



KTI Market Review

Spring 2020

Increasing uncertainty in the real estate investment and rental markets due to the outbreak of COVID-19

Transactions market active in the first quarter, a slowdown expected

Rental income plummeting in 2020

The impact of crisis differs between real estate sectors



KTI Market Review

Spring 2020

The outbreak of COVID-19 and the restrictions and uncertainty following it have quickly turned the outlook in the real estate market during the spring. In the RAKLI-KTI Property Barometer survey conducted in April, the outlook for most real estate market indicators turned negative. For the time being, the depth and duration of the economic downturn caused by the situation is unknown, and therefore, there are more questions than answers about the development of the real estate market in the coming months and years.

The year started briskly in the property transactions market, fueled by a few exceptionally large transactions. The transactions volume automatically slows down as a result of the travel and other restrictions caused by the COVID-19 pandemic. Uncertainty about the economic situation is also likely to slow down transactions activity in the coming months. The longer-term effects of the crisis on investor interest and on the values and rents of various properties will only be revealed over time.

Rental income from real estate will inevitably decrease for the current year, especially in the retail and leisure property markets. The longer-term effects will depend, on the one hand, on the duration of the crisis and, on the other hand, on the changes that the exceptional situation will bring to qualitative and quantitative space demand. Some of the changes brought about by the crisis are likely to recover once the situation calms down, while some may be more permanent.

The outlook for rents and vacancy rates for commercial properties have turned negative due to the crisis. Shopping centres and hotels are the biggest immediate sufferers in the real estate market. In these sectors, the crisis will inevitably cause a significant cut in this year's rental income. In the office markets, the demand has developed positively during the past few years, but the situation is likely to change with the general deterioration of the economic situation. However, the impact is likely to be less dramatic and come with a slight delay. In the commercial property markets, logistics and warehouse properties are expected to show the most resilience, supported by the growth in e-commerce. Public use properties needed for the provision of public services are also considered to be reasonably crisis-resistant.

The rental housing market has started on the best footing at the early stages of the crisis: demand in large cities is strong, rents are rising and occupancy rates remain high. The potential effects of the crisis on the rental housing markets are likely to be seen with a slight delay, if the economic effects are prolonged and weaken tenants' ability to pay, while, at the same time, supply continues to grow briskly.

The rapidly deteriorating economic situation is reflected in the real estate market

Even before the spring's turmoil, the outlook for the Finnish economy was deteriorating due to the expected decline in export demand, and the forecasted GDP growth was moderate, at some 1 per cent. The outbreak of COVID-19 suddenly proved the earlier growth forecasts obsolete, and the magnitude and duration of the economic collapse can currently only be guessed. In mid-April, the Ministry of Finance forecasted a 5.5 per cent drop in GDP for this year and a just over 1 per cent growth for 2021, provided that the economic recovery starts already in the latter half of the year. If the restrictions last longer and the consequent problems of consumer confidence and unemployment deepen, the decline may be much more severe and prolonged.

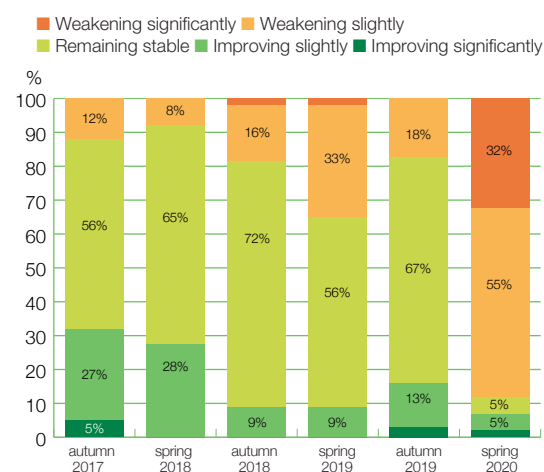
Interest rates are expected to remain low, access to finance is becoming restricted

Property markets are drifting into this economic crisis from a very different situation compared to the global financial crisis a decade ago. Therefore, the real estate market impacts of the crisis are difficult to assess. On the positive side, the Nordic banks are healthy, and the level of debt in real estate investments is reasonably low, which will hopefully soften the market impact. Low interest rates - which are likely to continue for a long time going forward - also support real estate investment and its relative position in the investment market. However, the availability and terms of financing are likely to tighten as a result of the market turnaround. In the RAKLI-KTI Property Barometer, carried out in mid-April, about 90 per cent of respondents expected that access to finance will tighten and loan margins will increase during the next six months.

- Economic forecasts are being made within uncertainty
- Tightening conditions expected in the real estate financing market
- Construction volumes slowing down – can stimulus actions be expected in the sector?

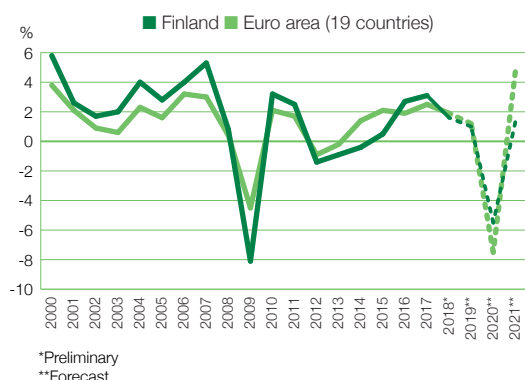
Outlook for the availability of bank financing

% of responses



Source: RAKLI-KTI Property Barometer

GDP growth in Finland and in the Euro area



Source: Eurostat, IMF, Statistics Finland, Ministry of Finance

The outlook for the relative position of real estate in the investment market is unclear

The impact of the situation on the perceived risks of real estate investments and thus the values in the longer term still remains to be seen. On the one hand, the relative position of real estate in the investment market remains strong, supported by the low interest rates; on the other hand, the situation may also open up interesting alternatives in the other parts of the investment market. In the commercial real estate market in particular, corrections are likely to be seen in the valuations, and their recovery will depend on longer-term anticipated rental and investment market demand.

Construction volumes are slowing down

After the financial crisis, the early stages of economic recovery were largely driven by construction. Construction activity has been high in recent years, but it began, however, to slow down even before the current crisis, and the situation will inevitably bring additional challenges to construction as well. The government's subsidy measures following the financial crisis significantly boosted housing construction in the largest cities, which might also be needed in order to recover from this situation. Public stimulus measures

can also be targeted at renovation and public sector property investments. The future of commercial property construction activity depends, to a large extent, on the development of space demand. Due to the active construction of recent years, both the retail and office space stock has increased significantly, and current and upcoming supply is likely to provide sufficient buffer for the next few years. In EK's (Confederation of the Finnish Industries) Economic Barometer, the balance figure for the demand expectations for construction sector collapsed from -9 in January to -54 in April.

The real estate investment market continued to grow in 2019

According to KTI's calculations, the size of the Finnish professional real estate investment market stood at €77.1 billion at the end of 2019. The market grew by 11 per cent during the year. The completion of new properties developed by professional investors was, again, the main source of market growth. The increase in market values also contributed to the growth of the market: according to the KTI Property Index, the market values of real estate investments rose by four per cent on average in 2019.

