

## CREDIT OPINION

31 August 2018

Update

✓ Rate this Research

### RATINGS

#### TAG Immobilien AG

Domicile	Germany
Long Term Rating	Baa3
Type	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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## TAG Immobilien AG

### Update to credit analysis

#### Summary

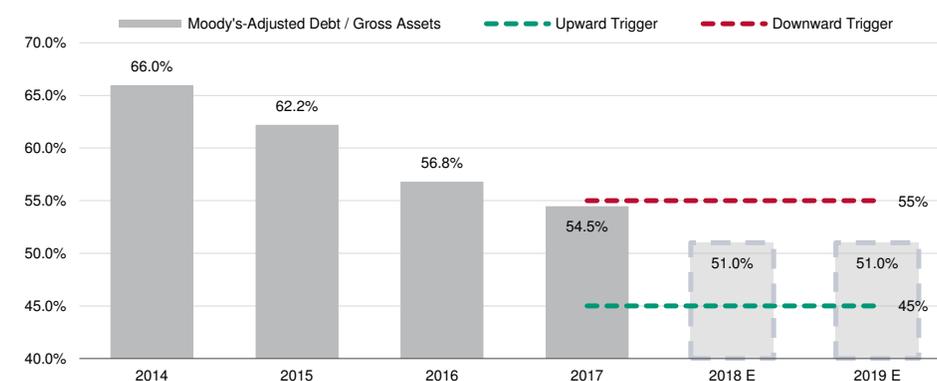
TAG Immobilien AG's (TAG) Baa3 long-term issuer rating mainly reflects i) its focus on regulated affordable housing activities which result in stable rental income, ii) the broad tenant diversification derived from a sizeable portfolio of around 82,400 residential units valued at around €4.5 billion across a number of regions in Germany, which we believe is one of the most stable European real estate markets, iii) a good coverage of fixed charges of 3.2 x as at 30 June 2018 (YTD, 2.9x LTM), and iv) long dated debt maturities averaging 8.8 years.

These positives are partly offset by i) the secondary locations of the property portfolio in economically weaker regions in Eastern and Northern Germany, ii) improving but still relatively high vacancy rates especially if compared to other rated residential peers and iii) more limited financial flexibility compared to some peers, with unencumbered assets representing a low 16% of total assets as at 30 June 2018 or around 12% pro-forma for the repayment of unsecured debt completed in August 2018.

We expect TAG's leverage, measured as Moody's adjusted gross debt to total assets, assets, which stood at 53.0% as at 30 June 2018 and 56.8% at the end of 2016, to further improve to around 51.0% before the end of 2018 driven by the repayment of unsecured debt in August 2018, and to remain around the same level in 2019 assuming no changes in portfolio valuations. The strengthening of the debt/assets ratio more strongly positions TAG at the current rating level, although the level of unencumbered assets remains a weakness.

#### Exhibit 1

**TAG's leverage has continued to improve and more strongly positions the company at the current rating level, although a still low unencumbered assets ratio remains a weakness**  
Moody's-adjusted Debt / Gross assets



Source: Moody's Financial Metrics™

## Credit strengths

- » Focus on stable and regulated rental housing activities in Germany
- » Good coverage of fixed charges, partly reflecting the higher yield of the portfolio
- » Long dated debt maturities and improved liquidity following recent refinancing

## Credit challenges

- » Portfolio predominantly located in economically weaker regions of Germany and still relatively high vacancies, albeit improving
- » Limited unencumbered assets, expected to gradually improve

## Rating outlook

The stable outlook reflects our expectation that TAG's leverage will remain below 55% and the company will gradually improve the level of its unencumbered assets over time.

## Factors that could lead to an upgrade

- » An upgrade would be considered if:
- » Gross debt to Total Assets sustained towards 45%
- » Fixed charge coverage maintained above 3.0x
- » Unencumbered assets closer to a third of total assets

## Factors that could lead to a downgrade

- » Gross debt to Total Assets above 55%. Failure to improve the level of unencumbered assets to around a third of total would require the debt to assets ratio to be well below 50% for assigned rating
- » Fixed charges coverage below 2.25x
- » Failure to maintain adequate liquidity

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moody's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.

