

CREDIT OPINION

8 April 2021

Update

✓ Rate this Research

RATINGS

Kojamo plc

Domicile	Finland
Long Term Rating	Baa2
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.

Contacts

Maria Gillholm +46 851.791.270
VP-Sr Credit Officer
maria.gillholm@moodys.com

Anton Horozov +49.69.70730.755
Associate Analyst
anton.horozov@moodys.com

Anke Rindermann +49.69.70730.788
Associate Managing Director
anke.rindermann@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

Kojamo plc

Update to credit analysis

Summary

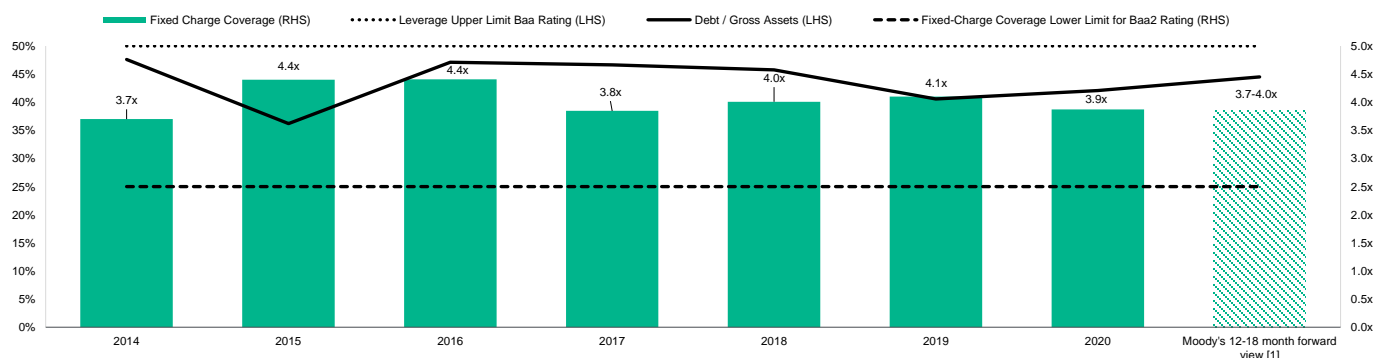
[Kojamo plc's](#) (Kojamo) Baa2 issuer rating reflects its position as Finland's largest residential property company; stable rental cash flow from its portfolio of 35,802 rental apartments as of Q4 2020; and a well-located residential property portfolio predominantly in attractive locations in the Helsinki metropolitan area but also in other growth cities in Finland. The company's granular tenant base and consistently high occupancy rates (96.4% as of 31 December 2020) lead to predictable and steady cash flows and historical like-for-like rental income growth. Kojamo has developed a meaningful franchise that enhances its ability to attract tenants in a dynamic and competitive rental market. Its properties are concentrated in seven growing Finnish cities that comprise the vast majority of the country's population, with the greatest proportion (73.8% by property value) in the metropolitan Helsinki area.

Financial metrics such as debt/assets of 42.1% as of year end 2020 position Kojamo solidly in the Baa2 rating category, however, we expect net debt/EBITDA to slightly weaken over the next 12 to 18 months as Kojamo will further invest into developments that will drive up debt but will take time until cash flow is generated. Other key strengths underpinning the rating a strong fixed charge coverage ratio of 3.9x as of Q4 2020 and adequate liquidity. The company has been diversifying its funding sources by refinancing secured debt with unsecured debt which led to an increase in its unencumbered asset pool, decrease in the proportion of secured debt in the capital structure and improved access to capital through three successfully issued Euro bonds.

Challenges relate to the unregulated segment within the Finnish rental market, which can lead to changes in operating conditions more swiftly than in regulated markets; moderate development activity (6.6% of assets) in a market that has experienced increased construction activities focusing on the largest cities; high tenant turnover and a high net debt/EBITDA (12.4x as of Q4 2020). The net debt/EBITDA will increase towards 13x and is impacted by the increase of its developments program and acquisitions starting from 2020 with lower net yields compared to divested assets.

Exhibit 1

Leverage and fixed-charge coverage



[1] This represents Moody's view; not the view of the issuer.

Sources: Moody's Financial Metrics and Moody's Investor Service estimates

Credit strengths

- » Stable rental income from a medium-sized portfolio of residential properties
- » Good-quality assets located in attractive city centre locations
- » Consistently high occupancy rates, a diversified tenant base and historically strong rental growth
- » Strong property market fundamentals and positive demand for Kojamo's apartments
- » Controlled development programme with an adequate pipeline that is likely to enhance value and portfolio quality
- » Adequate liquidity, moderate effective leverage and solid fixed-charge coverage

Credit challenges

- » Weaker economical environment in the next 6-12 months on back of coronavirus pandemic
- » Significant construction activity within Kojamo's focus markets, which could strain rent levels but not necessarily occupancy rates as the urbanisation trend is strong
- » High net debt/EBITDA, as a result of the company's development programme and which we expect to further increase
- » More shareholder friendly policy as a consequence of a slightly more aggressive but stable dividend policy following the IPO in 2018

Rating outlook

The stable outlook reflects our expectation that Kojamo will continue to generate stable cash flows through its stable assets class, and either maintain or improve its adequate liquidity. Although we expect leverage to increase towards 45% and interest coverage to remain around 3.9x as a result of acquisitions and continued development activity, we expect these levels to be appropriate to the assigned rating with an effective leverage well below 50%.