Foreign real estate investors continued to increase their investments

Almost a third of the total value of the invested real estate market is currently owned by foreign investors. The amount of foreign investors' Finnish property holdings increased to almost €25 billion in 2019, meaning a net increase of about €2.5 billion compared to the previous year. In the transactions market, the net purchases of foreign investors were again positive, as several new players entered the market and the old ones continued to increase their investments. At the end of 2019, 13 of Finland's 30 largest real estate investors were foreign investors.

Holdings of domestic real estate funds increased

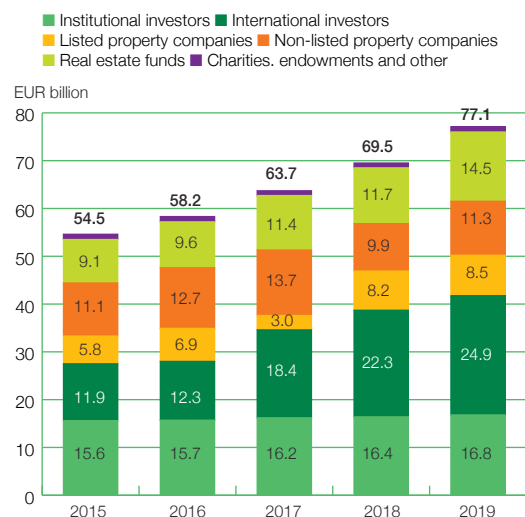
Among domestic players, real estate funds grew the most, with total real estate holdings rising to €14.5 billion. Special investment funds in particular continued to grow rapidly, fueled by inflows of equity, and, by the end of the year, special investment funds' total property holdings amounted to about €7.5 billion.

The total amount of all real estate investments held by the Finnish institutional investors was about €24 billion at the end of 2019. Of these, the vast majority, about 70 per cent, or €16.8 billion, are still traditional domestic direct investment. Although many institutions have emphasized the importance of international diversification in recent years, the amount of their foreign investments remained almost unchanged in 2019, accounting for about 20 per cent of the total institutional property portfolios.

- Property investment market grew by 11 per cent in 2019
- The share of foreign investors rose to almost a third
- Property investments of institutional investors almost unchanged
- The volume of residential investments increased, driven by both new construction and capital growth

The size and structure of the Finnish property investment market by investor group

Direct property investments in Finland



Source: KTI (query for investors, annual reports, KTI estimates)

The portfolios of the largest investors continued to grow

The listed housing investment company Kojamo strengthened its position as Finland's largest real estate investor. The value of Kojamo's real estate portfolio increased by more than €1 billion to almost €6.3 billion. A significant part of the increase in value is explained by a technical change in the valuation method of their property portfolio. The total value of real estate holdings of the 30 largest real estate investors was €52.6 billion at the end of the year, showing a growth of just over €3.5 billion compared to the previous year.

Residential strengthened its position as the largest sector in the investment market

The share of residential real estate investments of the total property investment universe rose to 32 per cent in 2019. Professional investors owned a total of approximately €25 billion worth of rental properties. The growth in residential investments was driven by both new rental residential properties being developed and strong development in market values. The capital growth was supported by the transition of some large investors to income-based valuation methods instead of the previous transaction-based method.

The amount of office and retail properties remained almost unchanged in the investment market

Office properties maintained their position as the largest commercial real estate sector in the real estate

investment market, although their share fell compared to the previous year. The share of retail properties also decreased slightly, due to their compressed investment performance in recent years. The total amount of public use properties, needed for the provision of various public services, continued to grow in the investment market, and, at the end of the year, about €5 billion worth of public use properties were owned by professional investors.

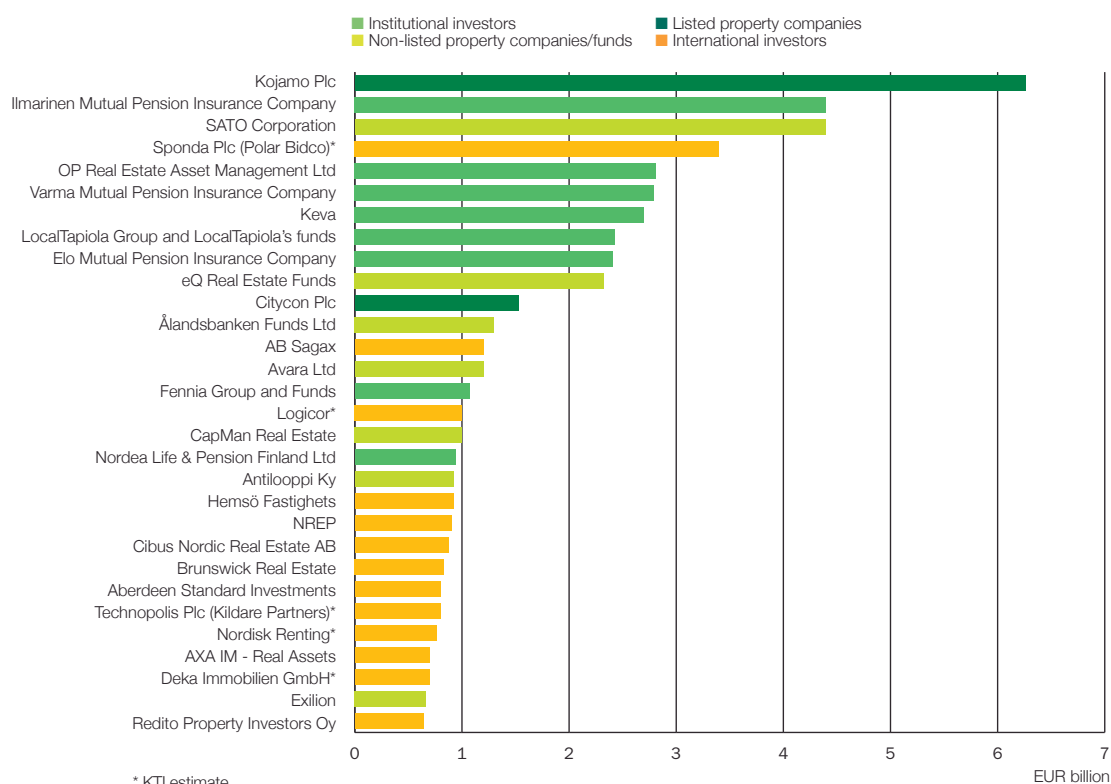
The total return on real estate investments rose to 8.8 per cent, with significant differences between sectors

Residential real estate was, again, the best performing real estate sector in 2019 with a total return of over 14 per cent, measured by the KTI Index. The total return was boosted by a capital growth amounting to almost 10 per cent. Of the commercial property sectors, industrial properties showed the best performance, mainly due to their strong net income. In the retail property market, market values continued to decline, resulting as a negative average annual capital growth for the past 10 years. The market values of office properties have increased in the past few years, but the decline in net income is pressuring total returns on office properties.