## Key indicators

Exhibit 2

### TAG Immobilien AG's Indicators and Forward View

#### TAG Immobilien AG

US Millions	13-Dec	14-Dec	15-Dec	16-Dec	17-Dec	LTM (Jun-18)	12-18 Months Forward View
Amount of Unencumbered Assets	7.0%	10.7%	9.7%	6.3%	15.7%	16.1%	15% - 20%
Debt / Real Estate Gross Assets	64.1%	66.0%	62.2%	56.8%	54.5%	53.0%	50% - 52%
Net Debt / EBITDA	18.4x	16.4x	14.1x	12.3x	11.6x	11.4x	9.5x - 10x
Secured Debt / Real Estate Gross Assets	55.6%	50.8%	48.2%	45.3%	41.7%	38.4%	35% - 40%
Real Estate Gross Assets (million)	\$5,271.30	\$4,533.10	\$4,134.50	\$4,248.90	\$5,578.30	\$5,584.00	\$5,800 - \$6,100
Development Pipeline	0%	0%	0%	0%	0%	0%	0%
EBITDA Margin (YTD)	55.2%	56.0%	61.8%	62.8%	60.1%	48.3%	65% - 70%
EBITDA / Fixed Charges (YTD) - REITS	1.4x	1.5x	1.7x	2.1x	2.6x	3.2x	3.4x - 3.9x

Source: Moody's Financial Metrics™. All figures and ratios are calculated using Moody's estimates and standard adjustments. Moody's 12-18 Months Forward View is Moody's opinion and does not represent the views of the issuer. Periods are Financial Year-End unless indicated. LTM = Last Twelve Months.

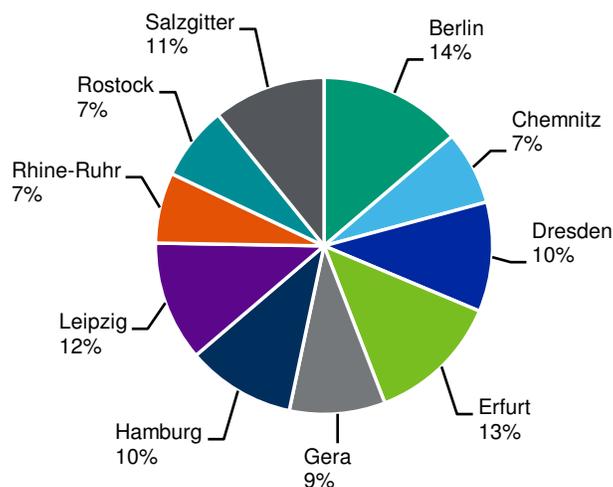
## Profile

TAG Immobilien owns and manages a multi-family residential rental portfolio of approximately 82,400 units located across Germany. As of 30 June 2018, TAG's assets totaled around €4.9 billion. Headquartered in Hamburg, TAG is listed on the MDAX Frankfurt Stock Exchange with a market capitalisation of €3.1 billion as of 27 August 2018, i.e. at a 38% premium to reported NAV.

Exhibit 3

### TAG's portfolio is predominantly located in Eastern and Northern Germany

Property fair value split by geography (as of June 2018)



Source: Company Information

## Detailed credit considerations

### Focus on stable and regulated rental housing activities in Germany

We view the German residential sector as one of the most stable asset classes in the real estate industry in Europe, with favourable and sustainable prospects for further value and rent increases due to a structural imbalance between demand and supply that current

regulation tends to exacerbate by reducing incentives to build. Despite recent changes in regulation tilted towards stimulating new construction, the number of building permits remain at low levels with an estimated shortage of around 250,000 units per annum, according to the German Statistical Office (Statistisches Bundesamt). The shortage is particularly acute in the largest cities but also in smaller locations. New builds and refurbishments of existing properties are limited because construction costs are high at above €2,000 per square meter and the return on investments is limited by the current regulation capping rents. Although less pronounced than in West Germany, these trends are beginning to appear in parts of Eastern Germany as well, in particular around relatively larger and economically stronger metropolitan areas, such as Dresden and Leipzig.

The German rental market is regulated: although new leases can be set freely, rent increases for existing tenants are capped with reference to a local index (Mietspiegel) calculated by local authorities reflecting location and quality of the units. Rent increases are capped at between 15% and 20% over a three-year period. Prices and rents for residential property have been more stable in Germany than in any other large developed economies even taking into account recent increases. Since 1970, German house prices have increased broadly in line with inflation whilst never declining more than 3% in any given year according to the OECD.

Demand for rental housing in Germany is strong driven by rising household formation and net immigration, including the recent influx of refugees. Demand for smaller one- and two-person households is expected to grow by 3% over the next 20 years, according to BBSR – Regional Planning 2035. Affordability remains higher in Germany when compared to other European countries.

