustments due to administrative requirements, and the high acquisition activity over the last two years requires even more extensive work.

Further rent potential through \$559 modernisations

There's also further rent potential to be unlocked through a more active modernisation approach (\$559 modernisations with a stronger focus on building investments), which would increase tenant fluctuation and increase rent revisionary potential. Currently, the company's modernisation investments are purely on apartment level. These issues might become more relevant when the portfolio becomes more mature and rent revisionary potential more limited – a comfortable situation for the company then to have further investment opportunities, unlocking additional rental growth.

Opportunistic capex programme

ADO's capex strategy is more opportunistic compared with DW's, with lower maintenance levels (half of maintenance capitalised) and modernisation investments purely on apartment level, which is all reflected in a rather high capitalisation ratio. We regard this as the right strategy at the current point of portfolio cycle (less mature due to high growth in the last two years) as it allows it to quickly maximise rents as long as the regulatory environment doesn't turn tighter.

**Chart 106: ADO with opportunistic capex programme**


Source: Jefferies, company data, 2016 as of 9M 2016

Portfolio size more than doubled over the last two years

ADO has been in a strong external growth mode, more than doubling its portfolio size over the last two years. The acquisition of the 'Carlos' portfolio from main peer DW in 2015 was the largest single expansion step so far.

**Table 32: ADO's acquisition track record**

| Year | Portfolio / Key locations                                 | # units | NCR yield |
|------|---|---------|-----------|
| 2014 | Waypoint / Berlin inner-city locations                    | 1,064   | 5.0%      |
| 2015 | Carlos / Spandau, Reinickendorf                           | 5,749   | 6.4%      |
| 2015 | Prenzlauer Berg, Kreuzberg, Neukölln, Lichtenberg, Pankow | 1,021   | 4.8%      |
| 2016 | Charlottenburg, Wedding, Neukölln, Marzahn, Spandau       | 978     | 4.7%      |
| 2016 | Neukölln, Schöneberg, Wilmersdorf                         | 1,877   | 4.5%      |
| 2016 | Tempelhof, Charlottenburg, Köpenick                       | 140     | 3.3%      |

Source: Jefferies, company data

Carlos portfolio

ADO bought the Carlos portfolio last year from main peer DW for an acquisition price of €376m (6.4% NCR yield, €940 per sqm). It was recently valued at €448m (5.7% NCR yield, €1,124 per sqm). ADO's rental growth strategy for the Carlos portfolio is focused on re-letting-driven modernisation investments on apartment level. As of September, 626 apartments (above 10% of total Carlos units) have been modernised. The like-for-like rental growth of the Carlos portfolio amounts to 4.3%, of which about 2.3ppt stems from pure rent increase, the rest from vacancy reduction.

Further significant expansion this year

ADO has further expanded its portfolio size by about 20% year-to-date (c.3,000 units) at cap rates of 3.3-4.5%. We regard the average asset and location quality of these assets as slightly below average. For example, a large portion is the larger-scale settlement product from the 70ies / 90ies and the 'White City' portfolio with about 1,500 units is located in weaker micro locations of Neukölln. The most recent deal (140 units) was above average portfolio quality.

**Table 33: ADO's acquisitions 2016**

| Key metrics                          | Q1 acquisitions                                     | Q2 acquisitions                   | Q3 acquisitions                     |
|--------------------------------------|---|-----------------------------------|-------------------------------------|
| # residential units                  | 978   | 1,877                             | 140                                 |
| Key locations                        | Charlottenburg, Wedding, Neukölln, Marzahn, Spandau | Neukölln, Schöneberg, Wilmersdorf | Tempelhof, Charlottenburg, Köpenick |
| Building type                        | 80% large-scale, 20% small-scale                    | 80% large-scale, 20% small-scale  | mostly small-scale                  |
| Acquisition costs (€m)               | 116   | 229                               | 34                                  |
| Acquisition costs per sqm (€)        | 1,535   | 1,665                             | 2,568                               |
| Gross rents p.a. (€m)                | 5.4   | 10.2                              | 1.1                                 |
| NCR yield                            | 4.7%  | 4.5%                              | 3.3%                                |
| In-place rent per sqm / month (€)    | 5.68  | 6.26                              | 6.55                                |
| New letting rent per sqm / month (€) | 6.92  | 7.56                              | 11.79                               |
| Rent revisionary potential           | 22%   | 21%                               | 80%                                 |
| Vacancy rate residential             | 2.0%  | 0.8%                              | 2.3%                                |
| Estimated FFO I (first 12 months)    | 3.8   | 6.9                               | 0.8                                 |
| FFO margin                           | 70%   | 68%                               | 73%                                 |
| FFO yield (at 50% leverage)          | 6.6%  | 6.0%                              | 4.8%                                |
| FFO yield ADO 2017E                  | 4.5%  | 4.5%                              | 4.5%                                |

Source: Jefferies, company data



Accretive growth despite low acquisition yields – excellent funding and financing conditions supportive

Despite low acquisition yields, these deals are still rather accretive in NAVPS and FFOPS terms, which is a function of excellent funding and financing conditions as well as high rent revisionary potential. ADO raised about €300m new equity year-to-date at an average premium on NAV of 24%, providing a comfortable base for accretive growth. At the same time, current financing rates for these deals are 1.1%-1.3% for a 10-year mortgage at 50% LTV. We calculate about 10% FFOPS accretion on a 12 months forward-looking base, allowing for further upside considering high rent revisionary potential. We estimate the company's current acquisition power at about €500m (at 47% LTV and pre property revaluation); the company is currently looking at a deal pipeline of the same amount. Our model considers €400m acquisition volume in 2017E at 3.7% average acquisition yield.

**Table 34: ADO with excellent funding conditions**

| Date   | Transaction type     | Gross proceeds (€) | # new shares issued (m) | # new shares / total | Issue price per share (€) | Discount on share price | Premium on spot NAV |
|--------|----------------------|--------------------|-------------------------|----------------------|---------------------------|-------------------------|---------------------|
| 13-Sep | ABB capital increase | 199                | 5.6                     | 14.5%                | 35.5                      | -3.9%                   | 29%                 |
| 20-Apr | ABB capital increase | 100                | 3.5                     | 10.0%                | 28.5                      | -0.9%                   | 18%                 |

Source: Jefferies, company data

64% privatisation margin gives proof of revaluation upside

The company has also recently started selling condominiums (privatisations) and has currently identified 362 units with a mid-term / long-term potential of up to 1,763 / 1,899 units. It targets about 100 disposals this year and has already sold 81 units as of 9M 2016 at an average sales price of €3,071, 65% above current book values. We appreciate this strategy as it gives proof of property revaluation upside.

Pure Berlin portfolio with rental upside might spark takeover interest

With its Berlin pure play residential portfolio and the high rent potential (re-let upside, rent index upside, modernisation-driven rent upside), we see ADO as a takeover target for any other player with a major Berlin portfolio since the high portfolio overlap would allow it to realize operating synergies. The company's high exposure on the rent cap law might be seen as a potential trigger for the current main shareholder ADO Group to merge ADO into a larger player in order to create a more balanced rental growth mix, reducing potential regulatory risks.

ADO Group as main shareholder – synergy potential might allow attractive takeover premium

ADO Group still owns a remaining 37% stake in ADO, which might serve as an entry point for a strategic buyer. We assume a DW-ADO merger could easily generate €10m synergies (only 20% of ADO FFO, DW-GSW merger started with 33% synergy ratio and finally ended-up much higher), corresponding to €210m capitalised (5% tax, 4.5% capitalisation rate corresponding to current ADO FFO yield 2017E), allowing to pay up to €4.8 per share takeover premium (15% premium on current share price). We apply 50% likelihood, adding €2.4 per ADO share in our price target calculation.

### Risks

Besides macro and sector-specific risks described in the chapter 'Sector Key Investment Thesis', ADO is exposed to the following company-specific risks:

Berlin bulk risks

As a Berlin pure play the investment case implies corresponding portfolio bulk risks. Any decline of Berlin residential dynamics (demographics, supply/demand, wages and salaries) might negatively impact rental growth and valuations. Berlin is also characterised by one of the highest residential rent regulation levels among the German key cities. Any further tightening of regulations might negatively impact rental growth and valuations.

Regulation risks

ADO's rental growth strategy is strongly focused on realising rent revisionary potential through modernisation investments in vacant apartments. It follows a rather opportunistic approach of 'extensive modernisations' in order to get exempted from the rental cap. Therefore, it strongly relies on the interpretation of the rent index law. Furthermore, it relies on tenant fluctuation. Any further tightening of the rental cap law or

### Low-yielding property valuation with high interest rate sensitivity

any further decline of tenant fluctuation might negatively impact the company's rental growth and limit valuation upside.

On the back of strong Berlin rent and house price dynamics, ADO's property valuation has been marked-up by 90bps since the IPO mid-2015 and now stands at 4.7% NCR yield, the highest valuation levels among our residential universe (as of 1H 2016). Therefore, interest rate sensitivity could be specifically high. Any meaningful increase of interest rates might negatively impact property and stock valuations.

### Rent growth dilution risk

With recent acquisitions of larger-scale settlements like 'Carlos' in Spandau or 'White City' in Neukölln, the company might dilute its high rental growth, which so far has been a key differentiator to its peers and major reason for premium valuations.

### Corporate governance risks

ADO has often been criticised for its corporate governance. The main points of criticism are the complex shareholder structure, the board composition, which is dominated by the main shareholder and doesn't represent the free-float majority, and potential conflicts of interest between the main shareholder and ADO. ADO's main shareholder is ADO Group, a Tel Aviv-listed holding company. Its exclusive asset is the ADO stake. ADO Group's key shareholder is Shikun & Binui, an Israel-listed infrastructure company. ADO's board comprises seven members, of which only two are independent from the main shareholder. Potential conflicts of interest may arise if ADO Group / Shikun & Binui would compete with ADO for residential transactions. These issues might negatively impact share price valuations.

### ADO valuation

### Valuation and sensitivity

Our price target of €38 implies a total return of 27%. It values ADO at 1% target discount on NAV17E and 3.6% target FFO I yield FY17E and implies a target value per sqm of €1,890 at 4.0% target NCR yield, which is 20bps below our target yield for DW. ADO's recent Berlin portfolio acquisitions were priced at 3.3%-4.5% yield. Berlin average condominium prices and rents are currently at €3,300 per sqm and €9.6 per sqm/month, implying 3.5% yield.

### Potential takeover premium

Our ADO takeover scenario considers €10m synergies (only 20% of ADO FFO, DW-GSW merger started with 33% synergy ratio and finally ended-up much higher), would be about €210m capitalised (5% tax, 4.5% capitalisation rate corresponding to current ADO FFO yield 2017E), allowing to pay up to €4.8 per share takeover premium (15% premium on current share price).

**Table 35: ADO – valuation**

| Total return                         | 2013 | 2014 | 2015  | 2016E | 2017E | 2018E | 2019E |
|--------------------------------------|------|------|-------|-------|-------|-------|-------|
| Price target (€)                     | -    | -    | -     | 38.0  | 38.0  | 38.0  | 38.0  |
| Share price (€)                      | -    | -    | -     | 30.6  | 30.6  | 30.6  | 30.6  |
| Deviation                            | -    | -    | -     | 24%   | 24%   | 24%   | 24%   |
| Dividend yield                       | -    | -    | -     | 1.6%  | 2.2%  | 2.6%  | 2.7%  |
| Total return                         | -    | -    | -     | 26%   | 27%   | 27%   | 27%   |
| <b>Current stock valuation</b>       |      |      |       |       |       |       |       |
| NAV premium                          | -    | -    | -7%   | -5%   | -20%  | -31%  | -37%  |
| FFO 1 yield                          | -    | -    | 3.9%  | 3.3%  | 4.5%  | 5.1%  | 5.5%  |
| AFFO 1 yield                         | -    | -    | 2.3%  | 1.8%  | 2.3%  | 2.1%  | 2.5%  |
| Dividend yield                       | -    | -    | 1.7%  | 1.6%  | 2.2%  | 2.6%  | 2.7%  |
| Implied NCR yield                    | -    | -    | 5.2%  | 4.5%  | 4.6%  | 4.7%  | 4.9%  |
| Implied value per sqm (€)            | -    | -    | 1,368 | 1,599 | 1,672 | 1,705 | 1,705 |
| <b>Target price based valuation</b>  |      |      |       |       |       |       |       |
| NAV premium                          | -    | -    | -     | 18%   | -1%   | -15%  | -21%  |
| FFO 1 yield                          | -    | -    | -     | 2.7%  | 3.6%  | 4.1%  | 4.4%  |
| AFFO 1 yield                         | -    | -    | -     | 1.5%  | 1.8%  | 1.7%  | 2.0%  |
| Dividend yield                       | -    | -    | -     | 1.3%  | 1.8%  | 2.1%  | 2.2%  |
| Implied NCR yield                    | -    | -    | -     | 3.9%  | 4.0%  | 4.1%  | 4.3%  |
| Implied value per sqm (€)            | -    | -    | -     | 1,847 | 1,890 | 1,923 | 1,923 |
| <b>Cap rates and values per sqm</b>  |      |      |       |       |       |       |       |
| NCR yield                            | -    | -    | 5.0%  | 4.4%  | 4.0%  | 3.8%  | 3.7%  |
| Implied NCR yield                    | -    | -    | 5.2%  | 4.5%  | 4.6%  | 4.7%  | 4.9%  |
| Target price based NCR yield         | -    | -    | -     | 3.9%  | 4.0%  | 4.1%  | 4.3%  |
| Value per sqm (€)                    | -    | -    | 1,419 | 1,658 | 1,898 | 2,116 | 2,222 |
| Implied value per sqm (€)            | -    | -    | 1,368 | 1,599 | 1,672 | 1,705 | 1,705 |
| Target price based value per sqm (€) | -    | -    | -     | 1,847 | 1,890 | 1,923 | 1,923 |

Source: Jefferies estimates

**Table 36: ADO – NAV sensitivity**

|                       | Yield compression |      |      | Base case |      |      | Yield expansion |      |      |
|-----------------------|-------------------|------|------|-----------|------|------|-----------------|------|------|
| NCR yield             | 3.0%              | 3.3% | 3.5% | 3.8%      | 4.0% | 4.3% | 4.5%            | 4.8% | 5.0% |
| NAVPS (€)             | 58.1              | 52.1 | 46.9 | 42.3      | 38.3 | 34.3 | 30.7            | 27.5 | 24.7 |
| % change to base case | 52%               | 36%  | 22%  | 11%       | 0%   | -11% | -20%            | -28% | -35% |

Source: Jefferies estimates

**Key financials**
**Table 37: ADO – key financials (1)**

| Key data                 | 2013 | 2014 | 2015 | 2016E | 2017E | 2018E | 2019E |
|--------------------------|------|------|------|-------|-------|-------|-------|
| Gross rental income (€m) | 21   | 32   | 62   | 93    | 121   | 132   | 137   |
| EBITDA adj. (€m)         | 16   | 24   | 48   | 70    | 92    | 102   | 107   |
| FFO I (€m)               | 8    | 13   | 31   | 44    | 60    | 69    | 74    |
| AFFO I (€m)              | 4    | 4    | 18   | 24    | 30    | 29    | 34    |
| NAVPS (€)                | -    | -    | 24.1 | 32.3  | 38.3  | 44.6  | 48.2  |
| FFOPS I (€)              | -    | -    | 0.88 | 1.01  | 1.37  | 1.56  | 1.67  |
| AFFOPS I (€)             | -    | -    | 0.51 | 0.56  | 0.69  | 0.65  | 0.77  |
| DPS (€)                  | -    | -    | 0.39 | 0.50  | 0.69  | 0.78  | 0.84  |
| NAV premium              | -    | -    | -7%  | -5%   | -20%  | -31%  | -37%  |
| FFO I yield              | -    | -    | 3.9% | 3.3%  | 4.5%  | 5.1%  | 5.5%  |
| AFFO I yield             | -    | -    | 2.3% | 1.8%  | 2.3%  | 2.1%  | 2.5%  |
| Dividend yield           | -    | -    | 1.7% | 1.6%  | 2.2%  | 2.6%  | 2.7%  |
| Net LTV                  | 59%  | 54%  | 44%  | 34%   | 40%   | 38%   | 36%   |
| Gearing (x)              | 2.4  | 7.5  | 5.0  | 0.9   | 0.7   | 0.8   | 0.7   |

**Key assumptions**

|                                   |      |      |       |       |       |       |       |
|-----------------------------------|------|------|-------|-------|-------|-------|-------|
| Like-for-like rent growth (y-o-y) | 4.7% | 8.0% | 7.3%  | 5.0%  | 5.0%  | 4.5%  | 4.0%  |
| Vacancy rate                      | -    | -    | 4.0%  | 3.0%  | 2.5%  | 2.3%  | 2.1%  |
| NCR yield                         | -    | -    | 5.0%  | 4.4%  | 4.0%  | 3.8%  | 3.7%  |
| NCR multiplier (x)                | -    | -    | 20.1  | 22.9  | 24.9  | 26.6  | 26.8  |
| Value per sqm (€)                 | -    | -    | 1,419 | 1,658 | 1,898 | 2,116 | 2,222 |

**Per share data (€)**

|                                   |   |   |      |      |      |      |      |
|-----------------------------------|---|---|------|------|------|------|------|
| Number of shares, outstanding (m) | - | - | 35.0 | 44.1 | 44.1 | 44.1 | 44.1 |
| NAVPS                             | - | - | 24.1 | 32.3 | 38.3 | 44.6 | 48.2 |
| FFOPS I                           | - | - | 0.88 | 1.01 | 1.37 | 1.56 | 1.67 |
| FFOPS II                          | - | - | 0.92 | 1.08 | 1.44 | 1.63 | 1.74 |
| AFFOPS I                          | - | - | 0.51 | 0.56 | 0.69 | 0.65 | 0.77 |
| AFFOPS II                         | - | - | 0.55 | 0.62 | 0.76 | 0.72 | 0.83 |
| EPS                               | - | - | 4.46 | 4.04 | 6.11 | 7.54 | 4.36 |

**Valuation**

|                           |   |   |       |       |       |       |       |
|---------------------------|---|---|-------|-------|-------|-------|-------|
| NAV premium               | - | - | -7%   | -5%   | -20%  | -31%  | -37%  |
| FFO I yield               | - | - | 3.9%  | 3.3%  | 4.5%  | 5.1%  | 5.5%  |
| FFO II yield              | - | - | 4.1%  | 3.5%  | 4.7%  | 5.3%  | 5.7%  |
| AFFO I yield              | - | - | 2.3%  | 1.8%  | 2.3%  | 2.1%  | 2.5%  |
| AFFO II yield             | - | - | 2.5%  | 2.0%  | 2.5%  | 2.4%  | 2.7%  |
| Dividend yield            | - | - | 1.7%  | 1.6%  | 2.2%  | 2.6%  | 2.7%  |
| Payout ratio (% of FFO I) | - | - | 44%   | 50%   | 50%   | 50%   | 50%   |
| Implied NCR yield         | - | - | 5.2%  | 4.5%  | 4.6%  | 4.7%  | 4.9%  |
| Implied value per sqm (€) | - | - | 1,368 | 1,599 | 1,672 | 1,705 | 1,705 |

Source: Company data, Jefferies estimates

**Table 38: ADO – key financials (2)**

| <b>Key income data and ratios</b>        | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016E</b> | <b>2017E</b> | <b>2018E</b> | <b>2019E</b> |
|--|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Gross rental income (€m)                 | 21          | 32          | 62          | 93           | 121          | 132          | 137          |
| Net operating income (€m)                | 19          | 28          | 54          | 79           | 104          | 115          | 120          |
| EBITDA adj. (€m)                         | 16          | 24          | 48          | 70           | 92           | 102          | 107          |
| Valuation result (€m)                    | 23          | 69          | 159         | 165          | 262          | 328          | 159          |
| Disposal result (€m)                     | 0           | 0           | 1           | 3            | 3            | 3            | 3            |
| Net financing costs (€m)                 | -12         | -14         | -24         | -27          | -39          | -40          | -40          |
| PBT (€)                                  | 27          | 80          | 186         | 209          | 316          | 390          | 225          |
| Net profit (€m)                          | 23          | 69          | 156         | 178          | 269          | 332          | 192          |
| FFO I (€m)                               | 8           | 13          | 31          | 44           | 60           | 69           | 74           |
| FFO II (€m)                              | 8           | 13          | 32          | 47           | 63           | 72           | 77           |
| AFFO I (€m)                              | 4           | 4           | 18          | 24           | 30           | 29           | 34           |
| AFFO II (€m)                             | 4           | 4           | 19          | 27           | 33           | 32           | 37           |
| NOI margin                               | 91%         | 86%         | 88%         | 85%          | 86%          | 87%          | 88%          |
| EBITDA adj. margin                       | 78%         | 76%         | 79%         | 75%          | 76%          | 77%          | 78%          |
| FFO I margin                             | 37%         | 41%         | 50%         | 48%          | 50%          | 52%          | 54%          |
|  |             |             |             |              |              |              |              |
| <b>Key balance sheet data and ratios</b> |             |             |             |              |              |              |              |
| Investment property (€m)                 | 474         | 778         | 1,504       | 2,186        | 2,849        | 3,176        | 3,335        |
| Cash and equivalents (€m)                | 5           | 10          | 134         | 200          | 243          | 313          | 343          |
| Shareholders' equity (€m)                | 56          | 130         | 786         | 1,324        | 1,586        | 1,864        | 2,023        |
| NAV (€m)                                 | 191         | 355         | 844         | 1,426        | 1,688        | 1,966        | 2,125        |
| Net debt (€m)                            | -282        | -423        | -655        | -747         | -1,147       | -1,197       | -1,197       |
| Net LTV (%)                              | 59%         | 54%         | 44%         | 34%          | 40%          | 38%          | 36%          |
| Gearing (x)                              | 2.4         | 7.5         | 5.0         | 0.9          | 0.7          | 0.8          | 0.7          |
|  |             |             |             |              |              |              |              |
| <b>Key cash flow data and ratios</b>     |             |             |             |              |              |              |              |
| CF operating (€m)                        | 15          | -19         | 56          | 78           | 95           | 90           | 105          |
| CF investing (€m)                        | -75         | -191        | -575        | -223         | -430         | -40          | -40          |
| CF financing (€m)                        | 63          | 216         | 579         | 275          | 378          | 20           | -34          |
| Net cash flow (€m)                       | 3           | 5           | 60          | 130          | 43           | 70           | 30           |
| Cash at beginning of period (€m)         | 2           | 5           | 10          | 69           | 200          | 243          | 313          |
| Cash at the end of period (€m)           | 5           | 10          | 69          | 200          | 243          | 313          | 343          |

Source: Company data, Jefferies estimates

## Pure Berlin residential portfolio

### Company description

ADO owns a c. 18,600 units pure Berlin residential portfolio with a hold-to-let strategy in the affordable housing segment. The company went public in mid-2015 and has more than doubled its portfolio size over the last two years. The acquisition of the 'Carlos' portfolio from main peer DW in 2015 was the largest single expansion step so far. The company has continued its strong expansion mode also this year with almost 3,000 units signed year-to-date at an average NCR yield of 4.5%. Almost half of the portfolio is located in central locations of Berlin with a high portion of smaller-scale 'Altbau' buildings (historical, architectural buildings with year of construction before 2018). The company shows the strongest like-for-like rental growth within the peer group. Its rental growth strategy is strongly focused on realising rent revisionary potential. The company is Luxemburg based and listed in the SDAX segment of the Deutsche Boerse. Its free-float shareholder structure is characterised by real estate specialist investors. ADO Group, a Tel Aviv-listed holding company, owns a remaining 34% stake in ADO after the IPO and a secondary placement.

## High portion of central locations in Berlin

### Portfolio

The portfolio comprises about 18,600 residential units including the recently signed new acquisitions. Almost half of the portfolio is located in 'central locations', measured in terms of property value. The average rent per sqm/month amounts to €6.02, which is the same level as of main peer DW's Berlin portfolio (€6.04).

## Portfolio clustering

The company clusters its Berlin portfolio as following: Central locations: Charlottenburg-Wilmersdorf, Friedrichshain, Kreuzberg, Mitte, North Neukölln, North Steglitz, Prenzlauer Berg, South Reinickendorf, Schöneberg; North: Reinickendorf, Pankow, East: Lichtenberg, Marzahn-Hellersdorf, Treptow-Köpenick; South: Neukölln, Tempelhof-Schöneberg, Steglitz-Zehlendorf; West: Charlottenburg-Wilmersdorf, Spandau.

**Table 39: ADO portfolio structure**

|                                    | Central locations | North | East  | South | West  | Total  |
|------------------------------------|-------------------|-------|-------|-------|-------|--------|
| Property value (€m)                | 883               | 291   | 188   | 291   | 319   | 1,972  |
| in % of total                      | 45%               | 15%   | 10%   | 15%   | 16%   | 100%   |
| # units                            | 6,387             | 3,147 | 1,719 | 2,500 | 3,885 | 17,638 |
| in % of total                      | 36%               | 18%   | 10%   | 14%   | 22%   | 100%   |
| In-place rent per sqm/month (€)    | 6.42              | 5.60  | 6.57  | 6.26  | 5.38  | 6.02   |
| New-letting rent per sqm/month (€) | 10.04             | 6.42  | 8.32  | 8.33  | 6.22  | 7.83   |
| Occupancy (sqm)                    | 97.3%             | 98.5% | 98.4% | 97.8% | 96.2% | 97.4%  |

**Source: Jefferies, company data as of 9M 2016, all values except the property value are for the residential portfolio only**

## Currently valued at 4.7% (as of 1H 2016)

The portfolio is currently valued at 4.7% NCR yield or €1,540 per sqm with a rather wide gap between the portfolio clusters. The portfolio in the West (mainly the large-scale settlements like the 'Carlos' portfolio) is valued lowest at 5.4% NCR yield or €1,163 per sqm. The 'central location' portfolio is valued at 4.2% NCR yield or €1,857 per sqm.

**Table 40: ADO portfolio valuation**

|  | Central locations | North | East  | South | West  | Total |
|--|-------------------|-------|-------|-------|-------|-------|
| Property value as of 9M 2016 (€m)                | 883               | 291   | 188   | 291   | 319   | 1,972 |
| in % of total                                    | 45%               | 15%   | 10%   | 15%   | 16%   | 100%  |
| Value per sqm as of 1H 2016 (€)                  | 1,857             | 1,269 | 1,642 | 1,711 | 1,163 | 1,540 |
| In-place rent per sqm/month as of 9M 2016 (€)    | 6.42              | 5.60  | 6.57  | 6.26  | 5.38  | 6.02  |
| CBRE market rent per sqm/month as of 1H 2016 (€) | 7.62              | 6.39  | 7.26  | 7.31  | 6.13  | 6.92  |
| New letting rent per sqm/month as of 9M 2016 (€) | 10.04             | 6.42  | 8.32  | 8.33  | 6.22  | 7.83  |
| Multiplier current rent as of 1H 2016 (x)        | 23.62             | 18.98 | 21.16 | 21.97 | 18.66 | 21.34 |
| Yield current rent as of 1H 2016                 | 4.2%              | 5.3%  | 4.7%  | 4.6%  | 5.4%  | 4.7%  |
| Multiplier CBRE market rent as of 1H 2016 (x)    | 19.51             | 16.23 | 18.74 | 18.46 | 15.52 | 17.92 |
| Yield CBRE market rent as of 1H 2016             | 5.1%              | 6.2%  | 5.3%  | 5.4%  | 6.4%  | 5.6%  |
| Multiplier new letting rent as of 1H 2016 (x)    | 15.03             | 16.6  | 15.8  | 15.66 | 15.52 | 16.14 |
| Yield new letting rent as pf 1H 2016             | 6.7%              | 6.0%  | 6.3%  | 6.4%  | 6.4%  | 6.2%  |

Source: Jefferies, company data as of 1H 2016 / 9M 2016

### Highest rent revisionary potential

The company's rent revisionary potential is by far the highest in the sector with 30%. That of main peer DW is 20%, most of the other peers are below the 10% level. The range of revisionary potential within the Berlin clusters is relatively wide, with central locations at 57% and northern locations at 12%.

**Table 41: ADO portfolio rent revisionary potential**

|                                    | Central locations | North | East | South | West | Total |
|------------------------------------|-------------------|-------|------|-------|------|-------|
| Property value (€m)                | 883               | 291   | 188  | 291   | 319  | 1,972 |
| In-place rent per sqm/month (€)    | 6.42              | 5.60  | 6.57 | 6.26  | 5.38 | 6.02  |
| New letting rent per sqm/month (€) | 10.04             | 6.42  | 8.32 | 8.33  | 6.22 | 7.83  |
| Rent revisionary potential         | 56%               | 15%   | 27%  | 33%   | 16%  | 30%   |

Source: Jefferies, company data as of 9M 2016

## LEG Immobilien– Buy, €84 PT

**Solid high yield player turning to a more active modernisation approach, offering additional rent growth potential**

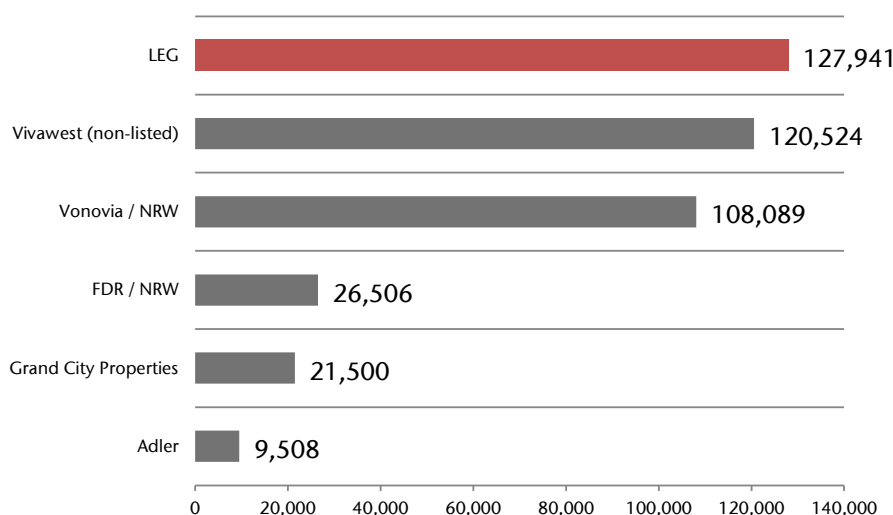
LEG is a play on earnings yields

LEG is a North-Rhine-Westphalia (NRW) pure-play and offers one of the best risk-return profiles in the sector with high cash flow visibility due to defensive rental growth and best-in-class earnings yields, driven by high operating efficiency and higher-yielding assets. We like the company for its high capital discipline. It has been in a significant expansion mode, adding >40,000 units since its IPO through selective single portfolio acquisitions at attractive yields with low execution risks, almost no goodwill burden, highly NAV and FFO accretive. The company runs at excellent rental growth efficiency, which is reflected in best-in-class AFFO margins – one of the key drivers is its strong underlying rental growth (2.5% p.a. for the total portfolio and 3.2% p.a. for the free-financed part on average 2014/2015), which is close to DW's growth and well above Vonovia's (1.5%). LEG has recently turned to a more active modernisation approach, providing additional rent growth potential. Balance sheet and financing is rock solid and property valuation looks more on the conservative side with NCR yield expected at 6.7%-6.8% by year-end, also providing room for revaluations and further NAV growth. The stock has been among the performance laggards this year, now trading at very attractive earnings yields well above the other major players (6.5% FFO and 4.2% dividend yield as of FY 2017E). We initiate with a Buy and PT of €84.

Largest NRW player

LEG is a North-Rhine-Westphalia (NRW) pure play, owning the largest residential portfolio (c. 130,000 units) among all major players. We regard the strongly focused portfolio as one of the main reasons for the company's high cost efficiency – it runs at one of the best operating profit margins among peers.

**Chart 107: LEG largest NRW residential player (# units)**



Source: Jefferies, company data as of 9M 2016, Vivawest and Immeo as of FY 2015

NRW a large rental market

NRW is Germany's largest federal state in terms of population (17.7m inhabitants) with the highest population density. With a homeownership rate of only 43%, it represents the largest rental market of all federal states in Germany. It is also the largest contributor to

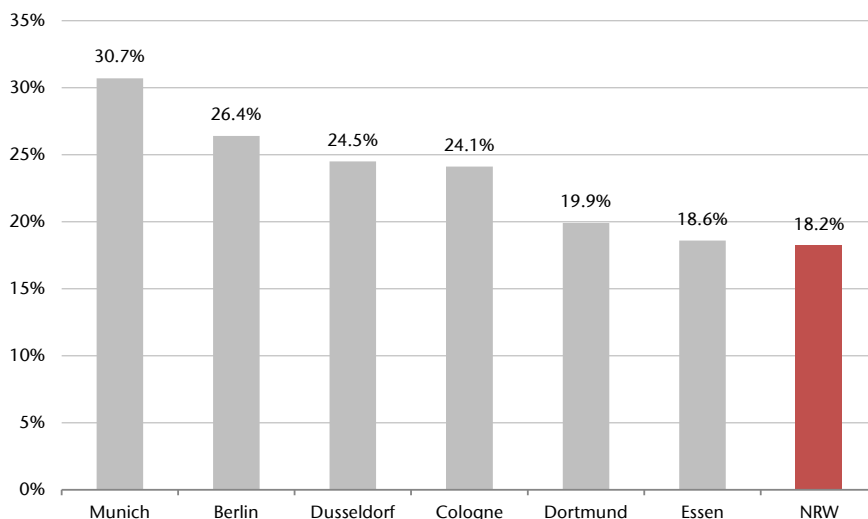


Strong demand for affordable rental apartments

German GDP – of the 50 largest companies in Germany, 18 are based in NRW (e.g. Bayer, Deutsche Telekom, EON, Evonik, RWE, ThyssenKrupp).

Demand for affordable rental apartments is high and has recently picked-up further through the refugee influx – about 25% of the refugees migrate to NRW and rent affordability is rather high at 18.2% average housing cost ratio.

**Chart 108: High rent affordability in NRW**

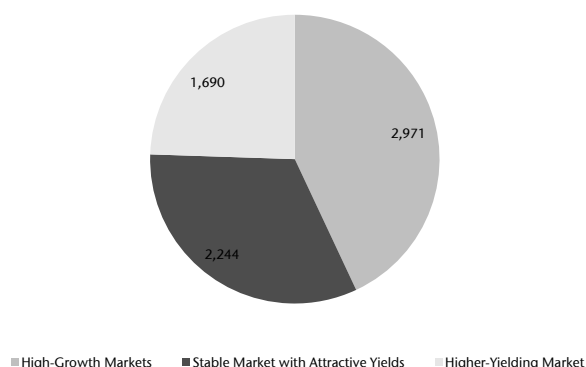


Source: Jefferies, LEG, CBRE, 2014 data, based on purchasing power and gross rent per household

Wide diversity of micro markets

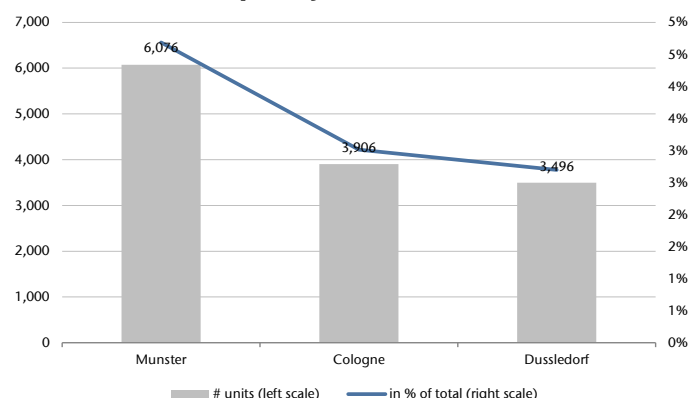
The NRW residential market is characterised by a high diversity of micro markets, which requires an in-depth local expertise. While some of NRW's main cities (e.g. Cologne, Dusseldorf, Munster) belong the German residential 'hot spots' with strong demographics and housing dynamics, some cities and areas belong to the weakest spots in the country. LEG has clustered its portfolio accordingly – the better-quality locations account for about 42% of the total property value.

**Chart 109: LEG – 42% in the better-quality cluster**



Source: Jefferies, company data as of 9M 2016, fair value refers to residential assets

**Chart 110: LEG – Top 3 city locations**

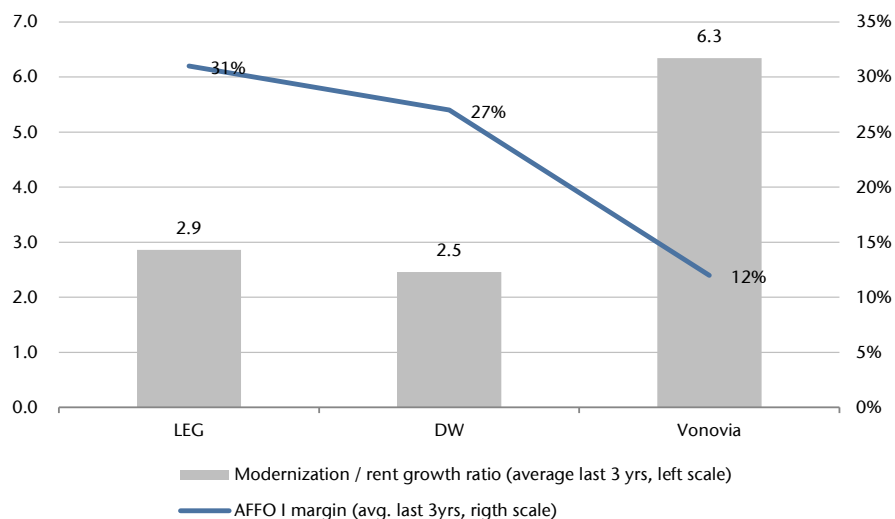


Source: Jefferies, company data, Jefferies

High rental growth efficiency resulting in best-in-class AFFO margins

The company runs at excellent rental growth efficiency, which is also reflected in attractive AFFO margins. It has spent only €7.4 per sqm for modernisations and generated 2.6% annual rental growth on average over the last three years, resulting in a modernisation / rent growth ratio of 2.9x, which is rather close to best-in-class player DW.