The outlook also reflects the strong demand for properties rental housing in Helsinki area driven by the strong urbanization trend in metropolitan areas in Finland and a decrease in average household size.

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 for the most updated credit rating action information and rating history.

Factors that could lead to an upgrade

- » Effective leverage moving towards 40% and a tighter financial policy that is supportive of such a level in combination with a consistent decline in net debt/EBITDA
- » Fixed charge coverage sustained at 4.0x
- » Strong market fundamentals, increasing market rental levels and asset values, and good access to capital markets

Factors that could lead to a downgrade

- » Effective leverage above 50% on a sustained basis, although in case of a meaningful increase in its net debt/EBITDA from 12x, our tolerance for effective leverage will materially reduce from the level of around 50%.
- » In case of material increase from current net debt/EBITDA levels at 12x in combination with effective leverage decreasing
- » Fixed charge coverage falling below 3.0x on a sustained basis
- » Weaker market fundamentals, resulting in falling rents and asset values

Key indicators

Exhibit 2

Kojamo's Key Indicators

USD Billion	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	12-18 Month Forward View [3]
Real Estate Gross Assets	\$4.7	\$4.9	\$6.0	\$6.3	\$7.4	\$8.9	\$9.5-10.5
Amount of Unencumbered Assets	34.3%	39.2%	44.9%	58.6%	59.8%	70.8%	70-80%
Debt / Real Estate Gross Assets	36.2%	47.1%	46.7%	45.8%	40.6%	42.1%	43-46%
Net Debt / EBITDA	7.0x	10.4x	11.8x	11.0x	11.5x	12.4x	13.0x
Secured Debt / Real Estate Gross As	32.3%	36.4%	28.8%	20.7%	19.3%	17.2%	16-18%
EBITDA / Fixed Charges [2]	4.4x	4.4x	3.8x	4.0x	4.1x	3.9x	3.7-4.0x

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

[2] Fixed charges includes capitalised interests explained in Moody's Approach to Global Standard Adjustments in the Analysis of Financial Statements for Non-Financial Corporations, revised in December 2016.

[3] This represents Moody's forward view; not the view of the issuer.

Source: Moody's Financial Metrics™

Profile

Kojamo is a residential real estate company established in 1969 and headquartered in Helsinki. The company owns, develops and manages a residential property portfolio located across Finland's largest growth cities (market value of €6.9 billion as of 31 December 2020). The company's main shareholders are the the Finnish Industrial Union (10%), Ilmarinen Mutual Pension Insurance Company (8.3%) and Varma Mutual Pension Insurance Company (7.8%). A larger number of industrial, health and welfare unions hold the remaining top 10 shareholder interests (around 23%). Kojamo is listed on the Nasdaq Helsinki exchange after the IPO in June 2018.

Detailed credit considerations

Leading residential landlord in Finland

Kojamo is the largest residential landlord in Finland. It has a market share of around 4%, ahead of its close competitor [SATO Oyj](#) (Baa3 stable), but also reflecting the market's high level of fragmentation.

The company's €6.9 billion property portfolio is spread across Finland's seven largest and fastest growing cities. Its 35,802 units span around 1.9 million square metres (sqm). Kojamo enjoys a high occupancy rate of 96.4%, although slightly decreased due to COVID-19, and generated €384 million in annual rental income for the 12 months ended 31 December 2020, leading to a reported yield of

3.8%. The Finnish professional property investment market had an estimated total value of €77 billion as of year-end 2019, of which institutional and international investors accounted for 54% (KTI Property Information, 2020).

Kojamo's strategy is to invest in the Finnish unregulated rental market. As of 2020, around 99% (35,476 apartments) of its residential units were not subject to rental regulations, while the remaining 1% were subject to restrictions on rent increases. Exposure to the regulated market will account for a smaller percentage of the overall property portfolio as the company continues to expand through acquisitions of unregulated properties and through the removal of rent restrictions over time. Between 2016 and 2018, Kojamo divested 11,208 apartments subject to long-term restrictions and acquired 4,768 market-based rental apartments.