We expect steady rental growth in the next two years in the German residential property market supported by 1) a stable macroeconomic environment; 2) population migration to metropolitan areas; 3) a limited amount of new property development in the largest but also smaller cities; 4) a lower percentage of owner-occupied housing relative to other European countries; 5) a population trend towards a greater number of smaller households; and 6) increasing longevity of the population.

As of 30 June 2018, TAG's portfolio comprises 81,023 residential units in multi-family apartment buildings with an aggregate size of 4.8 million square metres (sqm) and an average apartment size of c. 60 sqm. TAG offers affordable housing - average rent is €5.22/sqm or around €313 per apartment per month - which is targeted at smaller households of one to three people.

Exhibit 4

#### TAG's portfolio details as of 30 June 2017

Region	Fair value in EUR m	FV in % total	Units	Rentable area (sqm)	Fair value per sqm (EUR)	In-place yield	Vacancy June 2018	Vacancy June 2017	Actual net cold rent (EUR/sqm)	Letting rent (EUR/sqm)	Maintenance (EUR/sqm)	Capex (EUR/sqm)
Berlin	602.9	13%	9,915	565,651	1,010	5.9%	5.3%	5.3%	5.52	6.06	3.38	6.61
Chemnitz	311.0	7%	7,656	443,391	677	7.4%	10.7%	10.9%	4.82	4.78	2.89	15.01
Dresden	462.2	10%	6,334	411,178	1,090	5.8%	3.1%	3.5%	5.57	5.77	1.98	2.20
Erfurt	562.2	13%	10,528	592,293	913	6.2%	3.4%	2.1%	5.08	5.58	2.28	3.78
Gera	403.6	9%	9,747	567,407	678	7.5%	9.4%	9.3%	4.90	5.34	2.82	9.30
Hamburg	458.0	10%	7,125	437,704	1,024	6.1%	4.6%	4.4%	5.57	5.85	6.39	2.14
Leipzig	506.5	11%	10,227	608,532	815	7.0%	4.6%	4.4%	5.06	5.47	2.50	2.34
Rhine-Ruhr	297.8	7%	4,699	299,499	954	6.1%	3.9%	3.6%	5.28	5.38	6.34	3.74
Postock	313.7	7%	5,614	336,082	921	6.6%	3.7%	4.7%	5.37	5.73	2.76	7.63
Salzgitter	475.0	11%	9,177	563,080	841	7.0%	5.2%	6.1%	5.16	5.43	3.76	4.86
<b>Total residential</b>	<b>4,330</b>	<b>98%</b>	<b>81,023</b>	<b>4,824,816</b>	<b>883</b>	<b>6.5%</b>	<b>5.5%</b>	<b>5.5%</b>	<b>5.22</b>	<b>5.54</b>	<b>3.36</b>	<b>5.72</b>
Others	87.4	2%	173	152,677	2,719	5.1%	6.7%		12.35			
Commercial properties			1,195	32,140			16.7%	16.9%	7.60			
<b>Total</b>	<b>4,480</b>	<b>-</b>	<b>82,391</b>	<b>5,009,632</b>	<b>894</b>	<b>6.8%</b>	<b>5.8%</b>	<b>6.2%</b>	<b>5.33</b>			

Source: Companies' information

We have assigned TAG a Baa score for the subfactor Diversity reflecting the company's focus on stable residential property management in a regulated market, its large and granular tenant base and the strength of the German economy despite the weaker economic growth prospects of TAG's property locations. The company's Baa score is in line with the score of Deutsche Wohnen SE

(Deutsche Wohnen, A3 stable) and Sato Oyj (Sato, Baa3 stable) and below the A score assigned to LEG Immobilien AG (LEG, Baa1 stable) and Grand City Properties S.A. (Grand City, Baa1 stable).

### Portfolio predominantly located in economically weaker regions of Germany and still relatively high vacancies, albeit improving