**Chart 111: LEG – high rent growth efficiency and best AFFO margin**



Source: Jefferies, company data. Average 2013-15, modernisation per sqm, l-f-l rent growth, the lower the ratio the more efficient rental growth, AFFO I / gross rents

Solid external growth track record

We appreciate the company's capital discipline, both with regards to internal as well as external growth. The company has been in a significant expansion mode (adding >40,000 units) since its IPO through selective single portfolio acquisitions at attractive yields with low execution risks, almost no goodwill burden, highly NAV and FFO accretive.

**Table 42: LEG's acquisition track record**

| # units | Closing      | Geographic focus                       | Quality cluster          | Vacancy rate | NCR yield |
|---------|--------------|--|--------------------------|--------------|-----------|
| 1,922   | Jun-14       | Ruhr area                              | n/a                      | 3.0%         | 7.5%      |
| 2,200   | Aug-14       | Dortmund, Essen, Bochum                | Stable                   | 8.2%         | n/a       |
| 9,591   | Oct-14       | Monchengladbach, Wuppertal, Leverkusen | Stable / Higher Yielding | 3.9%         | 7.2%      |
| 713     | Jun-15       | Cologne, Leverkusen, Sankt Augustin    | High Growth / Stable     | 2.9%         | n/a       |
| 3,539   | Jan-16       | Bielefeld, Detmold                     | Stable                   | 3.6%         | 6.3%      |
| 2,037   | Jan-16       | Duisburg, Essen                        | Stable / Higher Yielding | 6.7%         | n/a       |
| 13,570  | Apr-16       | Ruhr area                              | Higher Yielding / Stable | 5.3%         | 8.0%      |
| 1,294   | Jan/Jul - 16 | Siegen                                 | Stable                   | 17.3%        | 7.7%      |
| 1,100   | May-16       | Recklinghausen, Herne                  | Stable / Higher Yielding | 5.4%         | 7.5%      |
| 560     | Dec-16       | Hamm, Krefeld, Duisburg                | High Growth / Stable     | 7.1%         | n/a       |
| 320     | Jan-17       | Duisburg, Herten                       | Higher Yielding / Stable | 2.1%         | n/a       |

Source: Jefferies, company data

Also disciplined internal growth

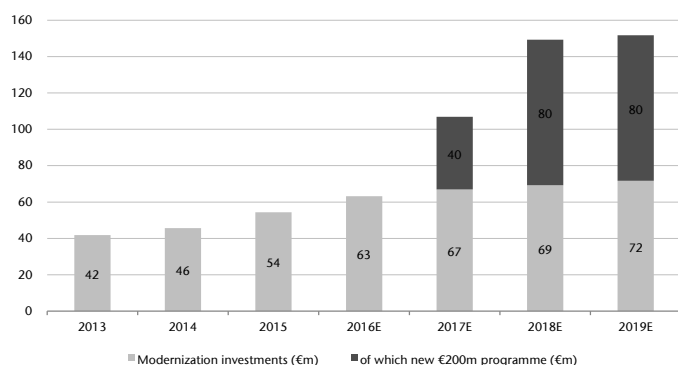
The company also follows a disciplined internal growth strategy with a 6% minimum IRR target on modernisation investments. Its capex programme focuses on \$559 modernisations. It has slightly stepped-up investments over the last three years, which was partly driven by investments in newly acquired assets and vacancy reduction. The

Additional rental growth from a more active modernisation approach

company guides for a further increase of modernisation investments this year with a 60%/40% split in buildings / apartments.

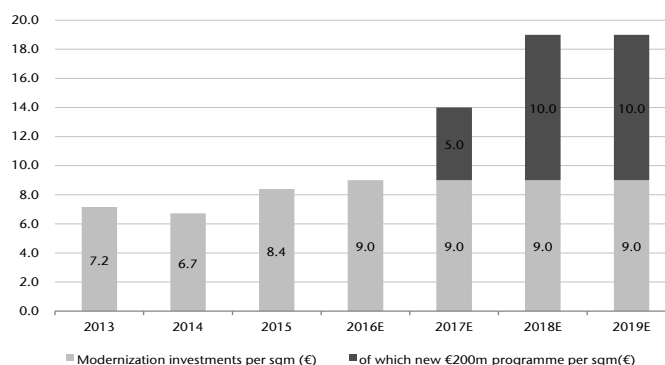
LEG has recently announced a more active modernisation approach, offering additional rent growth potential. It targets additional investments of about €200m from 2017-2019 with an investment focus on buildings (90% of total investments) in the higher-quality cluster (65% of total investments).

**Chart 112: LEG's modernisation investments up**



Source: Jefferies, company data

**Chart 113: Modernisation investments per sqm up**



Source: Jefferies, company data. Underlying modernisation investments of €9 per sqm estimated to remain unchanged

Unchanged IRR of at least 6% on new investments

The company expects an unchanged IRR of at least 6% on these investments, resulting in additional rental growth of 0.5%-points in 2018 and 0.9%-points in 2019 and additional FFO of €1.9m in 2017E, €5.0m in 2018 and €8.3m in 2018. While the 6% IRR target is unlevered, we understand the FFO return as levered. The company expects the modernisation investment also to provide additional revaluation potential.

Rental growth above the 3% level through modernisations

The more active modernisation approach should allow the company to further outperform market rental growth. LEG's like-for-like rent growth in 2015 was 2.7% for the total portfolio and 3.6% for free-financed units vs. market rent growth of 2.1% in 2015, according to CBRE's NRW housing market report. We expect modernisation investments to lift rental growth well above the 3% level.

**Table 43: LEG – Modernisations driving rental growth**

|                           | 2014 | 2015 | 2016E | 2017E | 2018E | 2019E |
|---------------------------|------|------|-------|-------|-------|-------|
| Total                     | 3.0% | 2.7% | 2.5%  | 3.3%  | 3.0%  | 3.5%  |
| o/w new lettings          | 0.4% | 0.5% | 0.5%  | 0.5%  | 0.4%  | 0.4%  |
| o/w regular rent increase | 2.2% | 1.9% | 1.6%  | 2.3%  | 1.7%  | 1.7%  |
| o/w modernisation         | 0.4% | 0.3% | 0.4%  | 0.5%  | 0.9%  | 1.4%  |

Source: Jefferies estimates, company data

Strong underlying rental growth with further upside

The company's underlying rental growth is rather solid – rental growth from regular rent increases and new lettings was 2.5% p.a. for the total portfolio and 3.2% p.a. from the free-financed part on average 2014/2015, which is well above that of main peer Vonovia (1.5%), providing high cash flow visibility. The average rent of the free-financed portfolio is about 4.5% below the average index rent, indicating towards further underlying rental upside. Furthermore, the company states 10% rent revisionary potential at 11% average tenant fluctuation, offering additional rental upside through re-lettings.

The company's rent growth cycle is influenced by a 28% exposure to subsidized units

The company's rental growth is influenced by the relatively high 28% portion of subsidised units (social housing), overall diluting rental growth numbers. LEG's like-for-

Solid balance sheet and conservative financing

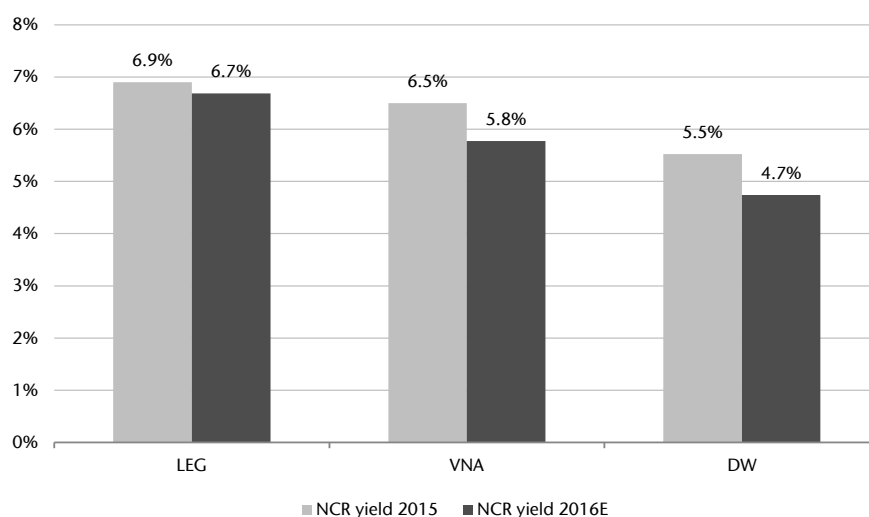
LEG's property valuation looks conservative

like rent growth was 2.7% for the total portfolio and 3.6% for free-financed units in 2015. The subsidised rents get adjusted every three years (next adjustment in 2017), stepping-up rental growth in those years. For example, the company guides rental growth of 2.4%-2.6% this year and 3.0%-3.3% next year – the difference mainly stemming from the adjustment of subsidised rents in 2017.

LEG has a solid balance sheet and very conservative financing. Its net LTV stands at 48.8% (45.2% post-conversion); we think a comfortable level given a rather conservative property valuation. More than 90% of the company's financing is mortgage debt and the average debt maturity is about 11 years at 2.1% average financing rate. It is Baa1 Moody's rated. The company prematurely refinanced its short-/mid-term debt last year.

The company's property valuation looks conservative. It has recently guided for €420-440m valuation uplift with FY 2016 results, reflecting a 6.7%-6.8% NCR yield (about 10-20bps yield shift versus FY 2015). It also benefits from a €150-160m positive valuation impact from the early refinancing of subsidised loans, reducing NCR yield to 6.6%-6.7% as of FY 2016, corresponding to about €927 per sqm according to our estimate.

**Chart 114: LEG – lowest property valuation**



**Source: Jefferies estimates, company data, all companies have guided property valuation for FY2016**

Transaction multiples indicating to further revaluation upside

Transaction multiples suggesting further revaluation potential

Comparing transaction multiples with LEG's property valuation comes with a high level of inaccuracy. Due to the high diversity of NRW residential markets, location and asset qualities can vary significantly, resulting in a wide range of multiples. Furthermore, LEG's high portion of subsidised units (28% of total) makes any comparison difficult.

For example, LEG's recent acquisitions, which were predominantly in the mid- and lower end quality cluster ('stable and higher yielding' according to LEG definition), were priced at an average 7.5% yield, which compares with LEG's valuation of 7.9%-8.0% yield for these clusters, indicating revaluation potential. Better quality NRW portfolios are currently offered at up to 20% premium to LEG's valuation, according to company statements.

**Table 44: LEG – Revaluation guidance FY 2016**

|                                      | NCR yield FY 2015 | Fair value per sqm FY 2015 (€) | FY 2016 fair value uplift guidance (y-o-y) |
|--------------------------------------|-------------------|--------------------------------|--|
| High-Growth Markets                  | 5.8%              | 1,157                          | 7.1%                                       |
| Stable Market with Attractive Yields | 7.6%              | 745                            | 5.9%                                       |
| Higher-Yielding Market               | 8.2%              | 668                            | 3.2%                                       |
| Total Portfolio                      | 6.9%              | 873                            | 5.9%                                       |

**Source: Jefferies, company data**

NRW bulk risks in respect of  
residential dynamics

New rent index regulations as key  
risk for rental growth

Major modernisation programme  
with potential execution risks

## Risks

Besides macro and sector-specific risks described in the chapter ‘Sector Key Investment Thesis’, LEG is exposed to the following company-specific risks:

As a NRW pure play, the investment case implies corresponding portfolio bulk risks. Any decline of NRW residential dynamics (demographics, supply/demand, wages and salaries) might negatively impact rental growth and valuations.

LEG’s rental growth strategy is strongly focused on rent index adjustments and therefore depends on the outcome of the rent index for each city. Any tighter regulations on rent indices might negatively impact the company’s rental growth. As discussed in the chapter ‘Regulation’, there are currently discussions about a potential extension of the rent indices’ reference period from four to eight years, which would most likely lower rent index growth.

LEG recently initiated a major modernisation programme focused on building modernisations within the company’s higher-quality cluster (‘high growth markets’) with an expected IRR of at least 6%. As this is the first larger-scale investment programme for the company, it might be attached with execution risks (e.g. construction capacity etc.).

**LEG valuation**
**Valuation and sensitivity**

Our price target of €84 implies a total return of 23%. It values LEG at 13% target premium on NAV17E and 5.4% target FFO I yield FY17E and implies a target value per sqm of €1,140 and 6.1% target NCR yield.

**Table 45: LEG – valuation**

| <b>Total return</b> | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016E</b> | <b>2017E</b> | <b>2018E</b> | <b>2019E</b> |
|---------------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Price target (€)    | -           | -           | -           | 84.0         | 84.0         | 84.0         | 84.0         |
| Share price (€)     | -           | -           | -           | 70.6         | 70.6         | 70.6         | 70.6         |
| Deviation           | -           | -           | -           | 19%          | 19%          | 19%          | 19%          |
| Dividend yield      | -           | -           | -           | 3.8%         | 4.2%         | 4.5%         | 4.8%         |
| Total return        | -           | -           | -           | 23%          | 23%          | 23%          | 24%          |

**Current stock valuation**

|                           |      |      |       |       |       |       |       |
|---------------------------|------|------|-------|-------|-------|-------|-------|
| NAV premium               | -14% | -2%  | 19%   | 6%    | -5%   | -12%  | -19%  |
| FFO 1 yield               | 6.4% | 5.6% | 4.7%  | 5.9%  | 6.5%  | 7.0%  | 7.3%  |
| AFFO 1 yield              | 4.5% | 4.0% | 3.5%  | 4.5%  | 4.0%  | 3.6%  | 3.9%  |
| Dividend yield            | 4.1% | 3.8% | 3.2%  | 3.8%  | 4.2%  | 4.5%  | 4.8%  |
| Implied NCR yield         | 7.7% | 7.3% | 6.2%  | 6.5%  | 6.7%  | 6.9%  | 7.1%  |
| Implied value per sqm (€) | 751  | 820  | 1,023 | 1,024 | 1,028 | 1,033 | 1,039 |

**Target price based valuation**

|                           |   |   |   |       |       |       |       |
|---------------------------|---|---|---|-------|-------|-------|-------|
| NAV premium               | - | - | - | 26%   | 13%   | 5%    | -3%   |
| FFO 1 yield               | - | - | - | 5.0%  | 5.4%  | 5.9%  | 6.2%  |
| AFFO 1 yield              | - | - | - | 3.8%  | 3.4%  | 3.0%  | 3.3%  |
| Dividend yield            | - | - | - | 3.2%  | 3.5%  | 3.8%  | 4.0%  |
| Implied NCR yield         | - | - | - | 5.8%  | 6.1%  | 6.2%  | 6.4%  |
| Implied value per sqm (€) | - | - | - | 1,139 | 1,143 | 1,149 | 1,154 |

**Cap rates and values per sqm**

|                                      |      |      |       |       |       |       |       |
|--------------------------------------|------|------|-------|-------|-------|-------|-------|
| NCR yield                            | 7.2% | 7.2% | 6.9%  | 6.7%  | 6.5%  | 6.4%  | 6.3%  |
| Implied NCR yield                    | 7.7% | 7.3% | 6.2%  | 6.5%  | 6.7%  | 6.9%  | 7.1%  |
| Target price based NCR yield         | -    | -    | -     | 5.8%  | 6.1%  | 6.2%  | 6.4%  |
| Value per sqm (€)                    | 806  | 827  | 873   | 927   | 998   | 1,054 | 1,118 |
| Implied value per sqm (€)            | 751  | 820  | 1,023 | 1,024 | 1,028 | 1,033 | 1,039 |
| Target price based value per sqm (€) | -    | -    | -     | 1,139 | 1,143 | 1,149 | 1,154 |

Source: Jefferies estimates

**Table 46: LEG – NAV sensitivity**

|                       | <b>Yield compression</b> |      | <b>Base case</b> |      |      |      | <b>Yield expansion</b> |      |      |
|-----------------------|--------------------------|------|------------------|------|------|------|------------------------|------|------|
| NCR yield             | 5.5%                     | 5.8% | 6.0%             | 6.3% | 6.5% | 6.8% | 7.0%                   | 7.3% | 7.5% |
| NAVPS (€)             | 95.5                     | 89.5 | 84.0             | 78.9 | 74.2 | 69.5 | 65.2                   | 61.1 | 57.4 |
| % change to base case | 29%                      | 21%  | 13%              | 6%   | 0%   | -6%  | -12%                   | -18% | -23% |

Source: Jefferies estimates

**Key financials**
**Table 47: LEG – key financials (1)**

| Key data                          | 2013 | 2014 | 2015  | 2016E | 2017E | 2018E | 2019E |
|-----------------------------------|------|------|-------|-------|-------|-------|-------|
| Gross rental income (€m)          | 361  | 390  | 436   | 506   | 539   | 555   | 574   |
| EBITDA adj. (€m)                  | 232  | 259  | 294   | 354   | 388   | 405   | 419   |
| FFO I (€m)                        | 141  | 163  | 206   | 263   | 288   | 311   | 327   |
| AFFO I (€m)                       | 99   | 118  | 152   | 200   | 180   | 160   | 174   |
| NAVPS (€)                         | 48.6 | 52.7 | 58.9  | 66.5  | 74.2  | 80.1  | 86.8  |
| FFOPS I (€)                       | 2.67 | 2.86 | 3.28  | 4.16  | 4.56  | 4.92  | 5.18  |
| AFFOPS I (€)                      | 1.88 | 2.06 | 2.42  | 3.16  | 2.85  | 2.53  | 2.76  |
| DPS (€)                           | 1.73 | 1.98 | 2.26  | 2.70  | 2.96  | 3.20  | 3.37  |
| NAV premium                       | -14% | -2%  | 19%   | 6%    | -5%   | -12%  | -19%  |
| FFO I yield                       | 6.4% | 5.6% | 4.7%  | 5.9%  | 6.5%  | 7.0%  | 7.3%  |
| AFFO I yield                      | 4.5% | 4.0% | 3.5%  | 4.5%  | 4.0%  | 3.6%  | 3.9%  |
| Dividend yield                    | 4.1% | 3.8% | 3.2%  | 3.8%  | 4.2%  | 4.5%  | 4.8%  |
| Net LTV                           | 48%  | 47%  | 44%   | 47%   | 45%   | 44%   | 43%   |
| Gearing (x)                       | 1.3  | 1.4  | 1.3   | 1.3   | 1.2   | 1.1   | 1.1   |
| <b>Key assumptions</b>            |      |      |       |       |       |       |       |
| Like-for-like rent growth (y-o-y) | 2.7% | 2.8% | 2.7%  | 2.5%  | 3.3%  | 3.0%  | 3.5%  |
| Vacancy rate                      | 2.9% | 2.7% | 2.5%  | 3.1%  | 3.1%  | 3.1%  | 3.1%  |
| NCR yield                         | 7.2% | 7.2% | 6.9%  | 6.7%  | 6.5%  | 6.4%  | 6.3%  |
| NCR multiplier (x)                | 13.9 | 13.9 | 14.5  | 15.0  | 15.3  | 15.7  | 16.0  |
| Value per sqm (€)                 | 806  | 827  | 873   | 927   | 998   | 1,054 | 1,118 |
| <b>Per share data (€)</b>         |      |      |       |       |       |       |       |
| Number of shares, outstanding (m) | 53.0 | 57.1 | 62.8  | 63.2  | 63.2  | 63.2  | 63.2  |
| NAVPS                             | 48.6 | 52.7 | 58.9  | 66.5  | 74.2  | 80.1  | 86.8  |
| FFOPS I                           | 2.67 | 2.86 | 3.28  | 4.16  | 4.56  | 4.92  | 5.18  |
| FFOPS II                          | 2.63 | 2.83 | 3.34  | 4.23  | 4.65  | 4.99  | 5.24  |
| AFFOPS I                          | 1.88 | 2.06 | 2.42  | 3.16  | 2.85  | 2.53  | 2.76  |
| AFFOPS II                         | 1.84 | 2.03 | 2.47  | 3.24  | 2.94  | 2.60  | 2.82  |
| DPS                               | 1.73 | 1.98 | 2.26  | 2.70  | 2.96  | 3.20  | 3.37  |
| <b>Valuation</b>                  |      |      |       |       |       |       |       |
| NAV premium                       | -14% | -2%  | 19%   | 6%    | -5%   | -12%  | -19%  |
| FFO I yield                       | 6.4% | 5.6% | 4.7%  | 5.9%  | 6.5%  | 7.0%  | 7.3%  |
| FFO II yield                      | 6.3% | 5.5% | 4.8%  | 6.0%  | 6.6%  | 7.1%  | 7.4%  |
| AFFO I yield                      | 4.5% | 4.0% | 3.5%  | 4.5%  | 4.0%  | 3.6%  | 3.9%  |
| AFFO II yield                     | 4.4% | 3.9% | 3.5%  | 4.6%  | 4.2%  | 3.7%  | 4.0%  |
| Dividend yield                    | 4.1% | 3.8% | 3.2%  | 3.8%  | 4.2%  | 4.5%  | 4.8%  |
| Payout ratio (% of FFO I)         | 65%  | 69%  | 69%   | 65%   | 65%   | 65%   | 65%   |
| Implied NCR yield                 | 7.7% | 7.3% | 6.2%  | 6.5%  | 6.7%  | 6.9%  | 7.1%  |
| Implied value per sqm (€)         | 751  | 820  | 1,023 | 1,024 | 1,028 | 1,033 | 1,039 |

Source: Company data, Jefferies estimates

**Table 48: LEG – key financials (2)**

| <b>Key income data and ratios</b>        | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016E</b> | <b>2017E</b> | <b>2018E</b> | <b>2019E</b> |
|--|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Gross rental income (€m)                 | 361         | 390         | 436         | 506          | 539          | 555          | 574          |
| Net operating income (€m)                | 258         | 285         | 321         | 374          | 404          | 416          | 431          |
| EBITDA adj. (€m)                         | 232         | 259         | 294         | 354          | 388          | 405          | 419          |
| Valuation result (€m)                    | 82          | 143         | 286         | 426          | 456          | 295          | 355          |
| Disposal result (€m)                     | -2          | -2          | 4           | 12           | 12           | 3            | 3            |
| Net financing costs (€m)                 | -127        | -162        | -252        | -167         | -185         | -188         | -190         |
| PBT (€)                                  | 159         | 220         | 300         | 586          | 631          | 484          | 556          |
| Net profit (€m)                          | 137         | 157         | 218         | 426          | 458          | 352          | 404          |
| FFO I (€m)                               | 141         | 163         | 206         | 263          | 288          | 311          | 327          |
| FFO II (€m)                              | 140         | 162         | 210         | 268          | 294          | 315          | 331          |
| AFFO I (€m)                              | 99          | 118         | 152         | 200          | 180          | 160          | 174          |
| AFFO II (€m)                             | 98          | 116         | 155         | 205          | 186          | 164          | 178          |
| NOI margin                               | 71%         | 73%         | 73%         | 74%          | 75%          | 75%          | 75%          |
| EBITDA adj. margin                       | 64%         | 66%         | 67%         | 70%          | 72%          | 73%          | 73%          |
| FFO I margin                             | 39%         | 42%         | 47%         | 52%          | 54%          | 56%          | 57%          |
|  |             |             |             |              |              |              |              |
| <b>Key balance sheet data and ratios</b> |             |             |             |              |              |              |              |
| Investment property (€m)                 | 5,187       | 5,990       | 6,754       | 7,855        | 8,418        | 8,864        | 9,371        |
| Cash and equivalents (€m)                | 111         | 130         | 253         | 284          | 315          | 245          | 185          |
| Shareholders' equity (€m)                | 2,249       | 2,477       | 2,968       | 3,380        | 3,820        | 4,161        | 4,552        |
| NAV (€m)                                 | 2,616       | 3,269       | 4,001       | 4,552        | 5,083        | 5,483        | 5,945        |
| Net debt (€m)                            | -2,473      | -2,830      | -2,989      | -3,681       | -3,804       | -3,909       | -4,025       |
| Net LTV (%)                              | 48%         | 47%         | 44%         | 47%          | 45%          | 44%          | 43%          |
| Gearing (x)                              | 1.3         | 1.4         | 1.3         | 1.3          | 1.2          | 1.1          | 1.1          |
|  |             |             |             |              |              |              |              |
| <b>Key cash flow data and ratios</b>     |             |             |             |              |              |              |              |
| Cash flow operating (€m)                 | 102         | 147         | 167         | 205          | 186          | 164          | 178          |
| Cash flow investing (€m)                 | -163        | -607        | -496        | -480         | -108         | -151         | -153         |
| Cash flow financing (€m)                 | 38          | 480         | 452         | 307          | -47          | -83          | -85          |
| Net cash flow (€m)                       | -23         | 19          | 123         | 31           | 30           | -70          | -60          |
| Cash at the end of period (€m)           | 111         | 130         | 253         | 284          | 315          | 245          | 185          |

Source: Company data, Jefferies estimates



NRW pure-play with large scale

Portfolio clustering according to quality measures

Better quality cluster

Mid-quality cluster

Lower-quality cluster

Wide quality gap between the clusters

### Company description

LEG runs a c.128,000 units residential portfolio purely focused on North-Rhine-Westphalia (NRW) with a hold-to-let strategy in the affordable housing segment. It is the third largest listed residential player in Germany. The company has expanded its portfolio size by more than 40% (>40,000 units) since the IPO at the beginning of 2013. The largest expansion steps were an almost 14,000 unit portfolio in 2015 and a 9,000 unit portfolio in 2014; both were sold by listed peer Vonovia. The top-3 cities are Dortmund, Münster and Mönchengladbach, in terms of number of units. The portfolio contains a high portion of restricted rents (currently 28% of total units). Its rent growth strategy is strongly focused on rent index adjustments. The company is the third largest listed residential player in Germany, listed in the MDAX with most of the capital free-float and a broad shareholder structure, both sector specialists as well as generalists.

### Portfolio

The portfolio comprises about 128,000 residential units, more or less all belong to the core portfolio. There is only a tiny portion outside NRW. LEG clusters its portfolio according to quality measures like demographics as well as rent growth and vacancy:

‘High-Growth Markets’: Characterized by strong economics and demographics, high rental growth and low vacancy; Key cities like Bonn, Cologne, Düsseldorf, Aachen and Münster; Bielefeld and Leverkusen were recently upgraded to this segment.

‘Stable Market with Attractive Yields’: Characterized by average economics and stable demographics with average rent growth and vacancy; In these locations, the demographic outlook is typically subdued, but also supply is rather low; Cities like Dortmund, Essen; Unna was recently upgraded to this segment.

‘Higher-Yielding Market’: Characterized by below average economics and demographics, but also rather low supply. It offers attractive investment opportunities but requires an in-depth understanding of the dynamics in micro locations; Cities like Duisburg, Gelsenkirchen.

**Table 49: LEG’s portfolio structure**

|                                      | # residential units | in % of total | Fair value (€m) | in % of total |
|--------------------------------------|---------------------|---------------|-----------------|---------------|
| High-Growth Market                   | 39,027              | 31%           | 2,971           | 42%           |
| Stable Market with Attractive Yields | 46,728              | 37%           | 2,244           | 32%           |
| Higher-Yielding Market               | 40,291              | 31%           | 1,690           | 24%           |
| Subtotal NRW                         | 126,046             | 99%           | 6,905           | 98%           |
| Portfolio outside NRW                | 1,895               | 1%            | 123             | 2%            |
| Total Portfolio                      | 127,941             | 100%          | 7,028           | 100%          |

Source: Jefferies, company data as of 9M 2016

LEG’s portfolio valuation is characterised by a wide gap between the higher quality and the lower quality segment. ‘High-Growth Markets’ are valued at 6.0% NCR yield or €1,150 per sqm. The two other clusters are valued at 7.9% and 8.0% NCR yield. The portfolio valuation refers to FY15.

10% rent revisionary potential

**Table 50: LEG's portfolio valuation**

|   | Fair value<br>(€m) | in % of<br>total | Fair value per<br>sqm (€m) | NCR<br>multiple<br>(x) | NCR<br>yield |
|---|--------------------|------------------|----------------------------|------------------------|--------------|
| High-Growth Market                      | 2,971              | 42%              | 1,151                      | 16.6                   | 6.0%         |
| Stable Market with<br>Attractive Yields | 2,244              | 32%              | 746                        | 12.7                   | 7.9%         |
| Higher-Yielding Market                  | 1,690              | 24%              | 683                        | 12.2                   | 8.2%         |
| Subtotal NRW                            | 6,905              | 98%              | 856                        | 14.0                   | 7.1%         |
| Portfolio outside NRW                   | 123                | 2%               | 961                        | 14.4                   | 6.9%         |
| Total Portfolio                         | 7,027              | 100%             | 858                        | 14.0                   | 7.1%         |

Source: Jefferies, company data as of 9M 2016

LEG states its rent revisionary potential on an annual base, with the most recent number of 10% referring to FY15 results. Again, there is a rather wide gap between the quality clusters, with the 'High-Growth Market' segment at 15% rental upside.

**Table 51: LEG's rent revisionary potential**

|   | NCR yield in-place<br>rent | NCR yield market<br>rent | Rent revisionary<br>potential |
|---|----------------------------|--------------------------|-------------------------------|
| High-Growth Market                      | 5.8%                       | 6.7%                     | 15%                           |
| Stable Market with Attractive<br>Yields | 7.6%                       | 8.3%                     | 8%                            |
| Higher-Yielding Market                  | 8.2%                       | 8.7%                     | 6%                            |
| Subtotal NRW                            | 6.9%                       | 7.6%                     | 11%                           |
| Portfolio outside NRW                   | 6.9%                       | 7.5%                     | 9%                            |
| Total Portfolio                         | 6.9%                       | 7.6%                     | 10%                           |

Source: Jefferies, company data as of FY 2015

Also wide rent gap between the clusters

The average rent of the higher quality cluster is about 17% above the lower quality segments and vacancy rates vary from a rather low 1.4% for the higher quality cluster to 3% for the mid-segment and 5% for the lower quality assets.

**Table 52: LEG's portfolio KPIs**

|   | # residential<br>units | In-place rent per<br>sqm/month (€) | Vacancy<br>rate |
|---|------------------------|------------------------------------|-----------------|
| High-Growth Markets                     | 39,027                 | 5.87                               | 1.6%            |
| Stable Market with Attractive<br>Yields | 46,728                 | 5.00                               | 3.1%            |
| Higher-Yielding Market                  | 40,291                 | 4.93                               | 5.4%            |
| Subtotal NRW                            | 126,046                | n/a                                | n/a             |
| Portfolio outside NRW                   | 1,895                  | n/a                                | n/a             |
| Total Portfolio                         | 127,941                | 5.31                               | 3.1%            |

Source: Jefferies, company data as of 9M 2016

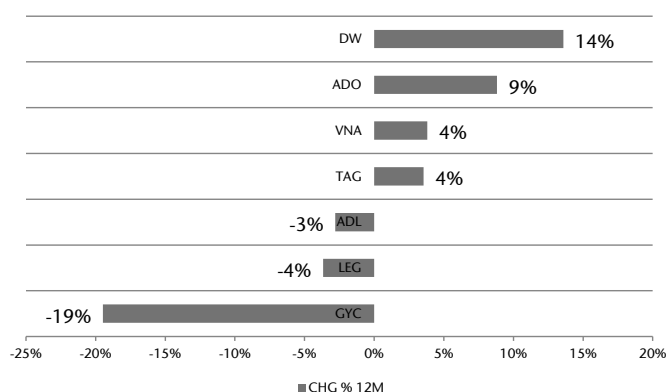
## Grand City Properties – Buy, €19 PT

### Attractive stock valuation, strong turnaround track record, efficient rental growth, improving corporate governance

GYC – unmatched valuation metrics offering significant upside

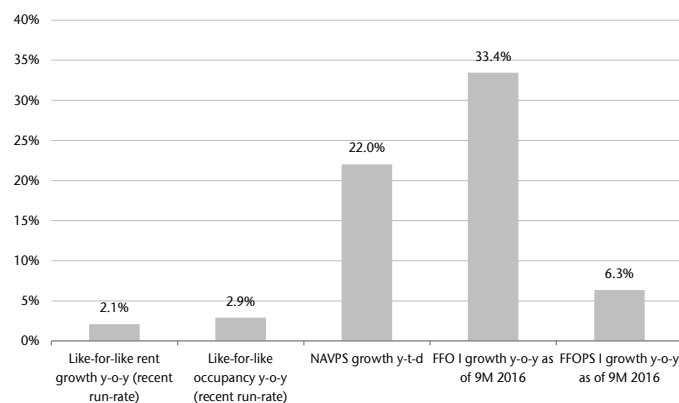
The share price of GYC has strongly underperformed over the last 12 months, despite a strong operating turnaround, continuing high rental growth (5.0% like-for-like in 2016E) and significant NAV expansion (+26% NAVPS 2016E). The stock now trades at about 25% valuation discount to the sector average FFO I yield, and the discount is even wider on an AFFO basis (50%). Even if external growth momentum came down this year from rather high levels in recent years, operating turnaround potential remains high (28% from rent revisions and vacancy reduction) and provides strong earnings and revaluation upside (+14% FFOPS, +22% NAVPS 2017E). The planned switch to the regulated market should also be a positive trigger, improving corporate governance. We initiate with a Buy and PT of €19.

**Chart 115: GYC – weak share price performance**



Source: Jefferies, Factset, absolute performance

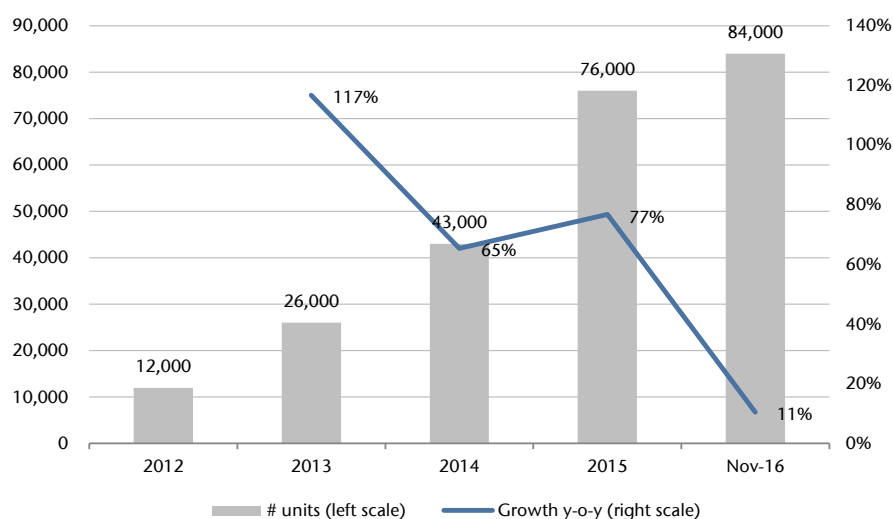
**Chart 116: GYC – Strong operating performance**



Source: Jefferies, company data

Significant growth in recent years

The company has significantly grown in recent years by acquiring financially distressed, undermanaged residential portfolios in metropolitan areas, typically in weaker micro-locations, at attractive yields. It has more than doubled its portfolio size over the last two years and now owns about 84,000 units, with the highest expansion activity last year, adding 33,000 units (+77% year-on-year).

**Chart 117: GYC – Significant portfolio expansion in recent years**


Source: Jefferies, company data

Lower growth momentum recently,  
but still highest among peers

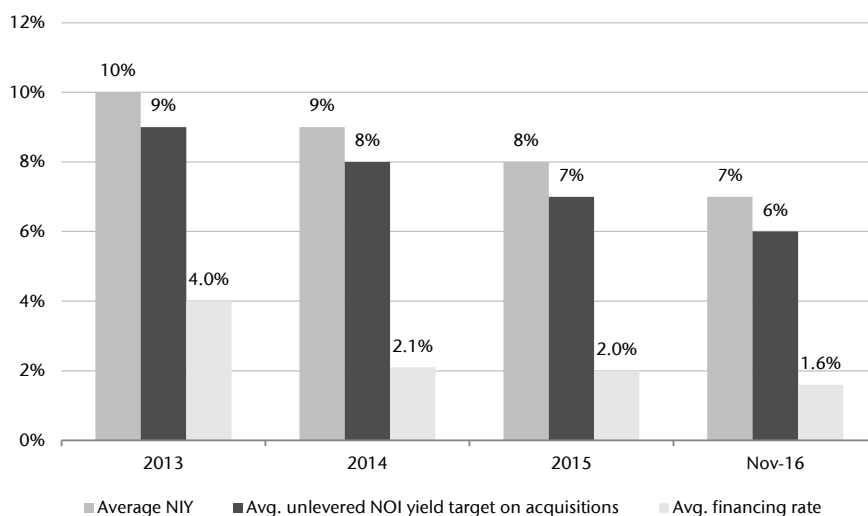
It has acquired 8,000 units year-to-date (+11%), which is still the highest external growth rate among peers. The average NIY for the acquisitions this year was 7.5% at below 10% vacancy rate and key locations in Berlin, Dresden/Leipzig/Halle and NRW, according to company information. Transparency on acquisitions typically is relatively low – the company basically discloses the number of acquired units.