Net income on property investments continue to decline

In all property sectors, income returns have declined in recent years, although the drivers differ between property sectors and regions. In the residential market,

Direct property holdings of 30 biggest property investors in Finland Property assets under management at the end of 2019

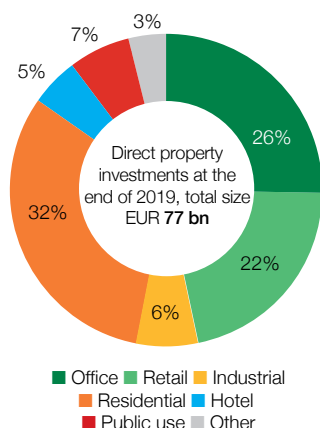


* KTI estimate

EUR billion

Source: KTI (query for investors, press releases, annual reports)

The structure of the Finnish property investment market by sector



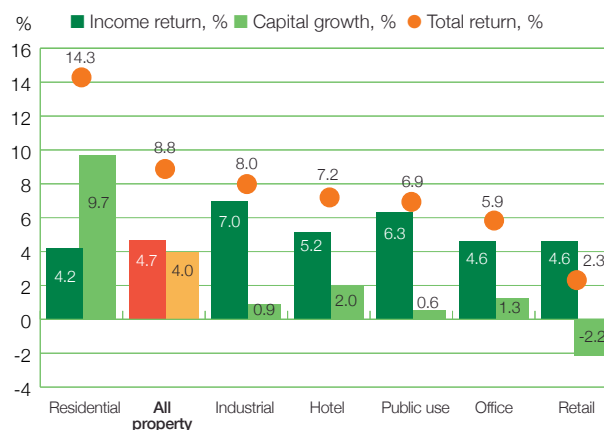
Source: KTI (query for investors, annual reports, KTI estimates)

net income is pressured mainly by the increase in market values. In prime office properties, the decline in income return is explained by both an increase in market values as well as by rising costs, while in secondary locations and properties, vacancy rates remain high and rents low. The level of net income in the retail sector is also declining, as rents remain unchanged at their best, and vacancy challenges are growing, especially outside the Helsinki metropolitan area. The average income return of the KTI Property Index stood 4.7 per cent in 2019.

The impact of the crisis varies between different sectors

As interest rates remain low and central banks provide high liquidity, the primary impact of the current crisis on the real estate market will come through the rental market and its increased uncertainty. In this respect, different sectors are being hit differently by the crisis: in the RAKLI-KTI Property Barometer, the collapse in rental income was estimated to be sharpest in hotel properties, with as many as 45% of respondents estimating their rental income to fall by more than 25 per cent this year. Also in retail premises, more than half of the respondents expect a drop of at least 15 per cent in rental income in 2020. In the office market, the impact of the crisis is assessed to be softer, but even there, half of the respondents expect a drop of at least 5 per cent in their annual rental income. Rental residential and public use properties are not expected to be affected severely by the crisis, and even in the industrial property sector, the majority of respondents consider the impact to be small.

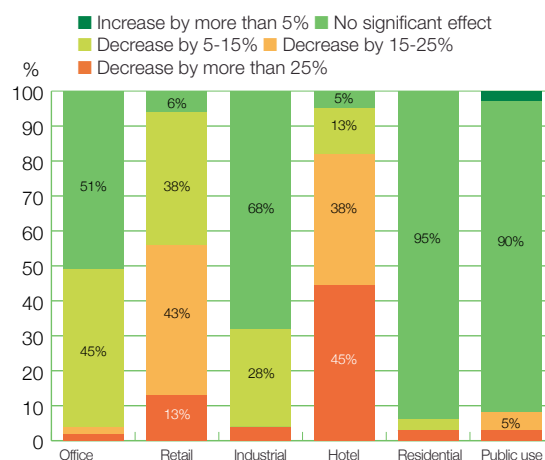
Total returns by property sector in 2019



Source: KTI Index

The impact of the COVID-19 crisis on rental income in 2020

% of responses



Source: RAKLI-KTI Property Barometer

Property transactions market was active early in the year, but a slowdown is expected

Demand for property in the investment market remained strong until the first quarter of this year. In 2019, the total transactions volume amounted to around €6.4 billion, which was clearly below the peak levels of the previous couple of years, but the decline was mostly explained by a shortage of supply rather than a decline in demand.

In 2020, the year started briskly in the transactions market. The total volume for January-March rose to more than 2.7 billion euros, which is one of the busiest quarters ever and all time's highest volume in the first quarter. During April, only a few significant transactions were published, which partly reflects the slackening of the transaction market.

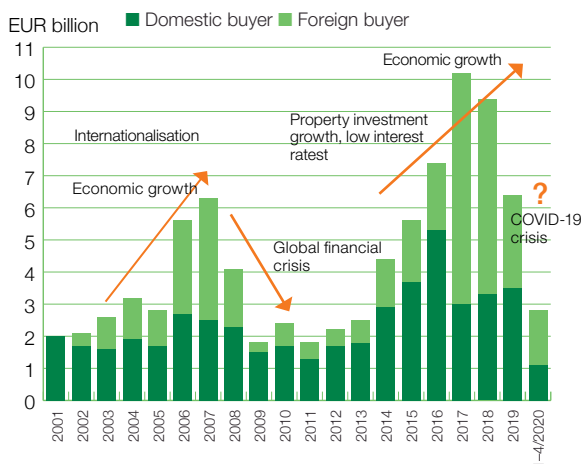
In early 2020, the volume of real estate transactions was boosted by a couple of long-prepared large deals, the completion of which were postponed to the beginning of this year. The OP Bank Group's head office property in Vallila was acquired by Varma and two Korean investors for a purchase price of €480 million. Aureit Holding, a subsidiary of the Belgian Aedifica, completed the acquisition of the Finnish care property investor Hoivatilat's shares, while the Swedish SBB completed the acquisition of Hemfosa. These two transactions comprised Finnish properties worth almost €850 million. In the first quarter's fourth major transaction, Antilooppi acquired nine properties in Ruoholahti from Sponda.

- Restrictions and uncertainty will halt real estate transactions, at least temporarily
- Office yields reacted only moderately
- A sharp drop in foreign investor demand

Offices were the most traded sector, large transactions boost the volume of public use properties

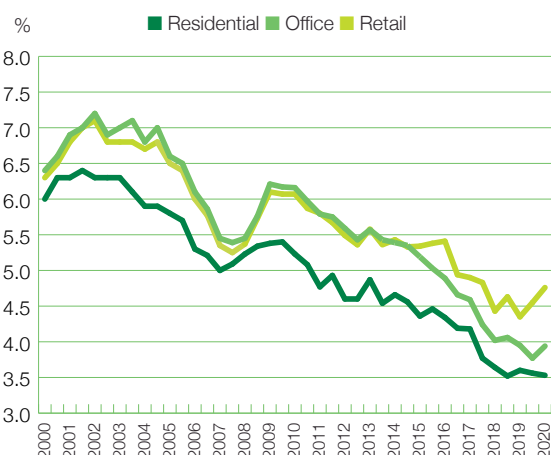
Office properties have been the most popular sector in the transaction market in 2017-2019, with a share of approximately 40% of the total volume each year. Also in the first quarter of 2020, the share of offices in the total volume rose to more than 40%, driven by large transactions in this sector. Public use properties have steadily increased in popularity in the investment market, and their trading volume has also become significant. The share of public use properties in transactions at the beginning of the year rose to 25%, boosted by the acquisitions of Hoivatilat and Hemfosa.