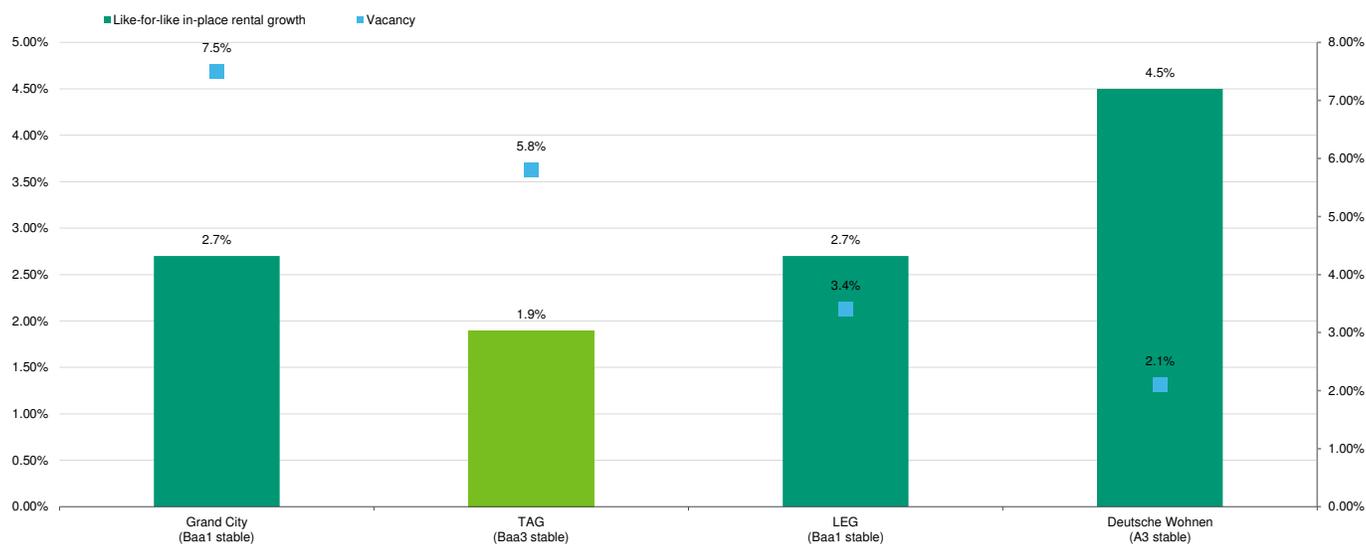
We have assigned TAG a Ba score for the rating subfactor Asset Quality in our methodology grid reflecting the still low occupancy of the portfolio and its location in economically weaker areas compared to rated residential peers, partly offset by an improving track record of both occupancy and rent increases. The score assigned to TAG for Asset Quality is in line with that of Grand City and below the A scores assigned to Deutsche Wohnen, LEG and Sato.

TAG's vacancies were the second highest in our rated residential peer group at 5.5% at 30 June 2018 for the residential units alone and 5.8% across the portfolio including newly acquired residential units and small commercial units within the residential portfolio. Whilst still high, TAG's vacancies have improved from a high 9.5% in January 2013. They still remain well above the 2.1% and 3.4% achieved by Deutsche Wohnen and LEG in Q2 2018, respectively, but compare well with the 7.5% achieved by Grand City.

In addition, TAG reported one of the lowest like-for-like rental income growth rates across the sector (2.5% in Q2 2018) due to reduced occupancy gains as a consequence of already realized vacancy reductions in prior years and its different approach to modernization programs, i.e. spending less capex than the residential peer group. Excluding occupancy gains, TAG's rental growth stands at 1.9% in June 2018 (year-on-year) and remains at the low end of the rated residential peers, whose in-place rents have grown in a 2-5% range in the last three years.

Exhibit 5

#### TAG's vacancies are the second highest within its peer group Like-for-like in-place rental growth and vacancy rates (as of June 2018)



Source: Companies' information

We anticipate sustained rental income growth of around 2.5% over the next two years, driven by further occupancy gains and rent increases.

Around two-thirds of TAG's residential units are located in 30 cities with over 20,000 inhabitants (although some are suburbs of larger urban areas), with only around 8,000 units, or 10% of the portfolio, located in cities with less than 20,000 inhabitants.

About 70% of TAG's properties are located across six federal states in Eastern Germany (Berlin, Brandenburg, Mecklenburg-Vorpommern, Sachsen, Sachsen-Anhalt and Thüringen), which are economically weaker regions compared to the rest of the country. The region has a population of approximately 16.2 million (or 20% of a total population in Germany of around 82.5 million), and 8 of the 50 largest cities in Germany (or 16%).

Since the fall of the Berlin Wall in 1989, around 1.8 million Germans moved from the Eastern to the Western part of the country. However and more positively, net migration from Western to Eastern Germany has started to improve in the last decade and in 2013, for the first time since Germany's reunification, Eastern Germany has actually experienced a net inflow of population from the West. We understand that reasons for the reversal in trend at least partly reflect growing employment and wages in the region combined with its lower cost of living.