Non-core sold at high disposal  
margins

With the high external growth of recent years, non-core units account for about 10% of the total portfolio – a relatively high number compared with peers. Non-core relates to units that do not fit to the company's key locations. GYC expects these units to be divested over the next five years. It has sold about 1,000 non-core units year-to-date. Non-core disposals amounted to 3,000 units in 2014 and 2,500 units in 2015 at disposal margins of above 30% and 40%, respectively.

Disciplined external growth

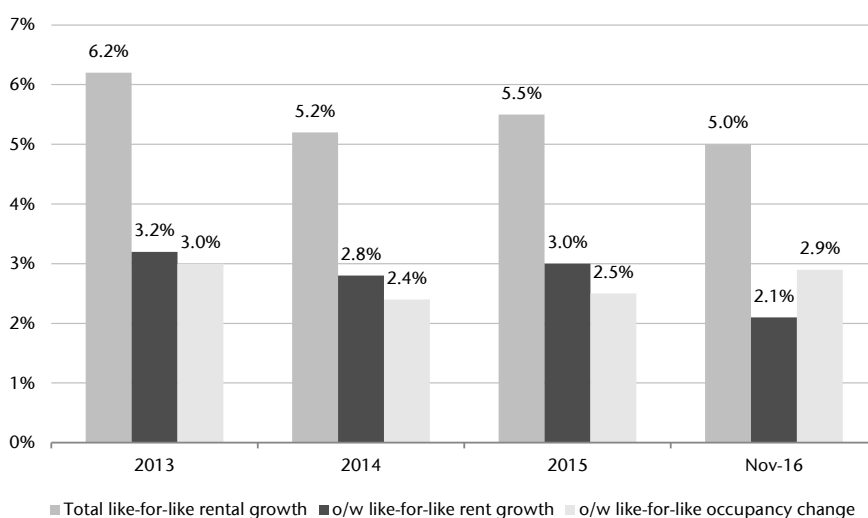
External growth has become more challenging recently due to the scarcity of the right assets for the right pricing. We regard the company as rather disciplined on acquisitions. It is currently targeting an unlevered NOI yield of 6%-6.5% after three years, which has been lowered in recent years more or less in line with financing cost reductions. The company has recently increased its dividend payout target to 50% of FFO I and lowered the LTV target to 45% maximum (LTV definition incl. hybrid), indicating towards subdued acquisition opportunities.

**Chart 118: GYC – Disciplined growth**


Source: Jefferies, company data. Avg. unlevered NOI yield target on acquisitions over 3yrs

High rental growth driven by strong turnaround track record

GYC has shown a strong turnaround track record with about 5.5% total like-for-like rental growth (incl. vacancy reduction) over the last three years. The company states like-for-like rent and vacancy change on a regular basis (at least quarterly), which we appreciate as it allows us to track the underlying turnaround performance in a timely manner. With an increasingly mature portfolio reflected in vacancy rates now well below the 10% level, we expect rental growth to fade down to about 4% annually – still well above most peers and also the most efficient rental growth, since the company spends rather limited capex.

**Chart 119: GYC – Strong underlying rent dynamics**


Source: Jefferies, company data

Increasing FFO contributions per unit

The strong turnaround track record is also reflected in increasing FFO contributions per unit, which also reflects lower financing costs (down to 1.6% from above 2% last year).

High rental growth with limited modernisation investments

Continuing high operating turnaround potential providing room for strong earnings growth

Opportunistic disposals becoming more likely

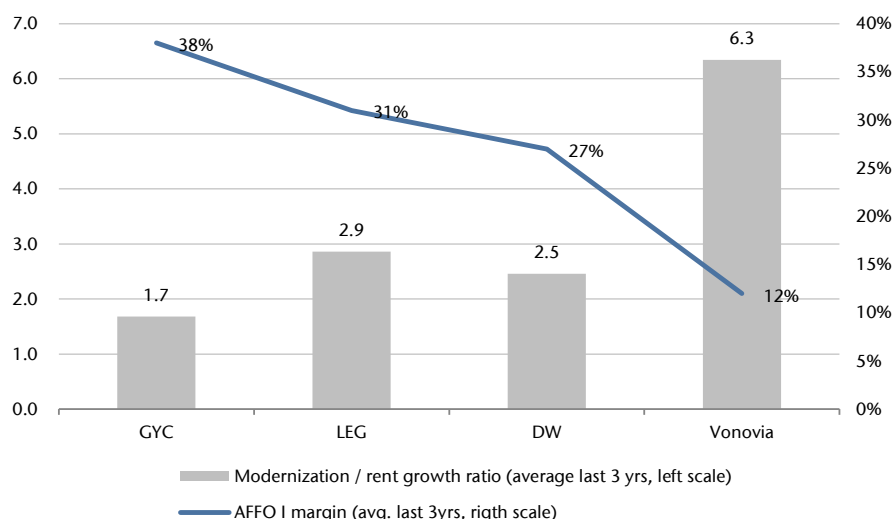
Property valuation driven by high rental growth and yield compression

**Table 53: GYC – Increasing FFO contribution per unit**

| Date    | # units | Annualized total gross revenues (€m) | Annualized FFO I (€m) | Average FFO I per unit (€) |
|---------|---------|--------------------------------------|-----------------------|----------------------------|
| FY 2014 | 43,000  | 217                                  | 76                    | 1,767                      |
| FY 2015 | 76,000  | 333                                  | 128                   | 1,684                      |
| 1H 2016 | 82,000  | 418                                  | 152                   | 1,854                      |
| Nov-16  | 84,000  | 452                                  | 164                   | 1,952                      |

Source: Jefferies estimates, company data

It has applied a rather opportunistic rental growth strategy, focusing on vacancy reduction and rent adjustments through minimum maintenance spending and modernisation investments. Therefore, it shows the most efficient rental growth with a modernisation/rent growth ratio of just 1.7x, by far the lowest among peers, resulting in a rather high AFFO yield. We regard this approach as ‘opportunistic’ as it is strongly focused on short- to mid-term return maximisation and less on long-term sustainable portfolio quality.

**Chart 120: GYC – Highly efficient rental growth**


Source: Jefferies, company data. Average 2013-15, modernisation per sqm, l-f-l rent growth, the lower the ratio the more efficient rental growth, AFFO I / gross rents

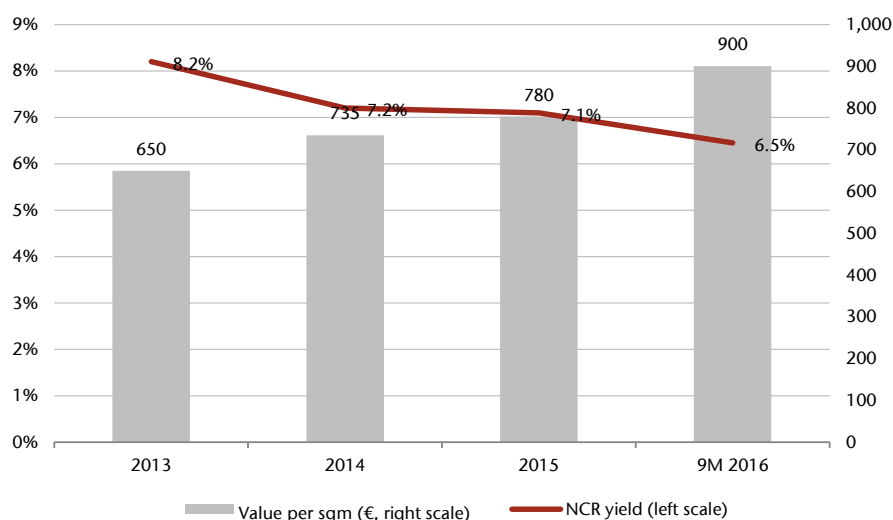
The company currently estimates its operating turnaround potential at about 28%, about two-thirds from the targeted rent increase (20% revisionary potential) and one-third from vacancy reduction. Despite the strong vacancy reduction in recent years, the turnaround potential remained rather high (was 30% in 2014/2015). We expect this to be the key earnings and valuation driver in the coming years as we expect external growth to further decline. Our model considers 10,000 additional units (plus 12% from today’s portfolio size) over the next two years.

While the company’s strategic focus is to build-up a fully stabilised hold-to-let portfolio, we believe opportunistic disposals might also become an option. Applying a capital recycling strategy, by replacing lower yielding for higher yielding assets, would increase earnings accretion.

GYC’s property valuation went up with a 60bps yield shift in the first nine months of this year to 6.5% NCR yield, reflecting strong like-for-like rental growth (5.0% as of 9M16) and yield compression in metropolitan areas. This values GYC’s portfolio at about €900 per

sqm. Due to the company's high external growth mode, a quarterly portfolio valuation is applied with JLL as key appraiser.

**Chart 121: GYC – Operating turnaround reflected in property valuation**



Source: Jefferies, company data

## Opportunistic funding and financing

We also regard the company's funding and financing as rather opportunistic with a €700m hybrid perpetual volume and a high portion of capital market debt. The LTV stands at 53% excluding hybrid and 39% including hybrid, with a maximum target of 45% including hybrid – it has recently lowered the target from 50% previously, which we appreciate.

## Lowest financing rate among peers

With a BBB / Baa2 corporate rating and most of its financing capital markets debt (64% of total debt), it has the lowest financing rate (1.6%) within the peers. It has recently issued another €200m hybrid (perpetual note) at a coupon of 2.75%, adding-up the total hybrid volume to €700m. We treat hybrids (incl. perpetual) as debt and therefore also deduct hybrid coupons (= interest costs) from the FFO. The company also states an adjusted FFOPS, cleaned-up for hybrid interest costs, which we regard as fair.

## Company's founder still has a major stake and remains a key person

The founder of GYC, Yakir Gabay, is still the major shareholder through the 33% Aroundtown / Edolaxia Group stake and we still regard him as the key person within the company. However, his strategic priority currently is on Aroundtown, a large-scale commercial player, which he also founded and in which he owns a 56% stake. Aroundtown is structured as a holding company, which also holds the 33% stake in GYC. Therefore, we see cannibalisation disadvantages for GYC (investor education focus on the Aroundtown story, shareholders shifting from GYC into Aroundtown etc.), which we see as a major reason for GYC's underperformance recently.

## Recent underperformance offers attractive entry point

With the strong share price underperformance and the strong operating performance over the last 12 months, the absolute and relative valuations look rather attractive. Despite high earnings growth, it trades at high earnings yields (7.5% FFO I yield FY17E, a 25% discount to the sector average). Due to the company's efficient rent growth, the valuation gap is even wider, when referring to AFFO (50% discount). We see the major drivers for the stock's underperformance (see below) now to be fully reflected in the share price valuation.

## Market should have adapted to lower external growth now

We think part of the stock's underperformance was due to declining external growth momentum, which is still the strongest among peers. However, market expectations might have been too high on the back of the company's stellar growth rates of last year. Market expectations should have been fully adjusted now to lower external growth rates.

Cannibalisation effects from the  
Aroundtown case, corporate  
governance improvements

Further reasons for the weak share price performance might have been cannibalisation effects from the Aroundtown case and the company's low transparency and corporate governance levels, since the market has turned more to a 'risk-off' mode. The company has recently announced to switch from the entry market to the regulated market of the German stock exchange, which should improve transparency and corporate governance levels.

FFO dilution should level-off

Furthermore, FFO per share growth has recently been diluted through convertible conversion and the issuance of perpetual hybrids, which should level off by the end of this year with FFO per share growth rates back to 14% level.

### Risks

Besides macro and sector-specific risks described in the chapter 'Sector Key Investment Thesis', GYC is exposed to the following company-specific risks:

Transparency and corporate  
governance risks

The company is the only player within its peer group that is listed in the entry standard of the Frankfurt Stock Exchange; the others are all prime standard listed. The entry standard segment is characterised by low transparency and corporate governance requirements. While the company allows good access to management and also provides rather detailed and reliable information on a bilateral base, its official disclosure quality is below that of its peers. This implies corresponding modelling and forecast risks. It also implies corporate governance risks. The company has recently announced to switch to the prime standard.

Key person risks

The company's founder Yakir Gabay, who still owns a major stake in GYC via Aroundtown, plays the key role within the board. Any potential retreat might negatively impact the company's valuation.

Turn-around depending on  
residential markets

The company's future earnings and NAV growth depends to a large extent to its ability to realise operating turnaround potential mainly through rental growth and vacancy reduction. Strong demand for affordable rental apartments in metropolitan areas is rather supportive in this respect. Any decline of strong housing demand might negatively impact the company's turnaround progress, with negative implications on rental and valuation growth.

Acquisition risks

External growth has become more challenging recently due to the scarcity of the right assets for the right pricing. The company has already reduced its return hurdles for acquisitions, referring to lower financing costs. It has acquired 8,000 units year-to-date, which is still the highest external growth rate among the peers. While we regard the company as rather disciplined in respect of acquisition pricing, current deals might end up as 'over-priced' if the expected turnaround can't be realised.

Potential risks from non-core assets

The company's portfolio contains a meaningful stake of non-core assets, corresponding to about 10% of total units, which stems from the high acquisition activity in recent years. GYC plans to sell these assets over the next five years. These non-core assets might dilute GYC's portfolio quality and also imply disposal risks.



**GYC valuation**
**Valuation and sensitivity**

Our price target of €19 implies a total return of 28%. It values GYC at 1% target discount on NAV17E and 6.0% target FFO I yield FY17E and implies a target value per sqm of €980 at 6.3% target NCR yield.

**Table 54: GYC – valuation**

| <b>Total return</b> | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016E</b> | <b>2017E</b> | <b>2018E</b> | <b>2019E</b> |
|---------------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Price target (€)    | -           | -           | -           | 19.0         | 19.0         | 19.0         | 19.0         |
| Share price (€)     | -           | -           | -           | 15.2         | 15.2         | 15.2         | 15.2         |
| Deviation           | -           | -           | -           | 25%          | 25%          | 25%          | 25%          |
| Dividend yield      | -           | -           | -           | 3.6%         | 4.3%         | 4.7%         | 4.8%         |
| Total return        | -           | -           | -           | 28%          | 29%          | 29%          | 30%          |

**Current stock valuation**

|                           |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|
| NAV premium               | -21% | -1%  | 28%  | -5%  | -22% | -33% | -38% |
| FFO 1 yield               | 6.0% | 7.0% | 4.9% | 6.3% | 7.5% | 8.3% | 8.6% |
| AFFO 1 yield              | 4.7% | 4.9% | 3.4% | 4.4% | 5.3% | 5.8% | 6.0% |
| Dividend yield            | 0.0% | 2.2% | 1.5% | 3.6% | 4.3% | 4.7% | 4.8% |
| Implied NCR yield         | 9.4% | 7.3% | 6.1% | 6.7% | 7.2% | 7.6% | 8.0% |
| Implied value per sqm (€) | 566  | 725  | 903  | 884  | 859  | 842  | 831  |

**Target price based valuation**

|                           |   |   |   |      |      |      |      |
|---------------------------|---|---|---|------|------|------|------|
| NAV premium               | - | - | - | 19%  | -1%  | -13% | -20% |
| FFO 1 yield               | - | - | - | 5.1% | 6.0% | 6.7% | 6.9% |
| AFFO 1 yield              | - | - | - | 3.5% | 4.2% | 4.7% | 4.8% |
| Dividend yield            | - | - | - | 2.9% | 3.4% | 3.7% | 3.9% |
| Implied NCR yield         | - | - | - | 5.9% | 6.3% | 6.6% | 7.0% |
| Implied value per sqm (€) | - | - | - | 999  | 976  | 964  | 956  |

**Cap rates and values per sqm**

|                                      |      |      |      |      |      |       |       |
|--------------------------------------|------|------|------|------|------|-------|-------|
| NCR yield                            | 8.2% | 7.2% | 7.1% | 6.5% | 6.3% | 6.1%  | 6.1%  |
| Implied NCR yield                    | 9.4% | 7.3% | 6.1% | 6.7% | 7.2% | 7.6%  | 8.0%  |
| Target price based NCR yield         | -    | -    | -    | 5.9% | 6.3% | 6.6%  | 7.0%  |
| Value per sqm (€)                    | 650  | 735  | 780  | 910  | 981  | 1,049 | 1,091 |
| Implied value per sqm (€)            | 566  | 725  | 903  | 884  | 859  | 842   | 831   |
| Target price based value per sqm (€) | -    | -    | -    | 999  | 976  | 964   | 956   |

Source: Jefferies estimates

**Table 55: GYC – NAV sensitivity**

|                       | <b>Yield compression</b> |      |      | <b>Base case</b> |      |      |      | <b>Yield expansion</b> |      |
|-----------------------|--------------------------|------|------|------------------|------|------|------|------------------------|------|
| NCR yield             | 5.3%                     | 5.5% | 5.8% | 6.0%             | 6.3% | 6.5% | 6.8% | 7.0%                   | 7.3% |
| NAVPS (€)             | 26.0                     | 24.2 | 22.5 | 21.0             | 19.6 | 18.2 | 16.9 | 15.7                   | 14.6 |
| % change to base case | 33%                      | 23%  | 15%  | 7%               | 0%   | -7%  | -14% | -20%                   | -26% |

Source: Company data, Jefferies estimates

**Key financials**
**Table 56: GYC – key financials (1)**

| Key data                 | 2013 | 2014 | 2015 | 2016E | 2017E | 2018E | 2019E |
|--------------------------|------|------|------|-------|-------|-------|-------|
| Gross rental income (€m) | 66   | 145  | 223  | 305   | 348   | 371   | 386   |
| EBITDA adj. (€m)         | 54   | 112  | 177  | 233   | 268   | 286   | 297   |
| FFO I (€m)               | 38   | 76   | 113  | 148   | 176   | 194   | 202   |
| AFFO I (€m)              | 30   | 54   | 79   | 104   | 123   | 137   | 141   |
| NAVPS (€)                | 6.9  | 9.3  | 12.8 | 16.1  | 19.6  | 22.7  | 24.6  |
| FFOPS I (€)              | 0.33 | 0.64 | 0.80 | 0.96  | 1.14  | 1.26  | 1.31  |
| AFFOPS I (€)             | 0.26 | 0.45 | 0.56 | 0.67  | 0.80  | 0.89  | 0.92  |
| DPS (€)                  | 0.00 | 0.20 | 0.25 | 0.55  | 0.65  | 0.71  | 0.73  |
| NAV premium              | -21% | -1%  | 28%  | -5%   | -22%  | -33%  | -38%  |
| FFO I yield              | 6.0% | 7.0% | 4.9% | 6.3%  | 7.5%  | 8.3%  | 8.6%  |
| AFFO I yield             | 4.7% | 4.9% | 3.4% | 4.4%  | 5.3%  | 5.8%  | 6.0%  |
| Dividend yield           | 0.0% | 2.2% | 1.5% | 3.6%  | 4.3%  | 4.7%  | 4.8%  |
| Net LTV                  | 37%  | 34%  | 51%  | 53%   | 51%   | 47%   | 46%   |
| Gearing (x)              | 0.9  | 1.3  | 1.5  | 1.3   | 1.1   | 1.0   | 0.9   |

**Key assumptions**

|                                   |       |       |       |      |      |       |       |
|-----------------------------------|-------|-------|-------|------|------|-------|-------|
| Like-for-like rent growth (y-o-y) | -     | 5.2%  | 5.5%  | 5.0% | 5.0% | 4.0%  | 4.0%  |
| Vacancy rate                      | 13.8% | 13.3% | 12.5% | 8.0% | 6.0% | 5.0%  | 4.0%  |
| NCR yield                         | 8.2%  | 7.2%  | 7.1%  | 6.5% | 6.3% | 6.1%  | 6.1%  |
| NCR multiplier (x)                | 12.2  | 13.9  | 14.1  | 15.4 | 15.9 | 16.4  | 16.4  |
| Value per sqm (€)                 | 650   | 735   | 780   | 910  | 981  | 1,049 | 1,091 |

**Per share data (€)**

|                                   |      |      |      |      |      |      |      |
|-----------------------------------|------|------|------|------|------|------|------|
| Number of shares, outstanding (m) | 115  | 119  | 141  | 154  | 154  | 154  | 154  |
| NAVPS                             | 6.9  | 9.3  | 12.8 | 16.1 | 19.6 | 22.7 | 24.6 |
| FFOPS I                           | 0.33 | 0.64 | 0.80 | 0.96 | 1.14 | 1.26 | 1.31 |
| FFOPS II                          | 0.53 | 1.08 | 1.07 | 1.21 | 1.39 | 1.51 | 1.56 |
| AFFOPS I                          | 0.26 | 0.45 | 0.56 | 0.67 | 0.80 | 0.89 | 0.92 |
| AFFOPS II                         | 0.46 | 0.90 | 0.83 | 0.92 | 1.05 | 1.13 | 1.16 |
| EPS                               | 2.31 | 2.06 | 2.79 | 3.79 | 3.55 | 3.38 | 2.62 |

**Valuation**

|                           |      |       |      |      |      |      |       |
|---------------------------|------|-------|------|------|------|------|-------|
| NAV premium               | -21% | -1%   | 28%  | -5%  | -22% | -33% | -38%  |
| FFO I yield               | 6.0% | 7.0%  | 4.9% | 6.3% | 7.5% | 8.3% | 8.6%  |
| FFO II yield              | 9.6% | 11.8% | 6.6% | 7.9% | 9.1% | 9.9% | 10.2% |
| AFFO I yield              | 4.7% | 4.9%  | 3.4% | 4.4% | 5.3% | 5.8% | 6.0%  |
| AFFO II yield             | 8.3% | 9.7%  | 5.1% | 6.0% | 6.9% | 7.5% | 7.6%  |
| Dividend yield            | 0.0% | 2.2%  | 1.5% | 3.6% | 4.3% | 4.7% | 4.8%  |
| Payout ratio (% of FFO I) | 0%   | 31%   | 31%  | 57%  | 57%  | 56%  | 56%   |
| Implied NCR yield         | 9.4% | 7.3%  | 6.1% | 6.7% | 7.2% | 7.6% | 8.0%  |
| Implied value per sqm (€) | 566  | 725   | 903  | 884  | 859  | 842  | 831   |

Source: Company data, Jefferies estimates

**Table 57: GYC – key financials (2)**

| <b>Key income data and ratios</b>        | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016E</b> | <b>2017E</b> | <b>2018E</b> | <b>2019E</b> |
|--|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Gross rental income (€m)                 | 66          | 145         | 223         | 305          | 348          | 371          | 386          |
| EBITDA adj. (€m)                         | 54          | 112         | 177         | 233          | 268          | 286          | 297          |
| Valuation result (€m)                    | 237         | 231         | 311         | 500          | 427          | 380          | 232          |
| Disposal result (€m)                     | 53          | 43          | 43          | 43           | 43           | 43           | 43           |
| Net financing costs (€m)                 | -4          | -55         | -26         | -51          | -56          | -56          | -56          |
| PBT (€)                                  | 302         | 288         | 460         | 681          | 637          | 608          | 472          |
| Net profit (€m)                          | 266         | 244         | 394         | 583          | 545          | 520          | 403          |
| FFO I (€m)                               | 38          | 76          | 113         | 148          | 176          | 194          | 202          |
| FFO II (€m)                              | 61          | 129         | 151         | 186          | 213          | 232          | 240          |
| AFFO I (€m)                              | 30          | 54          | 79          | 104          | 123          | 137          | 141          |
| AFFO II (€m)                             | 53          | 106         | 117         | 141          | 161          | 174          | 179          |
| EBITDA adj. margin                       | 81%         | 77%         | 79%         | 77%          | 77%          | 77%          | 77%          |
| FFO I margin                             | 58%         | 53%         | 51%         | 49%          | 50%          | 52%          | 52%          |
| <b>Key balance sheet data and ratios</b> |             |             |             |              |              |              |              |
| Investment property (€m)                 | 1,368       | 2,185       | 3,846       | 4,746        | 5,423        | 5,803        | 6,035        |
| Cash and equivalents (€m)                | 133         | 270         | 236         | 502          | 332          | 409          | 480          |
| Shareholders' equity (€m)                | 705         | 951         | 1,552       | 2,098        | 2,525        | 2,904        | 3,136        |
| NAV (€m)                                 | 862         | 1,349       | 1,924       | 2,474        | 3,012        | 3,490        | 3,783        |
| Net debt (€m)                            | -500        | -988        | -2,104      | -2,496       | -2,746       | -2,746       | -2,746       |
| Net LTV (%)                              | 37%         | 34%         | 51%         | 53%          | 51%          | 47%          | 46%          |
| Gearing (x)                              | 0.9         | 1.3         | 1.5         | 1.3          | 1.1          | 1.0          | 0.9          |
| <b>Key cash flow data and ratios</b>     |             |             |             |              |              |              |              |
| CF operating (€m)                        | 61          | 114         | 157         | 190          | 217          | 235          | 241          |
| CF investing (€m)                        | -411        | -328        | -1215       | -568         | -302         | -58          | -61          |
| CF financing (€m)                        | 401         | 352         | 1023        | 644          | -85          | -100         | -109         |
| Net cash flow (€m)                       | 52          | 138         | -34         | 266          | -170         | 77           | 71           |
| Cash at beginning of period (€m)         | 81          | 133         | 270         | 236          | 502          | 332          | 409          |
| Cash at the end of period (€m)           | 133         | 270         | 236         | 502          | 332          | 409          | 480          |

Source: Company data, Jefferies estimates

Opportunistic residential player with strong turnaround track record

Portfolio concentrated on six main regions

Cologne top location within NRW portfolio

### Company description

GYC runs a c. 84,000 units residential portfolio with a hold-to-let strategy in the affordable housing segment. North-Rhine-Westphalia represents the largest location, accounting for 33% of property value, followed by the Eastern German cities Dresden / Leipzig / Halle (19%) and Berlin (18%). The company has significantly grown in recent years by acquiring financially distressed, undermanaged residential portfolios in metropolitan areas, typically in weaker micro-locations, at attractive yields. It has more than doubled its portfolio size over the last two years, with the highest expansion activity last year, adding 33,000 units. It has acquired 8,000 units year-to-date. It has shown a strong turnaround track record with about 5% like-for-like rental growth over the last two years. The company is listed in the entry standard of the Frankfurt Stock Exchange. The company's founder, Yakir Gabay, owns a major stake in GYC via Aroundtown, and he plays the key role within the board. The company's free-float is widely spread and doesn't reflect the typical shareholder structure of the top-3 residential players.

### Portfolio

The portfolio comprises about 84,000 residential units, of which about 83% is concentrated on six main regions, as shown in the table below. The rest is widely spread throughout Germany and we understand most of these units refer to the non-core assets. Unfortunately, transparency on portfolio structure is rather low. The company provides only the regional portfolio split and doesn't disclose KPIs and valuations for each segment, as its peers do.

**Table 58: GYC portfolio structure**

| Key region                        | in % of fair value |
|-----------------------------------|--------------------|
| North-Rhine-Westphalia            | 33%                |
| Leipzig / Halle / Dresden         | 19%                |
| Berlin                            | 18%                |
| Mannheim / KL / Frankfurt / Mainz | 5%                 |
| Bremen / Hamburg                  | 5%                 |
| Nuremberg-Fürth / Munich          | 3%                 |
| Others                            | 17%                |

Source: Jefferies, company data as of November 2016

The company provides a more detailed regional split for its three top locations. Within the NRW cluster, Cologne is rather relevant, accounting for 18% of the property value in NRW. Cologne belongs to the residential 'hot spots' in Germany with attractive demographics and strong rental growth. However, there's also a rather high portion of 'others' within the NRW portfolio, indicating a widely spread portfolio.

**Table 59: GYC portfolio structure NRW**

| Location        | in % of fair value |
|-----------------|--------------------|
| Köln            | 18%                |
| Duisburg        | 10%                |
| Dortmund        | 9%                 |
| Gelsenkirchen   | 8%                 |
| Essen           | 7%                 |
| Bochum          | 5%                 |
| Wuppertal       | 5%                 |
| Mönchengladbach | 3%                 |
| Erkrath         | 3%                 |
| Düsseldorf      | 3%                 |
| Others          | 29%                |

Source: Jefferies, company data as of Nov 2016

Leipzig top location within East German portfolio

Within the Eastern German portfolio, Leipzig is the most relevant (Gutburg portfolio acquisition in 2015). The city is currently in a strong catch-up mode with attractive rent and condominium price dynamics.

**Table 60: GYC portfolio structure East Germany**

| Location | in % of fair value |
|----------|--------------------|
| Leipzig  | 48%                |
| Halle    | 31%                |
| Dresden  | 21%                |

Source: Jefferies, company data as of November 2016

High exposure to Berlin inner-city locations

The company's Berlin portfolio seems to be rather concentrated on key districts, with only a 6% stake referring to 'others'. Inner-city locations like Charlottenburg-Wilmersdorf, Friedrichshain, Kreuzberg, Mitte, Prenzlauer Berg account for almost half of the Berlin portfolio value.

**Table 61: GYC portfolio structure Berlin**

| Location                   | in % of fair value |
|----------------------------|--------------------|
| Charlottenburg-Wilmersdorf | 20%                |
| Mitte                      | 15%                |
| Reinickendorf              | 14%                |
| Lichtenberg                | 13%                |
| Marzahn-Hellersdorf        | 11%                |
| Friedrichshain-Kreuzberg   | 7%                 |
| Prenzlauer Berg / Pankow   | 4%                 |
| Tempelhof-Schöneberg       | 4%                 |
| Neukölln                   | 4%                 |
| Schönefeld                 | 2%                 |
| Others                     | 6%                 |

Source: Jefferies, company data as of November 2016

Company's top-10 locations

The company's top-10 city locations in terms of fair value are Berlin, Leipzig, Köln, Halle, Dresden, Nuremberg/Fürth, Duisburg, Dortmund, Bremen, Gelsenkirchen.

## Vonovia – Hold, €32 PT

**Needs growth, which dilutes NAV, expensive rental growth with regulation risks; scale with professional management and best-in-class corporate governance compensate for this**

Vonovia – needs growth, but diluting NAV, low rent efficiency

### Investment Case

We believe Vonovia needs to grow further in order to utilise its huge insourced service activities and to be able to continue with major modernisation programmes, which is the key source of the company's rental growth. Underlying rental growth is just 1.5% annually, which is well below peers and indicates weaker portfolio quality. The company needs to invest much more than its peers in order to reach same rental growth, therefore rent efficiency is rather low, which is also reflected in low AFFO margins. Furthermore, modernisation-driven rent increases are in the focus for further rent control, putting the returns of the company's large-scale investment programmes at risk. The strong external growth of recent years came with high goodwill burden, diluting NAV growth, and the convert deal will probably further dilute. Vonovia has implicitly levered-up on yield compression over recent years, again a consequence of the high and pricy expansion mode. We initiate with a Hold and a PT of €32.

Scale with professional management and best-in-class corporate governance to compensate

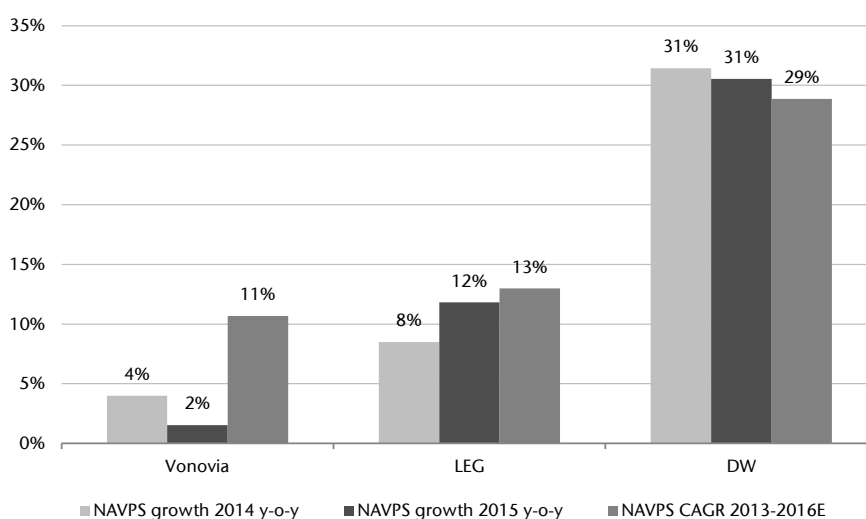
Vonovia, with its big size, its diversified financing structure, its large, industrialised investment programmes and its high M&A activity, has very much contributed to a higher level of professionalism in the sector, which we appreciate. Scale with professional management and best-in-class corporate governance seem to be valuation drivers, which compensate for the weak spots like low capital discipline, NAV dilutive growth, expensive rent growth and weak AFFO.

Expensive external growth

Vonovia has been in a strong external extension mode; since its IPO mid-2013, it has more than doubled its portfolio size. While we appreciate scale benefits in the residential rental business (specifically stock market liquidity, financing and operating cost efficiency), we think this growth came at a relatively high price in respect of acquisition yields as well as transaction costs. Therefore, on a post-goodwill base, NAV growth per share has been well below peers in recent years.

NAV growth to make-up this year, but still below peer growth

While Vonovia will make up ground in respect of NAV growth this year, due to the estimated 15%-17% valuation uplift, the average NAV growth over the last three years is still below peers and the convert deal might again dilute NAV growth next year on a post-goodwill base.

**Chart 122: Vonovia – NAV dilutive external growth**


**Source: Jefferies, company data. NAVPS post goodwill and based on fully-diluted outstanding number of shares**

High goodwill burdening NAV per share growth

The company has grown its portfolio mainly in 2014/2015, when residential prices were already well up and listed players already traded at wide NAV premiums. For example, the Gagfah deal produced about €2.3bn goodwill, corresponding to about 55% of deal value, and required rather high debt restructuring costs. The recent conwert deal is priced more than 30% above DW's bid last year; admittedly, the DW deal failed. Vonovia's bid for DW, which failed at the beginning of this year, would also have produced a huge goodwill, burdening NAV per share growth.

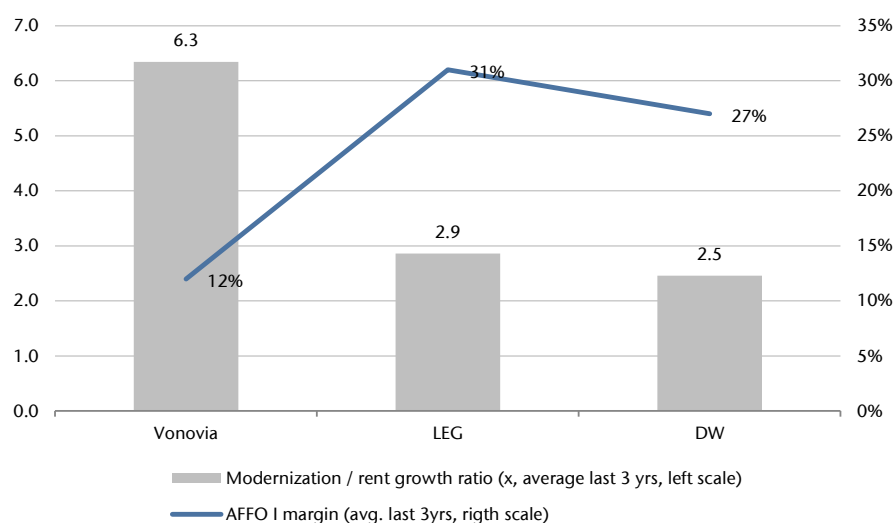
**Table 62: Vonovia's acquisition track record**

| Year | Portfolio / Key locations                   | # units | NCR yield | Execution |
|------|---|---------|-----------|-----------|
| 2014 | DEWAG / Berlin, Frankfurt                   | 11,000  | 6.7%      | closed    |
| 2014 | Vitus / North Germany                       | 30,000  | 7.7%      | closed    |
| 2015 | SÜDEWO / Baden-Württemberg                  | 19,800  | 5.6%      | closed    |
| 2015 | Gagfah / Germany-wide                       | 140,000 | 6.3%      | closed    |
| 2015 | Deutsche Wohnen / Berlin, Frankfurt, others | 150,000 | 4.6%      | failed    |
| 2016 | Conwert                                     | 27,000  | 5.5%      | pending   |

**Source: Jefferies estimates, company data**

Low rent growth efficiency also reflected in low AFFO margins

Vonovia has had to spend high capex in order to generate decent rental growth in recent years – in our view a reflection of lower portfolio quality. It has spent more than double the capex level of main peers DW and LEG, but rental growth was below that of these two peers. Therefore, the company's modernisation/rent growth ratio is the highest among peers, reflecting the lowest rental growth efficiency. This is also reflected in rather low AFFO margins.

**Chart 123: Vonovia – Low rental growth efficiency**


**Source: Jefferies, company data. Modernisation / rent growth ratio = modernisation investments per sqm / like-for-like rental growth, AFFO I margin = AFFO I / gross rents**

#### Needs further external growth

In our view, the company needs further external growth in order to get food for large-scale modernisation programmes and compensate for potentially larger non-core disposals (non-core 5% of total), which again is needed to keep up with 3%+ rental growth. It currently generates most of its rental growth from modernisation-driven rent increases (so called 'Modernisierungsumlage'). With transaction prices on a strong upwards trend, we see the risk of overpaying for external growth.

#### Modernisation-driven rental growth

The company has shown a well-balanced rental growth mix in recent years, with regular rent adjustments (rent index) and modernisation-driven rent increases as major contributors. With increased modernisation investments, we expect this to contribute an increasing portion of rental growth. The underlying rental growth from regular rent adjustments and re-lettings is well below that of peers, indicating to a weaker portfolio quality.