Transaction volume in the Finnish property market



Source: KTI

Prime property yields in the Helsinki CBD



Source: RAKLI-KTI Property Barometer

The COVID-19 crisis is slowing down the transactions market, at least temporarily

The effects of the global COVID-19 pandemic began to be visible in the Finnish real estate market towards the end of March. Transaction processes that have been started before the outbreak of the crisis will be taken forward as far as possible, despite exceptional circumstances, which may in part sustain transactions activity in the spring. However, travel and other restrictions caused by the COVID-19 situation are reducing transaction opportunities even physically; for example, international investors simply cannot review the properties and start more detailed investigations. Therefore, it is difficult to start new processes in the current situation, which is likely to affect transaction volumes, at least temporarily. In addition, the general uncertainty caused by the exceptional situation and the consequent pricing problems will most likely reduce transaction activity for some time.

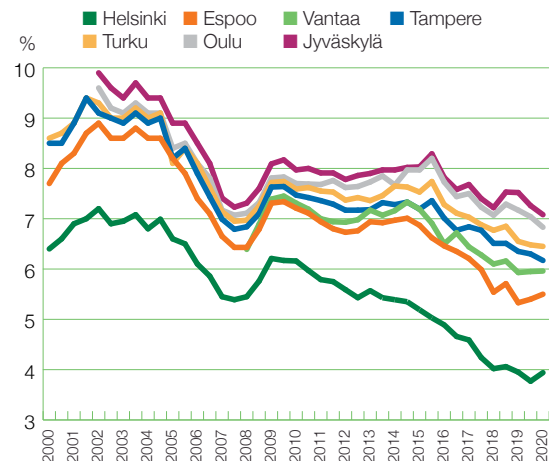
The coming months will be quiet – what about the future?

In the RAKLI-KTI Property Barometer conducted in April, expectations of the near-term development of investor demand collapsed compared to last autumn's survey. The balance figure for foreign investor demand fell from +50 in the autumn to -62 in April. The collapse is steeper than, for example, at the beginning of the financial crisis in autumn 2007, when there was a drop of 69 points between the two surveys. At that time, however, the depression deepened, and the balance figure continued to fall from -13 in autumn 2007 to its deepest level of almost -80 in autumn 2008. The aftermath of the COVID-19 crisis therefore still remains to be seen. Domestic investment demand is also expected to fall, although not as sharply as foreign investment. Respondents to the Barometer expect a clear drop in the volume of transactions in all property sectors.

Yields react only moderately to the crisis

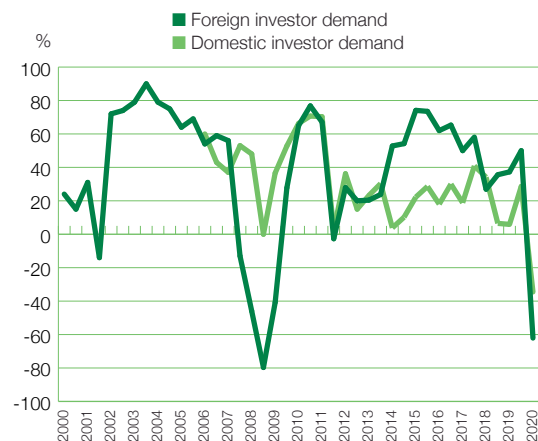
Yields for commercial properties have been compressing steadily in recent years. In the recent RAKLI-KTI Property Barometer, there was a turnaround also in yields, although perhaps surprisingly moderate. The net yield requirement for a prime office property in central Helsinki was now quoted at just over 3.9 per cent on average, which is less than 0.2 percentage points higher than in last autumn's survey. In other cities, office yields hardly changed since last autumn, but expectations for next year are 0.2-0.3 percentage points higher than the current level in all cities. As expected, the yield for retail properties rose more sharply, by about 0.4 percentage points in the center of Helsinki from last autumn. The expected resilience of rental residential is also reflected in the yield quotations: the yield for a well-located residential property in Helsinki remained almost unchanged compared to last autumn, and only a slight upward movement is expected for the coming year.

Prime office yields in major cities



Source: RAKLI-KTI Property Barometer

Outlook for investor demand Balance figures



If the balance figure is positive, greater amount of the respondents expects investor demand to increase.

Source: RAKLI-KTI Property Barometer

Office properties attract investors

Demand for office properties in the investment market has been broad-based in recent years, and both large portfolio transactions and exceptionally large single asset transactions have been carried out, and both expensive prime assets and more challenging office properties have attracted investors. The decline in the market values of offices following the financial crisis was reversed in the wake of economic growth in 2016, and returns in the Helsinki CBD and other prime locations and properties in particular have been very favorable in recent years. In the KTI Property Index, the five-year average total return on office properties is over 6 per cent, despite a significant drop in the net return level from 5.9 per cent in 2015 to 4.6 per cent in 2019. In the Helsinki CBD, the average total return on offices for the past five years is well above 9 per cent.

Strong development of rents continued in the Helsinki CBD

The capital growth of offices in the centre of Helsinki has been supported by both increasing rents and compressing yields. In the last three years, the rental levels in the city centre have set new records every year, boosted by positive economic development as the demand for space has increased and tenants' ability to pay has strengthened. The strong development of rents continued until the beginning of the COVID-19 crisis, and in the KTI rental database, the median rent per square metre in new leases started between September 2019 and February 2020 remained at 30 euros, while the upper quartile stood at over 36 euros. The KTI rental index for new office leases increased by 3.4 per cent per annum. The amount of vacant office space in the

- Office properties have accounted for almost 40% of transactions volumes in recent years
- In the Helsinki CBD, prime rents increased by 3.4 per cent p.a.
- Rental expectations also collapsed in the office market
- Large leases accelerate new construction

city centre has continued to decline, and the premises are almost fully occupied. Strong demand has also continued in the outskirts of the city centre, and the average rent per square metre of new leases in Kamppi, for example, rose by more than one euro in the past six months to almost 26 euros.

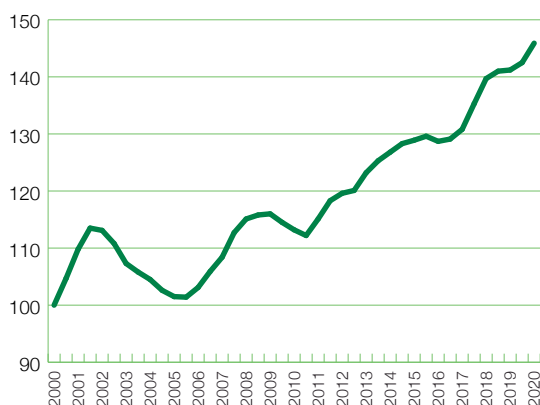
The outlook for rents and vacancy rates turned negative

The vacancy rate challenges have not disappeared in the Helsinki metropolitan area office market, despite the favorable development in recent years. In the KTI rental database, the occupancy rate of office space in the large investors' portfolios decreased to about 83 per cent in March. In the RAKLI-KTI Property Barometer, expectations turned clearly negative, and more than 60% of the respondents expect office vacancy rates to increase within the next six months in the Helsinki metropolitan area. Elsewhere in Finland, the outlook is even more negative. Also for rents, a larger share of respondents expect a decrease rather than an increase in all areas. The Helsinki CBD is expected to continue to hold up best, with the majority of respondents expecting office rents to remain unchanged, and with only 28% expecting a decline. In all other areas, the balance figures for office rental forecasts are even more clearly negative, with well over half of respondents expecting office rents to decrease during the next six months.