### Good coverage of fixed charges

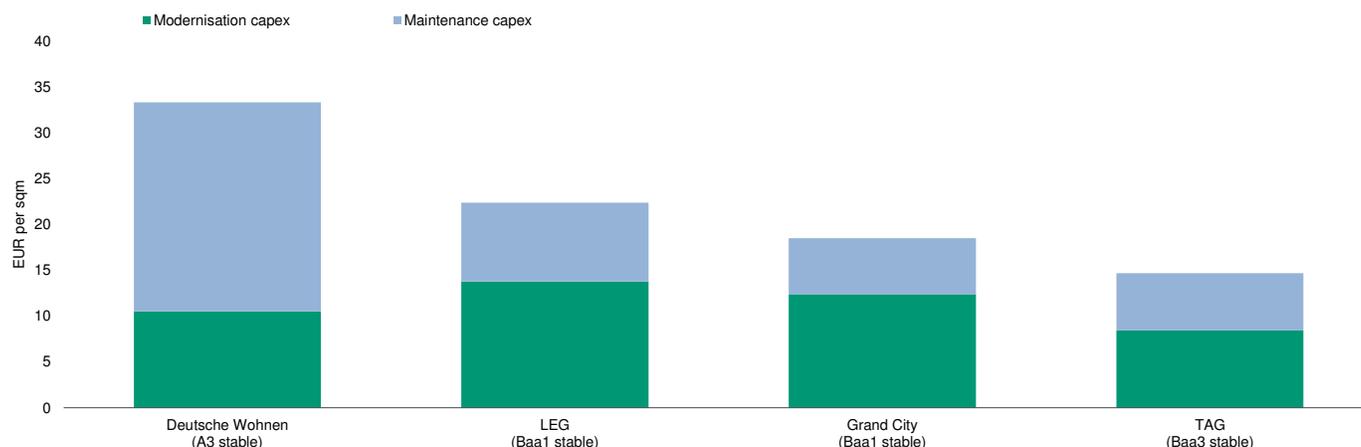
TAG scores A for the rating subfactor Fixed Charge Coverage but only Ba for Gross debt to Total Assets under both the current and forward views in our methodology scorecard.

TAG's fixed charge coverage ratio, as measured by adjusted EBITDA/interest expense, was 2.9x in Q2 2018 (LTM, 3.2x YTD), an improvement from the 2.6x achieved in at year end 2017. Assuming unchanged and broadly favourable capital market conditions, the fixed charge is likely to further improve from current levels as the company has issued two new corporate bonds in June 2018 of in aggregate EUR 250 million (average interest cost 1.5% p.a.) and has repaid a EUR 191 million corporate bond (interest cost 5.125% p.a.) in August 2018, thus significantly reducing interest costs and improving our measure of fixed charge coverage. The refinancing of bank loans coming due in the next two years will further slightly improve the coverage of fixed charges further (see exhibit 7). According to management, TAG is currently financing new mortgage secured bank loans with all-in interest cost between 1.7%-1.8% for 10-year maturities, i.e. below its average cost of funding.

TAG owns the highest yielding portfolio across the rated residential peer group, whether measured in terms of gross rental income or EBITDA relative to total assets, which also translates into a comparatively moderate 11.4 x Net Debt to EBITDA as of 30 June 2018. TAG's annual maintenance expenditure per sqm is at the lower end compared to some of its peers (see Exhibit 6 below), which partly reflects its location in less expensive regions but also the fact that a large part of the portfolio, especially in Eastern Germany, consists of pre-fabricated buildings with a high degree of standardization acquired from state-owned companies with larger modernizations already done in the past.

Exhibit 6

### TAG's capital spending is low compared to its peers Modernisation and maintenance capex (2017)



Source: Companies' information

The company's average cost of debt was 1.99% as of August 2018, compared with 2.34% in December 2017 and 3.15% in 2016 but still slightly above rated residential peers (1.3% for Deutsche Wohnen, 1.6% for Grand City and 1.75% for LEG). Differences in average interest rates across peers reflect different choices in terms of type of debt (secured versus unsecured) as well as debt maturities.

TAG's effective leverage ratio, as measured by adjusted debt/gross assets, stood at 53.0% at 30 June 2018, down from 54.5% at the end of 2017 due to revaluation gains mainly driven by yield compression. We expect leverage to improve to around 51.0% by the end of 2018 driven by the repayment of €191.0 million of debt in August 2018 and to remain around this level in 2019, assuming

no changes in valuations. The valuation of the property portfolio was performed annually until 2016, but since 2017 the valuation is conducted every six months. The last portfolio valuation was carried out by CBRE at 30 June 2018, resulting in a valuation gain of €230.0 million driven by yield compression (€194.8 million) and operational performance (€35.2 million). The next valuation will follow at 31 December 2018.