**Table 63: Vonovia – Modernisation-driven rental growth**

|                           | 2013 | 2014 | 2015 | 2016E | 2017E | 2018E | 2019E |
|---------------------------|------|------|------|-------|-------|-------|-------|
| Total                     | 2.0% | 2.5% | 2.9% | 3.1%  | 3.7%  | 4.2%  | 3.9%  |
| o/w new lettings          | 0.7% | 0.5% | 0.6% | 0.5%  | 0.5%  | 0.5%  | 0.5%  |
| o/w regular rent increase | 0.9% | 1.1% | 1.1% | 1.0%  | 1.0%  | 1.0%  | 1.0%  |
| o/w modernisation         | 0.4% | 0.9% | 1.2% | 1.6%  | 2.2%  | 2.7%  | 2.4%  |

**Source: Jefferies, company data**

#### Potential regulation changes on modernisation-driven rent increases

With its rental growth strategy focused on \$559 modernisations, the company is exposed to potential rent regulation changes. There have been discussions about a reduction of modernisation-driven rent increases, and our impression is that there has been a high degree of consensus on the proposed measure. We have shown the regulation draft proposal in the table below. Theoretically, it would reduce Vonovia's modernisation return to about 5% from 7%. However, the company to be able to compensate by putting more emphasis on projects with higher returns. We also don't expect this to become effective law before 2018/2019.



**Table 64: New regulations on modernisation-driven rent increases in the discussion**

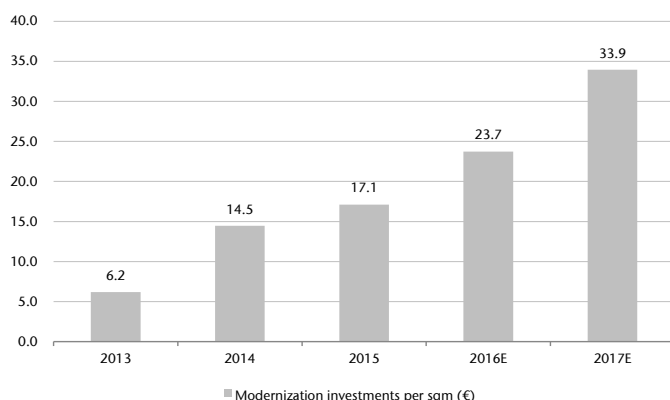
| Current regulation / restriction   | New proposal / regulation / restriction  | Potential impact   |
|--|--|--|
| Rent increases are capped at a maximum of 11% of the modernisation expenses on an annual base, specific costs caused by the modernisation including interest on credit, administrative costs, loss of rent due to vacancy, etc. cannot be allocated, the average allocation rate amounts to 40%-70% depending on the type of modernisation | Tightening of the 'Modernisierungsumlage' by limiting the portion of modernisation expenses which the landlord can charge to the tenant from a maximum of 11% to not more than 8% and implementing a hard cap of €3 per sqm over eight years | Potential negative impact as it theoretically reduces the return on investment by almost one-third; Vonovia expects to be able to compensate by putting more emphasis on projects with higher returns; we expect the 'hard cap' rule to have a limited impact, since most of the modernisation projects remain below the €3 per sqm hurdle |
| Soft cap: The so called 'Härtefallregelung', a hardship ruling, which applies when the rent increase is significant, however the ruling is rather vague ('soft') and needs to be agreed on an individual base  | Specifying the so-called 'Härtefallregelung' by capping the rent increase to not more than 40% of the household income   | This would have a further negative impact on modernisation returns; however the magnitude of the impact is unknown   |

Source: Jefferies

### High capex need for rental growth

The company has been running at rather high capex levels in recent years (more than double the level of main peers DW and LEG), spending about €1bn since the IPO and targeting to spend about €0.7bn from next year onwards – which the company expects to be a sustainable level also for the following years.

**Chart 124: Vonovia – Modernisation investments well up**

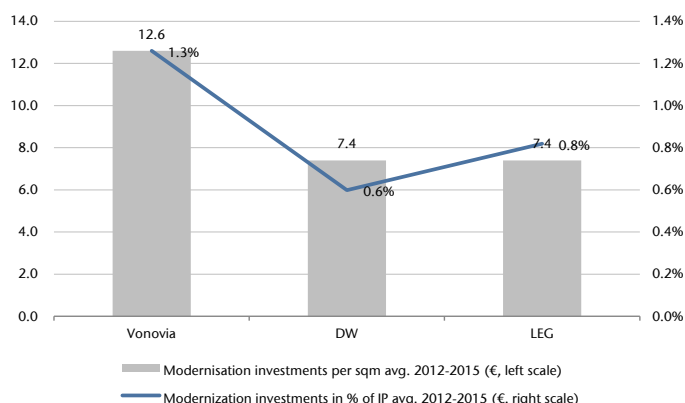


Source: Jefferies. Pure modernisation investments excl. capitalised maintenance; based on 21m sqm residential space in 2016/17E

### Increasing investments in new initiatives

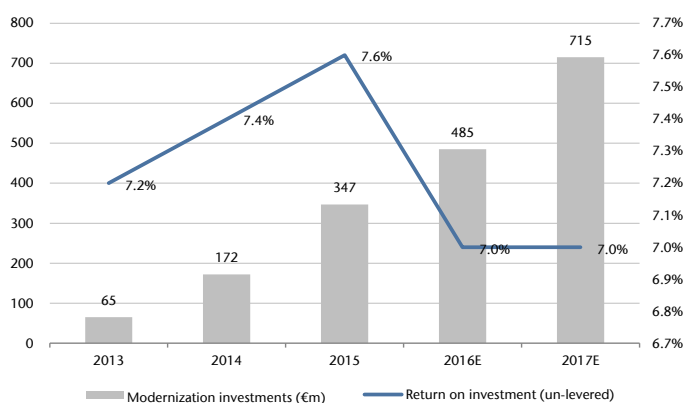
Investments on building level (mainly insulations, also balconies) made up most of the investments in recent years, followed by apartment investments (e.g. new bathrooms). New initiatives (e.g. multimedia, new construction, metering) play an increasingly role since this year. The company has reached an average return on un-levered investment of about 7.6% in 2015, up from about 7.2% in 2013 – it targets at least 7%. The company doesn't give a return split per investment segment – apartment investments seem to yield a higher return on investments, but likely lower IRRs due to shorter maturity.

**Chart 125: Vonovia – Capex well above peers**



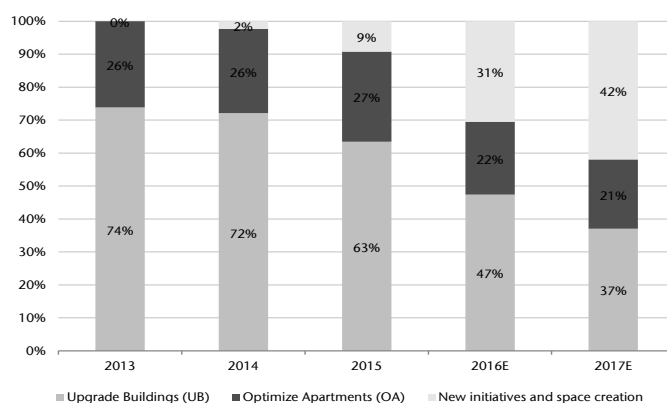
Source: Jefferies. Pure modernisation investments excl. capitalised maintenance, IP = investment property

**Chart 126: Vonovia – 7% return on investment**



Source: Jefferies. Pure modernisation investments excl. capitalised maintenance; 2016 mid-range guidance

**Chart 127: Vonovia – More investments in new initiatives**



Source: Jefferies. Pure modernisation investments excl. capitalised maintenance; 2016 mid-range guidance

Vonovia has spent c.€240 per sqm for modernisations

The company has disclosed a more detailed investment split for its major modernisations from 2012 to 2014. This shows a total investment volume of €203m on about 14,000 units, which corresponds to about €14,000 per unit and €240 per sqm, if based on 60sqm average apartment size.

**Table 65: Vonovia's modernisation programme 2012-2014**

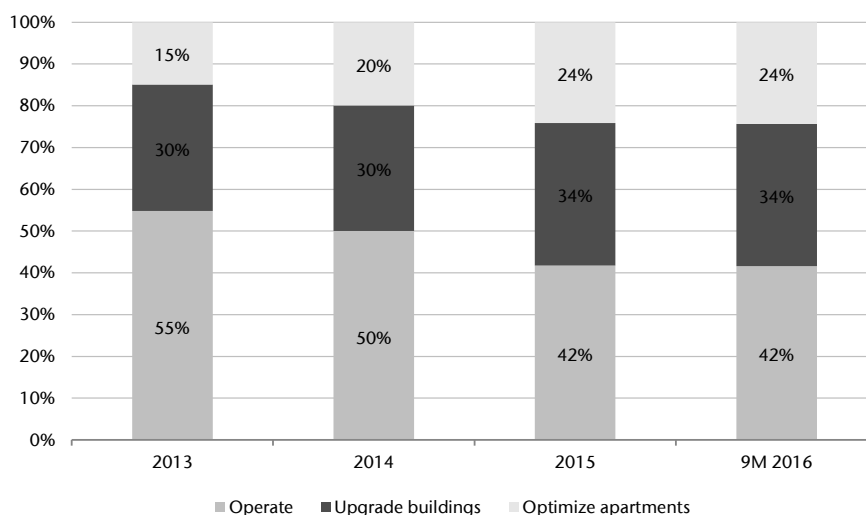
|                | # units | investment (€) | investment per unit (€) | investment per sqm (€) |
|----------------|---------|----------------|-------------------------|------------------------|
| Location       |         |                |                         |                        |
| Dortmund       | 2,813   | 44.6           | 15,855                  | 264.2                  |
| Frankfurt      | 1,817   | 27.1           | 14,915                  | 248.6                  |
| Berlin         | 1,691   | 22.9           | 13,542                  | 225.7                  |
| Bonn           | 1,164   | 18.9           | 16,237                  | 270.6                  |
| Kassel         | 717     | 11.0           | 15,342                  | 255.7                  |
| Köln           | 647     | 8.4            | 12,983                  | 216.4                  |
| Essen          | 793     | 7.2            | 9,079                   | 151.3                  |
| Darmstadt      | 336     | 6.6            | 19,643                  | 327.4                  |
| Aachen         | 320     | 6.3            | 19,688                  | 328.1                  |
| Gelsenkirchen  | 369     | 5.7            | 15,447                  | 257.5                  |
| Augsburg       | 410     | 5.2            | 12,683                  | 211.4                  |
| Bochum         | 528     | 4.5            | 8,523                   | 142.0                  |
| München        | 673     | 4.4            | 6,538                   | 109.0                  |
| Altenholz      | 223     | 4.3            | 19,283                  | 321.4                  |
| Duisburg       | 377     | 4.1            | 10,875                  | 181.3                  |
| Düsseldorf     | 541     | 4.1            | 7,579                   | 126.3                  |
| Wiesbaden      | 224     | 3.9            | 17,411                  | 290.2                  |
| Rosenheim      | 145     | 3.8            | 26,207                  | 436.8                  |
| Landshut       | 93      | 3.6            | 38,710                  | 645.2                  |
| Recklinghausen | 198     | 3.1            | 15,657                  | 260.9                  |
| Schwarzenbek   | 110     | 3.0            | 27,273                  | 454.5                  |
| Total          | 14,189  | 202.7          | 14,286                  | 238.1                  |

Source: Jefferies, company data

Portfolio clustering and management according to modernisation potential

The company clusters its strategic portfolio into 'Operate', 'Upgrade buildings' and 'Optimise apartments', according to the modernisation potential. The 'Upgrade buildings' cluster offers investment opportunities on building level, the 'Optimise apartments' on apartment level. With the acquisitions over the last three years, the portion of clusters with investment opportunities increased significantly (currently 58% of core portfolio).

**Chart 128: Vonovia – Portfolio still offering major investment opportunities**



Source: Jefferies. Portion of portfolio clusters in % of total core strategic units

High portion of upgrade and optimise clusters suggests further modernisation potential

On the back of more than 170,000 units in the 'upgrade and optimise' cluster, there seems to be still significant investment potential. Applying the €14,000 average investment volume per apartment (average of the 2012-2014 investment programme), would sum-up to about €2.4bn investment potential. However, this is a theoretical number – we assume only a portion of the 'upgrade and optimise' units to allow for the 7% minimum return hurdle. For example, the 14,000 units, which have been modernised between 2012 and 2014 correspond to only 20% of the average stated 'upgrade and optimise' units in the corresponding period. Also limited capacity (e.g. craftsmen) back in 2012-2014 might be a reason for the lower realisation rate, suggesting further modernisation potential.

Further investment potential is key for the investment case

We believe one of the key issues for the Vonovia investment case is to assess further investment potential, both in terms of volume as well as return, since this is the company's main source of rental growth – the underlying rental growth from regular rent adjustments and re-letting is only about 1.5% annually. It has built-up large capacity (e.g. internalised craftsmen organisations) allowing it to realise major modernisation programmes. The company has further stepped-up its investment budget to €700-730m in 2017 and expects this to be a sustainable level for the following years. It also sticks to its 7% return on investment hurdle. While we see the expected investment volumes as realistic, we believe the 7% return hurdle might be more challenging in the coming years as we assume the company to have already reaped the lower-hanging fruits / higher yielding investments in recent years (e.g. large-scale building insulation programmes, which allow for high cost allocations to the tenants).

Internalised service activities

Vonovia has built-up a significant internalised craftsmen organization (called TGS), which is held as a 51%/49% joint venture between Vonovia and BNO. With increasing size and relevance of the business for Vonovia, we expect it to go for full-control in the mid- to long-term. The organisation currently comprises about 3,600 craftsmen and gardeners.

New construction seems to play an increasing role

The new construction programme, comprising currently a total potential of about 7,000 newly-built units on the base of re-densification of existing land, seems to play an

Industrialised construction approach  
reducing construction costs

Should allow for returns above the  
7% level

increasing role for the company's modernisation programme – we estimate a major part of the c.€150m / 300m investment budget for 'new initiatives' in 2016 / 2017 to relate to the new construction programme.

The programme is based on a standardised, modular construction concept (the company calls it 'industrialised construction'), which allows to keep construction costs at minimum levels. The company estimates construction costs of €1,800 per sqm, which is well below the current industry average in metropolitan areas of €3,300 per sqm, according to the GDW, the largest construction association in Germany. The programme focuses on key cities due to higher rent levels.

Due to low construction costs and the usage of existing land, we expect the product to be rather profitable. Based on the company's 7% minimum return on investments, the minimum rent would be €10.5 per sqm. The average newly-built rent in key cities currently amounts to €13-18 per sqm, according to JLL. Therefore, there should be room for higher returns. We expect it will take about 3-4 years to realise all of the 7,000 units, with construction permits as a key bottleneck.

**Table 66: Vonovia – New construction programme should provide good returns**

**Key assumptions**

|  |        |
|--|--------|
| Total potential # newly-built units                            | 7,000  |
| Construction costs per sqm (€)                                 | 1,800  |
| Average apartment size (sqm)                                   | 50     |
| Total newly-built ('000 sqm)                                   | 350    |
| Construction costs per unit (€)                                | 90,000 |
| Total investment potential (€m)                                | 630    |
| # permits p.a.   | 2,000  |
| Realization phase (yrs)  | 3.5    |
| Investment volume p.a. (€m)                                    | 180    |
| Total return p.a. applying 7% return on investment target (€m) | 44.1   |
| Required minimum rent per sqm / month (€)                      | 10.5   |
| Average newly-built rent per sqm / month top4 cities (€)       | 14.6   |
| Implied return at average newly-built rent top4 cities         | 10%    |

**Source: Jefferies, company data. Average newly-built rent per sqm refers to Berlin, Munich, Hamburg, Frankfurt as of 1H 2016 according to JLL**

Conwert bid

The company is currently bidding for its Austrian-listed peer conwert, which owns a €2.7bn real estate portfolio, of which about €2bn refers to core residential; the rest is non-core, most commercial. Part of the non-core commercial has been sold by conwert recently. Out of the €2bn core residential portfolio, about €1.5bn refers to Germany with Leipzig, Berlin, Wuppertal and Potsdam as key locations.

**Table 67: conwert deal timeline**

| Date            | Event   |
|-----------------|---|
| 5 Sept 2016     | Deal announcement with support from conwert board and management and main shareholder Adler commitment to tender all its conwert shares (26.4% stake) |
| 6 Oct 2016      | Approval from German Federal Cartel Office  |
| 28 Oct 2016     | Clearance from Austrian Federal Competition Authority   |
| 17 Nov 2016     | Publication of the offer document   |
| 18 Nov 2016     | Start of acceptance period  |
| 19 Dec 2016     | End of the acceptance period  |
| 22 Dec 2016     | Publication of results of acceptance period   |
| End of Dec 2016 | Start of secondary acceptance period  |

Making sense strategically, but comes at high price

Prices German residential assets at 5.1% / 5.6% NCR yield

Deal slightly NAV dilutive, slightly FFO accretive

**Table 67: convert deal timeline**

| Date                    | Event  |
|-------------------------|--|
| Early Jan 2017          | Payment and settlement                             |
| Second half of Jan 2017 | convert EGM  |
| Mar 2017                | End of secondary acceptance period                 |
| Apr 2017                | Payment and settlement secondary acceptance period |

Source: Jefferies, company data

We believe the deal makes sense strategically due to the high overlap of the German residential portfolios. However, the deal is pricy, considering the deal complexity (high portion of non-core to be sold) as well as potential corporate governance risks (convert was plagued by corporate governance issues over recent years).

**Table 68: Pricy convert deal**

| Implied pricing of German residential assets               | Share deal | Cash deal |
|--|------------|-----------|
| German residential core fair value (€m)                    | 1,468      | 1,468     |
| NCR yield  | 5.8%       | 5.8%      |
| NCR (€m)   | 85         | 85        |
| German residential core fair value incl. deal premium (€m) | 1,655      | 1,510     |
| Implied NCR yield  | 5.1%       | 5.6%      |
| Total sqm German residential core portfolio (m)            | 1,253      | 1,253     |
| Current fair value per sqm (€)                             | 1,171      | 1,171     |
| Implied fair value per sqm (€)                             | 1,320      | 1,205     |

Source: Jefferies estimates, company data, as of announcement date

Based on the share offer / cash offer, the deal is priced at 5.5% / 5.8% NCR yield. It prices the German residential portfolio at 5.1% / 5.6% NCR yield, if attaching the takeover premium (12% / 3% on convert's spot NAV) fully to the German assets. The bid represents about 30% / 22% premium to DW's convert bid last year, which failed. We expect the deal to create up to €400m goodwill – the company hasn't guided yet. Vonovia also applies high synergy costs (mainly debt breakage costs) to realise financing synergies.

Vonovia's share price has declined by about 14% since the announcement of the deal and with the implied share offer now below the cash offer, the latter will be in favour, making the deal less accretive. We estimate the deal slightly NAV dilutive and slightly FFO accretive on an initial per share base. Our NAV forecast for the new-co is based post-goodwill, post transaction and synergy costs.

**Table 69: convert deal slightly NAV dilutive**

New-co initial NAVPS impact (as of 1H 2016)

|   |        |
|---|--------|
| NAV combined (€m)   | 12,558 |
| Est'ed convert goodwill (€m)                              | -400   |
| NAV combined post goodwill (€m)                           | 12,158 |
| Deal one-off costs post-tax (€m)                          | -105   |
| NAV combined post goodwill, post one-off costs (€m)       | 12,053 |
| # shares new-co (m)                                       | 522    |
| o/w # VNA shares old (m)                                  | 466    |
| o/w # new VNA shares for CWI deal maximum (m)             | 56     |
| NAVPS combined, post goodwill (€)                         | 23.1   |
| VNA NAVPS pre CWI deal, post goodwill (€)                 | 23.5   |
| Initial accretion (+) / dilution (-) for VNA shareholders | -2%    |

Source: Jefferies estimates, company data

**Table 70: convert deal slightly FFO accretive**

New-co initial FFOPS impact (as of 1H 2016)

|  |       |
|--|-------|
| FFO I combined (€m)  | 411.6 |
| FFO I synergies from CWI deal (post tax at 8% eff. Tax rate) | 11.0  |
| FFO I post synergies (€m)                                    | 422.6 |
| # shares, fully-diluted                                      | 522   |
| FFOPS I new-co   | 0.81  |
| FFOPS I VNA pre-deal   | 0.80  |
| Accretion (+) / dilution (-) for DW shareholders             | 1%    |

Source: Jefferies estimates, company data

**Risks**

Besides macro and sector-specific risks described in the chapter 'Sector Key Investment Thesis', Vonovia is exposed to the following company-specific risks:

Leverage adjusted for hybrid above peer level

We expect the company's leverage to be at about 46% (adjusted for hybrid equity) by year-end, considering €3.5-3.9bn guided valuation uplift. In case of the convert deal going through mainly as a cash deal, the leverage would move up again to about 49%, which is at the higher end of peer range. The company has implicitly levered-up on yield compression in recent years mainly due to the high external growth mode. As we expect the company to continue with its active role in sector consolidation, we remain cautious on a major 'active' de-leveraging. Any downturn of the German residential property cycle might have a negative impact on Vonovia's leverage and financing situation.

High capital market debt exposure

The company has also a rather high exposure to capital market debt; currently about 80% of its debt is capital market debt. Any meaningful deterioration of debt capital markets might negatively impact Vonovia's financing situation.

Capacity risks for insourced craftsmen organisation

While most of its peers have outsourced their service organizations (e.g. craftsmen), Vonovia runs its own internalised craftsmen organisation through its subsidiary TGS, in which Vonovia holds a 51% joint venture stake. We think this makes sense, given the company's size, as it safeguards craftsmen capacity, which is crucial in times of high demand and given the company's huge modernisation programmes. However, it also implies capacity risks, given a high fixed cost rate for service activities. Any meaningful decline of the German residential property cycle and modernisation investments might negatively impact Vonovia's cost efficiency and operating profit margins.

Non-core / non-strategic portfolio still accounting for 6% of total units

Due to the high external growth activity, the company owns a relatively large non-core / non-strategic portfolio. While this has been significantly reduced by almost 29,000 units year-on-year (portion reduced to 6% from 14% in terms of # residential units), it is still a meaningful portfolio size, characterised by relatively high vacancy levels (7.3%-9.0%) and high yields (9.0%-9.1%), diluting portfolio quality.

Rent regulation risks

With its rental growth strategy on §559 modernisations, the company is also exposed to rent regulations. There have been discussions about a reduction of these modernisation-based rent increases. Currently, up to 11% of these modernisation expenses can be charged to the tenant's annual rent bill. The new proposal suggests the cap be reduced to 8%. Our impression is that there has been a certain degree of consensus on the new proposal – at least, there has been no direct rejection from any party. The key argumentation is to pass on at least some benefits of lower financing costs to the tenants.

### Vonovia valuation

### Pre-conwert model

### Valuation and sensitivity

Our price target of €32 implies a total return of 9%. It values Vonovia at 8% target discount on NAV17E and 5.3% target FFO I yield FY17E and implies a target value per sqm of €1,360 at 5.7% target NCR yield.

Our Vonovia model is pre-conwert deal as the transaction is expected to close only next year. Our pro-forma post-conwert model (see Table 69/70) shows a more or less neutral NAV and FFO per share impact with about 3ppt leverage increase, assuming maximum cash deal ratio.

**Table 71: VNA – valuation**

| Total return     | 2013 | 2014 | 2015 | 2016E | 2017E | 2018E | 2019E |
|------------------|------|------|------|-------|-------|-------|-------|
| Target price (€) | -    | -    | -    | 32.0  | 32.0  | 32.0  | 32.0  |
| Share price (€)  | -    | -    | -    | 30.5  | 30.5  | 30.5  | 30.5  |
| Deviation        | -    | -    | -    | 5%    | 5%    | 5%    | 5%    |
| Dividend yield   | -    | -    | -    | 3.7%  | 4.1%  | 4.3%  | 4.5%  |
| Total return     | -    | -    | -    | 8%    | 9%    | 9%    | 9%    |

### Current stock valuation

|                           |      |      |       |       |       |       |       |
|---------------------------|------|------|-------|-------|-------|-------|-------|
| NAV premium               | -22% | -13% | 19%   | 0%    | -12%  | -18%  | -23%  |
| FFO 1 yield               | 5.5% | 5.0% | 4.2%  | 5.1%  | 5.5%  | 5.8%  | 6.1%  |
| AFFO 1 yield              | 3.2% | 1.4% | 0.9%  | 0.9%  | -0.2% | 0.5%  | 1.1%  |
| Dividend yield            | 3.9% | 3.7% | 3.3%  | 3.7%  | 4.1%  | 4.3%  | 4.5%  |
| Implied NCR yield         | 8.0% | 7.3% | 6.0%  | 5.8%  | 5.8%  | 5.9%  | 6.0%  |
| Implied value per sqm (€) | 801  | 894  | 1,146 | 1,289 | 1,328 | 1,364 | 1,398 |

### Target price based valuation

|                           |   |   |   |       |       |       |       |
|---------------------------|---|---|---|-------|-------|-------|-------|
| NAV premium               | - | - | - | 5%    | -8%   | -14%  | -20%  |
| FFO 1 yield               | - | - | - | 4.9%  | 5.3%  | 5.6%  | 5.9%  |
| AFFO 1 yield              | - | - | - | 0.8%  | -0.2% | 0.4%  | 1.1%  |
| Dividend yield            | - | - | - | 3.5%  | 3.9%  | 4.1%  | 4.3%  |
| Implied NCR yield         | - | - | - | 5.6%  | 5.7%  | 5.8%  | 5.8%  |
| Implied value per sqm (€) | - | - | - | 1,321 | 1,360 | 1,396 | 1,430 |

### Cap rates and values per sqm

|                                      |      |      |       |       |       |       |       |
|--------------------------------------|------|------|-------|-------|-------|-------|-------|
| NCR yield                            | 7.1% | 6.8% | 6.5%  | 5.8%  | 5.4%  | 5.3%  | 5.2%  |
| Implied NCR yield                    | 8.0% | 7.3% | 6.0%  | 5.8%  | 5.8%  | 5.9%  | 6.0%  |
| Target price based NCR yield         | -    | -    | -     | 5.6%  | 5.7%  | 5.8%  | 5.8%  |
| Value per sqm (€)                    | 901  | 964  | 1,054 | 1,287 | 1,420 | 1,514 | 1,603 |
| Implied value per sqm (€)            | 801  | 894  | 1,146 | 1,289 | 1,328 | 1,364 | 1,398 |
| Target price based value per sqm (€) | -    | -    | -     | 1,321 | 1,360 | 1,396 | 1,430 |

Source: Jefferies estimates

**Table 72: VNA – NAV sensitivity**

|                       | Yield compression |      | Base case |      |      |      | Yield expansion |      |
|-----------------------|-------------------|------|-----------|------|------|------|-----------------|------|
| NCR yield             | 4.4%              | 4.7% | 4.9%      | 5.2% | 5.4% | 5.7% | 5.9%            | 6.2% |
| NAVPS (€)             | 48.5              | 44.5 | 40.9      | 37.7 | 34.7 | 31.8 | 29.1            | 26.6 |
| % change to base case | 40%               | 28%  | 18%       | 9%   | 0%   | -9%  | -16%            | -23% |

Source: Jefferies estimates

**Key financials**
**Table 73: VNA – key financials (1)**

| Key data                 | 2013 | 2014 | 2015  | 2016E | 2017E | 2018E | 2019E |
|--------------------------|------|------|-------|-------|-------|-------|-------|
| Gross rental income (€m) | 728  | 789  | 1,415 | 1,546 | 1,581 | 1,631 | 1,678 |
| EBITDA adj. (€m)         | 470  | 554  | 1,029 | 1,129 | 1,170 | 1,223 | 1,275 |
| FFO I (€m)               | 219  | 281  | 568   | 725   | 789   | 832   | 874   |
| AFFO I (€m)              | 128  | 81   | 124   | 125   | -26   | 67    | 159   |
| NAVPS (€)                | 22.9 | 23.8 | 24.2  | 30.4  | 34.7  | 37.3  | 39.8  |
| FFOPS I (€)              | 0.98 | 1.03 | 1.22  | 1.56  | 1.69  | 1.79  | 1.87  |
| AFFOPS I (€)             | 0.57 | 0.30 | 0.27  | 0.27  | -0.05 | 0.14  | 0.34  |
| DPS (€)                  | 0.70 | 0.78 | 0.94  | 1.12  | 1.26  | 1.32  | 1.39  |
| NAV premium              | -22% | -13% | 19%   | 0%    | -12%  | -18%  | -23%  |
| FFO I yield              | 5.5% | 5.0% | 4.2%  | 5.1%  | 5.5%  | 5.8%  | 6.1%  |
| AFFO I yield             | 3.2% | 1.4% | 0.9%  | 0.9%  | -0.2% | 0.5%  | 1.1%  |
| Dividend yield           | 3.9% | 3.7% | 3.3%  | 3.7%  | 4.1%  | 4.3%  | 4.5%  |
| Net LTV                  | 49%  | 50%  | 51%   | 46%   | 44%   | 44%   | 44%   |
| Gearing (x)              | 0.0  | 1.3  | 1.2   | 0.9   | 0.9   | 0.9   | 0.8   |

**Key assumptions**

|                                   |      |      |       |       |       |       |       |
|-----------------------------------|------|------|-------|-------|-------|-------|-------|
| Like-for-like rent growth (y-o-y) | 1.9% | 2.5% | 2.9%  | 3.1%  | 3.7%  | 4.2%  | 3.9%  |
| Vacancy rate                      | 3.5% | 3.4% | 2.7%  | 2.5%  | 2.4%  | 2.4%  | 2.4%  |
| NCR yield                         | 7.1% | 6.8% | 6.5%  | 5.8%  | 5.4%  | 5.3%  | 5.2%  |
| NCR multiplier (x)                | 14.1 | 14.7 | 15.4  | 17.3  | 18.4  | 18.8  | 19.2  |
| Value per sqm (€)                 | 901  | 964  | 1,054 | 1,287 | 1,420 | 1,514 | 1,603 |

**Per share data (€)**

|                                   |      |      |      |      |       |      |      |
|-----------------------------------|------|------|------|------|-------|------|------|
| Number of shares, outstanding (m) | 224  | 272  | 466  | 466  | 466   | 466  | 466  |
| NAVPS                             | 22.9 | 23.8 | 24.2 | 30.4 | 34.7  | 37.3 | 39.8 |
| FFOPS I                           | 0.98 | 1.03 | 1.22 | 1.56 | 1.69  | 1.79 | 1.87 |
| FFOPS II                          | 1.10 | 1.22 | 1.37 | 1.74 | 1.85  | 1.94 | 2.03 |
| AFFOPS I                          | 0.57 | 0.30 | 0.27 | 0.27 | -0.05 | 0.14 | 0.34 |
| AFFOPS II                         | 0.70 | 0.48 | 0.42 | 0.46 | 0.10  | 0.30 | 0.49 |
| DPS                               | 0.70 | 0.78 | 0.94 | 1.12 | 1.26  | 1.32 | 1.39 |

**Valuation**

|                           |      |      |       |       |       |       |       |
|---------------------------|------|------|-------|-------|-------|-------|-------|
| NAV premium               | -22% | -13% | 19%   | 0%    | -12%  | -18%  | -23%  |
| FFO I yield               | 5.5% | 5.0% | 4.2%  | 5.1%  | 5.5%  | 5.8%  | 6.1%  |
| FFO II yield              | 6.2% | 5.9% | 4.8%  | 5.7%  | 6.0%  | 6.3%  | 6.6%  |
| AFFO I yield              | 3.2% | 1.4% | 0.9%  | 0.9%  | -0.2% | 0.5%  | 1.1%  |
| AFFO II yield             | 3.9% | 2.3% | 1.5%  | 1.5%  | 0.3%  | 1.0%  | 1.6%  |
| Dividend yield            | 3.9% | 3.7% | 3.3%  | 3.7%  | 4.1%  | 4.3%  | 4.5%  |
| Payout ratio (% of FFO I) | 72%  | 75%  | 77%   | 72%   | 74%   | 74%   | 74%   |
| Implied NCR yield         | 8.0% | 7.3% | 6.0%  | 5.8%  | 5.8%  | 5.9%  | 6.0%  |
| Implied value per sqm (€) | 801  | 894  | 1,146 | 1,289 | 1,328 | 1,364 | 1,398 |

Source: Company data, Jefferies estimates



**Table 74: VNA – key financials (2)**

| <b>Key income data and ratios</b> | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016E</b> | <b>2017E</b> | <b>2018E</b> | <b>2019E</b> |
|-----------------------------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Gross rental income (€m)          | 728         | 789         | 1,415       | 1,546        | 1,581        | 1,631        | 1,678        |
| Net operating income (€m)         | 443         | 504         | 948         | 1,052        | 1,091        | 1,142        | 1,191        |
| EBITDA adj. (€m)                  | 470         | 554         | 1,029       | 1,129        | 1,170        | 1,223        | 1,275        |
| Valuation result (€m)             | 554         | 371         | 1,324       | 3,701        | 2,106        | 1,298        | 1,263        |
| Disposal result (€m)              | 52          | 69          | 119         | 119          | 119          | 119          | 119          |
| Net financing costs (€m)          | 286         | 272         | 410         | 421          | 446          | 470          | 492          |
| PBT (€)                           | 690         | 589         | 1,735       | 4,201        | 2,622        | 1,844        | 1,838        |
| Net profit (€m)                   | 484         | 410         | 995         | 2,941        | 1,836        | 1,291        | 1,287        |
| FFO I (€m)                        | 219         | 281         | 568         | 725          | 789          | 832          | 874          |
| FFO II (€m)                       | 247         | 331         | 639         | 813          | 860          | 903          | 945          |
| AFFO I (€m)                       | 128         | 81          | 124         | 125          | -26          | 67           | 159          |
| AFFO II (€m)                      | 156         | 131         | 195         | 213          | 45           | 138          | 230          |
| NOI margin                        | 61%         | 64%         | 67%         | 68%          | 69%          | 70%          | 71%          |
| EBITDA adj. margin                | 65%         | 70%         | 73%         | 73%          | 74%          | 75%          | 76%          |
| FFO I margin                      | 30%         | 36%         | 40%         | 47%          | 50%          | 51%          | 52%          |

**Key balance sheet data and ratios**

|                           |        |        |         |         |         |         |         |
|---------------------------|--------|--------|---------|---------|---------|---------|---------|
| Investment property (€m)  | 10,327 | 12,759 | 24,398  | 27,099  | 29,920  | 31,883  | 33,761  |
| Cash and equivalents (€m) | 548    | 1,565  | 3,108   | 1,219   | 1,571   | 1,807   | 1,952   |
| Shareholders' equity (€m) | 3,806  | 4,933  | 10,621  | 13,524  | 15,531  | 16,729  | 17,892  |
| NAV (€m)                  | 5,123  | 6,578  | 13,988  | 16,892  | 18,899  | 20,097  | 21,260  |
| Net debt (€m)             | -5,595 | -7,827 | -13,778 | -13,575 | -14,389 | -15,154 | -15,869 |
| Net LTV (%)               | 49%    | 50%    | 51%     | 46%     | 44%     | 44%     | 44%     |
| Gearing (x)               | 0.0    | 1.3    | 1.2     | 0.9     | 0.9     | 0.9     | 0.8     |

**Key cash flow data and ratios**

|                                  |      |        |        |        |       |       |       |
|----------------------------------|------|--------|--------|--------|-------|-------|-------|
| CF operating (€m)                | 260  | 463    | 690    | 813    | 774   | 723   | 661   |
| CF investing (€m)                | 171  | -1,188 | -3,240 | 452    | -715  | -665  | -615  |
| CF financing (€m)                | -353 | 1,742  | 4,093  | -3,153 | 293   | 178   | 98    |
| Net cash flow (€m)               | 78   | 1,017  | 1,543  | -1,889 | 352   | 236   | 144   |
| Cash at beginning of period (€m) | 470  | 548    | 1,565  | 3,108  | 1,219 | 1,571 | 1,807 |
| Cash at the end of period (€m)   | 548  | 1,565  | 3,108  | 1,219  | 1,571 | 1,807 | 1,952 |

Source: Company data, Jefferies estimates

Largest residential player in Germany

## Company description

Vonovia runs a c.338,000 units residential portfolio with a hold-to-let strategy in the affordable housing segment. It is by far the largest listed residential real estate company in Germany and also belongs to the largest players in Europe. It became a DAX constituent last year. The company went public in mid-2013 and has more than doubled its portfolio size since then. The acquisition of Gagfah in 2015 was the largest expansion step since the IPO, adding c.140,000 units. With the recent announcement of the conwert acquisition, the company shows it remains in expansion mode. Vonovia's strategic portfolio is widely spread over about 400 locations throughout Germany, most in Western Germany. North Rhine-Westphalia represents the largest sub-portfolio. The top-3 cities are Frankfurt, Hamburg and Berlin in terms of fair value. The company is the only player within its peer group that has insourced its complete service activities, including craftsmen. Its rent growth strategy is strongly focused on §559 modernisations, therefore running large-scale 'industrialised' modernisation programmes. The company is listed in the DAX with most of the capital free-float and a rather broad shareholder structure, both generalists as well as sector specialists.

## Portfolio

Germany-wide about 340,000 units

The portfolio comprises about 340,000 residential units, of which 91% refer to the company's core strategic clusters in terms of fair value. The company clusters its core portfolio according to the asset management strategy for each cluster:

'Operate': Rent growth, vacancy reduction, effective and sustainable maintenance spending and cost savings.

'Upgrade buildings': Comprehensive investments with a focus on energy efficiency.

'Optimise apartments': Selective investments in individual flats (focus on senior living and high-end modernisation in strong markets that allow a rental premium for fully refurbished apartments).