Large leases are boosting the growth in the modern office stock

In recent years, the office market has been characterised by fairly abundant new construction at the same time when a significant amount of older office space remains

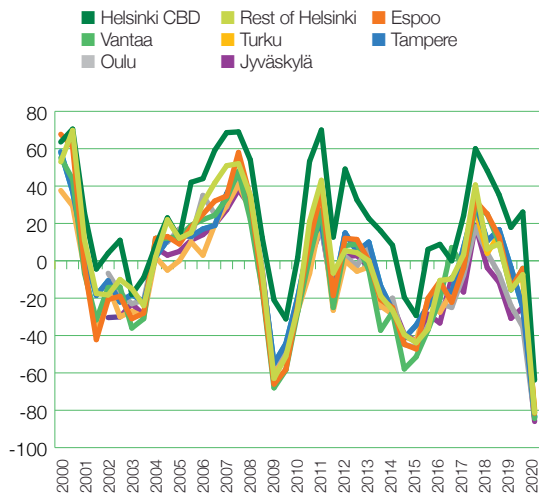
KTI Office Rent Index
Helsinki CBD offices, new agreements, index 2000=100



Source: KTI

Outlook for office rents

Balance figures



If the balance figure is positive, greater amount of the respondents expects rents to increase.

Source: RAKLI-KTI Property Barometer

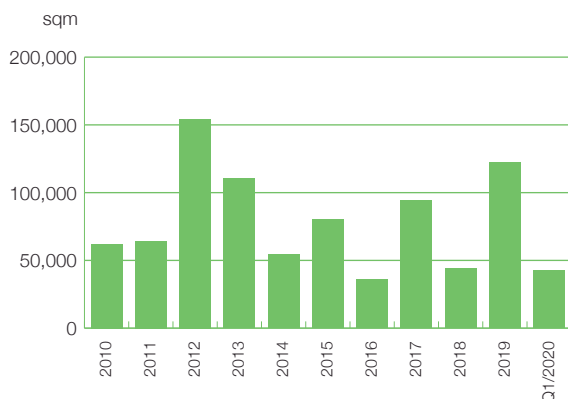
vacant - most likely permanently, at least to some extent. In the past couple of years, new construction has been fueled by several exceptionally large leases of thousands or even tens of thousands of square metres, where corporations relocate their headquarters to new, efficient and well-located premises. In 2019, for example, Ramboll, Kesko and Accountor Group moved to new premises. At the beginning of this year, the new offices of Telia and HOK-Elanto, for example, were completed in connection with Tripla, and later this year Supercell will move to its new premises in Jätkäsaari. In addition, Trimble Solutions, Kone, Fiskars and Stora

Enso have announced their relocation plans in 2019, and most recently, NCC's WeLand project in Ruoholahti, where Deloitte will relocate its Finnish headquarters, has been confirmed. The new projects continue to highlight a trend that has been going on for years, where new efficient facilities free up more space in old locations, which maintain a large amount of vacant space despite the positive net take-up in recent years.

Conversions soften the growth in office stock

During the past decade, some 82,000 square metres of new office space has been completed in the Helsinki metropolitan area annually on average. During the first quarter of this year, only one project was completed, the Tripla Workery offices in Pasila, which increased the stock by more than 40,000 square metres. At the end of March, just over 110,000 square metres were under construction, as several major projects have gotten underway. Property owners are trying to soften the vacancy problem with conversions, the volume of which has accelerated significantly in recent years. During the past decade, conversions have reduced the office stock by 72,000 square metres each year on average. Measured by the amount of space, more than two-thirds of old office premises have found a new life in residential use. The hotel boom of recent years has boosted a significant number of hotel conversion projects, especially in the center of Helsinki. Hotel conversions have accounted for almost a quarter of the total office space reduction over the past decade.

Completions of new offices in the Helsinki metropolitan area



Source: KTI, RPT Docu Oy

Office property conversions in the Helsinki metropolitan area

From office to residential / hotel / other use



Source: KTI

Examples of major corporate head office relocations in the Helsinki metropolitan area

Property	Rentable area	Main user(s)	Owner(s)	Completion / Moving date
Headquarters of Ramboll Finland Oy	20,750*	Ramboll Finland Oy	Keva	Q1/2019
Kalasataman Kampus	35,000	Kesko Oyj	Varma	Q2/2019
Accountor Tower	24,700*	Accountor Group	Fund managed by DWS	Q4/2019
Tripla Workery offices	50,000	Telia, HOK-Elanto	Fund managed by Commerz Real	Q1/2020
Wood City	13,000*	Supercell Oy	Supercell Oy	Q3/2020
Keilalampi	15,000*	If Vahinkovakuutus Oyj	Fund managed by DWS	Q4/2020
OOPS (Phase A & B)	18,500	Trimble Solutions Corporation	Varma	Q3/2021
Keilaniemi Next	9,500	Fiskars Group	NCC	Q1/2022
Headquarters of KONE	48,000*	KONE Oyj	Regenero (HGR Property Partners Oy & YIT Oy)	2022
We Land	21,000	Deloitte	NCC	2023
Headquarter of Stora Enso	20,000*	Stora Enso	Varma	2023

*Gross area

Source: KTI

Shopping centres hit hard by the crisis

The current crisis has brought shopping centres and their tenants into the spotlight as the business of many tenants came to a standstill due to the outbreak of COVID-19. The position of cafes and restaurants is, of course, the most difficult following the government's closure decision. Only a few businesses, such as the groceries and pharmacies, are sheltered from the effects. In this situation, shopping centre owners have been almost forced into rent reliefs, at least in the form of rental payment suspensions, but, in many cases, also temporary discounts or even remissions have been granted. Opening hour regulations have also been relaxed or even completely liberalised in most shopping centres.

Retail properties underrepresented in the transactions market

The share of shopping centre and retail properties in the real estate transaction volume fell to 17% last year, which is 5 percentage points lower than their share of the total invested market. The attractiveness of retail properties has been weighed down above all by the uncertainty of retail trade and consumer demand. In the KTI Property Index, the average 10-year annual capital growth of retail properties is negative by 1.3 per cent, which partly reflects the upward trend in the estimated risk associated with retail properties. The strong growth in the retail space stock in the Helsinki metropolitan area in recent years contributes to the expected polarization development, which has been visible in the office market for years already. However, uncertainty and a downward trend in the retail market now also extends to the best locations and properties.

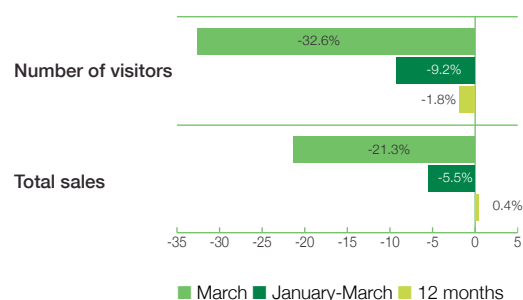
Sales and visitor numbers plummeted in March

The sales and visitor indices of the Finnish Council for Shopping Centers and KTI clearly demonstrate the effects of the COVID-19 on shopping centres. During the

- A big drop in the number of visitors and sales in shopping centres in March
- The COVID-19 crisis will inevitably leave a notch in the rental income of retail properties in 2020 - what about the future?
- Rental expectations for retail premises fell sharply

Shopping centre sales and visitor indices

Change in the total sales and number of visitors in shopping centres, compared to the previous year



Source: Finnish Council of Shopping Centers, KTI

first quarter of the year, the number of visitors fell by more than 9 per cent and total sales by 5.5 per cent compared to the same period last year. Until the end of February, sales and numbers of visitors were even higher than last year, so the drop came exclusively in March, when visitor numbers for the last two weeks were 50 to 60 per cent lower than last year. The worst quarterly declines were reported for the sales of fashion and accessories, leisure products, as well as for cafes and restaurants.