## Liquidity analysis

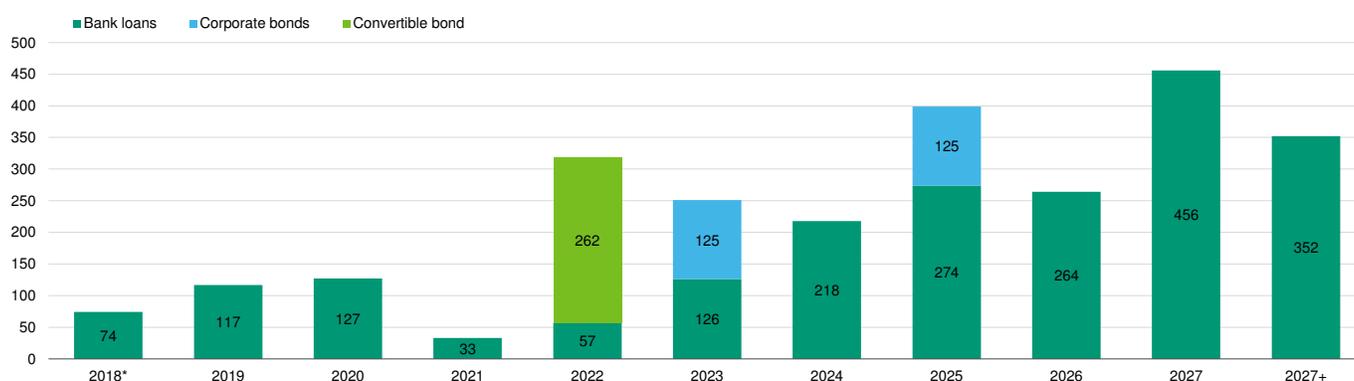
### Long-dated debt maturities and improved liquidity following recent refinancing

TAG scores Aa for the quantitative subfactor Debt Maturities under our current view, reflecting the company's very long dated average debt maturity of 8.8 years as of August 2018, which is slightly above its German residential peers (7.7 years for Deutsche Wohnen, 7.8 years for LEG Immobilien and 8.3 years for Grand City) and well above other European rated landlords and a key rating consideration.

In June 2018, the company placed two senior unsecured bonds with institutional investors with an aggregate amount of €250 million, comprising a 5-year fixed bond of €125 million maturing in 2023 (with a coupon of 1.25%) and a 7-year fixed bond of €125 million maturing in 2025 (with a coupon of 1.75%). The proceeds were used for a buy back of the outstanding 3.75% bond due in 2020 and for general corporate purposes. TAG also completed the repayment of a €310 million bond in August 2018 (€191 million was left to be repaid) with a coupon rate of 5.125%.

Exhibit 7

#### Debt maturity profile as of August 2018



\*2018 is excluding the EUR 191m corporate bond repaid in Aug-2018

Source: Companies' information

### Limited unencumbered assets, expected to improve

Whilst TAG's long dated debt is a positive factor in terms of liquidity, the company scores only B for Secured Debt / Gross Assets and Caa for unencumbered assets, reflecting its high reliance on secured bank loans. Only about 16% of TAG's assets are unencumbered as of 30 June 2018, the lowest ratio across the rated residential peer group – well below Grand City Properties (around 52%) but not much lower than Deutsche Wohnen and LEG Immobilien (25% and 21%, respectively) - mapping to Caa in our methodology grid. Although we acknowledge that the company has limited refinancing needs for secured debt and will therefore only gradually be able to increase its unencumbered assets, the rating assigned factors in expectations of a gradual increase in unencumbered assets.

As of 31 December 2017, TAG had available credit lines totaling €72.5 million, none of which was drawn. This volume of available credit lines was increased by a new €50.0 million credit line with a five-year maturity, bringing the total volume to €122.5 million as of 30 June 2018. We understand that the company uses these facilities as back up lines and has no plans to draw them down. TAG also has a substantial cash balance of around €315 million as of June 2018, providing adequate funding for any potential acquisitions.

Although we anticipate positive operating free cash flow generation after dividends and broadly balanced net acquisitions and divestments over the next two years, with limited debt maturities, we have assigned TAG a Ba score for the Liquidity Coverage subfactor in our methodology scorecard reflecting the presence of standard MAC clauses in line with the typical language used in bilateral loans with German banks.

