

Office Market Report

Tokyo | Q4 2016

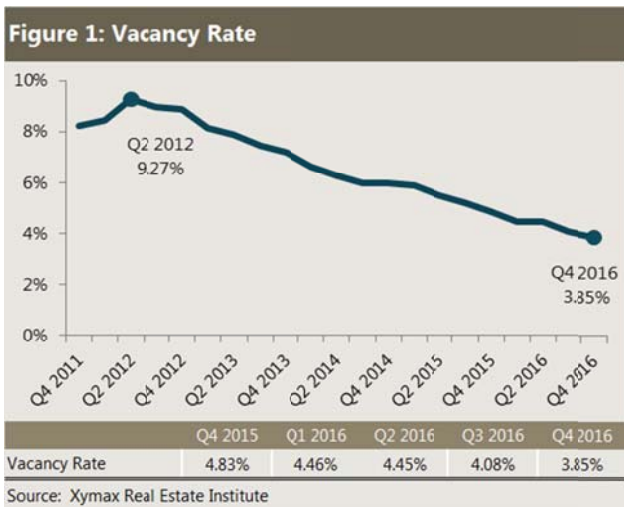
February 1, 2017



Summary

(1 tsubo = approx. 3.3 sq m)

- In the December 2016 quarter, the Tokyo 23 Wards' office market continued to see solid demand for office space; the vacancy rate decreased and the contract rent increased as companies posted strong results and hired more office workers. However, the rental growth was slow and some owners of large buildings or other buildings decided to lower the asking rents.
- The vacancy rate was 3.85%, a decrease by 0.23 points. Increase and Decrease in Vacant Space, which is Xymax's new indicator released from this quarter, showed that a quarterly decrease in vacant space was 238,000 tsubo while an increase in vacant space was 210,000 tsubo; the decrease exceeded the increase.
- New Contract Rent Index (the level of new lease rent) was 107, an increase by 3 points. Contract Rent Diffusion Index (calculated by subtracting the percentage of buildings with a rent decrease from the percentage of buildings with a rent increase) was +18, a decrease by 3 points.
- Paying Rent Index (the level of new lease rent and that of existing lease rent combined) was 86, an increase by 2 points.
- Average Free Rent Month was 2.8 months, a decrease by 0.3 months. Ratio of Free Rent Granted also decreased for all the periods.



Vacancy

Figure 1 shows changes in **vacancy rate** in Tokyo 23 Wards since 2011. The vacancy rate in the fourth quarter of 2016 decreased by 0.23 points quarter-on-quarter to 3.85%. The rate kept decreasing since the third quarter of 2012.

Companies keep expanding their office spaces reflecting the strong performance and increase in office workers. This expanded the demand for office space in the periphery 18 wards. How comfortable the office for workers is now important, in addition to having enough space, when tenants choose their office. In the IT, financial, insurance and real estate industries, companies mentioned that they want to improve the grade and location of the office to attract job candidates.