Kojamo's tenant turnover is 32.5% for 2020, which is relatively high compared with that of European peers and increased on the back of COVID-19's negative impact on migration and supply. This reflects the local practice of signing lease agreements that can be terminated at will, the sizable proportion of young professionals among Kojamo's tenants, overall market competition and a growing stock of new properties. The high tenant turnover is mitigated by historically high occupancy rates.

We have assigned Kojamo a score of A for Market Positioning and Asset Quality to reflect its focus on stable rental housing operations in good locations, strong market position, consistently high occupancy rates and historical ability to achieve higher rental growth than the market.

Strong tenant diversification; some concentration in Helsinki mitigated by population growth and presence in attractive micro locations

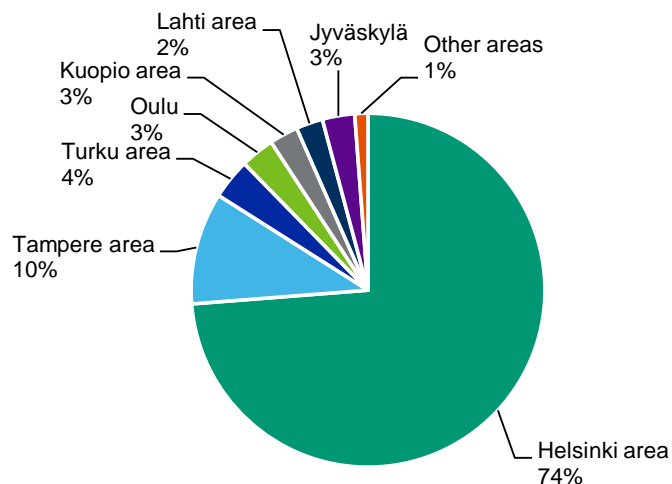
Kojamo has a diversified tenant base only partly offset by some geographical concentration. The strong diversification of its tenant base, which is typical of residential real estate companies, is credit positive and is further enhanced by the relatively small size of the apartments on offer, which cater to small family units and individuals. Kojamo's property portfolio is granular and includes 35,802 rental apartments.

As Exhibit 3 shows, Kojamo's largest holdings are in Helsinki, representing 74% of the total portfolio value and 59% of the total number of its apartments. With a population of 1.5 million, the Helsinki region is the country's most populous area (out of a total population of 5.5 million). Kojamo operates in six other metropolitan areas with growing populations, namely Tampere, Turku, Oulu, Kuopio, Lahti and Jyväskylä.

Exhibit 3

Kojamo operates in Finland's seven largest cities

Fair value of apartments as of 31 December 2020



Source: Company data

Increasing urbanisation, ageing population and smaller households underpin steady demand for Kojamo's properties

Three population trends in Finland underpin demand for rental housing in general, and for Kojamo's rental housing stock in particular. These trends are (1) growing levels of urbanisation with an increasing proportion of the Finnish population residing in cities; (2) a general ageing of the population in combination with elderly people staying longer in their own households; and (3) the growing proportion of one-person households in Finland. All of these factors are likely to underpin demand for smaller apartments. Another contributing factor to demand for rental apartments is that banks have taken a more restrictive approach towards condominium and house lending as a result of the economic downturn in Finland. Kojamo's rental apartments meet the deepest segment of tenant demand. They lie at the smaller end of the range and average 55 sqm, which is adequate for one- and two-person households.

Kojamo's strategy is to create attractive urban housing in Finnish growth centres and provide a digital service offering, which aims to respond to changing customer demand and make it easier for people to move around in pursuit of employment. The company's rental apartments are mainly located in high-rise apartment buildings in city centres. These are well-connected locations that offer good employment opportunities, transport links and schools.

Kojamo has developed a significant franchise as Finland's largest residential landlord, and benefits from a recognised brand name in the form of LUMO. We positively view the company's focus on providing tenants with value-added services. These include a 24-hour rental service that allows people to choose and rent apartments online, a car-sharing scheme under which cars are reserved and picked up from a building's own car pool, and its affordable offering, Lumo Kompakti.

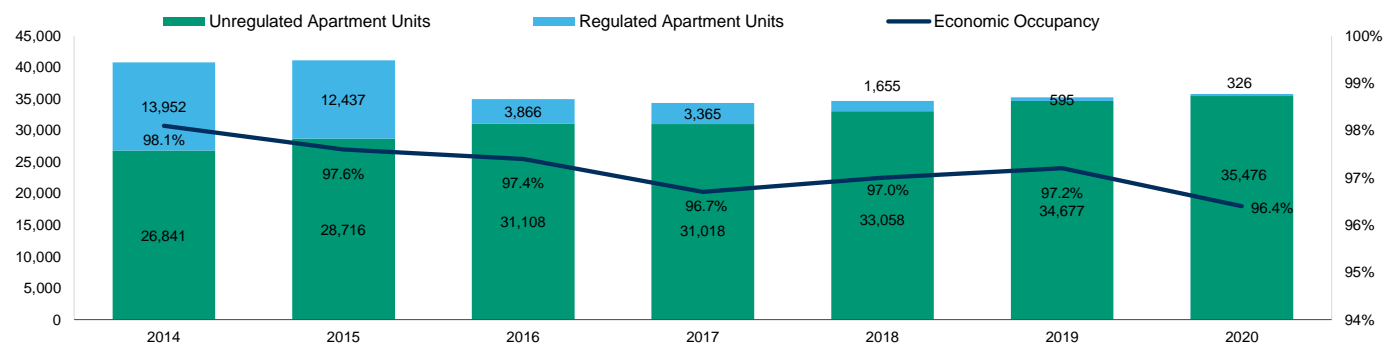
Rental housing across most developed markets has historically been a more stable asset class compared with other property types (such as offices, shopping centres and industrial/logistics facilities), both in terms of rents and property values.