The company's largest shareholders as of 30 June 2018 are the Versorgungsanstalt des Bundes und der Länder (Pension Institution of the Federal Republic and the Federal States, VBL) with 13.8% and two US-based funds, MFS Investment Management with 11.4% and Capital Group with 9.9%. VBL is one of Germany's largest providers of public-sector occupational pensions in Germany and is controlled by the German Ministry of Finance. TAG's payout ratio target is set at 75% of FFO I (i.e. FFO before capex and capital gains).

We have assigned TAG a Ba score for the rating subfactor Access to Capital positively reflecting its access to both private and public sources of capital and strong banking relationships. These strengths are partly offset by a generally less diversified capital structure compared to rated residential peers and a concentration on a few main German banks.

### Structural considerations

The majority of group assets and debt are held by subsidiaries of the holding company, TAG Immobilien AG, which is a pure holding company and the issuer of two unsecured bond issues of €125 million and €125 million and a convertible bond of €262 million. We understand that in most cases each mortgage loan is only guaranteed by the property held by the relevant subsidiary.

### Rating methodology and scorecard factors

The grid implied ratings for TAG are Ba1 and Baa3 under the current and the forward view, respectively. However, the implied ratings reflect scores for EBITDA margins that are based on recent changes in IFRS standards (IFRS 15) that do not appropriately reflect real business conditions. Revenues included revenues from services, not just rents, whose much lower margins negatively impact on the EBITDA margins. If we had adjusted the EBITDA margin in line with the previous accounting standards to 59.9%, the score for the EBITDA margin subfactor would be Baa and the overall implied rating under the current view would be Baa3. Also, our grid does not reflect the debt repayment made after 30 June 2018, which are instead reflected in our forecasts on which the forward view is based. Although the score for liquidity is constrained by the presence of standard MAC clauses in the company's bilateral loans with German banks, we currently view TAG's liquidity as adequate.

Exhibit 8

## TAG Immobilien AG

REITs and Other Commercial Property Firms Industry Grid [1][2]	Current LTM 6/30/2018		Moody's 12-18 Month Forward View As of 08/22/2018 [3]	
Factor 1: Liquidity and Funding (24.5%)	Measure	Score	Measure	Score
a) Liquidity Coverage	Ba	Ba	Ba	Ba
b) Debt Maturities	Aa	Aa	Aa	Aa
c) FFO Payout	64.3%	Baa	65% - 70%	Baa
d) Amount of Unencumbered Assets	16.1%	Caa	15% - 20%	Caa
<b>Factor 2: Leverage and Capital Structure (30.5%)</b>				
a) Debt / Gross Assets	53.0%	Ba	50% - 52%	Ba
b) Net Debt / EBITDA	11.4x	Caa	9.5x - 10x	B
c) Secured Debt / Gross Assets	38.4%	B	35% - 40%	B
d) Access to Capital	Ba	Ba	Ba	Ba
<b>Factor 3: Market Position and Asset Quality (22%)</b>				
a) Franchise / Brand Name	Baa	Baa	Baa	Baa
b) Gross Assets(USD Million)	\$5,584	Baa	\$5,800 - \$6,100	Baa
c) Diversity: Location / Tenant / Industry / Economic	Baa	Baa	Baa	Baa
d) Development Pipeline	0%	Aa	0%	Aa
e) Asset Quality	Ba	Ba	Ba	Ba
<b>Factor 4: Cash Flows and Earnings (23%)</b>				
a) EBITDA Margin (YTD)	48.3%	B	65% - 70%	A
b) EBITDA Margin Volatility	9.4%	Ba	6% - 8%	Ba
c) EBITDA / Fixed Charges (YTD)	3.2x	A	3.4x - 3.9x	A
d) Joint Venture Exposure (YTD)	0%	Aa	0%	Aa
<b>Rating:</b>				
a) Indicated Rating from Grid		Ba1		Baa3
b) Actual Rating Assigned				Baa3

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations

[2] As of 6/30/2018(L)

[3] This represents a Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.