**Table 75: Vonovia's portfolio structure**

|                             | # residential units | in % of total | Fair value (€m) | in % of total |
|-----------------------------|---------------------|---------------|-----------------|---------------|
| Operate                     | 125,566             | 37%           | 8.8             | 37%           |
| Upgrade buildings           | 102,781             | 30%           | 7.1             | 30%           |
| Optimize apartments         | 73,440              | 22%           | 5.7             | 24%           |
| Subtotal Strategic Clusters | 301,787             | 89%           | 21.6            | 91%           |
| Privatize                   | 17,582              | 5%            | 1.4             | 6%            |
| Non-strategic               | 12,159              | 4%            | 0.5             | 2%            |
| Non-core                    | 6,192               | 2%            | 0.2             | 1%            |
| Total                       | 337,720             | 100%          | 23.7            | 100%          |

Source: Jefferies, company data, 9M 2016

Average in-place rent of €5.9 per sqm / month at upper-end of peer range

The average in-place rent of the portfolio is currently about €5.9 per sqm per month, which is at the upper-end of peer range. The vacancy rate of the strategic core portfolio stands at 2.3%. Due to relatively high vacancy levels in the non-strategic and non-core portfolio, the vacancy rate of the total portfolio is 2.8%. The company expects the current non-core portfolio to be more or less fully sold by end 2017.

**Table 76: Vonovia's portfolio KPIs**

|                             | # residential units | In-place rent per sqm/month (€) | Vacancy rate |
|-----------------------------|---------------------|---------------------------------|--------------|
| Operate                     | 125,566             | 5.98                            | 2.4%         |
| Upgrade buildings           | 102,781             | 5.90                            | 2.5%         |
| Optimize apartments         | 73,440              | 6.22                            | 2.2%         |
| Subtotal Strategic Clusters | 301,787             | 6.01                            | 2.4%         |

### Widely-spread portfolio

**Table 76: Vonovia's portfolio KPIs**

|               | # residential units | In-place rent per sqm/month (€) | Vacancy rate |
|---------------|---------------------|---------------------------------|--------------|
| Privatize     | 17,582              | 5.91                            | 4.5%         |
| Non-strategic | 12,159              | 4.81                            | 7.3%         |
| Non-core      | 6,192               | 4.65                            | 9.0%         |
| Total         | 337,720             | 5.94                            | 2.8%         |

Source: Jefferies, company data, 9M 2016

The company's top 10 cities, in terms of number of residential units, amount to about 47% of total units, reflecting the wide portfolio distribution. The vacancy rates of the key city locations are below the 1.5% level, a de facto full occupancy.

**Table 77: Vonovia's top-10 city locations**

|                   | # residential units | in % of total units | In-place rent per sqm/month (€) | Vacancy rate |
|-------------------|---------------------|---------------------|---------------------------------|--------------|
| Dresden           | 37,894              | 11%                 | 5.41                            | 2.0%         |
| Berlin            | 30,487              | 9%                  | 5.95                            | 1.5%         |
| Dortmund          | 19,217              | 6%                  | 5.20                            | 2.5%         |
| Essen             | 12,082              | 4%                  | 5.51                            | 4.8%         |
| Kiel              | 11,973              | 4%                  | 5.43                            | 1.6%         |
| Frankfurt am Main | 11,670              | 3%                  | 7.92                            | 1.1%         |
| Bremen            | 11,271              | 3%                  | 5.29                            | 3.8%         |
| Hamburg           | 10,966              | 3%                  | 6.64                            | 1.2%         |
| Bochum            | 7,504               | 2%                  | 5.55                            | 2.0%         |
| Hannover          | 7,180               | 2%                  | 6.11                            | 2.4%         |
| Top 10            | 160,244             | 47%                 | -                               | -            |

Source: Jefferies, company data, 9M 2016

### Property valuation split – significant mark-up expected with FY 2016 valuations

The portfolio is currently valued at 6.5% NCR yield or €1,095 per sqm. There is a wide quality gap between the strategic and non-strategic cluster, with the latter valued roughly half of the values of the strategic. The last comprehensive portfolio valuation by CBRE refers to FY 2015. The company already indicated towards a significant 15%-17% mark-up for FY 2016 valuation, reducing the NCR yield by about 70bps to about 5.8%.

**Table 78: Vonovia's portfolio valuation**

|                             | Fair value (€m) | in % of total | Fair value per sqm/month (€m) | NCR multiple (x) | NCR yield |
|-----------------------------|-----------------|---------------|-------------------------------|------------------|-----------|
| Operate                     | 8.8             | 37%           | 1,067                         | 14.7             | 6.8%      |
| Upgrade buildings           | 7.1             | 30%           | 1,119                         | 15.9             | 6.3%      |
| Optimize apartments         | 5.7             | 24%           | 1,216                         | 16.7             | 6.0%      |
| Subtotal Strategic Clusters | 21.6            | 91%           | 1,121                         | 15.6             | 6.4%      |
| Privatize                   | 1.4             | 6%            | 1,177                         | 17.1             | 5.8%      |
| Non-strategic               | 0.5             | 2%            | 608                           | 11.3             | 8.8%      |
| Non-core                    | 0.2             | 1%            | 557                           | 11.2             | 8.9%      |
| Total                       | 23.7            | 100%          | 1,095                         | 15.5             | 6.5%      |

Source: Jefferies, company data, 9M 2016

### Property valuation of the top-10 city locations

There's also a wide valuation gap between the top-10 city locations; for example, Bochum assets are valued roughly half of the value of Frankfurt assets. Berlin is valued at 5.5% NCR yield (as of end FY15). This compares with DW's Berlin portfolio valuation of 4.9% NCR

yield and ADO's at 4.7% NCR yield, however, both revalued as of 1H 2016, indicating to a revaluation upside for Vonovia's Berlin portfolio. All three have CBRE as main appraiser.

**Table 79: Vonovia's top-10 city valuation**

|                      | Fair value<br>(€m) | in % of<br>total | Fair value per<br>sqm/month (€m) | NCR<br>multiple (x) | NCR<br>yield |
|----------------------|--------------------|------------------|----------------------------------|---------------------|--------------|
| Dresden              | 2,123              | 9%               | 932                              | 14.5                | 6.9%         |
| Berlin               | 2,578              | 11%              | 1,311                            | 18.3                | 5.5%         |
| Dortmund             | 982                | 4%               | 829                              | 13.4                | 7.5%         |
| Essen                | 642                | 3%               | 821                              | 12.7                | 7.9%         |
| Kiel                 | 618                | 3%               | 853                              | 13.1                | 7.6%         |
| Frankfurt am<br>Main | 1,223              | 5%               | 1,682                            | 17.7                | 5.6%         |
| Bremen               | 645                | 3%               | 916                              | 14.7                | 6.8%         |
| Hamburg              | 1,057              | 4%               | 1,475                            | 18.0                | 5.6%         |
| Bochum               | 359                | 2%               | 827                              | 12.5                | 8.0%         |
| Hannover             | 513                | 2%               | 1,089                            | 14.9                | 6.7%         |

Source: Jefferies, company data, 9M 2016

New portfolio clustering in 15 key regional markets

The company has also recently started clustering its strategic core portfolio into 15 regional markets, each of which represents a homogeneous area with similar characteristics and future development potential, geographic proximity and commuter relations.

**Table 80: Vonovia's strategic cluster in 15 regional markets**

|                           | Fair value (€m) | Fair value per sqm/month<br>(€m) | NCR multiple (x) | Like-for-like rent<br>growth | Re-letting rent<br>growth |
|---------------------------|-----------------|----------------------------------|------------------|------------------------------|---------------------------|
| Berlin                    | 2,716           | 1,296                            | 18.1             | 3.2%                         | 6.7%                      |
| Rhineland                 | 2,515           | 1,273                            | 16.4             | 2.6%                         | 5.4%                      |
| Rhine Main Area           | 2,303           | 1,578                            | 17.4             | 3.7%                         | 5.6%                      |
| Southern Ruhr Area        | 2,172           | 829                              | 13.0             | 3.0%                         | 6.1%                      |
| Dresden                   | 2,136           | 931                              | 14.5             | 2.9%                         | 7.1%                      |
| Stuttgart                 | 1,821           | 1,432                            | 16.9             | 2.5%                         | 0.1%                      |
| Hamburg                   | 1,468           | 1,359                            | 17.2             | 3.4%                         | 5.3%                      |
| Munich                    | 1,374           | 2,071                            | 22.5             | 3.4%                         | 5.9%                      |
| Northern Ruhr Area        | 1,210           | 734                              | 12.3             | 2.2%                         | 4.3%                      |
| Hanover                   | 912             | 1,014                            | 14.5             | 2.1%                         | 6.7%                      |
| Kiel                      | 726             | 859                              | 13.1             | 2.5%                         | 7.0%                      |
| Bremen                    | 652             | 922                              | 14.7             | 3.0%                         | 5.5%                      |
| Westphalia                | 515             | 826                              | 13.0             | 3.2%                         | 4.9%                      |
| Freiburg                  | 393             | 1,399                            | 17.4             | 3.1%                         | 3.2%                      |
| Leipzig                   | 234             | 905                              | 13.8             | 1.8%                         | 1.0%                      |
| Other Strategic Locations | 1,771           | 1,071                            | 15.2             | 2.7%                         | 3.3%                      |
| Total                     | 22,920          | 1,125                            | 15.7             | 2.9%                         | 4.4%                      |

Source: Jefferies, company data, 9M 2016

# TAG Immobilien (TAG) – Hold, €12 PT

## High yield player with E. Germany focus, strong vacancy reduction, refinancing opportunities, lowest portfolio valuation but pricy share valuation

TAG with positive momentum, but pricy share valuation

TAG locations with limited yield compression yet

Only meagre mark-up with recent valuation update

### Investment case

TAG is a higher-yielding residential player with a strong focus on East Germany. The company has shown positive momentum recently in respect of rental growth, mainly driven by vacancy reduction. With a high portion of shorter-term debt maturities, the company has a good chance to reduce financing costs. It also applies an active capital recycling strategy, allowing for further accretive growth. Its property valuation looks conservative and it has also improved in terms of corporate governance. However, stock valuation looks pricy and we see GYC offering better value within the opportunistic high-yield plays. We initiate with a Hold and a PT of €12.

TAG's residential portfolio is focused on the northern and eastern part of Germany, with the latter accounting for 56% of property value. Most of its assets are in B-locations – for example, only about 1,000 units of the about 10,000 units Berlin portfolio are located in the city, with the rest widely spread over the outskirts of Berlin. While rental momentum has picked up recently, there has been hardly any meaningful yield compression in these locations yet, as seen in the recent valuation update.

TAG's portfolio valuation is done annually by CBRE as of end of September. With recent 9M results, it has been slightly marked-up by about 20bps to 7.4% NCR yield, mainly driven by underlying rental growth. The company's Berlin and Hamburg portfolio (most outskirt locations) have experienced at least first signs of yield compression.

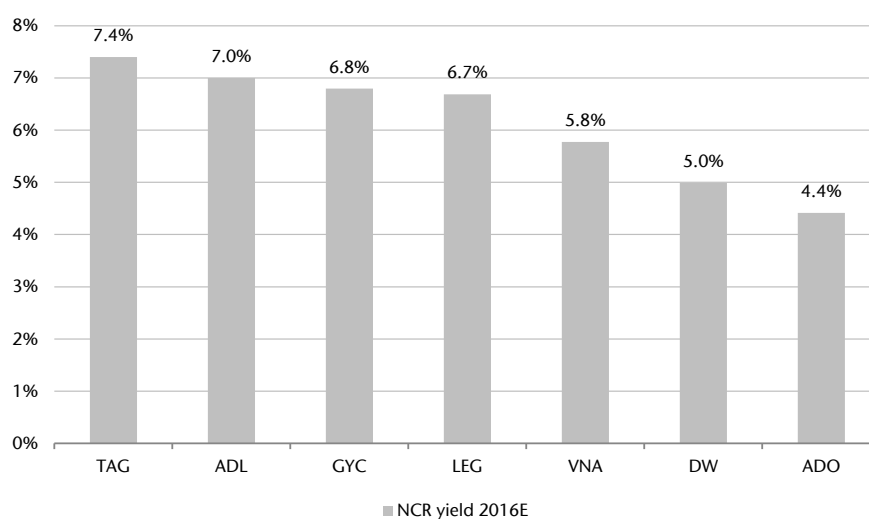
**Table 81: TAG's portfolio valuation**

|                         | NCR yield 9M 2016 | NCR yield 9M 2015 |
|-------------------------|-------------------|-------------------|
| Berlin                  | 6.8%              | 7.1%              |
| Chemnitz                | 8.4%              | 8.3%              |
| Dresden                 | 6.9%              | 7.0%              |
| Erfurt                  | 7.2%              | 7.4%              |
| Gera                    | 7.8%              | 7.9%              |
| Hamburg                 | 7.2%              | 7.5%              |
| Leipzig                 | 8.0%              | 8.1%              |
| Rhine-Ruhr              | 7.2%              | 7.1%              |
| Rostock                 | 7.4%              | 7.6%              |
| Salzgitter              | 7.8%              | 7.9%              |
| Total residential units | 7.4%              | 7.6%              |

Source: Jefferies, company data as of 9M 2016

TAG has by far the lowest property valuation

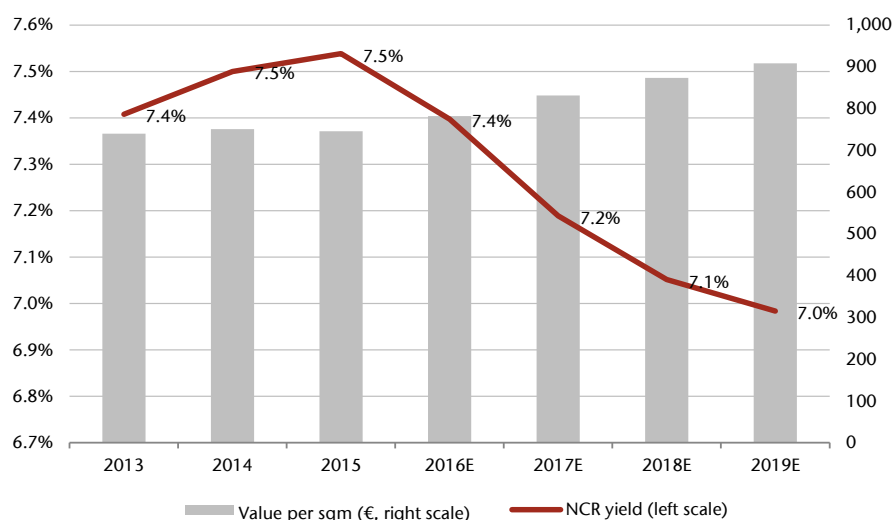
TAG's property valuation is still well below that of its peers. Even main peer Adler, which has portfolio quality close to that of TAG, in our view, is valued at lower yields.

**Chart 129: TAG has by far the highest property yield**


Source: Jefferies estimates, company data as of 9M 2016

We model moderate revaluations

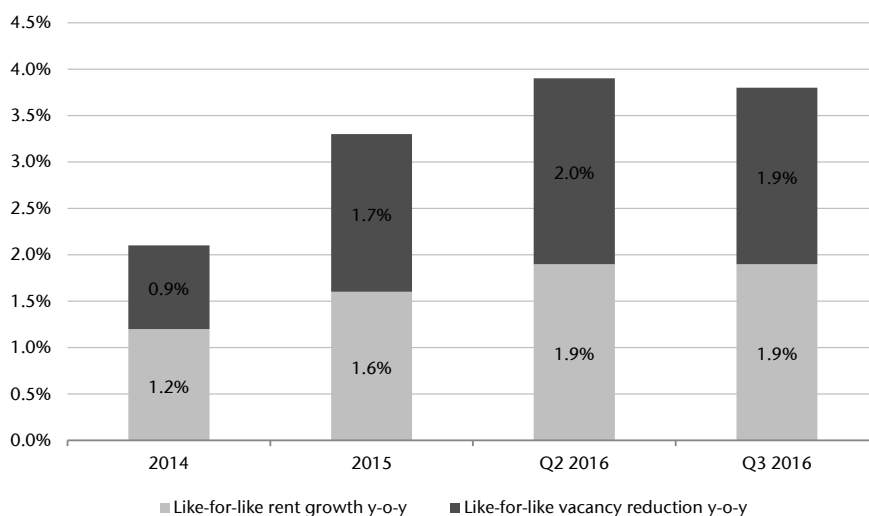
We see room for further moderate mark-ups mainly driven by underlying rental growth and slight yield compression. Our model considers a 50bps yield reduction until 2019E.

**Chart 130: We expect a moderate yield shift for TAG in coming years**


Source: Jefferies estimates, company data

Strong vacancy reduction track record

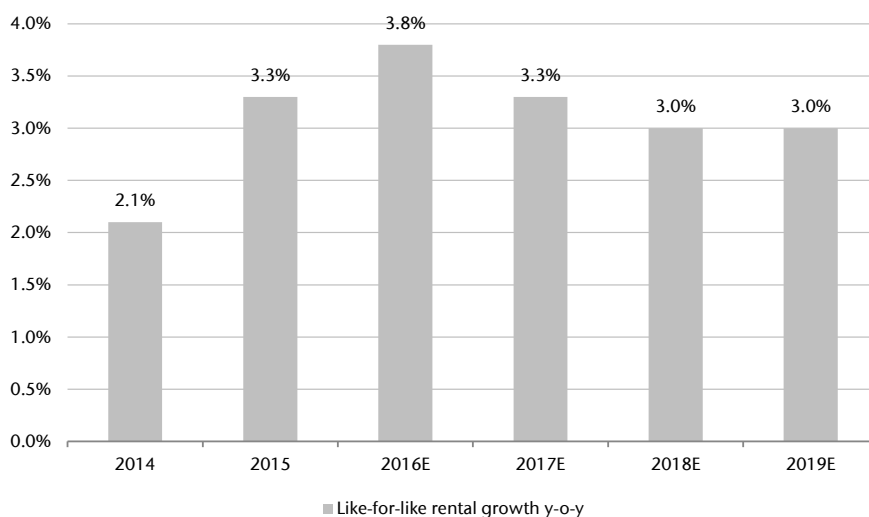
The company has successfully reduced vacancy rates in recent years — on a like-for-like base by 190bps year-to-date, 170bps in 2015 and 90bps in 2014. The strongest vacancy downturn has been reached in the Salzgitter region (Lower Saxony), with a reduction to a vacancy rate of 9.6% from 18.6% at the end of 2013 — a rather strong operating turnaround. The Salzgitter portfolio, corresponding to about 12% of total value, has been the most challenging sub-portfolio within the group as the location is characterised by weak demographics and weak economics. It has been acquired as part of the Colonia Real Estate acquisition in 2011 with a vacancy rate of about 25%.

**Chart 131: TAG – Positive rental growth momentum**


Source: Jefferies, company data as of 9M 2016

#### Also rent growth picked up recently

The company's rental growth momentum has picked up recently, driven by both vacancy reduction and underlying rental growth. TAG's like-for-like rental growth was 1.9% excluding and 3.8% including vacancy reduction as of 9M16, well above the 2.4% average level (including vacancy) of the last three years. Out of the 1.9% pure rental growth in 9M16, about 0.7% stems from re-letting and 1.2% from regular rent increases. The company expects to continue with above 3% like-for-like rental growth (including vacancy reduction) in the coming years.

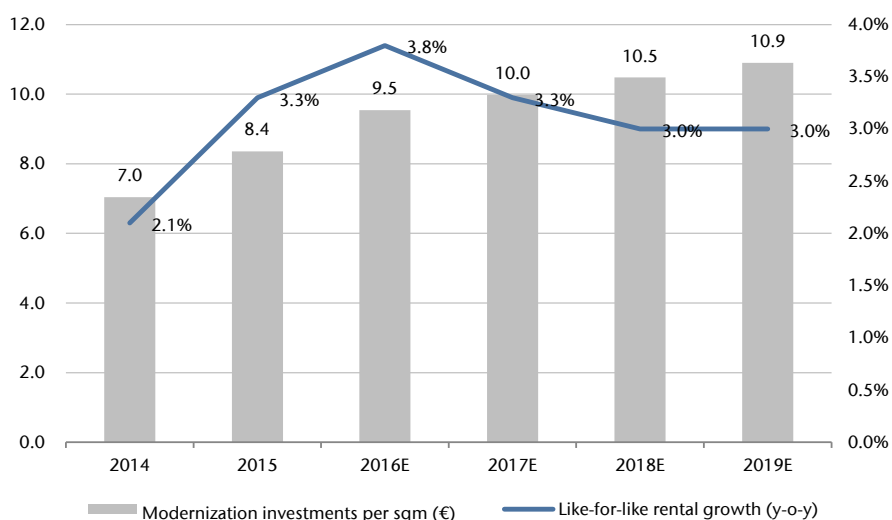
**Chart 132: TAG – Continuing solid rental growth expected**


Source: Jefferies estimates, company data

#### High returns on its investments

The company provides a split of its €40.1m capex investments in 2015; about 65% refers to apartment and 35% to building investments. Out of the apartment investments, about two-thirds refer to the modernisation of vacant flats and one-third to re-letting driven investments. The company has also disclosed its return on investment for each segment for 2015: 30%-35% for apartment and 8%-12% for building investments. Within the apartment investments, the modernisation of vacant flats amounts to 45%-50% and that

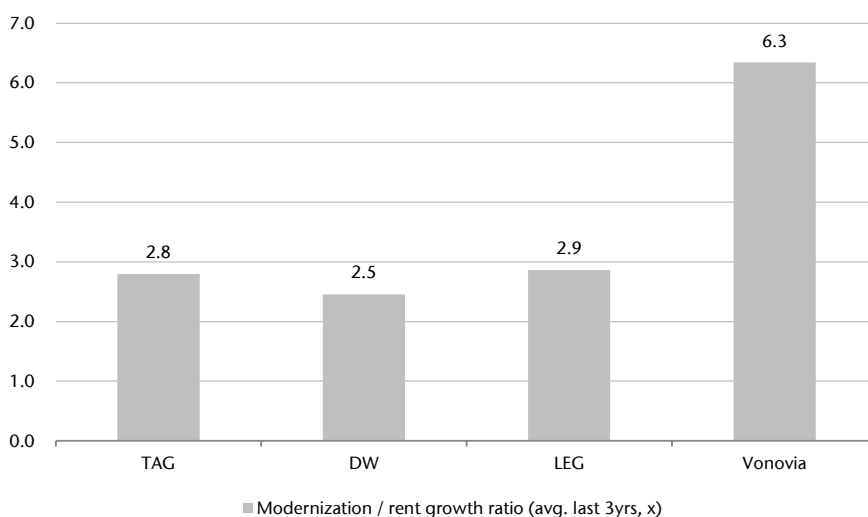
of re-letting modernisations to 6%-10%. The company assumes the investment split of 2015 to remain roughly unchanged.

**Chart 133: TAG – Modernisation investments only slightly up**


Source: Jefferies estimates, company data

Efficient rental growth – without major investment programmes

With its capex focus on vacancy reduction, the company has shown efficient rental growth and, with accelerating rent momentum, it should even become more efficient. It expects to reach the 3%+ rental growth over the coming years without any major investment programmes – our model assumes only a slight increase in modernisation investments in the coming years.

**Chart 134: TAG – Efficient rental growth strategy**


Source: Jefferies, company data. Modernisation investments per sqm / like-for-like rental growth, the lower the ratio the higher rental growth efficiency

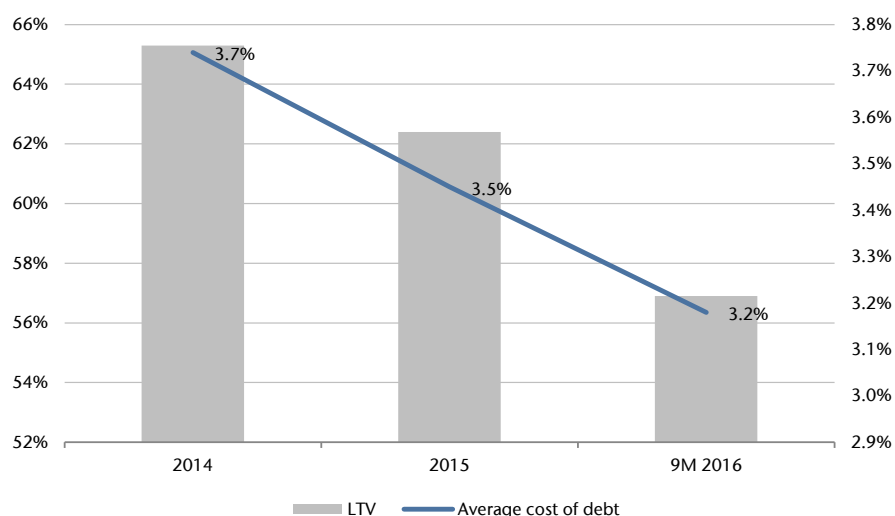
Higher leverage strategy with financings upside

The company follows a higher leverage strategy with an LTV target of below 60%. Its current LTV stands at 57%, which has been significantly reduced in recent years, and we expect it to stay in the 55%-60% range. Also, financing costs came down significantly in



recent years to the current 3.2% and are expected to drop further to about 2.2% by 2018E on the basis of refinancing of shorter-term debt maturities.

**Chart 135: TAG – Improving balance sheet and financing**



Source: Jefferies, company data

Attractive refinancing opportunity next two years

The company's financing structure is split about 80% mortgage debt and 20% corporate bonds. About one-third of the mortgage loans with an average interest rate of 3.5% mature until 2018 – most in the year 2018 – and can be potentially refinanced at cheaper rates (we assume 1.3% for 10-year mortgage), saving up to €14m interest costs over the coming years. Also, a large corporate bond with a volume of €310m and an effective interest rate of 4.83% matures in 2018. The company refrains from premature refinancing, referring to about €15m debt-breakage costs. We have considered lower financing costs in our model, with a 20% safety discount to account for interest rate risks.

Capital recycling strategy

The company has been running an active capital recycling strategy over the last two years, replacing lower-yielding (c.5%) by higher-yielding assets (c.10%), which we appreciate as it emphasises the company's consequent high yield approach and enables it to capitalise on its turnaround expertise. It also allows for capital efficient growth. However, the scale of this programme is limited, specifically on the acquisition side due to high pricing levels. The company expects about 1,500 residential units to be acquired and about 1,100 units to be disposed this year.

TAG's special location mix making it not the most obvious takeover target

With the company's progress of operating turnaround, the portfolio becoming more mature and East German key locations experiencing better residential dynamics, the company might come more into the spotlight of sector consolidation. However, we are a bit sceptical on this as TAG's location mix is rather special with a high exposure to smaller cities in East Germany, which offer limited overlap to the portfolios of other listed players. Furthermore, the relatively high stock valuation and the company's shareholder structure, which is dominated by long-term key shareholders (e.g. Flossbach, Ruffer, THS), make it more challenging.

**Table 82: TAG's shareholder structure**

| Shareholder   | Stake |
|---|-------|
| Flossbach von Storch AG, Germany                      | 12.7% |
| Sun Life Financial Inc., USA                          | 11.8% |
| Versorgungsanstalt des Bundes und der Länder, Germany | 10.1% |
| Universal Investment GmbH, Germany                    | 9.0%  |
| Ruffer LLP, UK  | 9.9%  |
| The Capital Group Companies Inc., USA                 | 5.2%  |
| MFS International Fund, USA                           | 4.9%  |
| Black Rock, USA                                       | 4.4%  |
| GAM / Taube Hudson Stonex Partners LLP, UK            | 3.9%  |

Source: Jefferies, company data

TAG shares trade at the sector's highest NAV premiums, which we see as the main limiting factor for further valuation upside from here. This might only unlock if property revaluation comes out well above our expectation. At the same time, it trades at earnings yields that are only slightly above the sector average ('high yield player' only in terms of cap rates!). Only in terms of dividend yield, the stock looks attractive. All this, combined with a rather high leverage, makes us less enthusiastic, and we regard GYC as the better choice among the opportunistic higher-yielding players. We rate the stock Hold.

### Risks

Besides macro and sector-specific risks described in the chapter 'Sector Key Investment Thesis', TAG is exposed to the following company-specific risks:

#### B-locations with demographic risks

Some of the company's locations are characterised by weak demographics with weak demand, requiring TAG to offer better quality or lower rents compared with its local competitor (often state-owned housing companies). Any further deterioration of demographics might negatively impact the company's rental growth. Furthermore, any deterioration of the competitive situation in these locations might negatively impact rental growth.

#### Higher leverage with higher interest rate sensitivity

With a relatively high leverage (57% LTV), the company's interest rate sensitivity is above that of most of its lower-leveraged peers. Increasing interest rates might therefore negatively impact the company's valuation.

#### Also interest rate risks in respect of refinancing plans

The company's average financing rate, at 3.2%, is well above most of its peers. The company targets to refinance its mortgage loans by much cheaper rates in order to reduce average financing rate. However, it refrains from a premature refinancing, which again implies interest rate risks. Increasing interest rates might therefore negatively impact the company's earnings growth.

#### Integration risks from lower-quality, higher-yielding acquisitions

Based on TAG's capital recycling strategy, the company is actively replacing lower-yielding assets through higher-yielding assets, diluting portfolio quality and implying integration risks. This might negatively impact the company's valuation.

**TAG valuation**
**Valuation and sensitivity**

Our price target of €12 implies a total return of 7%. It values TAG at 10% target premium on NAV17E and 5.9% target FFO I yield FY17E and implies a target value per sqm of €866 at 6.9% target NCR yield.

**Table 83: TAG – valuation**

| <b>Total return</b> | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016E</b> | <b>2017E</b> | <b>2018E</b> | <b>2019E</b> |
|---------------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Price target (€)    | -           | -           | -           | 12.0         | 12.0         | 12.0         | 12.0         |
| Share price (€)     | -           | -           | -           | 11.8         | 11.8         | 11.8         | 11.8         |
| Deviation           | -           | -           | -           | 2%           | 2%           | 2%           | 2%           |
| Dividend yield      | -           | -           | -           | 4.8%         | 5.0%         | 5.3%         | 5.6%         |
| Total return        | -           | -           | -           | 7%           | 7%           | 7%           | 8%           |

**Current stock valuation**

|                           |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|
| NAV premium               | 3%   | 7%   | 26%  | 23%  | 8%   | -3%  | -10% |
| FFO 1 yield               | 5.2% | 6.8% | 5.2% | 5.5% | 6.0% | 6.6% | 6.9% |
| AFFO 1 yield              | 3.5% | 3.8% | 2.4% | 2.8% | 3.2% | 3.6% | 3.9% |
| Dividend yield            | 4.0% | 5.5% | 4.9% | 4.8% | 5.0% | 5.3% | 5.6% |
| Implied NCR yield         | 7.3% | 7.3% | 6.9% | 6.8% | 7.0% | 7.1% | 7.3% |
| Implied value per sqm (€) | 844  | 769  | 812  | 848  | 859  | 863  | 867  |

**Target price based valuation**

|                           |   |   |   |      |      |      |      |
|---------------------------|---|---|---|------|------|------|------|
| NAV premium               | - | - | - | 25%  | 10%  | -1%  | -9%  |
| FFO 1 yield               | - | - | - | 5.4% | 5.9% | 6.4% | 6.8% |
| AFFO 1 yield              | - | - | - | 2.8% | 3.2% | 3.6% | 3.8% |
| Dividend yield            | - | - | - | 4.8% | 4.9% | 5.2% | 5.5% |
| Implied NCR yield         | - | - | - | 6.8% | 6.9% | 7.1% | 7.3% |
| Implied value per sqm (€) | - | - | - | 855  | 866  | 870  | 874  |

**Cap rates and values per sqm**

|                                      |      |      |      |      |      |      |      |
|--------------------------------------|------|------|------|------|------|------|------|
| NCR yield                            | 7.4% | 7.5% | 7.5% | 7.4% | 7.2% | 7.1% | 7.0% |
| Implied NCR yield                    | 7.3% | 7.3% | 6.9% | 6.8% | 7.0% | 7.1% | 7.3% |
| Target price based NCR yield         | -    | -    | -    | 6.8% | 6.9% | 7.1% | 7.3% |
| Value per sqm (€)                    | 740  | 751  | 746  | 782  | 832  | 873  | 908  |
| Implied value per sqm (€)            | 844  | 769  | 812  | 848  | 859  | 863  | 867  |
| Target price based value per sqm (€) | -    | -    | -    | 855  | 866  | 870  | 874  |

Source: Jefferies estimates

**Table 84: TAG – NAV sensitivity**

|                       | <b>Yield compression</b> |      |      | <b>Base case</b> |      |      |      | <b>Yield expansion</b> |      |
|-----------------------|--------------------------|------|------|------------------|------|------|------|------------------------|------|
| NCR yield             | 6.2%                     | 6.4% | 6.7% | 6.9%             | 7.2% | 7.4% | 7.7% | 7.9%                   | 8.2% |
| NAVPS (€)             | 15.1                     | 13.9 | 12.8 | 11.8             | 10.9 | 9.9  | 9.0  | 8.2                    | 7.4  |
| % change to base case | 39%                      | 28%  | 18%  | 9%               | 0%   | -9%  | -17% | -25%                   | -32% |

Source: Jefferies estimates

**Key financials**
**Table 85: TAG – key financials (1)**

| Key data                 | 2013 | 2014 | 2015 | 2016E | 2017E | 2018E | 2019E |
|--------------------------|------|------|------|-------|-------|-------|-------|
| Gross rental income (€m) | 251  | 257  | 259  | 274   | 283   | 291   | 300   |
| EBITDA adj. (€m)         | 159  | 163  | 160  | 172   | 184   | 189   | 195   |
| FFO I (€m)               | 60   | 73   | 73   | 94    | 102   | 111   | 117   |
| AFFO I (€m)              | 41   | 41   | 34   | 49    | 56    | 63    | 67    |
| NAVPS (€)                | 8.6  | 8.4  | 8.9  | 9.6   | 10.9  | 12.1  | 13.1  |
| FFOPS I (€)              | 0.46 | 0.61 | 0.59 | 0.65  | 0.71  | 0.77  | 0.82  |
| AFFOPS I (€)             | 0.31 | 0.35 | 0.27 | 0.33  | 0.38  | 0.43  | 0.46  |
| DPS (€)                  | 0.35 | 0.50 | 0.55 | 0.57  | 0.59  | 0.62  | 0.66  |
| NAV premium              | 3%   | 7%   | 26%  | 23%   | 8%    | -3%   | -10%  |
| FFO I yield              | 5.2% | 6.8% | 5.2% | 5.5%  | 6.0%  | 6.6%  | 6.9%  |
| AFFO I yield             | 3.5% | 3.8% | 2.4% | 2.8%  | 3.2%  | 3.6%  | 3.9%  |
| Dividend yield           | 4.0% | 5.5% | 4.9% | 4.8%  | 5.0%  | 5.3%  | 5.6%  |
| Net LTV                  | 65%  | 65%  | 63%  | 56%   | 54%   | 52%   | 51%   |
| Gearing (x)              | 2.2  | 2.4  | 2.3  | 1.8   | 1.6   | 1.5   | 1.4   |

**Key assumptions**

|                                   |      |      |      |      |      |      |      |
|-----------------------------------|------|------|------|------|------|------|------|
| Like-for-like rent growth (y-o-y) | -    | 2.1% | 3.3% | 3.8% | 3.3% | 3.0% | 3.0% |
| Vacancy rate                      | 8.8% | 8.1% | 7.5% | 7.0% | 6.0% | 5.2% | 4.5% |
| NCR yield                         | 7.4% | 7.5% | 7.5% | 7.4% | 7.2% | 7.1% | 7.0% |
| NCR multiplier (x)                | 13.5 | 13.3 | 13.3 | 13.5 | 13.9 | 14.2 | 14.3 |
| Value per sqm (€)                 | 740  | 751  | 746  | 782  | 832  | 873  | 908  |

**Per share data (€)**

|                                   |      |      |      |      |      |      |      |
|-----------------------------------|------|------|------|------|------|------|------|
| Number of shares, outstanding (m) | 131  | 119  | 125  | 146  | 146  | 146  | 146  |
| NAVPS                             | 8.6  | 8.4  | 8.9  | 9.6  | 10.9 | 12.1 | 13.1 |
| FFOPS I                           | 0.46 | 0.61 | 0.59 | 0.65 | 0.71 | 0.77 | 0.82 |
| FFOPS II                          | 0.46 | 0.69 | 0.72 | 0.67 | 0.73 | 0.80 | 0.84 |
| AFFOPS I                          | 0.31 | 0.35 | 0.27 | 0.33 | 0.38 | 0.43 | 0.46 |
| AFFOPS II                         | 0.31 | 0.43 | 0.40 | 0.35 | 0.40 | 0.45 | 0.48 |
| EPS                               | 0.21 | 0.24 | 1.17 | 1.62 | 1.98 | 1.83 | 1.69 |

**Valuation**

|                           |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|
| NAV premium               | 3%   | 7%   | 26%  | 23%  | 8%   | -3%  | -10% |
| FFO I yield               | 5.2% | 6.8% | 5.2% | 5.5% | 6.0% | 6.6% | 6.9% |
| FFO II yield              | 5.2% | 7.7% | 6.4% | 5.7% | 6.2% | 6.8% | 7.1% |
| AFFO I yield              | 3.5% | 3.8% | 2.4% | 2.8% | 3.2% | 3.6% | 3.9% |
| AFFO II yield             | 3.5% | 4.7% | 3.6% | 3.0% | 3.4% | 3.8% | 4.1% |
| Dividend yield            | 4.0% | 5.5% | 4.9% | 4.8% | 5.0% | 5.3% | 5.6% |
| Payout ratio (% of FFO I) | 76%  | 82%  | 93%  | 88%  | 83%  | 80%  | 80%  |
| Implied NCR yield         | 7.3% | 7.3% | 6.9% | 6.8% | 7.0% | 7.1% | 7.3% |
| Implied value per sqm (€) | 844  | 769  | 812  | 848  | 859  | 863  | 867  |

Source: Company data, Jefferies estimates

**Table 86: TAG – key financials (2)**

| <b>Key income data and ratios</b>        | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016E</b> | <b>2017E</b> | <b>2018E</b> | <b>2019E</b> |
|--|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Gross rental income (€m)                 | 251         | 257         | 259         | 274          | 283          | 291          | 300          |
| Net operating income (€m)                | 199         | 210         | 205         | 219          | 226          | 233          | 240          |
| EBITDA adj. (€m)                         | 159         | 163         | 160         | 172          | 184          | 189          | 195          |
| Valuation result (€m)                    | 4           | 47          | 99          | 190          | 237          | 200          | 168          |
| Disposal result (€m)                     | 0           | 40          | 20          | 4            | 4            | 4            | 4            |
| Net financing costs (€m)                 | -99         | -110        | -96         | -92          | -89          | -83          | -81          |
| PBT (€)                                  | 35          | 121         | 175         | 282          | 344          | 319          | 295          |
| Net profit (€m)                          | 27          | 29          | 147         | 237          | 289          | 269          | 248          |
| FFO I (€m)                               | 60          | 73          | 73          | 94           | 102          | 111          | 117          |
| FFO II (€m)                              | 60          | 82          | 91          | 98           | 107          | 116          | 123          |
| AFFO I (€m)                              | 41          | 41          | 34          | 49           | 56           | 63           | 67           |
| AFFO II (€m)                             | 40          | 51          | 51          | 52           | 59           | 66           | 70           |
| NOI margin                               | 79%         | 81%         | 79%         | 80%          | 80%          | 80%          | 80%          |
| EBITDA adj. margin                       | 63%         | 63%         | 62%         | 63%          | 65%          | 65%          | 65%          |
| FFO I margin                             | 24%         | 29%         | 28%         | 34%          | 36%          | 38%          | 39%          |
|  |             |             |             |              |              |              |              |
| <b>Key balance sheet data and ratios</b> |             |             |             |              |              |              |              |
| Investment property (€m)                 | 3,544       | 3,371       | 3,578       | 3,768        | 4,005        | 4,205        | 4,373        |
| Cash and equivalents (€m)                | 79          | 171         | 96          | 135          | 171          | 182          | 194          |
| Shareholders' equity (€m)                | 1,107       | 980         | 1,085       | 1,337        | 1,524        | 1,704        | 1,853        |
| NAV (€m)                                 | 1,245       | 1,110       | 1,203       | 1,406        | 1,593        | 1,773        | 1,921        |
| Net debt (€m)                            | -2,304      | -2,202      | -2,243      | -2,126       | -2,176       | -2,196       | -2,216       |
| Net LTV (%)                              | 65%         | 65%         | 63%         | 56%          | 54%          | 52%          | 51%          |
| Gearing (x)                              | 2.2         | 2.4         | 2.3         | 1.8          | 1.6          | 1.5          | 1.4          |
|  |             |             |             |              |              |              |              |
| <b>Key cash flow data and ratios</b>     |             |             |             |              |              |              |              |
| CF operating (€m)                        | 75          | 81          | 78          | 104          | 118          | 132          | 141          |
| CF investing (€m)                        | 22          | 20          | -81         | -45          | -48          | -50          | -52          |
| CF financing (€m)                        | -50         | -8          | -73         | -20          | -34          | -71          | -76          |
| Net cash flow (€m)                       | 47          | 92          | -76         | 39           | 36           | 11           | 12           |
| Cash at beginning of period (€m)         | 32          | 79          | 171         | 96           | 135          | 171          | 182          |
| Cash at the end of period (€m)           | 79          | 171         | 96          | 135          | 171          | 182          | 194          |

Source: Company data, Jefferies estimates

Strong focus on Eastern Germany

More widely spread portfolio structure

Low city exposure – most in the outskirts

Comprehensive appraisal annually by end of September

### Company description

TAG runs a c.78,000 units residential portfolio with a hold-to-let strategy in the affordable housing segment. Eastern Germany (excluding Berlin) accounts for 56% of total property value. The company has expanded its portfolio rather early in the current residential cycle with the major expansion steps in 2011 through the takeover of listed peer Colonia Real Estate (19,000 units including Salzgitter), followed by the acquisition of DKBI (25,000 units in East Germany) and TLG residential (12,000 units in East Germany). The company is focused on a high yield strategy with high leverage, high yielding assets. With the company's progress of operating turnaround and the portfolio becoming more mature, it has been running an active capital recycling strategy over the last two years, replacing lower-yielding (c. 5%) by higher-yielding assets (c. 10%), allowing capital efficient growth and capitalising on its turnaround expertise. The company is listed in the German SDAX. The company's shareholder structure is characterised by some of the sector's big names holding quite large stakes; some can be regarded as very long-term key shareholders.