Finland's rental market is partly regulated, and volatility in market values and rent has been limited. A potential risk with a regulated rental housing market is that the sector is exposed to a degree of regulatory risk. Reflecting this, in 2016, the law on restricted housing changed and new legislation came into force in 2017; whereas previously a maximum 8% return on restricted housing was allowed, this has now fallen to 4%. The elevated leverage required for operations increases the risk.

As a result, Kojamo underwent a strategic transformation in 2016 and revised its strategic policies. The company decided to focus on its market-based operations and further reduce its number of state-subsidised ARA rental apartments, which are subject to rent controls. Kojamo's strategy is to invest in properties whose rent can be freely set based on prevailing market trends. As a consequence, Kojamo divested 11,208 apartments subject to long-term restrictions between 2016 and 2018 (also including units coming free from restrictions and moving out of regulated business to unregulated one), and both acquired and developed 4,768 (net) market-based rental apartments. As of FY2020, around 99% (35,476 apartments) of its units were not subject to any cap or regulation, while the remaining 1% were subject to restrictions on rent increases. This proportion is likely to fall as the company continues to expand through acquisitions, and through the removal of such restrictions by 2025.

Exhibit 4

Stable occupancy rates even amid the shift to unregulated apartments



Source: Company data

Rising development activities

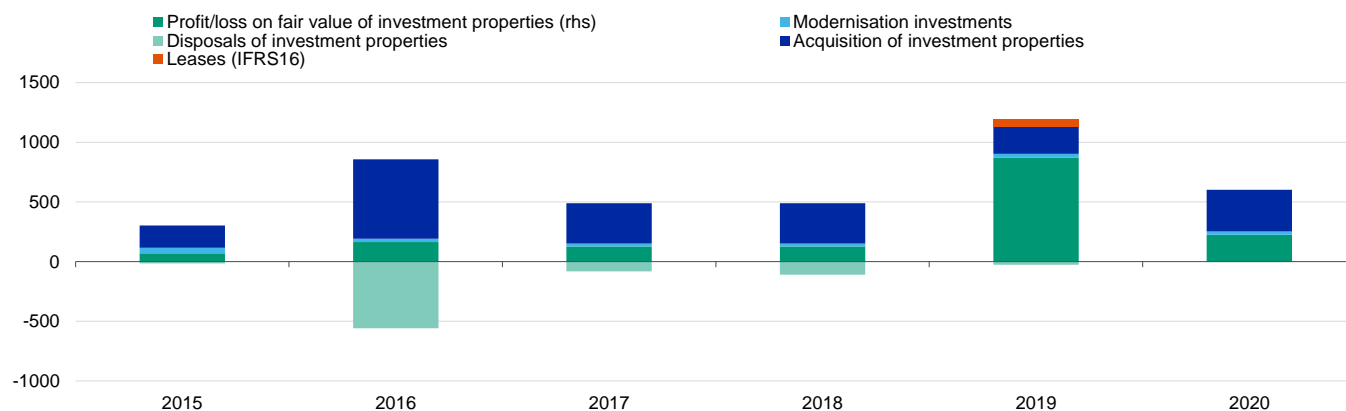
Kojamo plans to invest heavily until 2023 in developing new properties and purchasing property portfolios. The net investment program amounts to around €1,200 million in 2020-23 or between €200-€400m p.a. The new strategy aims for a 4%-5% annual revenue growth.

As of December 2020, Kojamo had binding acquisition agreements for new developments and cost of completion of apartments under construction totaling €477 million, corresponding to 6.6% of total assets.

Exhibit 5

Development of Kojamo's investment properties

Kojamo underwent a strategic portfolio reallocation in 2016 and changed its valuation technique in 2019



Source: Company Data

Kojamo's projects include large refurbishments of residential as well as office buildings, which it transforms into residential buildings because of their favourable location in the city, as well as the upgrading of apartments before new tenants move in and greenfield project developments. However, this vacancy risk is significantly mitigated by historical evidence of past developments showing occupancy rates of 93%-98% one to three months after completion, which reflects the attractive location of the units and good demand. Ultimately, development activities are likely to improve the asset quality of Kojamo's portfolio.