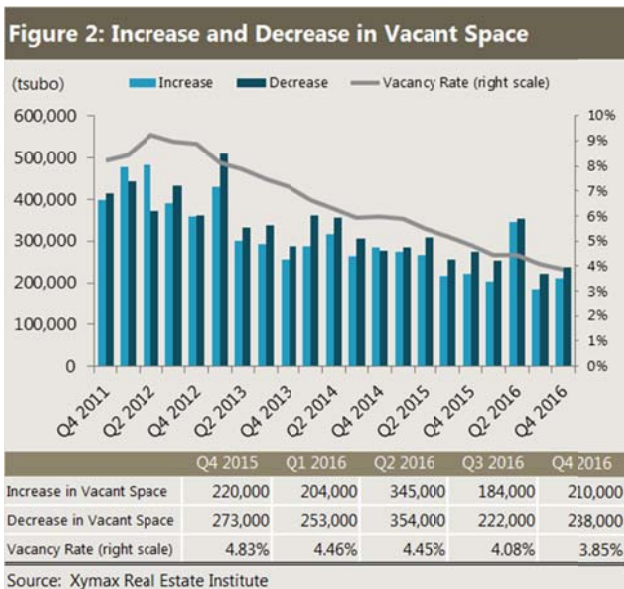


Figure 2 shows an increase and a decrease in vacant space by quarter (**Increase and Decrease in Vacant Space**). The demand for office space was strong; vacant space decreased by 238,000 tsubo this quarter, exceeding the increase in vacant space (210,000 tsubo). The demand for office space exceeded the increase in vacant space for seven consecutive quarters since the fourth quarter of 2014. The vacancy rate kept decreasing; the volume of quarterly increase and decrease also tend to decrease.



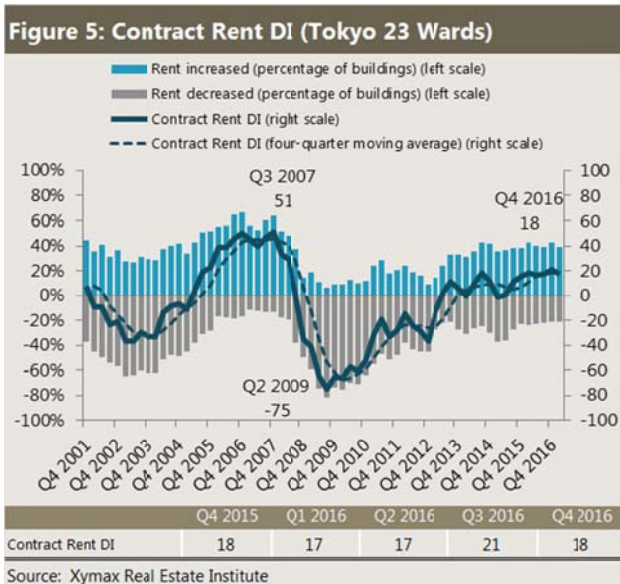
New Contract Rent

Figure 3 shows changes in **New Contract Rent Index**, which is the index of the rent in new lease. The fourth quarter of 2016 was 107, an increase by 3 points from 104 in the previous quarter. After bottoming in the second quarter of 2012 at 76, the rent continued to increase. The market remained tight, pushing up the rent in new lease agreements.



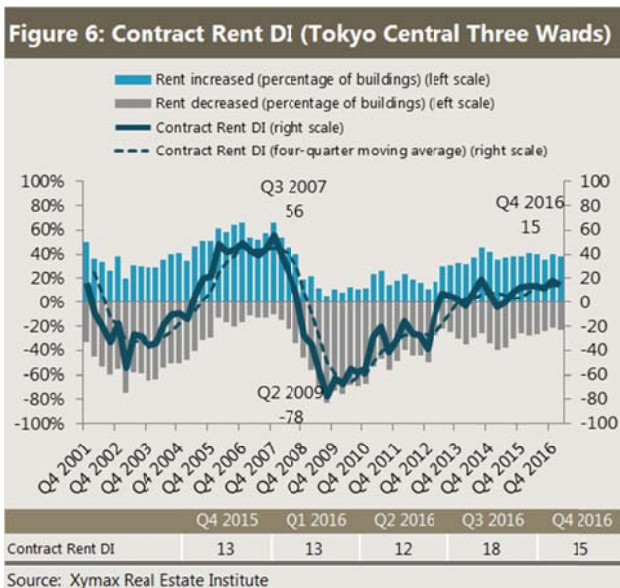
Figure 4 shows changes in New Contract Rent Index by size of buildings. The index for small and medium buildings (gross floor area: below 5,000 tsubo) was 107, an increase by 3 points and the index for large buildings (gross floor area: over 5,000 tsubo) was 109, a decrease by 2 points.

The owners of some large buildings offered a high rent for the remaining small vacant space while some other owners struggled to find a tenant and reduced the rent. Constructions of large buildings continued in recent years. Such new buildings are already different to each other due to their age and location and are beginning to face intensified competition.