Occupancy rates stable so far

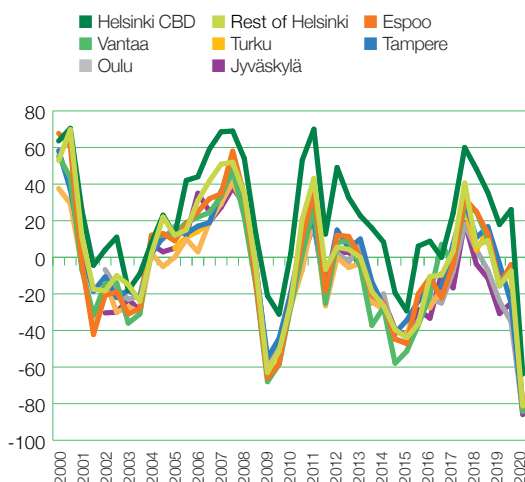
Occupancy rates in shopping centres have been slowly declining in recent years, due to the overall development in retail trade and the growth of e-commerce, but still stand

Total returns of retail properties



Source: KTI Index

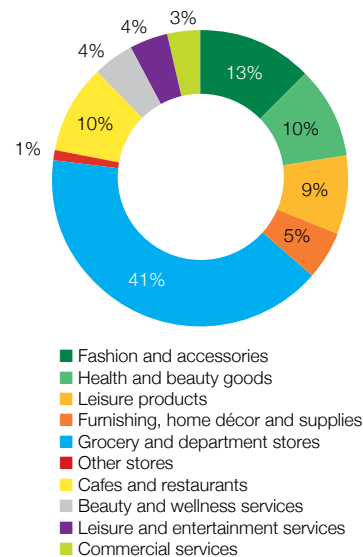
Outlook for retail rents Balance figures



If the balance figure is positive, greater amount of the respondents expects rents to increase.

Source: RAKLI-KTI Property Barometer

Distribution of sales in shopping centres, Q1/2020



Source: Finnish Council of Shopping Centers, KTI

at close to 95 per cent in the Helsinki metropolitan area. In other large cities (Tampere, Turku, Oulu, Jyväskylä, Lahti, Kuopio), the average occupancy rate of shopping centres also remained stable at 92 per cent, but in the rest of Finland, the amount of vacant space clearly increased and the occupancy rate fell to 87 per cent by the end of first quarter. The decline in sales and the consequent drop in turnover-based rents, rent cuts in the crisis situation, together with a fall in occupancy will inevitably leave a gap in this year's net rental income for retail properties, which cannot be offset by the possible normalisation towards the end of the year. Even after the situation has cleared up, it is likely that it will take time for consumer sentiment to return to normal, and the possible continuation of the weak economic situation will weaken employment, purchasing power and consumer confidence.

The development prospects for retail space rents slumped

In the RAKLI-KTI Property Barometer, expectations for rents and vacancy rates for retail premises collapsed more sharply than those of office premises, as expected. In last autumn's survey, the balance figure for the rental outlook for Helsinki CBD prime retail was fairly positive, but it now fell clearly negative, as two-thirds of the respondents predict rents to decrease within the next six months. The estimated rent per square metre of a prime retail space the Helsinki CBD was now 118 euros, and, within the next year, it is predicted to be 15 euros lower than now. In other areas, expectations were already declining in the previous survey, but they have now sunk deeper than ever before in the 25-year history of the Barometer, and now stand at below -80. Outside the Helsinki metropolitan area, about a third of respondents even expect a significant decline in retail rents. Vacancy rate expectations also declined significantly: nearly 90% of respondents expect retail property vacancy rates to rise during the next six months, both in the Helsinki metropolitan area and elsewhere in Finland.

The position of rental residential continues to strengthen in the property investment market

The share of residential properties in the professional real estate investment market is approaching one third. In recent years, growth has been boosted by both rapid new construction and increasing market values. The investor base in the residential property investment market has also diversified with new investors coming to the market. An increasing number of domestic funds are focusing exclusively or mainly on rental residential investments. In recent years, foreign investors have also rapidly increased their residential property investments in Finland.

Residential property holdings of international investors are growing

According to KTI's estimate, foreign investors owned approximately 17,000 Finnish rental apartments at the end of 2019. The strategies and portfolios of foreign investors differ significantly: while some focus exclusively on low-yielding new developments in the largest cities, others concentrate on older, higher-net-income residential assets in smaller cities. Round Hill Capital is the largest foreign residential investor with a portfolio of almost 5,000 apartments, and Starwood Capital Group, which entered the Finnish market in 2019, was ranked second on the list with its 2,200 apartments.

Rental residential supply continues to grow

According to KTI's statistics, more than 4,500 rental residential apartments were completed in the Helsinki metropolitan area in 2019 in properties that were built exclusively for rental use. This is the highest annual completion volume in 2010s, but it will be exceeded this year, when the number of completed apartments is estimated to increase to well over 5,000, according to KTI calculations. There are also many projects under construction scheduled for completion in 2021 or 2022. Rental residential development is being carried out by both municipal housing companies and other ARA operators, as well as by many types of investors in non-subsidised housing stock. A total of just over 2,100 rental apartments were completed in other large cities in 2019, and this year the number will rise to more than 2,700 apartments. The majority of these projects under construction are located in Tampere or Turku.

Rental residential supply has grown the most in Kivistö, Jätkäsaari and Tikkurila

In recent years, rental residential construction in the Helsinki metropolitan area has been concentrated in locations with good public transport connections. According to KTI's statistics, the largest number of rental apartments has been completed in the Kivistö area, where the supply has increased by 53,000 square metres between 2015 and the first quarter of 2020. More

- Rental residential is expected to show resilience to the COVID-19 crisis
- The Helsinki metropolitan area, Tampere and Turku stand out from other cities
- Strong demand for rental housing supports high occupancy rates

than 50,000 square metres have also been completed in Jätkäsaari, and the amount of rental apartments completed in Tikkurila also rose to almost 50,000 square metres. In Martinlaakso, Niittykumpu, Kalasatama and Laajasalo's Kruunuvuorenranta, the supply of rental housing has increased by more than 30,000 square metres over the past five years.