Kojamo changed the technique used to assess the fair value of its investment properties to a yield-based valuation technique from a transaction-based valuation technique, effective from 31 December 2019. This change led to a one-time increase in the fair value of properties of around €800 million in 2019.

Adequate liquidity despite sizable planned investments

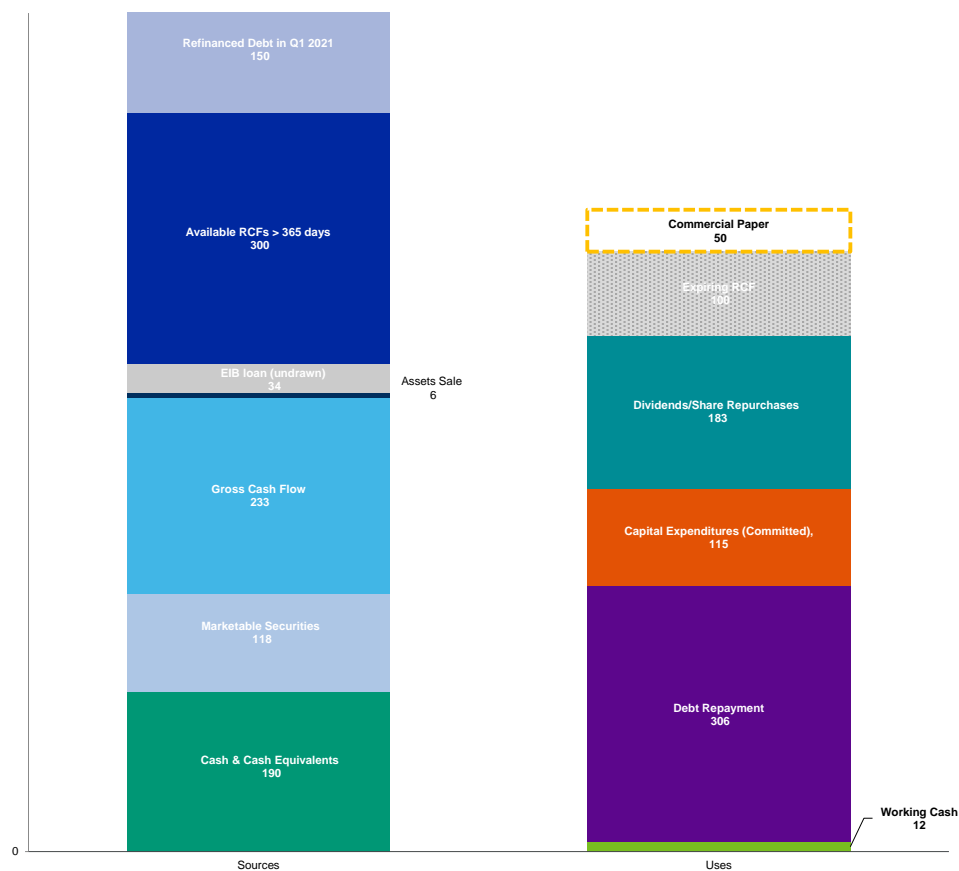
We believe that Kojamo has an adequate liquidity profile, reflecting its stable cash flow generation, staggered debt maturities and significant unused committed credit facilities. However, the company will rely on external funding to a considerable extent over the next two to three years as its investment plans of more than €900 million for upgrades and acquisitions will exceed internal cash flow and proceeds from divestments. Also, the adequate liquidity is only including committed capex and planned but not committed project developments require additional bond or bank financing.

However, we believe that this is mitigated by the company's good access to bonds and bank debt, and its diversified bank relationships and highly liquid housing portfolio. Following the issuance of three €500 million unsecured bonds in June 2017, March 2018 and May 2020, Kojamo increased its unencumbered asset pool to 71% as of FY2020 from 39% as of 31 December 2016. This also improved its access to capital. We expect this ratio to remain above 70% of total assets in the next 12-18 months as the company moves further from a secured funding structure towards a more unsecured funding structure and issues further under its new €2.5 billion Euro Medium Term Notes (EMTN) program. Also contributing to liquidity are its unsecured revolving credit facilities (RCFs) of €300 million as of March 2021 and a €250 million commercial paper program (€50 million outstanding as of December 2020). We assign Kojamo a Baa score for the Liquidity and Access to Capital subfactor.