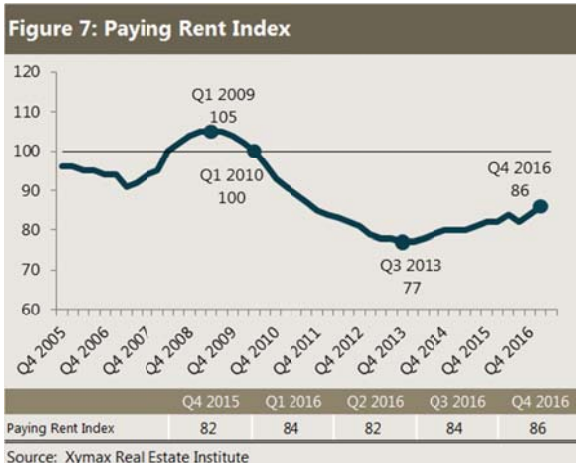
Figures 5 and 6 are changes in **Contract Rent Diffusion Index (DI)**. They show the direction of the change in rent of new contract. The DI in this quarter was +18 for Tokyo 23 Wards, a decrease by 3 points, and +15 for central three wards, a decrease by 3 points. The DI remained positive for seven consecutive quarters, meaning the buildings with a rent increase continued to exceed the buildings with a rent decrease. However, the DI did not go up but continued to remain flat at around 20.

Companies trying to relocate office to expand the space are struggling to find a space that satisfies their requirements because Tokyo 23 Wards is having limited availability. Some companies solved this situation by improving the use of current office and postponing the relocation. Some other companies solved it by having a satellite office away from their headquarters.



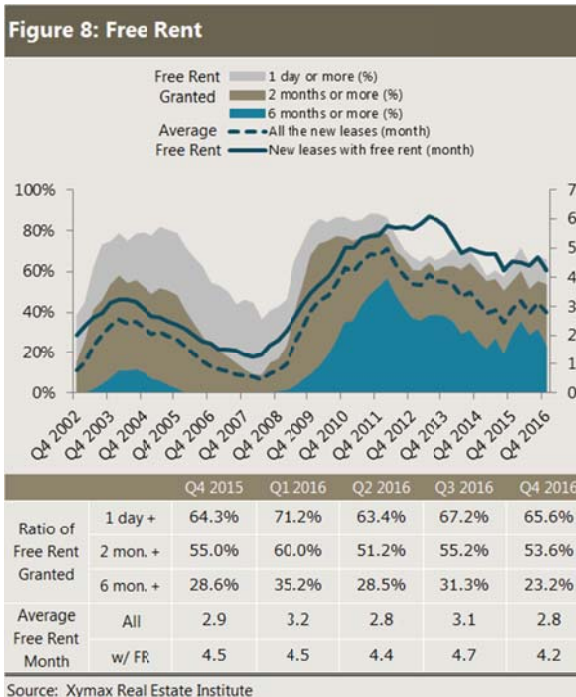
A great volume of new large buildings is expected to be completed in 2018 and beyond. This means that there will be new vacant space after tenants relocate to the new completions. Some companies requiring a large office space want to check the lease terms of such new vacant space in existing buildings before deciding whether to relocate to the new completions.¹

¹ Tokyo 23 Wards Supply of New Office Space 2017 & Office Stock Pyramid 2017 released on December 26, 2016



Paying Rent

Figure 7 shows changes in **Paying Rent Index**, in which new lease rents and existing lease rents are both covered. The Paying Rent Index in the fourth quarter of 2016 was 86, an increase by 2 points, and continued the modest growth started since the third quarter of 2013. Not only the increase in rent of new lease but also the increase in rent of existing tenants has contributed to the growth of the Paying Rent Index.

