
Japan Real Estate **INVESTMENT REVIEW**

Summer 2000



* New Developed Building (Sanno Park Tower, Shibuya Mark City, Cerulean Tower, Triton)

Nomura Real Estate Development Co, Ltd.
Investment Management & Advisory Department

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I . 2003- Oversupply of Large Office Buildings?

1. Supply of large office buildings: current trends

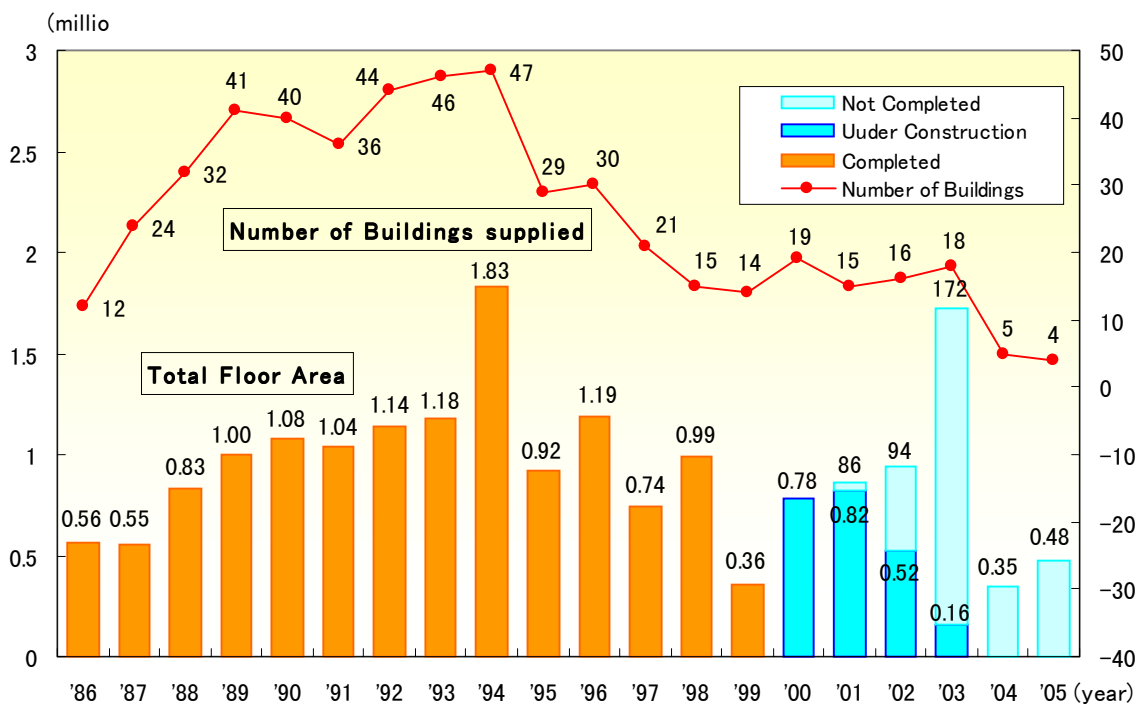
(1) Supply projection (~2002)

The supply of newly constructed large office buildings, 360,000 m², in 1999 was the lowest since 1986. Because construction of such buildings takes several years, judging from the total floor area of construction starts, the supply of large office buildings through 2002 is likely to be low (Figure 1-1).

(2) Supply projection (2003)