Source: Moody's Financial Metrics™

## APPENDIX

Exhibit 9

## Peer Comparison Table

(in US millions)	TAG Immobilien AG Baa3 Stable			Deutsche Wohnen SE A3 Stable			LEG Immobilien AG Baa1 Stable			Grand City Properties S.A. Baa1 Stable			SATO Oyj Baa3 Stable		
	FYE Dec-16	FYE Dec-17	LTM Jun-18	FYE Dec-16	FYE Dec-17	LTM Mar-18	FYE Dec-16	FYE Dec-17	LTM Mar-18	FYE Dec-16	FYE Dec-17	LTM Mar-18	FYE Dec-16	FYE Dec-17	LTM Jun-18
Real Estate Gross Assets	\$4,249	\$5,578	\$5,584	\$17,712	\$24,673	\$25,502	\$8,934	\$12,076	\$12,460	\$6,491	\$9,016	\$10,231	\$3,816	\$4,500	\$4,535
EBITDA Margin (YTD)	62.8%	60.1%	48.3%	50.1%	50.0%	67.5%	64.1%	72.2%	67.7%	49.8%	48.3%	50.8%	55.3%	59.0%	59.5%
EBITDA Margin Vol	6.2%	5.8%	9.4%	11.4%	12.3%	15.3%	4.4%	6.2%	10.1%	27.7%	10.7%	9.9%	3.1%	5.6%	4.9%
EBITDA/Fixed Charges(YTD)	2.1x	2.6x	3.2x	5.1x	5.6x	5.8x	3.5x	4.2x	5.3x	4.7x	4.6x	5.3x	2.8x	3.3x	3.6x
FFO Payout	69.4%	60.4%	64.3%	44.1%	57.1%	56.6%	62.5%	58.8%	58.4%	26.0%	65.8%	62.7%	31.8%	0.0%	27.6%
Debt / RE Gross Assets	56.8%	54.5%	53.0%	35.0%	35.5%	35.3%	46.9%	44.7%	44.3%	44.7%	41.7%	45.2%	55.8%	53.4%	52.5%
Net Debt / EBITDA	12.3x	11.6x	11.4x	10.0x	11.8x	11.8x	11.6x	10.9x	11.0x	10.4x	11.8x	11.9x	13.8x	12.1x	12.0x
Sec. Debt/RE Gross Assets	45.3%	41.7%	38.4%	27.4%	23.1%	22.9%	40.7%	35.5%	30.2%	14.9%	12.4%	11.2%	32.7%	23.9%	18.6%

Source: Moody's Financial Metrics™. All figures & ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months.

Source:

Exhibit 10

## Moody's-Adjusted Debt Breakdown

(in EUR Thousands)	FYE Dec-13	FYE Dec-14	FYE Dec-15	FYE Dec-16	FYE Dec-17	LTM Ending Jun-18
<b>As Reported Debt</b>	<b>2,434,004.0</b>	<b>2,452,910.0</b>	<b>2,349,582.0</b>	<b>2,270,167.0</b>	<b>2,513,832.0</b>	<b>2,580,182.0</b>
Pensions	5,618.0	6,317.0	6,020.0	6,132.0	5,942.0	5,942.0
Operating Leases	12,416.0	11,984.0	11,812.0	11,600.0	10,992.0	10,992.0
<b>Moody's-Adjusted Debt</b>	<b>2,452,038.0</b>	<b>2,471,211.0</b>	<b>2,367,414.0</b>	<b>2,287,899.0</b>	<b>2,530,766.0</b>	<b>2,597,116.0</b>

Source: Moody's Financial Metrics™. All figures are calculated using Moody's estimates and standard adjustments.

Exhibit 11

(in EUR Thousands)	FYE Dec-13	FYE Dec-14	FYE Dec-15	FYE Dec-16	FYE Dec-17	LTM Ending Jun-18
<b>As Reported EBITDA</b>	<b>130,736.0</b>	<b>226,377.0</b>	<b>277,517.0</b>	<b>342,328.0</b>	<b>488,390.0</b>	<b>684,667.0</b>
Operating Leases	3,104.0	2,996.0	2,953.0	2,900.0	2,748.0	2,748.0
Unusual	-5,292.0	-88,827.0	-119,200.0	-164,087.0	-295,169.0	-486,232.0
Non-Standard Adjustments	-50.0	-27.0	32.0	11.0	7.0	2.0
<b>Moody's-Adjusted EBITDA</b>	<b>128,498.0</b>	<b>140,519.0</b>	<b>161,302.0</b>	<b>181,152.0</b>	<b>195,976.0</b>	<b>201,185.0</b>

Source: Moody's Financial Metrics™. All figures are calculated using Moody's estimates and standard adjustments.

## Ratings

Exhibit 12

Category	Moody's Rating
<b>TAG IMMOBILIEN AG</b>	
Outlook	Stable
Issuer Rating -Dom Curr	Baa3

Source: Moody's Investors Service

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