Exhibit 6

Kojamo's liquidity as of Q4 2020

Kojamo's liquidity sources fully cover the liquidity needs for the next 18 months



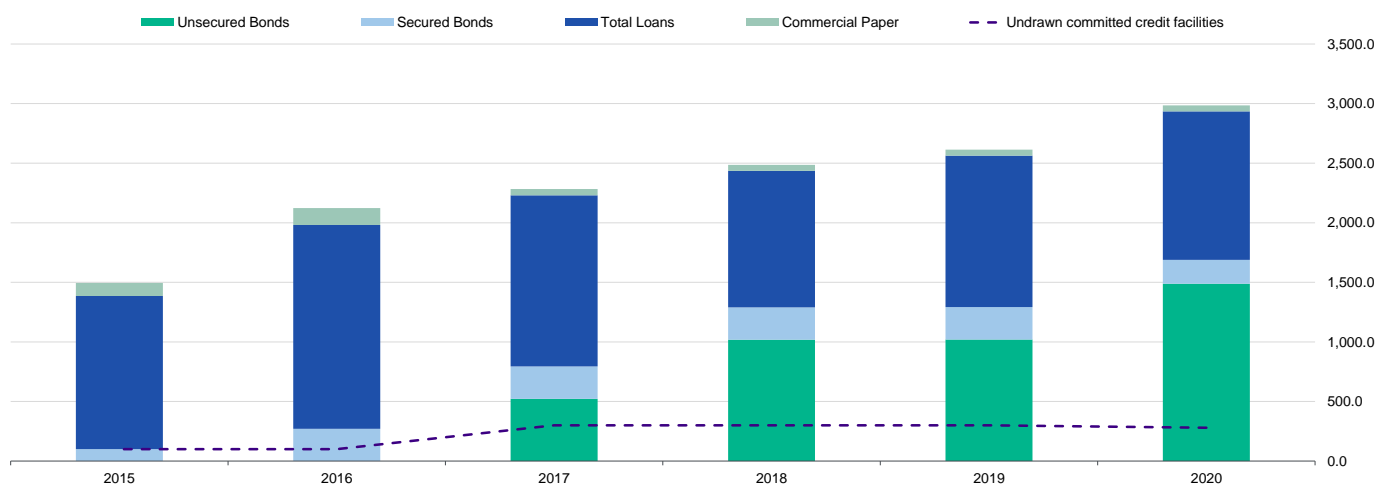
Source: Company Data

The company's dividend policy is to distribute a minimum of 60% of its funds from operations as dividends, provided that its equity ratio exceeds 40%. Historically, the payout ratio has been relatively low with the exception of 2016 when the company paid an additional dividend of €66.6 million following the divestment of 8,571 state apartments to M2 Kodit Oy. While we believe that shareholders will continue to extract dividends, we also view positively the fact that the company is not a REIT and it can stop paying dividends if needed.

Exhibit 7

Kojamo's debt funding sources

Kojamo has measurably increased unsecured bond debt since 2017



[1] Excludes IFRS16 Leases of €61.1 and €68.3 million in 2019 and 2020 respectively for comparability.

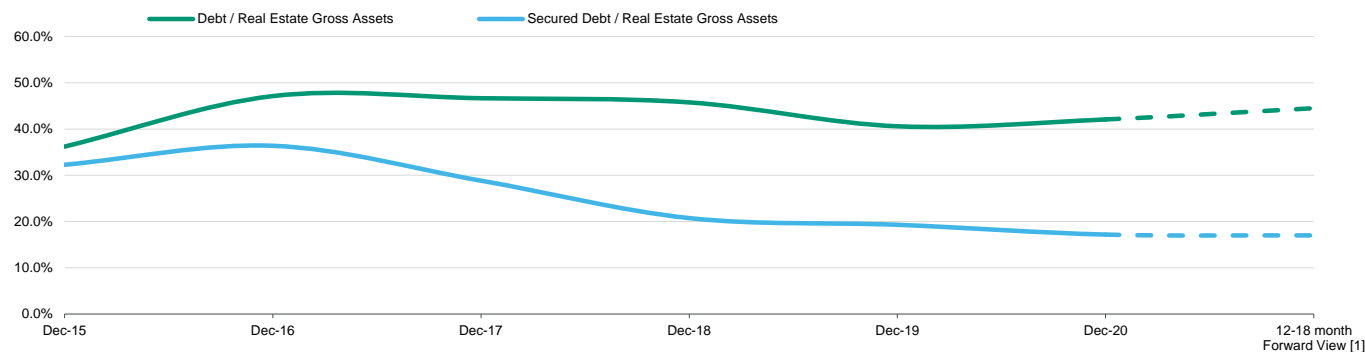
Source: Company Data

Increasing leverage and net debt/EBITDA due to investments in lower yielding assets

As Exhibit 8 shows, Kojamo's estimated Moody's-adjusted gross debt/total assets stood at 42.1% as of FY2020, with €3.1 billion of adjusted gross debt and total adjusted assets of €7.3 billion, including €6.9 billion of investment properties. We expect this ratio to remain at 43-46% over the next three years, driven mostly by investments into the existing property pool, including acquisitions and refurbishments, which increase property values.