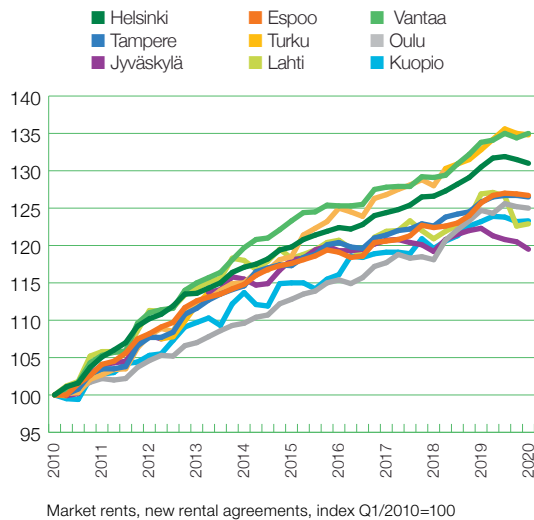
Income return is compressing as market values increase

Income returns on residential properties have declined in recent years, and amounted to 4.2 per cent in the whole of Finland in the KTI Index in 2019. The main driver for the decline in income return is the increase in market values in recent years. In the Helsinki metropolitan area, the average income return has already fallen well below 4 per cent, especially in newer properties. In 2019, income return was supported by increasing rents and a high occupancy rate, which remained at an average of almost 97%, but, on the other hand, increased maintenance costs pressured income returns compared to the previous year.

Rents continue to increase in the Helsinki metropolitan area, Tampere and Turku

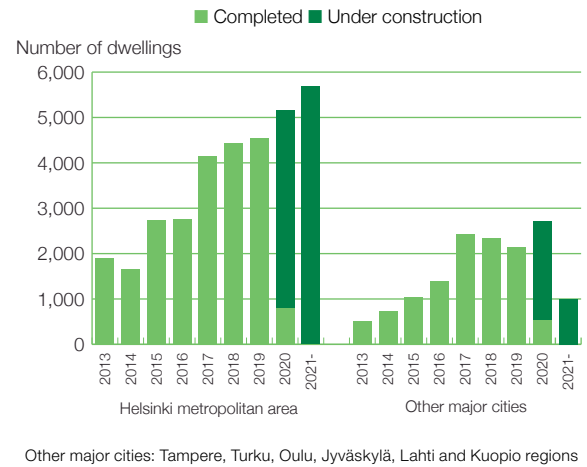
Even between the largest cities, there are increasing differences in the development of the residential rents. The Helsinki metropolitan area, Tampere and Turku stand out from the next size category cities by many indicators. Even in the largest cities, the growth rate of rents started to slow down in 2019, due to the growing uncertainty of the economic outlook as well as the growth in the supply of rental housing. KTI's rental index for new residential agreements, increased by an average of 0.6 per cent in the Helsinki metropolitan area between March 2019 and February 2020. During

KTI Residential rent indices in major cities, new agreements



Source: KTI

Rental residential dwellings completed and under construction



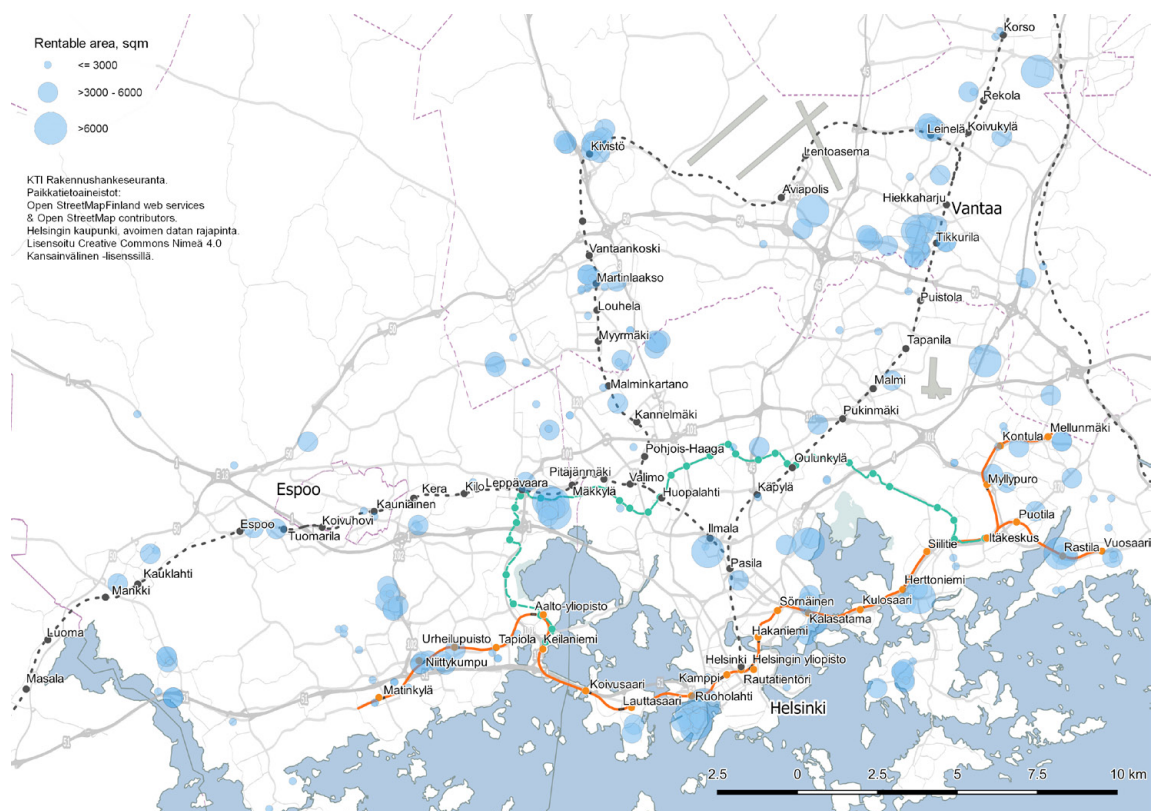
Source: KTI, RPT Docu Oy

the same period, rents rose by 0.5 per cent in Tampere and 1.5 per cent in Turku. Indices for all existing rental agreements rose by 1.6-1.8 per cent year-on-year in the cities in the Helsinki metropolitan area, while the increase amounted to 1.5 per cent in Tampere and 1.8 per cent in Turku.

The rental outlook for the largest cities was also most positive in the RAKLI Rental Residential Barometer

conducted at the end of March, where the rents for small apartments were expected to continue increasing in the Helsinki metropolitan area, Tampere and Turku. In the Helsinki metropolitan area, rents for large dwellings were also expected to increase rather than decrease, while the balance figures for rental expectations for large dwellings in Tampere and Turku were close to zero.

Completed rental residential projects in the Helsinki metropolitan area 2015-Q1/2020



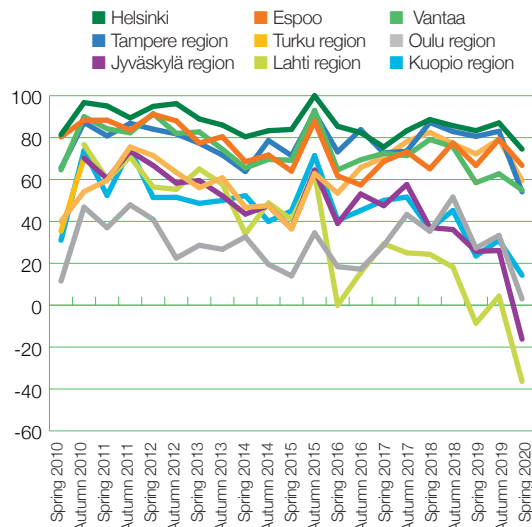
Increase in supply is limiting rental development outside the largest cities

Outside the largest cities, the rapid growth in the supply of rental housing in recent years now seems to have brought the increase in rents to an end. The annual change in the KTI rental indices for new agreements was close to zero in Kuopio and Oulu, and clearly negative in Jyväskylä and Lahti. In Jyväskylä, the downward trend has remained steady for about a year, while in Lahti the development has been more volatile over the past few years. Also in the RAKLI Rental Residential Barometer, rental expectations were clearly negative in Jyväskylä and Lahti, and in Kuopio and Oulu the balance figures were close to zero.