### Portfolio

The portfolio comprises about 78,000 residential units with a rather low portion of non-core units (800-1,000 units). The portfolio can be roughly split into the Northern part of Germany (44% of value) and the Eastern part of Germany (56% of value, excluding Berlin). The portfolio concentration (top-10 cities in % of total units) amounts to about 42%, indicating towards a more widely spread portfolio structure. The portion of restricted units is marginal with only 1% of total units. The rent revisionary potential is currently about 7%.

The city location split refers to corresponding areas rather than the cities itself. For example, of the almost 10,000 Berlin units, only about 1,000 are located in the city of Berlin, according to individual company information. The company's portfolio disclosure doesn't split between city and outskirt locations.

**Table 87: TAG portfolio structure**

|                         | # residential units | in % of total | Fair value (€m) | in % of total |
|-------------------------|---------------------|---------------|-----------------|---------------|
| Berlin                  | 9,882               | 13%           | 522             | 14%           |
| Chemnitz                | 6,519               | 9%            | 227             | 6%            |
| Dresden                 | 6,192               | 8%            | 374             | 10%           |
| Erfurt                  | 8,317               | 11%           | 407             | 11%           |
| Gera                    | 9,598               | 13%           | 382             | 10%           |
| Hamburg                 | 7,263               | 10%           | 389             | 11%           |
| Leipzig                 | 8,501               | 11%           | 373             | 10%           |
| Rhine-Ruhr              | 4,930               | 7%            | 291             | 8%            |
| Rostock                 | 5,470               | 7%            | 272             | 7%            |
| Salzgitter              | 9,174               | 12%           | 405             | 11%           |
| Total residential units | 75,846              | 100%          | 3,641           | 100%          |

Source: Jefferies, company data as of 9M 2016

The company's comprehensive appraisal through CBRE is done on an annual basis as of end September, contrary to most of its peers, which have valuation reference date typically by year-end or end June. Rhine-Ruhr, Berlin, Dresden and Erfurt are the locations valued at the lowest yields; Chemnitz is the one with the highest also with a rather low value per sqm.

**Table 88: TAG portfolio valuation**

|                            | Fair value<br>(€m) | in % of<br>total | Fair value per<br>sqm (€) | NCR multiple<br>9M 2016 (x) | NCR yield 9M<br>2016 |
|----------------------------|--------------------|------------------|---------------------------|-----------------------------|----------------------|
| Berlin                     | 519                | 14%              | 859                       | 14.6                        | 6.8%                 |
| Chemnitz                   | 226                | 6%               | 577                       | 11.9                        | 8.4%                 |
| Dresden                    | 374                | 10%              | 902                       | 14.4                        | 6.9%                 |
| Erfurt                     | 407                | 11%              | 828                       | 13.9                        | 7.2%                 |
| Gera                       | 381                | 10%              | 648                       | 12.8                        | 7.8%                 |
| Hamburg                    | 387                | 11%              | 857                       | 13.7                        | 7.3%                 |
| Leipzig                    | 371                | 10%              | 718                       | 12.5                        | 8.0%                 |
| Rhine-Ruhr                 | 291                | 8%               | 861                       | 13.8                        | 7.2%                 |
| Rostock                    | 271                | 7%               | 823                       | 13.6                        | 7.4%                 |
| Salzgitter                 | 405                | 11%              | 718                       | 12.9                        | 7.8%                 |
| Total residential<br>units | 3,633              | 100%             | 775                       | 13.5                        | 7.4%                 |

Source: Jefferies, company data as of 9M 2016

7% rent revisionary potential

TAG's rent revisionary potential amounts to 7% for the total residential portfolio, with by far the highest in Berlin (14%) and the other locations between 5% and 8%.

**Table 89: TAG portfolio rent revisionary potential**

|                            | In-place rent per<br>sqm/month (€) | Re-letting rent per<br>sqm/month (€) | Rent revisionary<br>potential |
|----------------------------|------------------------------------|--------------------------------------|-------------------------------|
| Berlin                     | 5.23                               | 6.08                                 | 16%                           |
| Chemnitz                   | 4.72                               | 5.10                                 | 8%                            |
| Dresden                    | 5.39                               | 5.55                                 | 3%                            |
| Erfurt                     | 5.02                               | 5.64                                 | 12%                           |
| Gera                       | 4.75                               | 5.10                                 | 7%                            |
| Hamburg                    | 5.29                               | 5.63                                 | 6%                            |
| Leipzig                    | 4.95                               | 5.25                                 | 6%                            |
| Rhine-Ruhr                 | 5.31                               | 5.48                                 | 3%                            |
| Rostock                    | 5.26                               | 5.48                                 | 4%                            |
| Salzgitter                 | 5.00                               | 5.25                                 | 5%                            |
| Total residential<br>units | 5.08                               | 5.46                                 | 7%                            |

Source: Jefferies, company data as of 9M 2016

Like-for-like rent growth split on  
portfolio level

The company also provides a detailed portfolio split of the key rental KPIs, showing rather high like-for-like rental growth in Salzgitter (7.9%) and Chemnitz (6.1%), both driven by strong vacancy reductions.

**Table 90: TAG portfolio KPIs**

|                      | <b>In-place rent<br/>per<br/>sqm/month<br/>(€)</b> | <b>Vacancy<br/>rate<br/>(current)</b> | <b>Vacancy<br/>rate FY15</b> | <b>L-f-I rental<br/>growth y-o-<br/>y</b> | <b>L-f-I rental<br/>growth incl.<br/>vacancy<br/>reduction y-o-y</b> |
|----------------------|--|---------------------------------------|------------------------------|---|--|
| Berlin               | 5.23   | 6.7%                                  | 5.1%                         | 2.9%                                      | 3.5%   |
| Chemnitz             | 4.72   | 13.6%                                 | 15.8%                        | 2.5%                                      | 6.1%   |
| Dresden              | 5.39   | 4.0%                                  | 2.7%                         | 1.0%                                      | 1.9%   |
| Erfurt               | 5.02   | 3.1%                                  | 4.3%                         | 1.5%                                      | 3.8%   |
| Gera                 | 4.75   | 10.2%                                 | 11.1%                        | 2.0%                                      | 3.3%   |
| Hamburg              | 5.29   | 4.6%                                  | 5.5%                         | 1.1%                                      | 2.4%   |
| Leipzig              | 4.95   | 5.0%                                  | 5.6%                         | 1.6%                                      | 3.4%   |
| Rhine-Ruhr           | 5.31   | 4.0%                                  | 2.2%                         | 2.3%                                      | 2.6%   |
| Rostock              | 5.26   | 4.8%                                  | 5.2%                         | 2.1%                                      | 3.1%   |
| Salzgitter           | 5.00   | 8.8%                                  | 12.1%                        | 2.5%                                      | 7.9%   |
| Total<br>residential | 5.08   | 6.7%                                  | 7.5%                         | 1.9%                                      | 3.8%   |

Source: Jefferies, company data as of 9M 2016



## ADLER Real Estate – Hold, €14 PT

### Opportunistic residential player with positive momentum, but still meagre FFO and weak corporate governance

Opportunistic, higher-yielding residential player with positive momentum – but share valuation not attractive enough

High acquisition activity in recent years

Westgrund was the largest acquisition – pricy deal but of high strategic relevance

High-leverage growth strategy

#### Investment case

Adler is an opportunistic residential player with a higher-yielding portfolio focused on North and West Germany. It has built-up most of its portfolio over the last three years through several portfolio deals – therefore, the company is still in a rather early stage of the corporate cycle, which is reflected in high financial leverage, high financing costs, resulting in low underlying earnings and low levels of transparency and corporate governance. However, momentum is positive for most of these issues, and with the likely sale of its convert stake to Vonovia it should further improve – particularly in respect of de-leveraging and financing. Operating upside mainly stems from vacancy reduction and internalisation of property management. However, the company still needs to provide more track record in this respect. We also regard its subsidiary Accentro as attractive – it operates a condominium privatisation business with a focus on Berlin, a high-margin business. Overall, we like the company's turnaround progress, but stock valuation is not attractive enough to make up for transparency and corporate governance issues. We see GYC offering better value within the opportunistic higher-yield plays. We initiate with a Hold and PT of €14.

Adler has built-up its current portfolio size of about 48,000 units more or less over the last three years. The acquisition of listed peer Westgrund last year was the largest deal with about 17,000 units. The acquisition of the Jade portfolio with almost 7,000 units in 2014 also included property management operations, which served as the base for building-up in-house property management. About a quarter of the property management was done internally in 2015, with the portion expected to increase to about 45% this year and a fully internalised rate in 2017, improving cost efficiency in the longer term.

**Table 91: Adler – Acquisition track record**

| Date   | Transaction                        | # units | Main locations                            | NIY   |
|--------|------------------------------------|---------|---|-------|
| Jun-15 | Westgrund, listed company          | 16,800  | Lower Saxony, Brandenburg, Saxony, Berlin | 6.1%  |
| Oct-14 | Jade portfolio                     | 6,750   | Wilhelmshafen                             | 9.0%  |
| Jun-14 | Corestate portfolio                | 8,500   | Germany-wide                              | 11.3% |
| May-14 | Ajax portfolio                     | 7,721   | Saxony, Sachsen Anhalt, NRW               | n/a   |
| May-14 | Estavis / Accentro, listed company | 2,200   | Berlin, Leipzig, Chemnitz                 | n/a   |
| Jan-14 | Portfolio transaction              | 1,906   | Germany-wide                              | n/a   |
| Dec-13 | Portfolio transaction              | 2,400   | Lower Saxony                              | n/a   |

Source: Jefferies, company data

The Westgrund acquisition was priced at €5.0 per Westgrund share or €407.3m total, split into €224.2m cash and €183.1m Adler shares, corresponding to a 6.1% NCR yield. It resulted in €103.5m of goodwill (25% of acquisition price) – overall a pricy deal in our view, given Westgrund's asset and location quality. However, the deal was important for Adler strategically in respect of scale. There's also a significant portfolio overlap between both portfolios allowing for operating synergies.

The company has realised its expansion through high financial leverage – it also fully levered-up on property revaluations over recent years. It currently states LTV at 66% / 62% incl. / excl. convertibles, which includes goodwill and other assets as value. We base the LTV calculation on investment properties, non-current assets (mainly convert stake)

and inventories (mainly Accentro). On this basis, we calculate an LTV of 72% / 67% incl. / excl. convertibles. The company considers the mandatory convertible as equity, which we also apply. Considering the mandatory convertible as debt would result in a LTV of 73%.

**Table 92: Adler – LTV definition**

|  | Company's LTV definition | LTV (our definition) |
|--|--------------------------|----------------------|
| Value (€m)                             | 3,254                    | 3,004                |
| o/w investment properties              | 2,403                    | 2,403                |
| o/w non-current assets (convert stake) | 446                      | 446                  |
| o/w inventories (Accentro)             | 155                      | 155                  |
| o/w goodwill                           | 131                      | 0                    |
| o/w others                             | 120                      | 0                    |
| Loan (€m)                              |                          |                      |
| o/w net debt incl. convertibles        | -2,160                   | -2,160               |
| o/w net debt excl. convertibles        | -2,015                   | -2,015               |
| LTV                                    |                          |                      |
| LTV incl. convertibles                 | 66.4%                    | 71.9%                |
| LTV excl. convertibles                 | 61.9%                    | 67.1%                |

Source: Jefferies estimates, company data, as of 9M 2016

Still rather high financing costs – significant room for improvement

The company's debt structure is roughly split 70% mortgage lending and 30% capital markets debt, with an average financing rate of 3.8% at five years average debt maturity. The company was rather active in issuing convertibles in recent years with a current outstanding volume of €145m as of 9M 2016 and a current potential share dilution from in-the-money convertibles of 10%. It has recently issued a convertible with a 2.5% coupon at 95% issue price at €13.79 strike price (15% premium), raising c. €138m gross proceeds, which will be mainly used for re-financing. This convertible is currently at-the-money and would dilute by another 18%. We consider in-the-money convertibles in our NAVPS calculation on a fully-diluted base. Therefore, potential dilution is mainly relevant for FFOPS. There is also a 6.25% convertible outstanding with a volume of c. €14m from subsidiary Accentro, maturing in 2019 with a strike price of €2.5.

**Table 93: Adler – convertible bonds**

| Convertible                                | Strike price (€) | Nominal # shares (m) | # shares as of end July 2016 | in % of total capital | Volume (€m) | Comment  |
|--|------------------|----------------------|------------------------------|-----------------------|-------------|--|
| 6% Adler convertible 2013/2017             | 2.00             | 5.0                  | 4.6                          | 8%                    | 9.0         | in-the-money                                       |
| 6% Adler convertible 2013/2018             | 3.75             | 3.0                  | 1.2                          | 2%                    | 4.0         | in-the-money                                       |
| 0.5% Adler mandatory convertible 2015/2018 | 16.50            | 10.6                 | 10.6                         | 18%                   | 1.8         | Most of 175m volume considered as equity           |
| 2.5% Adler convertible 2016/2021           | 13.79            | 10.0                 | 10.0                         | 17%                   | 116.2       | Issued in July 2016 for re-financing, at-the-money |
| Total Adler convertibles                   | -                | 28.6                 | 26.4                         | 45%                   | 131.0       | -  |

**Table 93: Adler – convertible bonds**

| Convertible                           | Strike price (€) | Nominal # shares (m) | # shares as of end July 2016 | in % of total capital | Volume (€m) | Comment |
|---------------------------------------|------------------|----------------------|------------------------------|-----------------------|-------------|---------|
| Total Adler convertibles in-the-money | -                | 8.0                  | 5.8                          | 10%                   | 13.0        | -       |
| 6.25% Accentro convertible 2014/2019  | 2.50             | 6.0                  | -                            | -                     | 14.0        | -       |

Source: Jefferies, company data as of 9M 2016

## High coupon corporate bonds

Besides convertibles, the company has also issued a total of €515m corporate bonds at coupons of 4.75%-8.75%. There's also a corporate bond from subsidiary Accentro with a volume of €10m and a coupon of 9.25%.

**Table 94: Adler – corporate bonds**

| Corporate bond                          | Nominal volume (€m) | Outstanding volume (€m) |
|---|---------------------|-------------------------|
| 4.75% Adler corporate bond 2015/2020    | 350.0               | 344.9                   |
| 6% Adler corporate bond 2014/2019       | 130.0               | 127.7                   |
| 8.75% Adler corporate bond 2013/2018    | 35.0                | 35.0                    |
| Total Adler corporate bonds             | 515.0               | 507.7                   |
| 9.25% Accentro corporate bond 2013/2018 | 10.0                | 11.2                    |

Source: Jefferies, company data as of 9M 2016

## Four equity events in recent years

The company has also raised a total of €285m equity over the last three years. Most equity was raised through a capital increase in kind for the Westgrund acquisition at an issue price of €13.01 per Adler share in April last year. The Estavis acquisition was based on a full share deal at an issue price of €6.44 per Adler share in March 2014. The company also raised capital through 10% ABB transactions in 2013 and 2014.

**Table 95: Adler – capital increases**

| Date   | Transaction                          | # shares (m) | in % of total capital | issue price (€) | Gross proceeds (€m) | Use of proceeds  |
|--------|--------------------------------------|--------------|-----------------------|-----------------|---------------------|--|
| Apr-15 | Capital increase in kind / Westgrund | 14.08        | 44%                   | 13.01           | 183.1               | Acquisition of Westgrund, total acquisition price of 407.3m split into 224.2m cash / 183.1m Adler shares |
| Oct-14 | ABB capital increase                 | 2.85         | 10%                   | 7.40            | 21.1                | Acquisitions, specifically Jade portfolio  |
| Mar-14 | Capital increase in kind / Estavis   | 12.02        | 72%                   | 6.44            | 77.4                | Acquisition of Estavis / Accentro, total acquisition price of  |
| Sep-13 | ABB capital increase                 | 1.50         | 10%                   | 2.40            | 3.6                 | Acquisitions   |

Source: Jefferies, company data

## Strategic focus on de-leveraging

We understand the company's current strategic focus is on de-leveraging, which we appreciate – it works towards a corporate rating by one of the major rating agencies. The proceeds of the potential sale of its convert stake to Vonovia (we see a high deal likelihood) should allow for further de-leveraging and a reduction of financing costs. Our model considers a 4ppt LTV reduction and €7m lower financing costs in FY 2017E from convert proceeds.

## Vonovia offer to provide room for de-leveraging

Adler has irrevocably accepted Vonovia's share offer for convert, which comprises a total of up to 26.2m convert shares (incl. 5m option) or 27.1% of the fully diluted convert

Operating upside through vacancy reduction and rent growth

Minority free-float, dominant main shareholders

share capital, corresponding to about €390m total value at current Vonovia share price. Our model considers €200m proceeds to be used for refinancing and de-leveraging.

Besides reducing financing costs, improving underlying rental growth is the second main earnings driver. The company expect 2% like-for-like rent growth plus 2% like-for-like vacancy reduction annually over the next three years. Current dynamics indicate that this might be within reach – Q3 performance was 1.8% like-for-like rent growth and 1.2%-points vacancy reduction, with strong vacancy improvement versus previous quarter (Q2 plus 0.5% year-on-year). If the company proves this to be a sustainable level, we would regard it as a positive.

Adler's ownership structure is dominated by strategically very active main shareholders – free-float amounts to 47%. Adler has been criticised for corporate governance, specifically in respect of its shareholder structure. Criticism mainly focuses on its main shareholder Mezzanine IX Investors S.A. (21.1% stake). Behind this stake are several family offices with Cevdet Caner regarded as a key person, according to German business weekly Wirtschaftswoche. Cevdet Caner is the founder of Level One, a Monaco-based property investment firm, which went bankrupt in 2008. In this respect, please also refer to the company risk section.

**Table 96: Adler – Dominant main shareholders**

| Shareholder                             | Stake | Background   |
|---|-------|--|
| Klaus Wecken & Cie., Switzerland        | 25.2% | Swiss-based real estate investor, was major shareholder of Westgrund AG, also held a stake in Estavis AG |
| Mezzanine IX Investors S.A., Luxembourg | 21.1% | Family offices, Cevdet Caner regarded as key person acc. to German business weekly Wirtschaftswoche      |
| Thomas Bergander, Germany               | 6.3%  | Germany-based real estate investor, was a major shareholder in Estavis AG                                |
| Asset Value Investors Ltd., UK          | 5.1%  | UK-based asset manager   |

Source: Jefferies, company data as of 9M 2016

Berlin privatisation expertise

Adler also runs a residential trading business through its fully-consolidated subsidiary Accentro. Its regional focus is on Berlin, where it currently owns almost 1,200 residential units for the purpose of disposal through privatisations and block-sales. Accentro's Berlin portfolio is currently valued (at cost) at €1,670 per sqm, which is roughly in line with that of Berlin peers DW and ADO – we therefore don't adjust for a mark-to-market valuation. The value is reflected in Adler's current asset position 'inventories', which stood at €155m as of 9M 2016. Accentro sold 897 privatisation units at 46% gross margin and 614 block sale units at book values as of 9M 2016. The company expects privatisation margins at about 35% in the short- to mid-term. The disposal profits are reflected in Adler's FFO II. We regard the business as attractive. Accentro's expertise on the Berlin residential market should allow it to continue with recent volumes and good margins, even in times of high investment demand.

Potential takeover target with some hurdles

With a 48,000 residential portfolio, we think Adler has reached relevant size for a potential acquirer like Vonovia. The key rationale for a potential deal might be portfolio overlap – Adler's top-3 locations Lower Saxony, NRW and Saxony also belong to Vonovia's top-6 locations if clustered according to federal states. Furthermore, Adler still offers significant refinancing potential with current average interest rate of 3.8%. Accentro, with its Berlin privatisation expertise might also be a relevant factor. We regard Adler's shareholder structure as the key hurdle for a potential deal. Furthermore, weaker portfolio quality might also be a hurdle since Vonovia's strategic focus is on asset quality improvement.

**Risks**

Besides macro and sector-specific risks described in the chapter 'Sector Key Investment Thesis', Adler is exposed to the following company-specific risks:

**Corporate governance risks**

Adler's ownership structure is dominated by strategically very active main shareholders – free-float amounts to only 47%, creating potential conflict of interest between the company and its main shareholder, implying corporate governance risks for minority shareholders. The company's participation in main peer convert serves as a good example for corporate governance risks. While the investment seems to end-up rather profitable for Adler on the back of the Vonovia bid, the deal has implied major risks in respect of investment size and deal complexity. Conwert's market cap was more than 2x that of Adler, and Adler was already running at rather high leverage (>75% LTV) combined with a weak financing situation (4% avg. financing rate). Furthermore, the transaction was characterised by high complexity due to Conwert's high non-core exposure and major corporate governance issues.

**Portfolio quality at the lower-end of the quality spectrum**

The company's residential portfolio is at the lower-end of the quality spectrum in terms of asset and location quality (e.g. lowest average value per sqm, lowest average in-place-rent, highest vacancy rate) with low tenant rent affordability, limiting rental upside through active modernisation investments. Therefore, the company depends on solid underlying residential markets. Any deterioration of the favourable supply / demand situation in affordable housing would negatively impact the company's rental growth.

**High leverage player with high interest rate sensitivity**

Adler runs at highest financial leverage among peers. With an LTV of 71%, the company's interest rate sensitivity is above that of its lower-levered peers. Increasing interest rates might therefore negatively impact the company's property and stock valuation.

The company's average financing rate of 3.8% is well above its peers. The company targets to refinance its mortgage loans by much cheaper rates in order to reduce average financing rate. Proceeds from the potential Vonovia-conwert deal are important for the company's next major de-leveraging step, implying deal execution risks.

**Integration risks**

The company has significantly expanded its portfolio over the last three years implying integration risks.

**Adler valuation**
**Valuation and sensitivity**

Our price target of €14 implies a total return of 0%. It values ADL at 18% target discount on NAV17E and 4.7% target FFO I yield FY17E and implies a target value per sqm of €770 at 7.3% target NCR yield.

**Table 97: ADL – valuation**

| <b>Total return</b> | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016E</b> | <b>2017E</b> | <b>2018E</b> | <b>2019E</b> |
|---------------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Price target (€)    | -           | -           | -           | 14.0         | 14.0         | 14.0         | 14.0         |
| Share price (€)     | -           | -           | -           | 14.0         | 14.0         | 14.0         | 14.0         |
| Deviation           | -           | -           | -           | 0%           | 0%           | 0%           | 0%           |
| Dividend yield      | -           | -           | -           | 0.0%         | 0.0%         | 0.0%         | 0.0%         |
| Total return        | -           | -           | -           | 0%           | 0%           | 0%           | 0%           |

**Current stock valuation**

|                           |        |       |      |      |      |      |      |
|---------------------------|--------|-------|------|------|------|------|------|
| NAV premium               | -50%   | -29%  | 6%   | -7%  | -18% | -23% | -28% |
| FFO 1 yield               | -11.8% | -0.6% | 2.2% | 3.1% | 4.7% | 6.6% | 7.8% |
| AFFO 1 yield              | -11.8% | -0.5% | 0.2% | 0.7% | 2.3% | 4.2% | 5.3% |
| Dividend yield            | 0.0%   | 0.0%  | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Implied NCR yield         | 7.9%   | 7.8%  | 6.8% | 7.0% | 7.3% | 7.4% | 7.7% |
| Implied value per sqm (€) | 734    | 694   | 760  | 783  | 773  | 781  | 778  |

**Target price based valuation**

|                           |   |   |   |      |      |      |      |
|---------------------------|---|---|---|------|------|------|------|
| NAV premium               | - | - | - | -7%  | -18% | -23% | -28% |
| FFO 1 yield               | - | - | - | 3.1% | 4.7% | 6.6% | 7.8% |
| AFFO 1 yield              | - | - | - | 0.7% | 2.3% | 4.2% | 5.3% |
| Dividend yield            | - | - | - | 0.0% | 0.0% | 0.0% | 0.0% |
| Implied NCR yield         | - | - | - | 7.0% | 7.3% | 7.4% | 7.7% |
| Implied value per sqm (€) | - | - | - | 783  | 773  | 782  | 779  |

**Cap rates and values per sqm**

|                                      |      |      |      |      |      |      |      |
|--------------------------------------|------|------|------|------|------|------|------|
| NCR yield                            | 6.8% | 7.2% | 7.0% | 6.8% | 6.7% | 6.7% | 6.7% |
| Implied NCR yield                    | 7.9% | 7.8% | 6.8% | 7.0% | 7.3% | 7.4% | 7.7% |
| Target price based NCR yield         | -    | -    | -    | 7.0% | 7.3% | 7.4% | 7.7% |
| Value per sqm (€)                    | 919  | 762  | 846  | 804  | 840  | 870  | 891  |
| Implied value per sqm (€)            | 734  | 694  | 760  | 783  | 773  | 781  | 778  |
| Target price based value per sqm (€) | -    | -    | -    | 783  | 773  | 782  | 779  |

Source: Jefferies estimates

**Table 98: ADL – NAV sensitivity**

|                       | <b>Yield compression</b> |      |      | <b>Base case</b> |      |      |      | <b>Yield expansion</b> |      |
|-----------------------|--------------------------|------|------|------------------|------|------|------|------------------------|------|
| NCR yield             | 5.7%                     | 6.0% | 6.2% | 6.5%             | 6.7% | 7.0% | 7.2% | 7.5%                   | 7.7% |
| NAVPS (€)             | 23.8                     | 21.9 | 20.2 | 18.6             | 17.2 | 15.7 | 14.3 | 13.0                   | 11.8 |
| % change to base case | 39%                      | 28%  | 18%  | 9%               | 0%   | -9%  | -17% | -24%                   | -31% |

Source: Jefferies estimates

**Key financials**
**Table 99: ADL – key financials (1)**

| Key data                 | 2013   | 2014  | 2015 | 2016E | 2017E | 2018E | 2019E |
|--------------------------|--------|-------|------|-------|-------|-------|-------|
| Gross rental income (€m) | 6      | 56    | 132  | 159   | 164   | 169   | 174   |
| EBITDA adj. (€m)         | 3      | 27    | 96   | 124   | 142   | 152   | 158   |
| FFO I (€m)               | -5     | -1    | 16   | 25    | 41    | 59    | 70    |
| AFFO I (€m)              | -5     | -1    | 1    | 6     | 20    | 38    | 47    |
| NAVPS (€)                | 4.6    | 8.7   | 12.2 | 15.0  | 17.2  | 18.2  | 19.3  |
| FFOPS I (€)              | -0.27  | -0.03 | 0.28 | 0.44  | 0.65  | 0.92  | 1.09  |
| AFFOPS I (€)             | -0.27  | -0.03 | 0.02 | 0.10  | 0.32  | 0.59  | 0.74  |
| DPS (€)                  | 0.00   | 0.00  | 0.00 | 0.00  | 0.00  | 0.00  | 0.00  |
| NAV premium              | -50%   | -29%  | 6%   | -7%   | -18%  | -23%  | -28%  |
| FFO I yield              | -11.8% | -0.6% | 2.2% | 3.1%  | 4.7%  | 6.6%  | 7.8%  |
| AFFO I yield             | -11.8% | -0.5% | 0.2% | 0.7%  | 2.3%  | 4.2%  | 5.3%  |
| Dividend yield           | 0.0%   | 0.0%  | 0.0% | 0.0%  | 0.0%  | 0.0%  | 0.0%  |
| Net LTV                  | 79%    | 78%   | 75%  | 71%   | 66%   | 63%   | 62%   |
| Gearing (x)              | 4.8    | 3.3   | 2.9  | 2.9   | 2.1   | 1.9   | 1.8   |

**Key assumptions**

|                                   |      |       |       |      |      |      |      |
|-----------------------------------|------|-------|-------|------|------|------|------|
| Like-for-like rent growth (y-o-y) | 2.5% | 2.5%  | 2.5%  | 4.0% | 3.0% | 3.0% | 3.0% |
| Vacancy rate                      | 9.0% | 12.8% | 11.2% | 9.2% | 8.2% | 7.2% | 6.2% |
| NCR yield                         | 6.8% | 7.2%  | 7.0%  | 6.8% | 6.7% | 6.7% | 6.7% |
| NCR multiplier (x)                | 14.6 | 13.9  | 14.4  | 14.7 | 14.9 | 15.0 | 14.9 |
| Value per sqm (€)                 | 919  | 762   | 846   | 804  | 840  | 870  | 891  |

**Per share data (€)**

|                                   |       |       |      |      |      |      |      |
|-----------------------------------|-------|-------|------|------|------|------|------|
| Number of shares, outstanding (m) | 17    | 32    | 57   | 58   | 63   | 64   | 64   |
| NAVPS                             | 4.6   | 8.7   | 12.2 | 15.0 | 17.2 | 18.2 | 19.3 |
| FFOPS I                           | -0.27 | -0.03 | 0.28 | 0.44 | 0.65 | 0.92 | 1.09 |
| FFOPS II                          | 0.16  | 0.04  | 0.78 | 0.95 | 1.29 | 1.55 | 1.71 |
| AFFOPS I                          | -0.27 | -0.03 | 0.02 | 0.10 | 0.32 | 0.59 | 0.74 |
| AFFOPS II                         | 0.16  | 0.05  | 0.52 | 0.61 | 0.96 | 1.21 | 1.36 |
| EPS                               | 2.83  | 2.47  | 1.96 | 2.65 | 2.77 | 2.59 | 2.36 |

**Valuation**

|                           |        |       |      |      |      |       |       |
|---------------------------|--------|-------|------|------|------|-------|-------|
| NAV premium               | -50%   | -29%  | 6%   | -7%  | -18% | -23%  | -28%  |
| FFO I yield               | -11.8% | -0.6% | 2.2% | 3.1% | 4.7% | 6.6%  | 7.8%  |
| FFO II yield              | 6.7%   | 0.7%  | 6.0% | 6.8% | 9.2% | 11.1% | 12.2% |
| AFFO I yield              | -11.8% | -0.5% | 0.2% | 0.7% | 2.3% | 4.2%  | 5.3%  |
| AFFO II yield             | 6.7%   | 0.8%  | 4.0% | 4.4% | 6.8% | 8.6%  | 9.7%  |
| Dividend yield            | 0.0%   | 0.0%  | 0.0% | 0.0% | 0.0% | 0.0%  | 0.0%  |
| Payout ratio (% of FFO I) | 0%     | 0%    | 0%   | 0%   | 0%   | 0%    | 0%    |
| Implied NCR yield         | 7.9%   | 7.8%  | 6.8% | 7.0% | 7.3% | 7.4%  | 7.7%  |
| Implied value per sqm (€) | 734    | 694   | 760  | 783  | 773  | 781   | 778   |

Source: Company data, Jefferies estimates

**Table 100: ADL – key financials (2)**

| <b>Key income data and ratios</b>        | <b>2013</b> | <b>2014</b> | <b>2015</b> | <b>2016E</b> | <b>2017E</b> | <b>2018E</b> | <b>2019E</b> |
|--|-------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Gross rental income (€m)                 | 6           | 56          | 132         | 159          | 164          | 169          | 174          |
| Net operating income (€m)                | 0           | 0           | 0           | 0            | 0            | 0            | 0            |
| EBITDA adj. (€m)                         | 3           | 27          | 96          | 124          | 142          | 152          | 158          |
| Valuation result (€m)                    | 60          | 133         | 59          | 123          | 109          | 89           | 66           |
| Disposal result (€m)                     | 1           | 2           | 23          | 30           | 40           | 40           | 40           |
| Net financing costs (€m)                 | 8           | 40          | 81          | 89           | 71           | 70           | 70           |
| PBT (€)                                  | 63          | 100         | 128         | 178          | 200          | 190          | 174          |
| Net profit (€m)                          | 47          | 79          | 111         | 155          | 174          | 166          | 151          |
| FFO I (€m)                               | -5          | -1          | 16          | 25           | 41           | 59           | 70           |
| FFO II (€m)                              | 3           | 1           | 44          | 55           | 81           | 99           | 110          |
| AFFO I (€m)                              | -5          | -1          | 1           | 6            | 20           | 38           | 47           |
| AFFO II (€m)                             | 3           | 2           | 29          | 36           | 60           | 78           | 87           |
| NOI margin                               | 0%          | 0%          | 0%          | 0%           | 0%           | 0%           | 0%           |
| EBITDA adj. margin                       | 48%         | 49%         | 73%         | 78%          | 86%          | 90%          | 91%          |
| FFO I margin                             | -73%        | -2%         | 12%         | 16%          | 25%          | 35%          | 40%          |
|  |             |             |             |              |              |              |              |
| <b>Key balance sheet data and ratios</b> |             |             |             |              |              |              |              |
| Investment property (€m)                 | 418         | 1,261       | 2,782       | 3,028        | 2,691        | 2,780        | 2,846        |
| Cash and equivalents (€m)                | 7           | 33          | 50          | 112          | 117          | 143          | 208          |
| Shareholders' equity (€m)                | 72          | 291         | 719         | 780          | 898          | 946          | 1,003        |
| NAV (€m)                                 | 95          | 351         | 880         | 1,072        | 1,221        | 1,293        | 1,368        |
| Net debt (€m)                            | 346         | 969         | 2,063       | 2,247        | 1,873        | 1,843        | 1,843        |
| Net LTV (%)                              | 79%         | 78%         | 75%         | 71%          | 66%          | 63%          | 62%          |
| Gearing (x)                              | 4.8         | 3.3         | 2.9         | 2.9          | 2.1          | 1.9          | 1.8          |
|  |             |             |             |              |              |              |              |
| <b>Key cash flow data and ratios</b>     |             |             |             |              |              |              |              |
| CF operating (€m)                        | 12          | 17          | 25          | 82           | 60           | 78           | 87           |
| CF investing (€m)                        | -94         | -208        | -439        | -74          | 320          | -22          | -22          |
| CF financing (€m)                        | 88          | 218         | 430         | 55           | -374         | -30          | 0            |
| Net cash flow (€m)                       | 6           | 26          | 16          | 62           | 6            | 26           | 65           |
| Cash at beginning of period (€m)         | 1           | 7           | 33          | 50           | 112          | 117          | 143          |
| Cash at the end of period (€m)           | 7           | 33          | 50          | 112          | 117          | 143          | 208          |

Source: Company data, Jefferies estimates



Opportunistic higher yielding residential player

48,000 units portfolio with high portion of non-core

Lowest average rent and highest vacancy level

## Company description

Adler runs a c.48,000 units residential portfolio with a hold-to-let strategy in the lower-end quality cluster of the affordable housing segment. The portion of non-core assets is relatively high with about 4,500 units, accounting for c.10% of the total portfolio. The company has built-up its portfolio over the last three years with the major expansion steps in 2014 and 2015. The company also runs a condominium disposal business through its fully-consolidated subsidiary Accentro. Adler also owns a 26.4% stake in conwert, which it agreed to sell to Vonovia in the course of the takeover bid. Adler's current strategic focus is on de-leveraging, optimising financing and rental growth through vacancy reduction and regular rent increases. Adler's ownership structure is dominated by strategically very active main shareholders; free-float amounts to about 47%. The company is listed in the German SDAX.