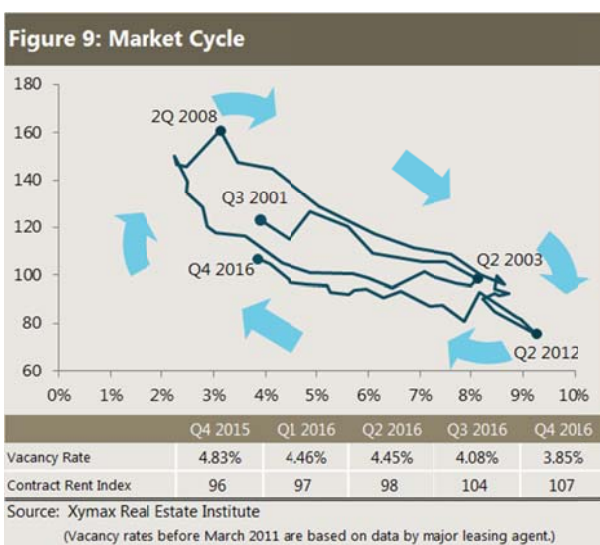


Free Rent

Figure 8 shows changes in the ratio of new leases with free rent to all the new leases (**Ratio of Free Rent Granted**) and changes in the average free rent period (**Average Free Rent Month**).

The Average Free Rent Month in the fourth quarter of 2016 was 2.8 months for all the new leases and 4.2 months for leases with free rent; a decrease by 0.3 months and 0.5 months, respectively. The Ratio of Free Rent Granted also decreased for all the periods.

The free rent period had increased in the previous quarter as influenced by leases of buildings which had been vacant for a long period of time. This quarter, however, the period decreased again. Although the market remained tight, the decrease in free rent period and the ratio of free rent granted was slow.



Market Cycle

Figure 9 is a graph plotted by quarter based on vacancy rates on the horizontal axis and the New Contract Rent Index on the vertical axis.

The graph shows that the market is cyclical; the plot started to move to lower right in 2001 (vacancy up, rent down) and remained static in 2003-2004, then it started to move to upper left in 2005 (vacancy down, rent up) and to lower right again in 2008 (vacancy up, rent down).

The office space market entered the recovery phase in 2013 and remained there in 2016 too. This quarter repeated the move in the previous quarter; the new contract rent increased and the vacancy rate

decreased and the plot moved slightly to the upper left, indicating a continued market improvement.

Reference

Figure 10: Major Building Completions (Q4 2016)

Name	Floors		Ward	Address	Completion	GFA
	Above Ground /	Below Ground				
Sumitomo Fudosan Roppongi Grand Tower	43 / 2		Minato	3-2-1 Roppongi	Oct 2016	31,346 tsubo
Agri Square Shinjuku	12 / 1		Shibuya	5-27-11 Sendagaya	Oct 2016	3,292 tsubo
KYOBASHI EDOGRAND	32 / 3		Chuo	2-2-1 Kyobashi	Oct 2016	20,144 tsubo
S-GATE Akasakasanno	10 / 1		Minato	2-5-1 Akasaka	Nov 2016	2,644 tsubo
Hibiya Building	10 / 1		Minato	1-1-1 Shinbashi	Dec 2016	1,935 tsubo

Source: Compiled by Xymax Real Estate Institute based on information released by companies

Figure 11: Major Office Relocations (Q4 2016)

Company	From	To	Month Year	Purpose	Size
Eagle Industry	Seiwa Building <i>Minato Ward</i>	Shiba Park Building <i>Minato Ward</i>	Feb 2017	Expansion	606 tsubo
FINOLAB	Tokyo Bankers Association Building <i>Chiyoda Ward</i>	Otemachi Building <i>Chiyoda Ward</i>	Feb 2017	Expansion	650 tsubo
Mitsubishi Heavy Industries	Mitsubishi Heavy Industries Building <i>Minato Ward</i> Mitsubishi Heavy Industries Yokohama Building, <i>Yokohama City</i>	Marunouchi 3-2 Project (temporary name) <i>Chiyoda Ward</i>	Oct 2018	Consolidation	5,717 tsubo

Source: Compiled by Xymax Real Estate Institute based on information released by companies.
The size of the office space is an estimate.