In connection with the IPO, Kojamo has also changed its dividend policy so that its annual dividend amounts to at least 60% of funds from operations, provided that its equity ratio, defined as equity/total assets, is 40% or more. Previously, the dividend policy was to distribute a minimum of 50% of the LUMO segment's operating results provided that its equity ratio exceeded 40%. We view this change in dividend policy as credit negative. However, this is offset by the fact that Kojamo is not a REIT and, if needed, the company can reduce or cut its dividends to hold adjust its effective leverage.

Exhibit 8

Improvement in effective leverage following change in valuation technique, but expected to rise again

[1] This represents Moody's view; not the view of the issuer.

Source: Moody's Financial Metrics™

Kojamo has a diversified funding mix, consisting of commercial paper, bank loans, bonds and interest subsidy loans. As of 31 December 2020, the company's debt included €1.3 billion of loan debt (€1.2 billion bank loans and €0.04 billion interest subsidy loans); three unsecured bonds of €500 million, maturing in 2024, 2025 and 2027; one secured bonds of €200 million, maturing in 2023, respectively; €50 million in commercial paper; and €280 million of undrawn RCFs, primarily backing its €250 million commercial paper

programme but which could also be used for general corporate purposes. The RCFs were refinanced and increased to €300m in Q1 2021. They are spread across several facilities, with staggered maturities between March 2022 and March 2026 as of March 2021. The four facilities are unsecured. Kojamo also has €40 million in interest subsidy loans outstanding.

The company had a cash position of €210 million as of 31 December 2020. The company maintains a low level of cash in bank accounts, and the liquidity is instead managed by commercial paper and bank lines. The long-dated unused RCFs with ample covenant capacity provide a backstop in the unlikely event that the company struggles to roll over its commercial paper.

Kojamo expects to use its commercial paper programme as a permanent funding source. The programme size is €250 million, but drawn commercial paper still constitutes a low share (2% as of December 2020) of total debt. The share of total debt constituted by interest-subsidised loans connected to the restricted business is only 1%. We expect this proportion to drop towards zero in the next two years as no new loans will be raised. Loan financing is the company's second-largest (42% as of December 2020: 41% bank loans and 1% interest subsidy loans) funding source and we expect this to decrease further as the company follows its target of moving from a secured debt structure to a unsecured debt structure.

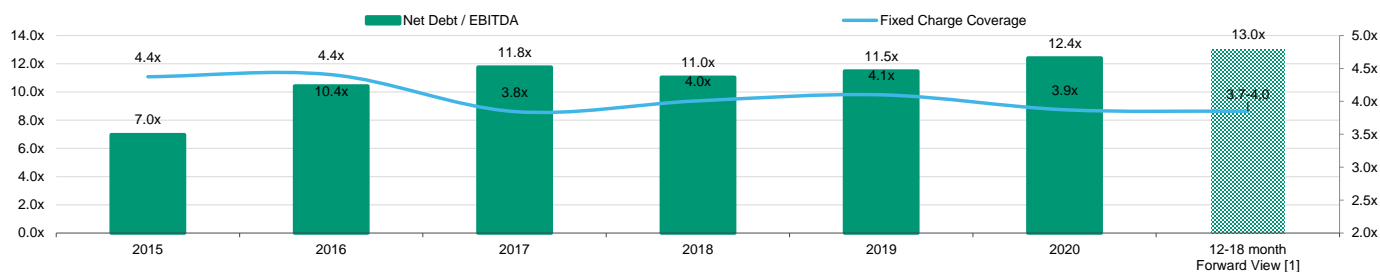
Strong fixed-charge coverage but sensitive to changes in interest rates, given some reliance on short-term debt

Kojamo's fixed-charge cover, measured as adjusted EBITDA/fixed charges, stood at a strong 3.9x as of FY2020. We expect the company's fixed-charge cover to stay around 3.9x as the company managed to maintain its average interest rate at 1.8% as of 31 December 2020.

The targeted hedging ratio is 50%-100%. As of 31 December 2020, 91% of Kojamo's debt was fixed, with an average duration of interest hedges of 4.6 years, which will contribute to the stability of the company's fixed-charge coverage over the coming years.

Exhibit 9

Property acquisitions and investments to push net debt/EBITDA higher and slightly weaken its still-comfortable fixed-charge coverage



[1] This represents Moody's view; not the view of the issuer.

Source: Moody's Financial Metrics™

For FY2020, Kojamo's Moody's-adjusted EBITDA stood at €220 million. Net debt was around €2.7 billion. Moody's-adjusted net debt/EBITDA was a high 12.4x, partly reflecting the fact that the company sold and acquired properties during March 2017 to December 2020. The net debt/EBITDA will increase towards 13x and is impacted by the increase of developments and acquisitions in 2020-2023. Thus the investment, and the financing, is made upfront and the EBITDA is generated after completion i.e. up to two years later and later compared to acquisitions. Also contributing to the increasing net debt/EBITDA is that the net initial yields in developments and acquisitions is at or above 4% and this is much higher compared to divested assets where the risk was higher.