## Portfolio

The portfolio comprises about 48,000 residential units with a rather high portion of non-core units (4,500 units). The company provides a split of its portfolio based on the number of rental units per federal state. Lower Saxony, NRW and Saxony comprise most of the units accounting for about 70% of total units. Overall, the company's portfolio transparency is relatively low.

**Table 101: Adler portfolio structure**

|                               | Rental units | in % of total |
|-------------------------------|--------------|---------------|
| Lower Saxony                  | 16,453       | 35%           |
| North Rhine Westphalia        | 9,163        | 20%           |
| Saxony                        | 7,253        | 16%           |
| Brandenburg                   | 3,625        | 8%            |
| Saxony-Anhalt                 | 3,351        | 7%            |
| Thuringia                     | 1,936        | 4%            |
| Berlin                        | 1,662        | 4%            |
| Mecklenburg-Western-Pomerania | 1,477        | 3%            |
| Schleswig-Holstein            | 650          | 1%            |
| Rhineland-Palatinate          | 530          | 1%            |
| Hesse                         | 249          | 1%            |
| Bavaria                       | 133          | 0%            |
| Bremen                        | 48           | 0%            |
| Baden-Wuerttemberg            | 21           | 0%            |
| Total                         | 46,551       | 100%          |

Source: Jefferies, company data as of 9M 2016

The company's average rent amounts to €4.99 per sqm/month, which is the lowest level among peers, rather close to main peer TAG (€5.05). Its vacancy rate is 10.7%, which is the highest among peers – versus other higher vacancy peers TAG (6.7%) and GYC (8.4%).

**Table 102: Adler portfolio KPIs**

|                               | In-place rent per sqm/month (€) | Occupancy |
|-------------------------------|---------------------------------|-----------|
| Lower Saxony                  | 4.84                            | 90.6%     |
| North Rhine Westphalia        | 5.07                            | 90.3%     |
| Saxony                        | 4.69                            | 85.4%     |
| Brandenburg                   | 4.74                            | 87.5%     |
| Saxony-Anhalt                 | 4.65                            | 84.9%     |
| Thuringia                     | 5.43                            | 79.9%     |
| Berlin                        | 5.58                            | 98.7%     |
| Mecklenburg-Western-Pomerania | 5.06                            | 88.4%     |
| Schleswig-Holstein            | 5.93                            | 91.8%     |
| Rhineland-Palatinate          | 6.89                            | 93.0%     |
| Hesse                         | 5.93                            | 87.3%     |
| Bavaria                       | 5.68                            | 84.0%     |
| Bremen                        | 5.18                            | 97.6%     |
| Baden-Wuerttemberg            | 7.84                            | 77.5%     |
| Total as of 1H 2016           | 4.98                            | 88.9%     |
| Total as of 9M 2016           | 4.99                            | 89.3%     |

Source: Jefferies, company data as of 9M 2016

Portfolio valuation only annually

The company provides property valuation on portfolio level only on an annual total base.

**Table 103: Adler portfolio valuation**

|                               | Fair value (€ '000) | in % of total |
|-------------------------------|---------------------|---------------|
| Lower Saxony                  | 731                 | 33%           |
| North Rhine Westphalia        | 535                 | 24%           |
| Saxony                        | 298                 | 13%           |
| Brandenburg                   | 130                 | 6%            |
| Saxony-Anhalt                 | 149                 | 7%            |
| Thuringia                     | 74                  | 3%            |
| Berlin                        | 115                 | 5%            |
| Mecklenburg-Western-Pomerania | 54                  | 2%            |
| Schleswig-Holstein            | 36                  | 2%            |
| Rhineland-Palatinate          | 49                  | 2%            |
| Hesse                         | 47                  | 2%            |
| Bavaria                       | 11                  | 0%            |
| Bremen                        | 5                   | 0%            |
| Baden-Wuerttemberg            | 2                   | 0%            |
| Total                         | 2,235               | 100%          |

Source: Jefferies, company data as of 9M 2016

## Appendix

### Residential rent regulations in Germany – a short description

German residential rents highly regulated

The German residential rental market is characterised by high regulation levels. The normal lease contract between a tenant and a professional landlord is based on an unlimited lease length and only the tenant has the right to terminate the contract, as long as the tenant pays the rent. The main instrument to adjust rents for existing leases is the rent index ('Mietspiegel'), which is a rent index table normally published every two years for most of the larger cities. The other key instrument to increase rents for existing leases is the so called 'Modernisierungsumlage', which is possible after modernisations. The main instrument to adjust rents for new leases (re-letting), is the so called 'Mietpreisbremse' or rental cap, which was introduced in June 2015 and caps re-lets at a maximum of 10% above the local comparable rent (e.g. rent index rent). Rent adjustments for subsidised housing (social housing) are typically defined for the long-term through low-interest loans or direct rent subsidies. Please, also refer to Table 104 'Residential Rent Regulations'.

**Table 104: Residential rent regulations**

| Rent adjustment                      | Restrictions  | Comment  |
|--------------------------------------|---|--|
| Regular rent increase                | Adjustment no more frequently than every 15 months<br><br>Rent increases are capped by the so-called 'Kappungsgrenze': They can be raised by no more than 15%/20% over a three-year period; the lower 15% cap can be applied by municipalities with 'tight' housing markets   | Rent increases for existing leases need to be agreed by both parties, the landlord and the tenant, the landlord is legally not allowed to terminate the lease contract if the tenant doesn't accept the rent increase, the tenant is allowed to terminate the lease contract in case of a rent increase  |
|                                      | Revised rents must not exceed the local comparable rent, that can be measured by:<br>a) The so-called 'Mietspiegel' (rent index), b) The average of three comparable apartments, c) An external appraiser   | The rent index ('Mietspiegel') is the most relevant instrument for measuring the 'local comparable rent'; theoretically it reflects market rent dynamics of the last four years (statistical reference period), however, the final outcome is the result of negotiations between tenant and landlord associations and local politicians  |
| Rent increase after modernisation    | Rent increases are capped at a maximum of 11% of the modernisation expenses on an annual base, specific costs caused by the modernisation including interest on credit, administrative costs, loss of rent due to vacancy, etc. cannot be allocated, the average allocation rate amounts to 40%-70% depending on the type of modernisation<br><br>Soft cap: the so called 'Härtefallregelung', a hardship ruling, which applies when the rent increase is significant; however the ruling is rather vague ('soft') and needs to be agreed on an individual base | Modernisation investments according to §559 of the German civil code, the so called 'Modernisierungsumlage', the 'Kappungsgrenze' and the limitation through the rent cap do not apply for these rent increases; therefore rent increases can be significant and are typically capped by the tenant's affordability level  |
| Rent increase for re-lettings        | Rent increases are capped at a maximum of 10% above the local comparable rent   | Newly-built and 'extensively modernised' apartments are exempt from the new rental cap; 'extensively modernised' is not specified, however, the draft law gave the following indication: 'If modernisation costs correspond to about one-third of a comparable newly-built'; The law became effective in June 2015; Berlin was the first major city who applied the law; The rent table ('Mietspiegel') is widely seen as the key measure for comparable rents; there is no sanction mechanism if a landlord charges a rent above the rent cap |
|                                      | It can be applied by municipalities for a period of five years if they regard their housing market as 'tight'   |  |
|                                      | Re-lets are protected against cuts below the rent level of the previous lease and there is no obligation for the landlord to disclose the previous rent   |  |
| Rent increase for subsidised housing | Typically defined for the long-term   | Either through low-interest loans or direct rent subsidies   |
| Milieuschutz                         | Modernisation investments in so called 'Milieuschutz' areas are subject to approval, which might limit rental upside  | The so-called 'Milieuschutz' is a kind of indirect rent regulation, it is ruled in the German construction law, it targets to prevent gentrification in 'tight' residential markets, it defines certain areas in key cities, where conversions from rental apartments into condominiums are subject to approval by the municipality, also modernisation investments are subject to approval  |

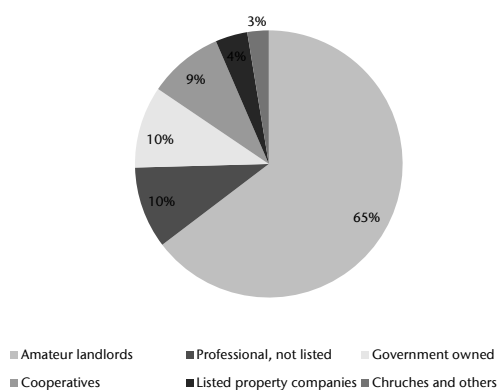
Source: Jefferies, company data

### Germany Europe's largest residential rental market

## The German residential market – a short description

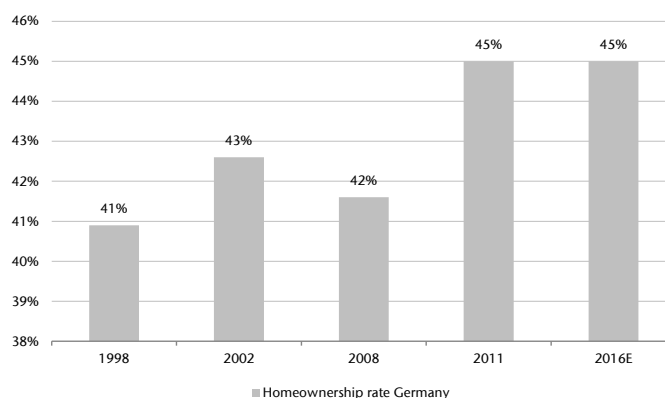
Germany, with about 82m inhabitants, 42m residential units and a home ownership rate of below 50%, is Europe's largest residential rental market. It is dominated by amateur landlords accounting for about 65% of rental units. The listed sector only comprises about 4% of the rental units. It is characterised by a high level of rent regulations, resulting in high rent affordability. Rent regulations create a large rental backlog, reflected in a wide gap between in-place rents and market rents (re-lets), providing solid rental growth potential. The affordable rental segment is characterised by a favourable supply/demand situation. Demand is mainly driven by positive net migration and urbanisation trends. On the other hand, the supply side is negatively impacted by low construction activity (due to highly regulated rents), a declining social housing stock and close-to-zero vacancy in key metropolitan areas. On this base, price and rent dynamics in key metropolitan areas have been rather strong in recent years. For the top-6 cities, average condominium prices and market rents have increased by 11% p.a. and 5% p.a., respectively, over the last six years, according to data from JLL. The standard lease contract is not subject to any fixed lease maturity. The average tenant turnover is 7%-10% p.a. implying a theoretical average lease length of 10-14 years.

**Chart 136: Amateur landlords dominate the market**



Source: Jefferies Vonovia, GdW (German Association of Professional Homeowners)

**Chart 137: Low home ownership rate**



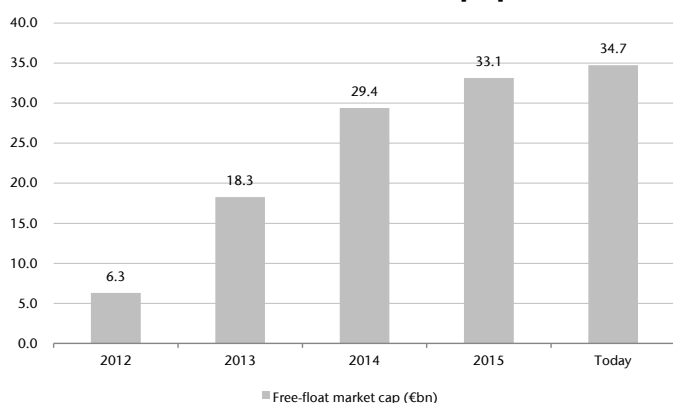
Source: Jefferies, Destatis for 1998-2011; number of households living in owner-occupied residential property, 2016E based on empirica research showing ratio remained unchanged in recent years

Listed residential players focused on the affordable housing segment

## The German listed residential sector – a short description

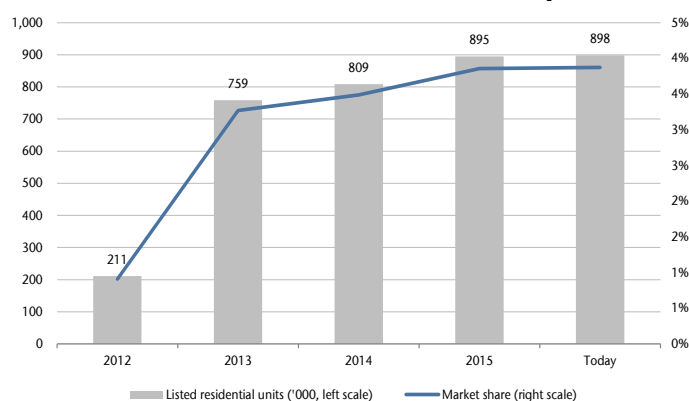
The German listed residential players run German pure play hold-to-rent models focusing on the affordable housing segment. The average rent for a 60sqm apartment amounts to about €350 per month. They all have their key asset and property management functions insourced. Typically, craftsmen organisations are outsourced, with the exception of Vonovia. It is a more or less unique asset class in Europe, since these residential rental pure plays only exist in Germany. The listed sector comprises about 1m residential units, corresponding to about 4% market shares. All players are non-REITs, since the German REIT legislation doesn't allow residential models. The listed residential sector has been growing significantly in recent years with total free-float market cap increasing from about €5bn end 2012 to about €37bn as of today. This has been partly driven by a number of large-cap IPOs including Vonovia and LEG, large secondary placements of private equity owners, as well as high acquisition activity. With Vonovia, the first real estate player was included in the German DAX index in 2015. M&A activity within the listed players has also been rather high in recent years, with Vonovia-Gagfah and Deutsche Wohnen-GSW the largest deals. We expect sector consolidation to continue.

**Chart 138: Sector's free-float market cap up**



Source: Jefferies Factset. Comprises all listed players with German residential portfolios

**Chart 139: Number of listed residential units up**



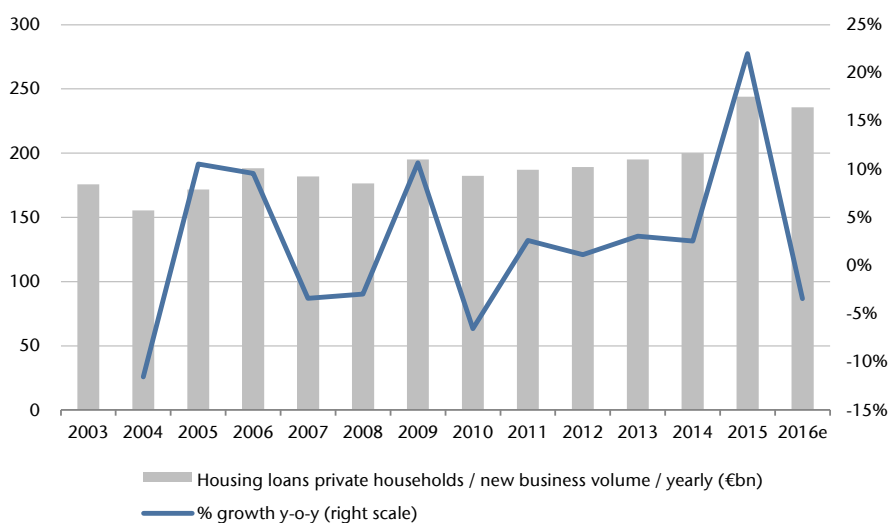
Source: Jefferies, company data. Comprises all listed players with German residential portfolios

Favourable lending conditions for private individuals

## Mortgages in Germany for private individuals – a short description

The average mortgage of a private individual in Germany is typically fixed rather long term – only about 1% is based on variable loans. Currently, the average maturity is 14.6 years and the average annual amortisation rate is 3.2% at an average LTV of 78%, according to Dr. Klein, one of the major independent mortgage brokers in Germany. The average financing rate for a 10-year mortgage currently stands at below 0.8%, about 10bps above recent lows, according to Dr. Klein. On the back of rather cheap financing rates, private mortgage loan volumes went up strongly recently, with new volume up by 22% in 2015 and August 2016 annualized levels only 3% below the high 2015 level.

**Chart 140: Private mortgages up**



Source: Jefferies, Bundesbank. 2016e: Aug 2016 number extrapolated

**Table 105: CBRE key residential numbers top 29 cities (demographics)**

| City              | # of Population 2014 | # of Population Development 2011-2014<br>(in %) | Demographics                      |       |       |       |   |    |    |    | # of Habitants Residents Forecast 2012-2030 (in %) | # of Households Forecast 2012-2030 (in %) |
|-------------------|----------------------|---|-----------------------------------|-------|-------|-------|---|----|----|----|--|---|
|                   |                      |   | Age Segment Breakdown 2014 (in %) |       |       |       | Residents per Household Breakdown 2014 (in %) |    |    |    |  |   |
|                   |                      |   | <18                               | 18-29 | 30-44 | 45-59 | 60+   | 1  | 2  | 3+ |  |   |
| Augsburg          | 281,111              | 4.3   | 15                                | 18    | 21    | 21    | 25  | 51 | 28 | 21 | -1.9   | 3.7                                       |
| Berlin            | 3,469,849            | 4.3   | 16                                | 16    | 22    | 22    | 25  | 54 | 28 | 18 | 4.7  | 5.9                                       |
| Braunschweig      | 248,502              | 1.9   | 15                                | 18    | 20    | 21    | 26  | 52 | 31 | 27 | -2.3   | 1.2                                       |
| Bremen            | 551,767              | 1.4   | 15                                | 16    | 19    | 22    | 27  | 50 | 31 | 19 | -0.2   | 1.2                                       |
| Chemnitz          | 243,521              | 1.2   | 14                                | 14    | 18    | 20    | 35  | 46 | 34 | 19 | -17.5  | 15.4                                      |
| Dortmund          | 580,511              | 1.6   | 16                                | 16    | 19    | 23    | 27  | 49 | 29 | 23 | -3.1   | 1.4                                       |
| Dresden           | 536,308              | 3.6   | 16                                | 18    | 21    | 18    | 27  | 51 | 31 | 18 | 1.2  | 3.0                                       |
| Duisburg          | 485,465              | -0.4  | 16                                | 15    | 19    | 23    | 27  | 45 | 29 | 25 | -7.6   | -3.2                                      |
| Düsseldorf        | 604,527              | 2.5   | 15                                | 15    | 22    | 22    | 25  | 54 | 26 | 20 | 3.4  | 6.9                                       |
| Erfurt            | 206,219              | 2.1   | 15                                | 16    | 19    | 22    | 28  | 45 | 33 | 22 | -7.0   | -4.4                                      |
| Essen             | 573,784              | 1.4   | 15                                | 15    | 19    | 23    | 28  | 49 | 29 | 22 | -5.0   | -0.4                                      |
| Frankfurt am Main | 712,624              | 6.1   | 16                                | 16    | 25    | 21    | 21  | 54 | 24 | 22 | -0.2   | 3.4                                       |
| Freiburg          | 222,203              | 3.7   | 13                                | 23    | 21    | 20    | 21  | 47 | 28 | 25 | 5.8  | 10.3                                      |
| Halle (Saale)     | 232,470              | 0.9   | 14                                | 17    | 18    | 20    | 31  | 51 | 34 | 16 | -14.3  | -11.6                                     |
| Hamburg           | 1,762,791            | 2.6   | 16                                | 16    | 23    | 22    | 24  | 51 | 29 | 19 | 5.4  | 6.7                                       |
| Hannover          | 523,642              | 2.8   | 15                                | 18    | 21    | 21    | 24  | 55 | 28 | 17 | 3.7  | n/a                                       |
| Karlsruhe         | 300,051              | 2.8   | 15                                | 20    | 21    | 21    | 24  | 54 | 26 | 20 | -0.3   | 3.5                                       |
| Kiel              | 243,148              | 2.3   | 14                                | 21    | 20    | 21    | 24  | 26 | 27 | 17 | -3.8   | 0.3                                       |
| Köln              | 1,046,680            | 3.3   | 16                                | 17    | 23    | 22    | 23  | 50 | 27 | 22 | 1.9  | 5.4                                       |
| Leipzig           | 544,479              | 6.8   | 15                                | 18    | 22    | 19    | 27  | 53 | 30 | 17 | 1.1  | 2.8                                       |
| Lübeck            | 214,420              | 1.8   | 15                                | 15    | 18    | 23    | 29  | 51 | 29 | 20 | -2.7   | 0.5                                       |
| Magdeburg         | 232,305              | 1.5   | 14                                | 17    | 18    | 21    | 31  | 47 | 36 | 17 | -11.0  | -8.0                                      |
| Mainz             | 206,991              | 0.3   | 15                                | 21    | 22    | 20    | 23  | 52 | 27 | 21 | 0.0  | 5.1                                       |
| Mannheim          | 299,844              | 2.9   | 15                                | 18    | 21    | 22    | 24  | 47 | 29 | 24 | 4.1  | 8.2                                       |
| München           | 1,429,584            | 4.7   | 15                                | 17    | 25    | 20    | 23  | 54 | 25 | 20 | 4.3  | 7.6                                       |
| Nürnberg          | 501,072              | 2.2   | 15                                | 16    | 21    | 21    | 26  | 50 | 28 | 22 | 3.7  | 7.3                                       |
| Rostock           | 204,167              | 1.2   | 13                                | 18    | 19    | 21    | 30  | 53 | 31 | 16 | -10.1  | -7.6                                      |
| Stuttgart         | 612,441              | 3.6   | 15                                | 18    | 23    | 20    | 23  | 45 | 29 | 26 | 4.5  | 8.2                                       |
| Wiesbaden         | 275,116              | 1.5   | 17                                | 14    | 21    | 22    | 25  | 47 | 28 | 26 | 6.6  | 10.4                                      |

Source: CBRE residential market report Germany 2016, Jefferies



**Table 106: CBRE key residential numbers top 29 cities (economics and property specific metrics)**

| City              | Economics                               |  |                               |                                      |                                    | Property Specifications                                 |   |   |
|-------------------|---|--|-------------------------------|--------------------------------------|------------------------------------|---|---|---|
|                   | Purchasing Power per Capita 2015 (in €) | Social Security Subjected Workers Development 2004-2014 (in %) | Unemployment Rate 2014 (in %) | Average Rent 2015 (in € / sqm / mth) | Average Offered Area 2015 (in sqm) | Vacancy in Multi-Family Residential Apartments 2014 (%) | Completed Apartments per 1,000 residents 2014 | Thereof Multi-Family Residential Apartments |
| Augsburg          | 20,911                                  | 11.6   | 6.7                           | 8.50                                 | 63.0                               | 1.2   | 5.5   | 4.7   |
| Berlin            | 20,303                                  | 24.6   | 11.1                          | 8.99                                 | 64.3                               | 1.5   | 2.1   | 1.5   |
| Braunschweig      | 23,154                                  | 17.4   | 6.8                           | 7.16                                 | 65.0                               | 2.0   | 1.2   | 0.6   |
| Bremen            | 21,018                                  | 11.5   | 10.1                          | 7.21                                 | 64.0                               | 2.2   | 2.0   | 1.4   |
| Chemnitz          | 19,256                                  | 6.3  | 9.9                           | 5.00                                 | 59.0                               | 9.2   | 1.7   | 0.8   |
| Dortmund          | 20,053                                  | 12.8   | 12.8                          | 6.00                                 | 64.0                               | 2.6   | 1.6   | 1.0   |
| Dresden           | 19,692                                  | 17.3   | 8.4                           | 6.93                                 | 58.3                               | 2.1   | 2.4   | 2.7   |
| Duisburg          | 18,459                                  | 6.6  | 13.0                          | 5.36                                 | 64.0                               | 5.1   | 1.0   | 0.5   |
| Düsseldorf        | 25,963                                  | 15.5   | 8.1                           | 9.23                                 | 70.0                               | 1.6   | 3.7   | 3.3   |
| Erfurt            | 19,918                                  | 6.8  | 8.2                           | 6.60                                 | 61.2                               | 2.6   | 1.7   | 0.9   |
| Essen             | 21,601                                  | 11.3   | 12.4                          | 6.00                                 | 64.0                               | 3.4   | 1.3   | 0.7   |
| Frankfurt am Main | 25,168                                  | 15.2   | 7.3                           | 12.00                                | 72.0                               | 0.6   | 5.0   | 4.4   |
| Freiburg          | 20,816                                  | 22.2   | 6.0                           | 10.91                                | 66.0                               | 0.7   | 3.0   | 2.7   |
| Halle (Saale)     | 18,129                                  | -0.7   | 11.8                          | 5.63                                 | 58.0                               | 8.2   | 0.6   | 0.1   |
| Hamburg           | 24,331                                  | 21.9   | 7.6                           | 10.23                                | 65.0                               | 0.7   | 3.5   | 2.9   |
| Hannover          | 22,432                                  | 12.9   | 10.2                          | 7.50                                 | 65.2                               | 2.0   | 1.9   | 1.4   |
| Karlsruhe         | 22,738                                  | 17.7   | 5.5                           | 8.97                                 | 72.0                               | 0.9   | 2.4   | 1.6   |
| Kiel              | 19,815                                  | 16.6   | 10.1                          | 7.03                                 | 57.0                               | 1.7   | 1.0   | 0.5   |
| Köln              | 23,487                                  | 18.2   | 9.6                           | 9.86                                 | 67.0                               | 1.1   | 3.3   | 2.5   |
| Leipzig           | 18,873                                  | 28.2   | 10.2                          | 5.63                                 | 62.0                               | 6.0   | 1.4   | 0.9   |
| Lübeck            | 20,170                                  | 15.9   | 10.1                          | 6.94                                 | 59.0                               | 1.4   | 2.0   | 0.8   |
| Magdeburg         | 18,895                                  | 4.2  | 11.4                          | 5.45                                 | 58.6                               | 5.5   | 1.6   | 0.6   |
| Mainz             | 23,473                                  | 13.9   | 6.4                           | 10.00                                | 63.0                               | 1.2   | 5.0   | 3.8   |
| Mannheim          | 21,649                                  | 13.1   | 6.0                           | 8.10                                 | 66.1                               | 1.9   | 2.1   | 1.5   |
| München           | 29,037                                  | 18.0   | 5.2                           | 14.61                                | 71.3                               | 0.4   | 4.4   | 3.8   |
| Nürnberg          | 22,767                                  | 12.5   | 7.6                           | 8.42                                 | 66.0                               | 1.0   | 3.1   | 2.2   |
| Rostock           | 19,003                                  | 16.4   | 10.9                          | 6.30                                 | 58.0                               | 3.1   | 2.1   | 1.3   |
| Stuttgart         | 24,919                                  | 11.7   | 5.7                           | 10.91                                | 74.0                               | 1.0   | 2.8   | 6.7   |
| Wiesbaden         | 24,352                                  | 5.4  | 7.4                           | 9.24                                 | 73.0                               | 2.0   | 2.0   | 1.8   |

Source: Jefferies

## Long Views

## Scenarios

## Target Investment Thesis

- Ongoing strong residential dynamics with no regulation changes until 2018E
- Like-for-like rental growth of 3.9% p.a. avg. from 2017 to 2019E
- Cap rate compression by 76bps over next 3yrs from 4.7% in FY 2016E to 4.0% in 2019E
- NAVPS of €33.9 in FY 2017E (+20% y-o-y)
- Implied target metrics 2017E: 3% NAV premium, 3.7% FFO yield, 4.2% cap rate, €1,850 value per sqm

## Upside Scenario

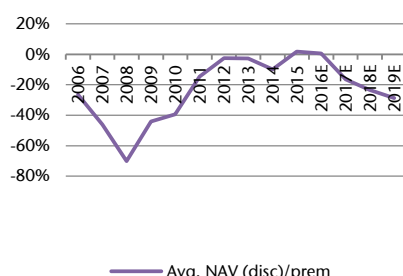
- Accelerating residential dynamics
- Like-for-like rental growth above 4.2% p.a. avg. from 2017 to 2019E
- Cap rate compression by 100bps over next 3yrs to 3.7% in 2019E
- NAVPS of €37.3 in FY 2017E (+11% versus base case)
- Price target €39
- Implied target metrics 2017E: 3.3% FFO yield, 3.9% cap rate, €2,000 value per sqm

## Downside Scenario

- Declining residential dynamics
- Like-for-like rental growth below 3.6% p.a. avg. from 2017 to 2019E
- Cap rate expanding by 40bps over the next 3yrs to 4.3% in 2019E
- NAVPS of €30.2 in FY 2017 (-12% versus base case)
- Price target €32
- Implied target metrics 2017E: 4.0% FFO yield, 4.4% cap rate, €1,740 value per sqm

## Long Term Analysis

## NAV valuation



Source: Factset, Jefferies estimates

## Long Term Financial Model Drivers

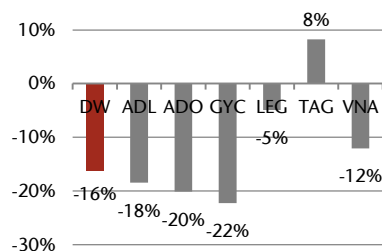
|                             |             |
|-----------------------------|-------------|
| <b>Rental growth (3yrs)</b> | <b>3.9%</b> |
| Yield shift (3yrs)          | -76bps      |
| NAV growth (CAGR 3yrs)      | 12%         |
| FFO growth (CAGR 3yrs)      | 9%          |

## Other Considerations

The company has a high exposure to the Berlin residential market. Berlin residential dynamics currently show the highest momentum among the major German cities, together with Munich. DW benefits from those excellent market dynamics and even outperforms market dynamics due to its large, highly efficient management platform.

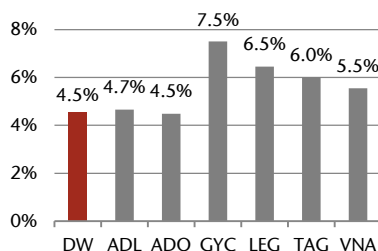
## Peer Group

## NAV 2017E (disc.)/prem



Source: Jefferies estimates, Factset

## FFO I yield 2017E



Source: Jefferies estimates, Factset

## Recommendation / Price Target

| Ticker         | Rec.       | PT         |
|----------------|------------|------------|
| <b>DWIN GR</b> | <b>Buy</b> | <b>€35</b> |
| ADL GR         | Hold       | €14        |
| ADJ GR         | Buy        | €38        |
| GYC GR         | Buy        | €19        |
| LEG GR         | Buy        | €84        |
| TEG GR         | Hold       | €12        |
| VNA GR         | Hold       | €32        |

## Catalysts

- Continuing strong Berlin residential dynamics in respect of demographics, house price and rent growth.
- Increased capex levels will lead to higher rental growth with positive surprise potential vs. conservative management guidance.
- New Berlin rent index to be released in May next year with strong market rent dynamics indicating a solid increase.
- DAX entry would improve liquidity and broaden investor base.

## Company Description

DW runs a c.158,000 units residential portfolio with a hold-to-let strategy in the affordable housing segment. It has a strong Berlin focus with almost 75% exposure to the capital. A small part of its business is 'nursing and assisted living'. The company has roughly doubled its portfolio size over the last four years, most of it in 2012-2014. The acquisition of its listed peer GSW in 2013 was the largest single expansion step. It is characterised by above-average rent and NAV growth with strong balance sheet and financing. It is the second largest player among the listed peers, listed in the MDAX segment of the Deutsche Boerse and regarded as a potential DAX candidate. Its shareholder structure is characterised by real estate specialist investors. It is an active consolidation player, even though the last two listed M&A deals failed (conwert and LEG as takeover targets). With the Vonovia bid last year, it has become an acquisition target itself; however the deal has also failed. Within the management board, CEO Michael Zahn has been playing a rather dominant role over the last decade. He's a real estate expert with deep sector know-how, rather than a capital markets expert.

**Scenarios**
**Target Investment Thesis**

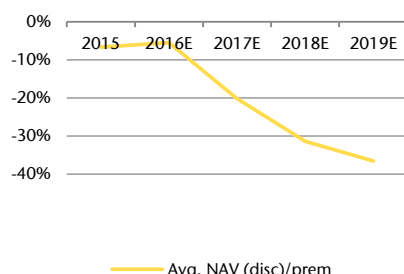
- Ongoing strong residential dynamics with no regulation changes until 2018E
- Like-for-like rental growth of 4.5% p.a. avg. from 2017 to 2019E
- Cap rate compression by 64bps over next 3yrs from 4.4% in FY 2016E to 3.7% in 2019E
- NAVPS of €38.3 in FY 2017 (+18% y-o-y)
- Implied target metrics 2017E: 1% NAV discount, 3.6% FFO yield, 4.0% cap rate, €1,890 value per sqm

**Upside Scenario**

- Accelerating residential dynamics
- Like-for-like rental growth above 5.8% p.a. avg. from 2017 to 2019E
- Cap rate compression by 80bps over next 3yrs to 3.4% in 2019E
- NAVPS of €42.1 in FY 2017E (+10% vs. base case)
- Price target €42
- Implied target metrics 2017E: 3.3% FFO yield, 3.8% cap rate, €2,000 value per sqm

**Downside Scenario**

- Declining residential dynamics
- Like-for-like rental growth below 3.5% p.a. avg. from 2017 to 2019E
- Cap rate expanding by 50bps over next 3yrs to 4.9% in 2019E
- NAVPS of €34.5 in FY 2017E (-11% vs. base case)
- Price target €34.0
- Implied target metrics 2017E: 4.0% FFO yield, 4.3% cap rate, €1,770 value per sqm

**Long Term Analysis**
**NAV valuation**


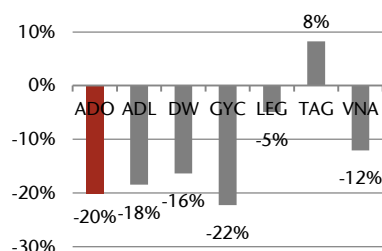
Source: Jefferies estimates, Factset

**Long Term Financial Model Drivers**

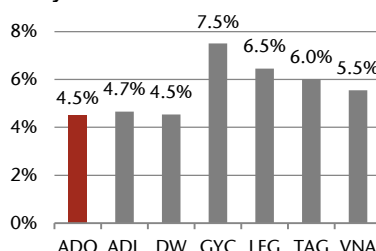
|                             |             |
|-----------------------------|-------------|
| <b>Rental growth (3yrs)</b> | <b>4.5%</b> |
| Yield shift (3yrs)          | -64bps      |
| NAV growth (CAGR 3yrs)      | 14%         |
| FFO growth (CAGR 3yrs)      | 14%         |

**Other Considerations**

The company has a full exposure to the Berlin residential market. Berlin residential dynamics currently show the highest momentum among the major German cities, together with Munich. ADO benefits from those excellent market dynamics and even outperforms market dynamics due to its active modernisation-driven re-letting strategy.

**Peer Group**
**NAV valuation**


Source: Jefferies estimates, Factset

**FFO I yield 2017E**


Source: Jefferies estimates, Factset

**Recommendation / Price Target**

| Ticker        | Rec.       | PT         |
|---------------|------------|------------|
| <b>ADJ GR</b> | <b>Buy</b> | <b>€38</b> |
| ADL GR        | Hold       | €14        |
| DWNI GR       | Buy        | €35        |
| GYC GR        | Buy        | €19        |
| LEG GR        | Buy        | €84        |
| TEG GR        | Hold       | €12        |
| VNA GR        | Hold       | €32        |

**Catalysts**

- Continuing strong Berlin residential dynamics in respect of demographics, house price and rent growth.
- Recent acquisitions to provide further potential for rent revision, allowing for continuing above-average rental growth.
- Tapping further rent potential through modernisation investments and more active rent index adjustments.
- Takeover target allowing an acquirer with high portfolio overlap to pay a decent premium on scale synergies.
- Further accretive acquisition.