Overview of Researches			
	Vacancy Rate	Increase and Decrease in Vacant Space	New Contract Rent Index
Description	Vacant space versus total office stock in the market.	A quarterly increase and a quarterly decrease in volume of vacant space in the market.	Office rent index based on new contract rents. This index uses a statistical method to remove property-specific influences such as size and age of buildings.
Main Point	Supply and demand balance in the market	Supply and demand balance in the market	Level of contract rents
Sector	Office Building		
Market	Tokyo 23 Wards	Tokyo 23 Wards	Tokyo 23 Wards
Building Size	All	All	All / large / Small & Medium
Release	Every Quarter		
Data Source	Data of available vacant spaces and buildings. Independently collected by Xymax.	Data of available vacant spaces and buildings. Independently collected by Xymax.	Data of new contract rents including CAM charge. Independently collected by Xymax.
Data Used in Recent Quarter	30,037 buildings	28,618 contracts	1,117 contracts
How to Calculate	<ul style="list-style-type: none"> • Vacancy rate = vacant space ÷ rentable space • Vacant Space Total available vacant space in completed buildings as of the time of the research. • Rentable Space Rentable space of completed buildings as of the time of the research. <p>Where rentable space is not available, the rentable space is estimated from the gross floor area of the building using the formula developed in the joint study with the laboratory of Professor Naoki Kato at Kyoto University Graduate School of Engineering.</p>	<ul style="list-style-type: none"> • Increase in volume of vacant space <ol style="list-style-type: none"> a. Space in existing buildings formerly occupied by tenants b. Total rentable area of new completions • Decrease in volume of vacant space <ol style="list-style-type: none"> a. Space in existing buildings leased under a new agreement b. Space in new completions but lease is signed prior to the completion c. Space that had been vacant but the owner decided not to lease <p>Where rentable space is not available, the rentable space is estimated from the gross floor area of the building using the formula developed in the joint study with the laboratory of Professor Naoki Kato at Kyoto University Graduate School of Engineering.</p>	<ol style="list-style-type: none"> 1) Develop a rolling hedonic model (overlapping period: five quarters) based on the collected new contract data with property-specific factors as variables (location, building size, building age, facilities, date of signing of lease, etc.). 2) Estimate the quarterly contract rent by assigning the values of a typical building to the model developed in the preceding step. 3) The New Contract Rent Index is the rent estimated in the preceding step based on Q1 2010 as the base point (=100). <p>This model shows changes in new contract rents after removing property-specific variables.</p>