In addition, Kojamo's focus on properties in attractive locations implies higher acquisition costs. We assess this ratio in conjunction with the effective leverage, which is more moderate and in line with that of similarly rated peers, and reflects the high potential value of Kojamo's property portfolio.

Methodology and scorecard

The principal methodology used in rating Kojamo was the REITs and Other Commercial Real Estate Firms rating methodology, published in September 2018. The assigned rating is in line with the Baa2 scorecard-indicated outcome under both FY2020 numbers and the forward-looking view.

Rating factors

Kojamo plc

Real Estate / REIT Industry Grid [1][2]	Current FY 12/31/2020		Moody's 12-18 Month Forward View As of March 2021 [3]	
Factor 1 : Scale (5%)	Measure	Score	Measure	Score
a) Gross Assets (USD Billion)	\$8.9	Baa	\$9.5 - \$10.5	A
Factor 2 : Business Profile (25%)				
a) Market Positioning and Asset Quality	A	A	A	A
b) Operating Environment	A	A	A	A
Factor 3 : Liquidity and Access To Capital (25%)				
a) Liquidity and Access to Capital	Baa	Baa	Baa	Baa
b) Unencumbered Assets / Gross Assets	70.8%	Baa	70% - 80%	Baa
Factor 4 : Leverage and Coverage (45%)				
a) Total Debt + Preferred Stock / Gross Assets	42.1%	Baa	43% - 46%	Baa
b) Net Debt / EBITDA	12.4x	Caa	13.0x	Caa
c) Secured Debt / Gross Assets	17.2%	Baa	16% - 18%	Baa
d) Fixed Charge Coverage	3.9x	Baa	3.7x - 4x	Baa
Rating:				
a) Scorecard-indicated outcome		Baa2		Baa2
b) Actual Rating Assigned				Baa2

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

[2] As of 12/31/2020; Source: Moody's Financial Metrics™.

[3] This represents 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™

Peers

Exhibit 11

Peer comparison

REITs and Other Commercial Property Firms Industry Grid ^[1]	Kojamo [2]	SATO [2]	LEG Immobilien ^[2]	ADO Properties S.A. ^[2]	Annington Limited ^[2]
Factor 1 : Scale (5%)	Measure	Measure	Measure	Measure	Measure
a) Gross Assets (USD Billion)	\$9.5 - \$10.5	\$5.3 - \$5.5	\$15.6 - \$16.7	\$13 - \$14	\$9.8 - \$10.4
Factor 2 : Business Profile (25%)					
a) Market Positioning and Asset Quality	A	A	Baa	Baa	Baa
b) Operating Environment	A	A	Aa	A	A
Factor 3 : Liquidity and Access To Capital (25%)					
a) Liquidity and Access to Capital	Baa	Ba	Baa	Ba	Baa
b) Unencumbered Assets / Gross Assets	70% - 80%	83% - 84%	28% - 32%	45% - 55%	100%
Factor 4 : Leverage and Coverage (45%)					
a) Total Debt + Preferred Stock / Gross Assets [3]	43% - 46%	45.2% - 45.4%	40% - 42%	50% - 55%	42% - 46%
b) Net Debt / EBITDA	13.0x	12.2x - 12.4x	12.3x - 12.8x	20x - 25x	12x - 16x
c) Secured Debt / Gross Assets	16% - 18%	9% - 9.4%	19% - 21%	20% - 25%	0%
d) Fixed Charge Coverage [4]	3.7x - 4x	3.7x - 3.8x	4.5x - 4.6x	1.6x - 2x	2x - 2.4x
Rating:					
a) Scorecard-indicated outcome	Baa2	Baa2	Baa3	Ba1	Baa1
b) Actual Rating Assigned	Baa2	Baa3	Baa1	Ba2	Baa2
c) Gap	0	-1	+2	-1	-1

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

[2] This represents Moody's view; not the view of the issuer.

[3] Debt includes a portion of hybrid securities considered to have debt like features as explained in Moody's Approach to Global Standard Adjustments in the Analysis of Financial Statements for Non-Financial Corporations revised December 2016.

[4] Fixed Charges includes capitalised interests explained in Moody's Approach to Global Standard Adjustments in the Analysis of Financial Statements for Non-Financial Corporations revised December 2016.

Sources: Moody's Financial Metrics and Moody's estimates

Ratings

Exhibit 12

Category	Moody's Rating
KOJAMO PLC	
Outlook	Stable
Issuer Rating -Dom Curr	Baa2
Senior Unsecured -Dom Curr	Baa2

Source: Moody's Investors Service

© 2021 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454