**Company Description**

ADO runs a c.18,000 units pure Berlin residential portfolio with a hold-to-let strategy in the affordable housing segment. The company went public in mid-2015 and has more than doubled its portfolio size over the last two years. The acquisition of the 'Carlos' portfolio from main peer DW in 2015 was the largest single expansion step so far. The company has continued its strong expansion mode also this year with almost 3,000 units signed y-t-d at an average NCR yield of 4.5%. Almost half of the portfolio is located in central locations of Berlin with a high portion of smaller-scale 'Altbau' buildings (historical, architectural buildings with year of construction before 2018). The company shows the strongest like-for-like rental growth within the peer group. Its rental growth strategy is strongly focused on realising rent revisionary potential. The company is Luxemburg based and listed in the SDAX segment of the Deutsche Boerse. Its free-float shareholder structure is characterised by real estate specialist investors. ADO Group, a Tel Aviv-listed holding company, owns a remaining 34% stake in ADO after the IPO and a secondary placement.

**Scenarios**
**Target Investment Thesis**

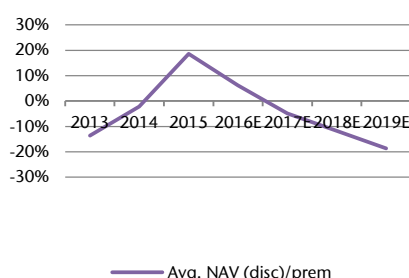
- Ongoing strong residential dynamics with no regulation changes until 2018E
- Like-for-like rental growth of 3.3% p.a. avg. from 2017 to 2019E
- Cap rate compression by 30bps over next 3yrs from 6.7% in FY 2016E to 6.3% in 2019E
- NAVPS of €74.2 in FY 2017E (+12% y-o-y)
- Implied target metrics 2017E: 13% NAV premium, 5.4% FFO yield, 6.1% cap rate, €1,140 value per sqm

**Upside Scenario**

- Accelerating residential dynamics
- Like-for-like rental growth above 3.6% p.a. avg. from 2017 to 2019E
- Cap rate compression by 60bps over next 3yrs to 6.1% in 2019E
- NAVPS of €82.2 in FY 2017E (+12% vs. base case)
- Price target €92.4
- Implied target metrics 2017E: 4.9% FFO yield, 5.6% cap rate, €1,230 value per sqm

**Downside Scenario**

- Declining residential dynamics
- Like-for-like rental growth below 3.0% p.a. avg. from 2017 to 2019E
- Cap rate remaining unchanged over next 3yrs
- NAVPS of €65.0 in FY 2017E (-12% vs. base case)
- Price target €75.6
- Implied target metrics 2017E: 6.2% FFO yield, 6.5% cap rate, €1,050 value per sqm

**Long Term Analysis**
**NAV valuation**


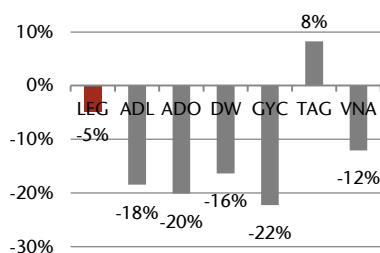
Source: Jefferies estimates, Factset

**Long Term Financial Model Drivers**

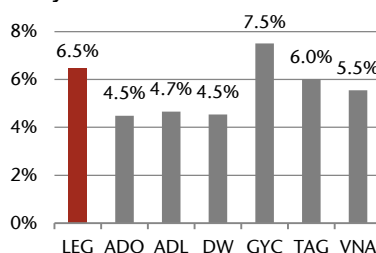
|                             |             |
|-----------------------------|-------------|
| <b>Rental growth (3yrs)</b> | <b>3.3%</b> |
| Yield shift (3yrs)          | -43bps      |
| NAV growth (CAGR 3yrs)      | 9%          |
| FFO growth (CAGR 3yrs)      | 7%          |

**Other Considerations**

LEG offers an unmatched risk-return profile. The stock has been among the performance laggards this year, now trading at very attractive earnings yields well above the other major players. A conservative property valuation with solid balance sheet and financing make it a safe haven, in our view.

**Peer Group**
**NAV valuation**


Source: Jefferies estimates, Factset

**FFO I yield 2017E**


Source: Jefferies estimates, Factset

**Recommendation / Price Target**

| Ticker        | Rec.       | PT         |
|---------------|------------|------------|
| <b>LEG GR</b> | <b>Buy</b> | <b>€84</b> |
| ADL GR        | Hold       | €14        |
| ADJ GR        | Buy        | €38        |
| DWNI GR       | Buy        | €28        |
| GYC GR        | Buy        | €19        |
| TEG GR        | Hold       | €12        |
| VNA GR        | Hold       | €32        |

**Catalysts**

- More active modernisation approach unlocking additional rent growth potential.
- Accelerating yield compression in NRW key cities providing revaluation potential for LEG's upper quality cluster.
- Higher-than-expected acquisition activity at accretive pricing levels.
- Benefiting from its defensive rental growth strategy relative to more re-letting driven models in case of tougher re-letting regulations.

**Company Description**

LEG runs a c.130,000 units residential portfolio purely focused on North-Rhine-Westphalia (NRW) with a hold-to-let strategy in the affordable housing segment. It is the third largest listed residential player in Germany. The company has expanded its portfolio size by more than 40% (>40,000 units) since the IPO at the beginning of 2013. The largest expansion steps were an almost 14,000 unit portfolio in 2015 and a 9,000 unit portfolio in 2014; both portfolios were sold by listed peer Vonovia. LEG's residential portfolio contains a high portion of restricted rents (currently 28% of total units). Its rent growth strategy is strongly focused on rent index adjustments. The top-3 cities are Dortmund, Münster and Mönchengladbach, in terms of number of units. The company is the third largest listed residential player in Germany, listed in the MDAX with most of the capital free-float and a broad shareholder structure, both sector specialists as well as generalists.

**Scenarios**
**Target Investment Thesis**

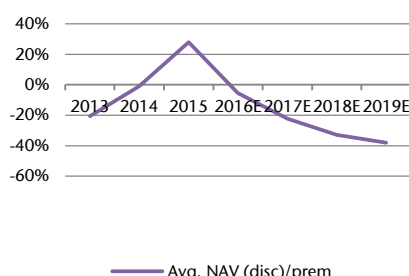
- Ongoing strong residential dynamics with no regulation changes until 2018E
- Like-for-like rental growth of 4.3% p.a. avg. from 2017 to 2019E
- Cap rate compression by 37 bps from 6.5% in 2016E to 6.1% in 2019E
- NAVPS growth of 15% CAGR 2016E-2019E
- Implied target metrics 2017E: 1% NAV discount, 6.0% FFO yield, 6.3% cap rate, €976 value per sqm

**Upside Scenario**

- Accelerating residential dynamics
- Like-for-like rental growth above 4.6% p.a. avg. from 2017 to 2019E
- Cap rate compression by 60bps from 6.5% in 2016E to 5.9% in 2019E
- NAVPS of €21.7 in FY 2017E (+11% vs. base case)
- Price target €21
- Implied target metrics 2017E: 5.2% FFO yield, 5.8% cap rate, €1,060 value per sqm

**Downside Scenario**

- Declining residential dynamics
- Like-for-like rental growth below 4.0% p.a. avg. from 2017 to 2019E
- Cap rate compression by 10bps from 6.5% in 2016E to 6.4% in 2019E
- NAVPS of €18.0 in FY 2017E (-10% vs. base case)
- Price target €17
- Implied target metrics 2017E: 6.3% FFO yield, 6.5% cap rate, €950 value per sqm

**Long Term Analysis**
**NAV valuation**


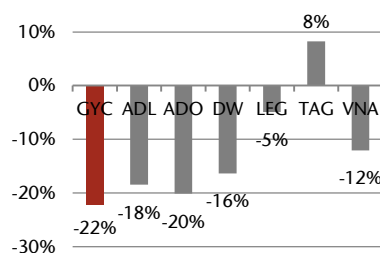
Source: Jefferies estimates, Factset

**Long Term Financial Model Drivers**

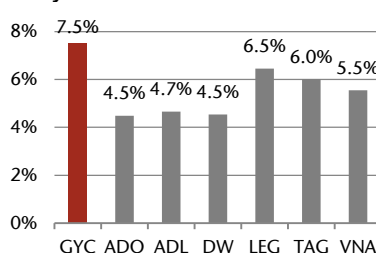
|                             |             |
|-----------------------------|-------------|
| <b>Rental growth (3yrs)</b> | <b>4.3%</b> |
| Yield shift (3yrs)          | -37bps      |
| NAV growth (CAGR 3yrs)      | 15%         |
| FFO growth (CAGR 3yrs)      | 9%          |

**Other Considerations**

GYC's share price has been strongly underperforming over the last 12 months, despite strong operating turnaround, continuing high rental growth and significant NAV expansion. Operating turnaround potential remains strong and provides significant earnings and revaluation upside.

**Peer Group**
**NAV valuation**


Source: Jefferies estimates, Factset

**FFO I yield 2017E**


Source: Jefferies estimates, Factset

**Recommendation / Price Target**

| Ticker        | Rec.       | PT         |
|---------------|------------|------------|
| <b>GYC GR</b> | <b>Buy</b> | <b>€19</b> |
| ADL GR        | Hold       | €14        |
| ADJ GR        | Buy        | €38        |
| DWNI GR       | Buy        | €35        |
| LEG GR        | Buy        | €84        |
| TEG GR        | Hold       | €12        |
| VNA GR        | Hold       | €32        |

**Catalysts**

- Positive surprise on property revaluation on the back of a pick-up of rental growth and yield compression.
- Disposal of fully turned-around sub-portfolios in key metropolitan locations, realising high sales profits and providing prove of valuation upside.
- Higher-than-expected external growth.
- Market refocusing on the company's strong fundamentals, unlocking deep valuation discounts.

**Company Description**

GYC runs a c.84,000 units residential portfolio with a hold-to-let strategy in the affordable housing segment. North-Rhine-Westphalia represents the largest sub-portfolio accounting for 33% of property value, followed by the Eastern German cities Dresden / Leipzig / Halle (19%) and Berlin (18%). The company has significantly grown in recent years by acquiring financially distressed, undermanaged residential portfolios in metropolitan areas, typically in weaker micro-locations, at attractive yields. It has more than doubled its portfolio size over the last two years, with the highest expansion activity last year, adding 33,000 units. It has acquired 8,000 units y-t-d. It has shown a strong turnaround track record with about 5% like-for-like rental growth over the last two years. The company is listed in the entry standard of the Frankfurt Stock Exchange. The company's founder Yakir Gabay, owns a major stake in GYC via Aroundtown and he plays the key role within the board. The company's free-float is widely spread and doesn't reflect the typical shareholder structure of the top-3 residential players.

## Scenarios

## Target Investment Thesis

- Ongoing strong residential dynamics with no regulation changes until 2018E
- Like-for-like rental growth of 3.9% p.a. avg. from 2017 to 2019E
- Cap rate compression by 56bps from 5.8% in 2016E to 5.2% in 2019E
- NAVPS growth of 9% CAGR 2016E-2019E
- Implied target metrics 2017E: 8% NAV discount, 5.3% FFO yield, 5.7% cap rate, €1,360 value per sqm

## Upside Scenario

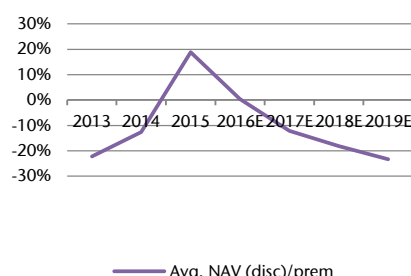
- Accelerating residential dynamics
- Like-for-like rental growth above 4.2% p.a. avg. from 2017 to 2019E
- Cap rate compression by 80bps from 5.8% in 2016E to 4.8% in 2019E
- NAVPS of €37.7 in FY 2017E (+9% vs. base case)
- Price target €35
- Implied target metrics 2017E: 4.8% FFO yield, 5.4% cap rate, €1,430 value per sqm

## Downside Scenario

- Declining residential dynamics
- Like-for-like rental growth below 3.6% p.a. avg. from 2017 to 2019E
- Cap rate compression by 30bps from 5.8% in 2016E to 5.5% in 2019E
- NAVPS of €32.5 in FY 2017E (-9% vs. base case)
- Price target €29
- Implied target metrics 2017E: 5.8% FFO yield, 6.0% cap rate, €1,290 value per sqm

## Long Term Analysis

## NAV valuation



Source: Jefferies estimates, Factset

## Long Term Financial Model Drivers

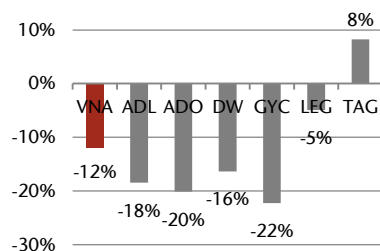
|                             |             |
|-----------------------------|-------------|
| <b>Rental growth (3yrs)</b> | <b>3.9%</b> |
| Yield shift (3yrs)          | -56bps      |
| NAV growth (CAGR 3yrs)      | 9%          |
| FFO growth (CAGR 3yrs)      | 6%          |

## Other Considerations

Vonovia needs to grow further externally in order to utilise its huge insourced service activities and to be able to continue with major modernisation programmes, which is the key source of the company's rental growth. Underlying rental growth is just 1.5% annually, which is well below peers and indicates towards weaker portfolio quality.

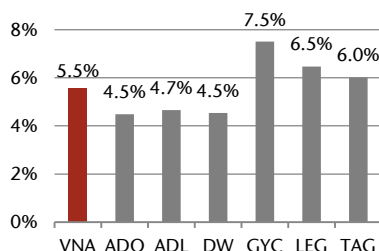
## Peer Group

## NAV valuation



Source: Jefferies estimates, Factset

## FFO I yield 2017E



Source: Jefferies estimates, Factset

## Recommendation / Price Target

| Ticker        | Rec.        | PT         |
|---------------|-------------|------------|
| <b>VNA GR</b> | <b>Hold</b> | <b>€32</b> |
| ADL GR        | Hold        | €14        |
| ADJ GR        | Buy         | €38        |
| DWNI GR       | Buy         | €35        |
| GYC GR        | Buy         | €19        |
| LEG GR        | Buy         | €84        |
| TEG GR        | Hold        | €12        |

## Catalysts

- Potential rent growth surprise if large-scale modernization and new construction programmes would yield higher returns than the 7% expected.
- Faster than expected sale of non-core units with better than expected margins.
- Potential acquisition risk if it 'overpays' for the next larger deal.
- Modernisation returns not to materialise or getting limited through tighter regulations.

## Company Description

Vonovia runs a c.340,000 units residential portfolio with a hold-to-let strategy in the affordable housing segment. It is by far the largest listed residential real estate company in Germany and also belongs to the largest players in Europe. The company went public in 2013 and has more than doubled its portfolio size since then. The acquisition of Gagfah in 2015 was the largest expansion step since the IPO, adding c.140,000 units. With the recent announcement of the convert acquisition, the company remains in expansion mode. Vonovia's strategic core portfolio is widely spread over more than 400 locations throughout Germany, most of it in Western Germany. North Rhine-Westphalia represents the largest sub-portfolio. The company is the only player within its peer group, which has insourced its service activities including craftsmen. Its rent growth strategy is strongly focused on \$559 modernisations, therefore, running large-scale 'industrialised' modernisation programmes. The company is listed in the DAX with most of the capital free-float and a rather broad shareholder structure, both generalists as well as sector specialists.



**Scenarios**
**Target Investment Thesis**

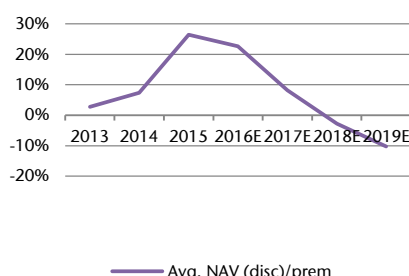
- Ongoing strong residential dynamics with no regulation changes until 2018E
- Like-for-like rental growth of 3.1% p.a. avg. from 2017 to 2019E
- Cap rate compression by 41bps from 7.4% in 2016E to 7.0% in 2019E
- NAVPS growth of 11% CAGR 2016E-2019E
- Implied target metrics 2017E: 10% NAV premium, 5.9% FFO yield, 6.9% cap rate, €870 value per sqm

**Upside Scenario**

- Accelerating residential dynamics
- Like-for-like rental growth above 3.4% p.a. avg. from 2017 to 2019E
- Cap rate compression by 60bps from 7.4% in 2016E to 6.8% in 2019E
- NAVPS of €12.3 in FY 2017E (+13% vs. base case)
- Price target €13.2
- Implied target metrics 2017E: 5.2% FFO yield, 6.6% cap rate, €910 value per sqm

**Downside Scenario**

- Declining residential dynamics
- Like-for-like rental growth below 2.8% p.a. avg. from 2017 to 2019E
- Cap rate compression by 20bps from 7.4% in 2016E to 7.2% in 2019E
- NAVPS of €9.7 in FY 2017E (-10% vs. base case)
- Price target €10.8
- Implied target metrics 2017E: 6.7% FFO yield, 7.3% cap rate, €820 value per sqm

**Long Term Analysis**
**NAV valuation**


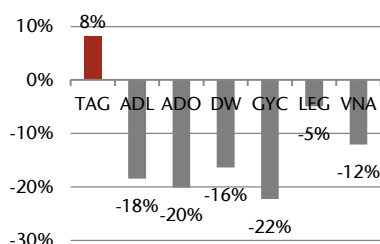
Source: Jefferies estimates, Factset

**Long Term Financial Model Drivers**

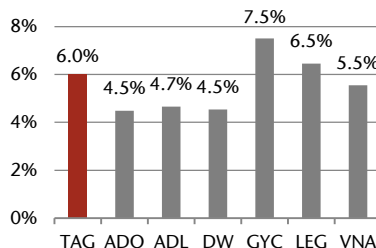
|                             |             |
|-----------------------------|-------------|
| <b>Rental growth (3yrs)</b> | <b>3.1%</b> |
| Yield shift (3yrs)          | -41bps      |
| NAV growth (CAGR 3yrs)      | 11%         |
| FFO growth (CAGR 3yrs)      | 5%          |

**Other Considerations**

The company has a high exposure to Eastern Germany, which is improving in respect of demographics. This is also reflected in TAG's rental performance, which showed positive momentum recently, mainly driven by vacancy reduction. If this trend continues, property valuations also might pick-up, allowing for higher NAV growth, which would be a positive trigger.

**Peer Group**
**NAV valuation**


Source: Jefferies estimates, Factset

**FFO I yield 2017E**


Source: Jefferies estimates, Factset

**Recommendation / Price Target**

| Ticker        | Rec.        | PT         |
|---------------|-------------|------------|
| <b>TEG GR</b> | <b>Hold</b> | <b>€12</b> |
| ADL GR        | Hold        | €14        |
| ADJ GR        | Buy         | €38        |
| DWNI GR       | Buy         | €35        |
| GYC GR        | Buy         | €19        |
| LEG GR        | Buy         | €84        |
| VNA GR        | Hold        | €32        |

**Catalysts**

- Potential positive surprise on property revaluation on the back of a pick-up of rental growth and yield compression.
- With the portfolio becoming more mature, we see an increasing likelihood for a takeover, offering a takeover premium.
- Rather high rate sensitivity due to its high yield, high leverage strategy.
- High share price valuation level in terms of NAV premium and earnings yield.

**Company Description**

TAG runs a c.78,000 units residential portfolio with a hold-to-let strategy in the affordable housing segment. Eastern Germany accounts for 56% of total property value. The company has expanded its portfolio rather early in the current residential cycle with the major expansion steps in 2011 through the takeover of listed peer Colonia Real Estate (19,000 units incl. Salzgitter), followed by the acquisition of DKBI (25,000 units in East Germany) and TLG residential (12,000 units in East Germany). The company is focused on a high yield strategy with high leverage, high yielding assets. With the company's progress of operating turnaround and the portfolio becoming more mature, it has been running an active capital recycling strategy over the last two years, replacing lower-yielding (c. 5%) by higher-yielding assets (c. 10%), allowing for capital efficient growth and capitalising on its turnaround expertise. The company is listed in the German SDAX. The company's shareholder structure is characterised by a few long-term key shareholders with the rest widely spread.



**Scenarios**
**Target Investment Thesis**

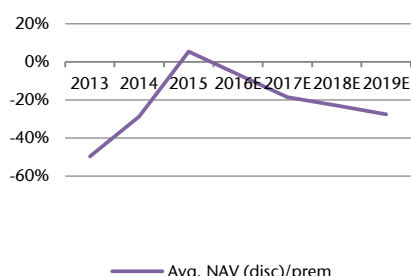
- Ongoing strong residential dynamics with no regulation changes until 2018E
- Like-for-like rental growth of 3.0% p.a. avg. from 2017 to 2019E
- Cap rate compression by 10bps from 6.8% in 2016E to 6.7% in 2019E
- NAVPS growth of 8% CAGR 2016E-2019E
- Implied target metrics 2017E: 16% NAV discount, 4.7% FFO yield, 7.2% cap rate, €784 value per sqm

**Upside Scenario**

- Accelerating residential dynamics
- Like-for-like rental growth above 3.3% p.a. avg. from 2017-2019E
- Cap rate compression by 40bps from 6.8% in 2016E to 6.4% in 2019E
- NAVPS of €18.9 in FY 2017E (+14% vs. base case)
- Price target €15.4
- Implied target metrics 2017E: 2.7% FFO yield, 6.6% cap rate, €820 value per sqm

**Downside Scenario**

- Declining residential dynamics
- Like-for-like rental growth below 2.7% p.a. avg. from 2017 to 2019E
- Cap rate expansion by 20bps from 6.8% in 2016E to 7.1% in 2019E
- NAVPS of €14.5 in FY 2017E (-13% vs. base case)
- Price target €12.6
- Implied target metrics 2017E: 5.4% FFO yield, 7.6% cap rate, €742 value per sqm

**Long Term Analysis**
**NAV valuation**


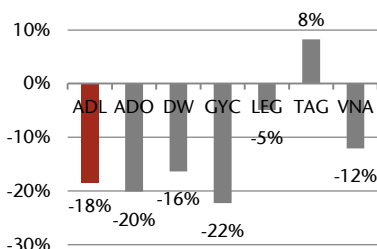
Source: Jefferies estimates, Factset

**Long Term Financial Model Drivers**

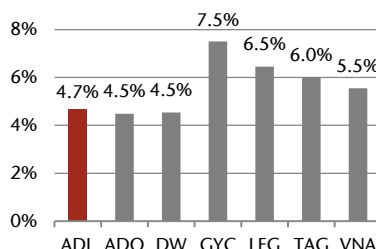
|                             |             |
|-----------------------------|-------------|
| <b>Rental growth (3yrs)</b> | <b>3.0%</b> |
| Yield shift (3yrs)          | -10bps      |
| NAV growth (CAGR 3yrs)      | 8%          |
| FFO growth (CAGR 3yrs)      | 35%         |

**Other Considerations**

The company is still in an early stage of corporate cycle, reflected in high leverage, low operating margins, and weak transparency and corporate governance. However, momentum is rather positive and if it provides more evidence of rental growth, de-leveraging and improving corporate governance, we see re-rating potential.

**Peer Group**
**NAV valuation**


Source: Jefferies estimates, Factset

**FFO I yield 2017E**


Source: Jefferies estimates, Factset

**Recommendation / Price Target**

| Ticker        | Rec.        | PT         |
|---------------|-------------|------------|
| <b>ADL GR</b> | <b>Hold</b> | <b>€14</b> |
| ADJ GR        | Buy         | €38        |
| DWNI GR       | Buy         | €35        |
| GYC GR        | Buy         | €19        |
| LEG GR        | Buy         | €84        |
| TEG GR        | Hold        | €12        |
| VNA GR        | Hold        | €32        |

**Catalysts**

- Improvement of corporate governance and transparency levels, higher free-float with corresponding reflection in the board would be favourable along with de-leveraging.
- De-leveraging, reducing financing costs, realizing operating upside through vacancy reduction, improving FFO I margins.
- Continuing strong underlying residential dynamics (supply/demand) enabling to accelerate vacancy reduction
- Providing more evidence for improving rental growth

page 161 of 165

**Company Description**

Adler runs a c. 48,000 units residential portfolio with a hold-to-let strategy in the lower-end quality cluster of the affordable housing segment. The portion of non-core assets is relatively high with about 4,500 units, accounting for c.10% of the total portfolio. The company has built-up its portfolio over the last three years with the major expansion steps in 2014 and 2015. The company also runs a condominium disposal business through its fully-consolidated subsidiary Accentro. Adler also owns a 26.4% stake in conwert, which it agreed to sell to Vonovia in the course of the takeover bid. Adler's current strategy focus is on de-leveraging, optimising financing and rental growth through vacancy reduction and regular rent increases. Adler's ownership structure is dominated by strategically very active main shareholders – free-float amounts to about 47%. The company is listed in the German SDAX.

Thomas Rothaeusler, Equity Analyst, +49 69719187103, trothaeusler@jefferies.com

## Company Description

ADLER is a residential rental model.

ADO Properties is a residential rental model.

Deutsche Wohnen is a residential rental model.

Grand City is a residential rental model.

LEG Immobilien is a residential rental model.

TAG Immobilien is a residential rental model.

Vonovia is a residential rental model.

## Analyst Certification:

I, Thomas Rothaeusler, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

**Registration of non-US analysts:** Thomas Rothaeusler is employed by Jefferies International Limited, a non-US affiliate of Jefferies LLC and is not registered/qualified as a research analyst with FINRA. This analyst(s) may not be an associated person of Jefferies LLC, a FINRA member firm, and therefore may not be subject to the NASD Rule 2241 and Incorporated NYSE Rule 472 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst.

As is the case with all Jefferies employees, the analyst(s) responsible for the coverage of the financial instruments discussed in this report receives compensation based in part on the overall performance of the firm, including investment banking income. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Aside from certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgement.

## Investment Recommendation Record

### (Article 3(1)e and Article 7 of MAR)

Recommendation Published , 23:56 ET. November 27, 2016

Recommendation Distributed , 00:01 ET. November 28, 2016

For Important Disclosure information on companies recommended in this report, please visit our website at [https://javatar.bluematrix.com/sellside/ Disclosures.action](https://javatar.bluematrix.com/sellside/Disclosures.action) or call 212.284.2300.

## Explanation of Jefferies Ratings

Buy - Describes securities that we expect to provide a total return (price appreciation plus yield) of 15% or more within a 12-month period.

Hold - Describes securities that we expect to provide a total return (price appreciation plus yield) of plus 15% or minus 10% within a 12-month period.

Underperform - Describes securities that we expect to provide a total return (price appreciation plus yield) of minus 10% or less within a 12-month period.

The expected total return (price appreciation plus yield) for Buy rated securities with an average security price consistently below \$10 is 20% or more within a 12-month period as these companies are typically more volatile than the overall stock market. For Hold rated securities with an average security price consistently below \$10, the expected total return (price appreciation plus yield) is plus or minus 20% within a 12-month period. For Underperform rated securities with an average security price consistently below \$10, the expected total return (price appreciation plus yield) is minus 20% or less within a 12-month period.

NR - The investment rating and price target have been temporarily suspended. Such suspensions are in compliance with applicable regulations and/or Jefferies policies.

CS - Coverage Suspended. Jefferies has suspended coverage of this company.

NC - Not covered. Jefferies does not cover this company.

Restricted - Describes issuers where, in conjunction with Jefferies engagement in certain transactions, company policy or applicable securities regulations prohibit certain types of communications, including investment recommendations.

Monitor - Describes securities whose company fundamentals and financials are being monitored, and for which no financial projections or opinions on the investment merits of the company are provided.

## Valuation Methodology

Jefferies' methodology for assigning ratings may include the following: market capitalization, maturity, growth/value, volatility and expected total return over the next 12 months. The price targets are based on several methodologies, which may include, but are not restricted to, analyses of market risk, growth rate, revenue stream, discounted cash flow (DCF), EBITDA, EPS, cash flow (CF), free cash flow (FCF), EV/EBITDA, P/E, PE/growth, P/CF, P/FCF, premium (discount)/average group EV/EBITDA, premium (discount)/average group P/E, sum of the parts, net asset value, dividend returns, and return on equity (ROE) over the next 12 months.

### Jefferies Franchise Picks

Jefferies Franchise Picks include stock selections from among the best stock ideas from our equity analysts over a 12 month period. Stock selection is based on fundamental analysis and may take into account other factors such as analyst conviction, differentiated analysis, a favorable risk/reward ratio and investment themes that Jefferies analysts are recommending. Jefferies Franchise Picks will include only Buy rated stocks and the number can vary depending on analyst recommendations for inclusion. Stocks will be added as new opportunities arise and removed when the reason for inclusion changes, the stock has met its desired return, if it is no longer rated Buy and/or if it triggers a stop loss. Stocks having 120 day volatility in the bottom quartile of S&P stocks will continue to have a 15% stop loss, and the remainder will have a 20% stop. Franchise Picks are not intended to represent a recommended portfolio of stocks and is not sector based, but we may note where we believe a Pick falls within an investment style such as growth or value.

## Risks which may impede the achievement of our Price Target

This report was prepared for general circulation and does not provide investment recommendations specific to individual investors. As such, the financial instruments discussed in this report may not be suitable for all investors and investors must make their own investment decisions based upon their specific investment objectives and financial situation utilizing their own financial advisors as they deem necessary. Past performance of the financial instruments recommended in this report should not be taken as an indication or guarantee of future results. The price, value of, and income from, any of the financial instruments mentioned in this report can rise as well as fall and may be affected by changes in economic, financial and political factors. If a financial instrument is denominated in a currency other than the investor's home currency, a change in exchange rates may adversely affect the price of, value of, or income derived from the financial instrument described in this report. In addition, investors in securities such as ADRs, whose values are affected by the currency of the underlying security, effectively assume currency risk.

For Important Disclosure information on companies recommended in this report, please visit our website at [https://javatar.bluematrix.com/sellside/](https://javatar.bluematrix.com/sellside/Disclosures.action) Disclosures.action or call 212.284.2300.

## Distribution of Ratings

| Rating       | Count | Percent | IB Serv./Past 12 Mos. |         |
|--------------|-------|---------|-----------------------|---------|
|              |       |         | Count                 | Percent |
| BUY          | 1101  | 51.71%  | 326                   | 29.61%  |
| HOLD         | 865   | 40.63%  | 170                   | 19.65%  |
| UNDERPERFORM | 163   | 7.66%   | 17                    | 10.43%  |

## Other Important Disclosures

Jefferies does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that Jefferies may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Jefferies Equity Research refers to research reports produced by analysts employed by one of the following Jefferies Group LLC ("Jefferies") group companies:

**United States:** Jefferies LLC which is an SEC registered firm and a member of FINRA.

**United Kingdom:** Jefferies International Limited, which is authorized and regulated by the Financial Conduct Authority; registered in England and Wales No. 1978621; registered office: Vintners Place, 68 Upper Thames Street, London EC4V 3BJ; telephone +44 (0)20 7029 8000; facsimile +44 (0)20 7029 8010.

**Hong Kong:** Jefferies Hong Kong Limited, which is licensed by the Securities and Futures Commission of Hong Kong with CE number AT5546; located at Suite 2201, 22nd Floor, Cheung Kong Center, 2 Queen's Road Central, Hong Kong.

**Singapore:** Jefferies Singapore Limited, which is licensed by the Monetary Authority of Singapore; located at 80 Raffles Place #15-20, UOB Plaza 2, Singapore 048624, telephone: +65 6551 3950.

**Japan:** Jefferies (Japan) Limited, Tokyo Branch, which is a securities company registered by the Financial Services Agency of Japan and is a member of the Japan Securities Dealers Association; located at Hibiya Marine Bldg, 3F, 1-5-1 Yuraku-cho, Chiyoda-ku, Tokyo 100-0006; telephone +813 5251 6100; facsimile +813 5251 6101.

**India:** Jefferies India Private Limited (CIN - U74140MH2007PTC200509), which is licensed by the Securities and Exchange Board of India as a Merchant Banker (INM000011443), Research Analyst (INH000000701) and a Stock Broker with Bombay Stock Exchange Limited (INB011491033) and National Stock Exchange of India Limited (INB231491037) in the Capital Market Segment; located at 42/43, 2 North Avenue, Maker Maxity, Bandra-Kurla Complex, Bandra (East) Mumbai 400 051, India; Tel +91 22 4356 6000.

This material has been prepared by Jefferies employing appropriate expertise, and in the belief that it is fair and not misleading. The information set forth herein was obtained from sources believed to be reliable, but has not been independently verified by Jefferies. Therefore, except for any obligation under applicable rules we do not guarantee its accuracy. Additional and supporting information is available upon request. Unless prohibited by the provisions of Regulation S of the U.S. Securities Act of 1933, this material is distributed in the United States ("US"), by Jefferies LLC, a US-registered broker-dealer, which accepts responsibility for its contents in accordance with the provisions of Rule 15a-6, under the US Securities Exchange Act of 1934. Transactions by or on behalf of any US person may only be effected through Jefferies LLC. In the United Kingdom and European Economic Area this report is issued and/or approved for distribution by Jefferies International Limited and is intended for use only by persons who have, or have been assessed as having, suitable professional experience and expertise, or by persons to whom it can be otherwise lawfully distributed. Jefferies International Limited Equity Research personnel are separated from other business groups and are not under their supervision or control. Jefferies International Limited has implemented policies to (i) address conflicts of interest related to the preparation, content and distribution of research reports, public appearances, and interactions between research analysts and those outside of the research department; (ii) ensure that research analysts are insulated from the review, pressure, or oversight by persons engaged in investment banking services activities or other persons who might be biased in their judgment or supervision; and (iii) promote objective and reliable research that reflects the truly held opinions of research analysts and prevents the use of research reports or research analysts to manipulate or condition the market or improperly favor the interests of the Jefferies International Limited or a current or prospective customer or class of customers. Jefferies International Limited may allow its analysts to undertake private consultancy work. Jefferies International Limited's conflicts management policy sets out the arrangements Jefferies International Limited employs to manage any potential conflicts of interest that may arise as a result of such consultancy work. Jefferies International Ltd, its affiliates or subsidiaries, may make a market or provide liquidity in the financial instruments referred to in this investment recommendation. For Canadian investors, this material is intended for use only by professional or institutional investors. None of the investments or investment services mentioned or described herein is available to other persons or to anyone in Canada who is not a "Designated Institution" as defined by the Securities Act (Ontario). In Singapore, Jefferies Singapore Limited is regulated by the Monetary Authority of Singapore. For investors in the Republic of Singapore, this material is provided by Jefferies Singapore Limited pursuant to Regulation 32C of the Financial Advisers Regulations. The material contained in this document is intended solely for accredited, expert or institutional investors, as defined under the Securities and Futures Act (Cap. 289 of Singapore). If there are any matters arising from, or in connection with this material, please contact Jefferies Singapore Limited, located at 80 Raffles Place #15-20, UOB Plaza 2, Singapore 048624, telephone: +65 6551 3950. In Japan this material is issued and distributed by Jefferies (Japan) Limited to institutional investors only. In Hong Kong, this report is issued and approved by Jefferies Hong Kong Limited and is intended for use only by professional investors as defined in the Hong Kong Securities and Futures Ordinance and its subsidiary legislation. In the Republic of China (Taiwan), this report should not be distributed. The research in relation to this report is conducted outside the PRC. This report does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. In India this report is made available by Jefferies India Private Limited. In Australia this information is issued solely by Jefferies International Limited and is directed solely at wholesale clients within the meaning of the Corporations Act 2001 of Australia (the "Act") in connection with their consideration of any investment or investment service that is the subject of this document. Any offer or issue that is the subject of this document does not require, and this document is not, a disclosure document or product disclosure statement within the meaning of the Act. Jefferies International Limited is authorised and regulated by the Financial Conduct Authority under the laws of the United Kingdom, which differ from Australian laws. Jefferies International Limited has obtained relief under Australian Securities and Investments Commission Class Order 03/1099, which conditionally exempts it from holding an Australian financial services licence under the Act in respect of the provision of certain financial services to wholesale clients. Recipients of this document in any other jurisdictions should inform themselves about and observe any applicable legal requirements in relation to the receipt of this document.

This report is not an offer or solicitation of an offer to buy or sell any security or derivative instrument, or to make any investment. Any opinion or estimate constitutes the preparer's best judgment as of the date of preparation, and is subject to change without notice. Jefferies assumes no obligation to maintain or update this report based on subsequent information and events. Jefferies, its associates or affiliates, and its respective officers, directors, and employees may have long or short positions in, or may buy or sell any of the securities, derivative instruments or other investments mentioned or described herein, either as agent or as principal for their own account. Upon request Jefferies may provide specialized research products or services to certain customers focusing on the prospects for individual covered stocks as compared to other covered stocks over varying time horizons or under differing market conditions. While the views expressed in these situations may not always be directionally consistent with the long-term views expressed in the analyst's published research, the analyst has a reasonable basis and any inconsistencies can be reasonably explained. This material does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this report is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of the investments referred to herein and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange

rates could have adverse effects on the value or price of, or income derived from, certain investments. This report has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of securities. None of Jefferies, any of its affiliates or its research analysts has any authority whatsoever to make any representations or warranty on behalf of the issuer(s). Jefferies policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis. Any comments or statements made herein are those of the author(s) and may differ from the views of Jefferies.

This report may contain information obtained from third parties, including ratings from credit ratings agencies such as Standard & Poor's. Reproduction and distribution of third party content in any form is prohibited except with the prior written permission of the related third party. Third party content providers do not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. Third party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Third party content providers shall not be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs) in connection with any use of their content, including ratings. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.

Jefferies research reports are disseminated and available primarily electronically, and, in some cases, in printed form. Electronic research is simultaneously available to all clients. This report or any portion hereof may not be reprinted, sold or redistributed without the written consent of Jefferies. Neither Jefferies nor any officer nor employee of Jefferies accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this report or its contents.

For Important Disclosure information, please visit our website at <https://javatar.bluematrix.com/sellside/Disclosures.action> or call 1.888.JEfferies

© 2016 Jefferies Group LLC