The potential effects of COVID-19 on the rental residential market might come with a delay

Of the large property sectors, the current exceptional conditions' impacts are expected to be the mildest on residential properties. Strong demand for rental housing is likely to continue, especially in the largest cities. The potential effects of the current situation on the rental market will be delayed, arriving only if the economy remains weak for a long time, unemployment rises and thus tenants' ability to pay decreases. In the RAKLI-KTI Property Barometer in April, property professionals had strong confidence in the residential property cash flow, and 95% of the respondents estimated that the COVID-19 crisis would not have an impact on actual rental income this year.

Outlook for residential rents in small apartments



If the balance figure is positive, greater amount of the respondents expects rents to increase.

Source: RAKLI Rental Residential Barometer

Other property sectors account for one fifth of the property investment market

Smaller property sectors account for some 20% of the Finnish professional property investment market. Industrial and hotel properties have traditionally been included in the property portfolios of many large investors, while the investor interest for public use properties has grown rapidly only in recent years.

The share of public use properties is increasing in the investment market

The share of so called public use properties continues to increase in the property investment market. At the end of 2019, the total value of public use properties owned by professional property investors stood at some €5 billion, corresponding some 7% of the total market. In this sector, investor interest has recently spread from various kinds of care properties to schools, children's day-care properties and fire stations, for example.

In 2019, the transaction volume of public use properties amounted to €800 million, accounting for approximately 13% of the total transaction volume. Nursing homes comprised some 70% of all public use property transactions, and the other transactions included mostly educational and healthcare properties. Early this year the largest public use property transaction ever in Finland was completed, when Belgian investor Aedifica completed the public tender offer to purchase all shares in the listed Finnish care property investor Hoivatilat Plc. At the end of 2019, the size of the property portfolio of Hoivatilat amounted to almost €500 million. Several Finnish public use properties were also traded when the Swedish SBB acquired all shares of another Swedish investor Hemfosa. By the end of April, this year's public use property transaction volume already amounted to some €700 million.

Public use properties survive the COVID-19 crisis with rather small damages

According to the KTI Index, the total return of public use properties amounted to 6.9 per cent in 2019. Income return stood at 6.3 per cent, while market values increased by 0.6 per cent. The values of educational properties increased by two per cent. Capital growth of nursing homes was slightly negative, but their income return was higher compared to educational properties.

Public use properties are mainly used for public service provision, and the strong investor interest is mainly based on their stable income return. The respondents of the RAKLI-KTI Property Barometer expected that public use properties will survive the current crisis better than commercial property sectors. Only 8% of the respondents expected the rental income of public use properties to decrease in 2020 compared to the previous year.

- COVID-19 crisis hits heavily on hotels, while industrial and public use properties are suffering smaller damages
- Public use property transaction volume already some €700 million in 2020
- Over 2,000 new hotel rooms under construction in the Helsinki metropolitan area

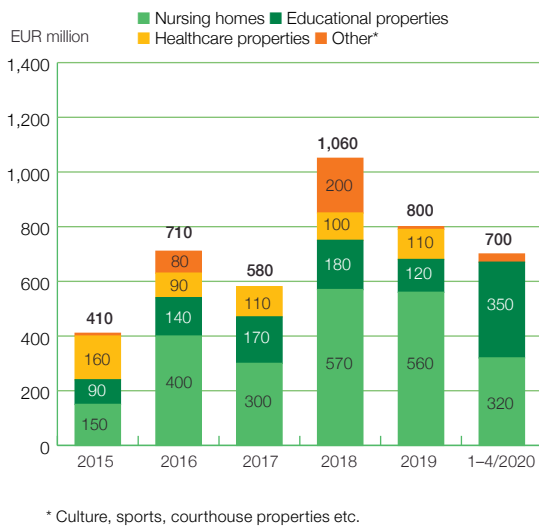
Industrial properties produce healthy income returns

At the end of 2019, the share of industrial properties amounted to some 6% of the total property investment market. In this sector, investor interest has recently been focusing mostly on modern warehouse and logistics properties. Some large industrial property construction projects are currently underway in Vantaa and Northern Helsinki region, and a couple of significant properties are under construction also in the Turku, Tampere and Lahti regions.

The transaction volume of industrial properties decreased from €500 million in 2018 to €440 million in 2019. In 2019, some significant logistics property deals were carried out in the Helsinki metropolitan area and elsewhere in the Uusimaa region. Also, in early 2020, a couple of large logistics properties were sold in Vantaa and Espoo. In the KTI Index, the total return of industrial properties increased to 8.0 per cent in 2019. The income return amounted to 7.0 per cent, while the capital growth was 0.9 per cent. After the global financial crisis, capital growth on industrial properties was negative for 11 consecutive years before turning positive in 2019. Within the sector, market values of logistics properties increased the most, by almost two per cent.

In the RAKLI-KTI Property Barometer, the average yield for good-quality industrial property in the Aviapolis district in Vantaa was quoted at 6.6 per cent, while six months earlier the figure was 6.2 per cent. Yields of the modern logistics properties in best locations are, however, significantly lower.

Public use property transaction volume



Source: KTI

The respondents of the Barometer expected that the rental income of industrial properties will be more resilient towards the COVID-19 crisis compared to office or retail properties. Also the amount of vacant industrial space is expected to increase only slightly.

Severe impacts on hotel properties

The supply of hotel properties is growing strongly in the Helsinki metropolitan area, where about ten new hotel development projects are currently underway. The projects comprise a total of over 2,000 new hotel rooms. Some large new hotels are also under construction in Tampere, Turku and Oulu. Most of the new hotel properties are being developed by property investors, and the hotel transaction volumes have been very low during the past years. Many old office properties have been converted into hotel use during the past few years, especially in central locations in Helsinki.

Hotel properties have produced high total returns in recent years. Also in 2019, market values of hotel properties increased by two per cent and the total return amounted to 7.2 per cent.

The COVID-19 crisis has badly hit hotel properties since overnight guests have almost totally disappeared. Of all property sectors, the immediate impacts of the crisis might be the most severe for the hotel properties. As much as 95% of the respondents of the RAKLI-KTI Property Barometer expected that the rental income of hotel properties will decrease in 2020, and 45% estimated that the rental income will decrease more than 25 per cent.



KTI Finland is an independent research organisation and service company providing information and research services for the Finnish real estate industry. KTI maintains extensive databases on returns, rents, transactions, operating costs and customer satisfaction measures in the Finnish property market. Based on these databases, various kinds of benchmarking and analysis services can be provided. KTI's clients comprise major property investors, managers, occupiers as well as service providers in the Finnish market. KTI is owned by the Finnish Real Estate Federation and RAKLI, the Finnish Association of Property Owners and Construction clients.

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