Overview of Researches			
	Contract Rent DI	Paying Rent Index	Free Rent Granted (%) & Average Free Rent (Month)
Description	Index of changes in new contract rents. Calculated by counting and comparing the buildings where rent has increased and those where rent has decreased.	Index of changes in paying rents (new and existing contract rents).	Distribution of free rent and average length of free rent period. Free rent is the time lag between the start of the contract and the start of the rent payment.
Main Point	Direction of contract rent trends	Level of rents paid by tenants	Market trends that are not reflected in contract
Sector	Office Building		
Market	Tokyo 23 Wards / Tokyo Central 3 Wards	Tokyo 23 Wards	Tokyo 23 Wards
Building Size	All	All	All
Release	Every Quarter		
Data Source	Data of new contract rents including CAM charge. Independently collected by Xymax.	Data of new and existing contracts signed for buildings under management by Xymax.	Data of new contracts signed for buildings under management by Xymax.
Data Used in Recent Quarter	958 contracts	4,048 contracts	125 contracts
How to Calculate	<ol style="list-style-type: none"> 1) Compare the data of new contract rent per tsubo with that in the 6-month prior period in the same building. Each contract was counted separately into three categories: buildings with "rent increase", "no change" or "rent decrease" 2) Calculate the percentage of buildings with "rent decrease" and buildings with "rent increase". 3) Subtract the percentage of buildings with "rent decrease" from the percentage of buildings with "rent increase". This outcome is the Contract Rent Diffusion Index (DI). 	<ol style="list-style-type: none"> 1) Calculate the rent per tsubo of each tenant from the data of new and existing lease contracts and memorandums. 2) Develop a rolling hedonic model (overlapping period: five quarters) based on the rents calculated in the preceding step (the "paying rent") with property-specific factors as variables (location, building size, building age, facilities, date of signing of lease, etc.). 3) Estimate a quarterly contract rent by assigning the values of a typical building to the model developed in the preceding step. 4) The Paying Rent Index is the rent estimated in the preceding step based on Q1 2010 as the base point (=100). <p>With this method, influences from replacement of sample data and deterioration of buildings over age are removed from the result.</p>	<ul style="list-style-type: none"> • Free Rent Period The period between the start of the contract and the start of the rent, shown in number of days. • Ratio of Free Rent Granted The ratio of contracts with free rent in all the new contracts (excl. contracts for expansion within the building and recontracts) • Average Free Rent (Month) of All the Contracts The simple average of the free rent period including lease contracts with no free rent. • Average Free Rent (Month) of Contracts with Free Rent The simple average of the free rent period of lease contracts with free rent. <p>In some cases, the rent agreed in a lease contract includes CAM charge, and then, for a certain period of time, the rent is reduced to the CAM charge equivalent or closer level, but such contracts are excluded from this research.</p>

Appendix

Xymax REI Research Updates Oct - Dec 2016

Tokyo 23 Wards | Supply of New Office Space 2017 & Office Stock Pyramid 2017 December 26, 2016

- New supply in 2017 is 117,000 tsubo. This is small and equivalent to the volume in 2013 when it was 10-year low. However, a relatively large volume is expected for 2018-2020 with around 200,000 tsubo per annum.
- Average new supply in 2017-2020 is 181,000 tsubo per annum based on rentable area. This is equivalent to the 10-year average of 180,000 tsubo per annum.
- Office stock at year-end 2017 is 12.26 million tsubo based on the rentable area: 5.77 million tsubo (47%) in small and medium buildings and more than half or 6.49 million tsubo (53%) in large buildings.

Osaka City | Supply of New Office Space 2017 & Office Stock Pyramid 2017 December 26, 2016

- New supply in 2017 is 31,000 tsubo. This is roughly equivalent to the 10-year average.
- Average new supply in 2017-2020 is 17,000 tsubo per annum based on rentable area. This is about half of the 10-year average of 30,000 tsubo.
- Office stock at year-end 2017 is 2.84 million tsubo based on the rentable area: 1.41 million tsubo in small and medium buildings and 1.43 million tsubo in large buildings; the volume is roughly the same.

Electric Power Consumption by Office Tenants (September 2016) December 2, 2016

- The 12-month moving average consumption was 35.9 kWh/tsubo.
- The monthly average consumption in the July-September 2016 quarter was 38.0 kWh/tsubo.

Energy Consumption and Energy Cost in Office Buildings (September 2016) December 2, 2016

- Energy Consumption: Remained roughly unchanged from the June 2016 quarter.
- Energy Price per Unit: 5 points down from the June 2016 quarter. Started to fall in March 2015.
- Energy Cost: 5 points down from the June 2016 quarter. Decreased in line with the falling consumption and price.

Repair of Retail Buildings Fact-Finding Study 2016 November 29, 2016

- Xymax Real Estate Institute, together with the research team of Professor Yukio Komatsu of Department of Architecture, Waseda University, conducted a survey and interviews. We asked multi-store retailers about repair of their retail buildings.
- This study is to reveal the little-known fact about how retailers repair their stores. We believe this study will improve the level of repair of commercial buildings.

Contact

Xymax Real Estate Institute
Phone: +81 3 3596 1477
Fax: +81 3 3596 1478
Email: info-rei@xymax.co.jp