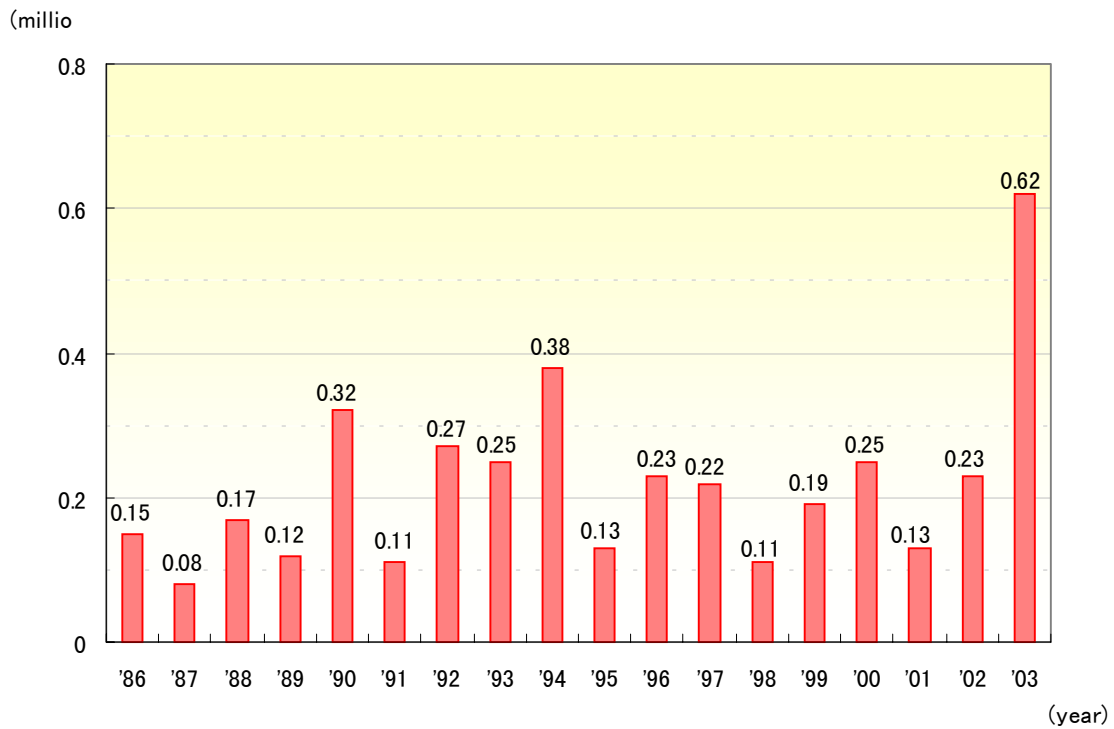
In 2003, the supply of large office buildings (only large office buildings) is likely to rise sharply to 1,720,000 m², the second highest level after the 1994 record of 1,830,000 m². The supply of owner-occupied buildings is projected to hit a record high since 1986 (Figure 1-2).

(Figure 1-1) Changes over time in supply of large office buildings (23 wards of Tokyo)



Source: Mori Building Co., Ltd.

(Figure 1-2) Supply of owner-occupied buildings (23 wards of Tokyo)

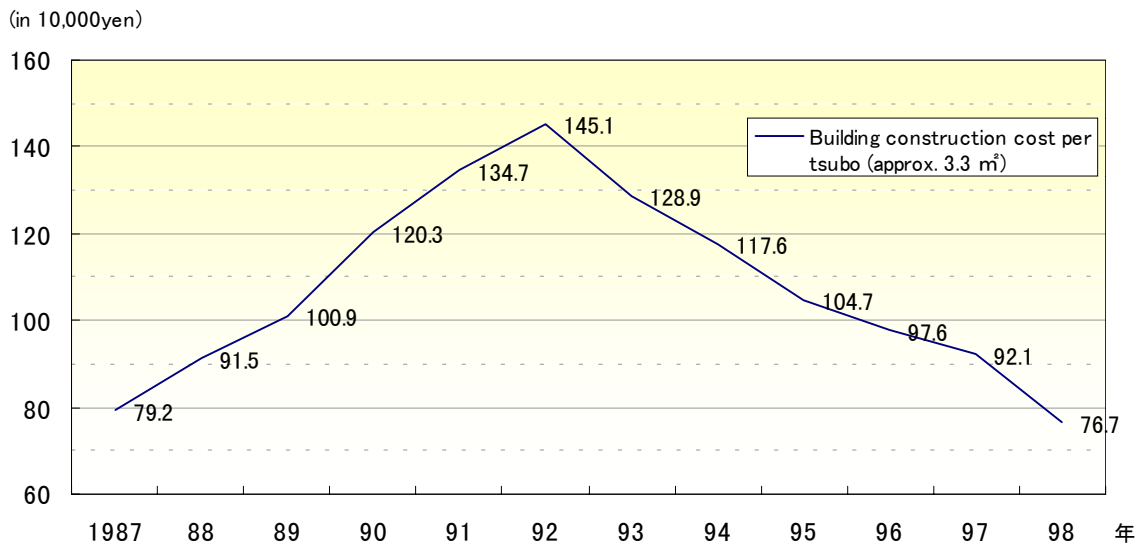


Source: Mori Building Co., Ltd.

(3) Analysis of factors contributing to supply in 2003

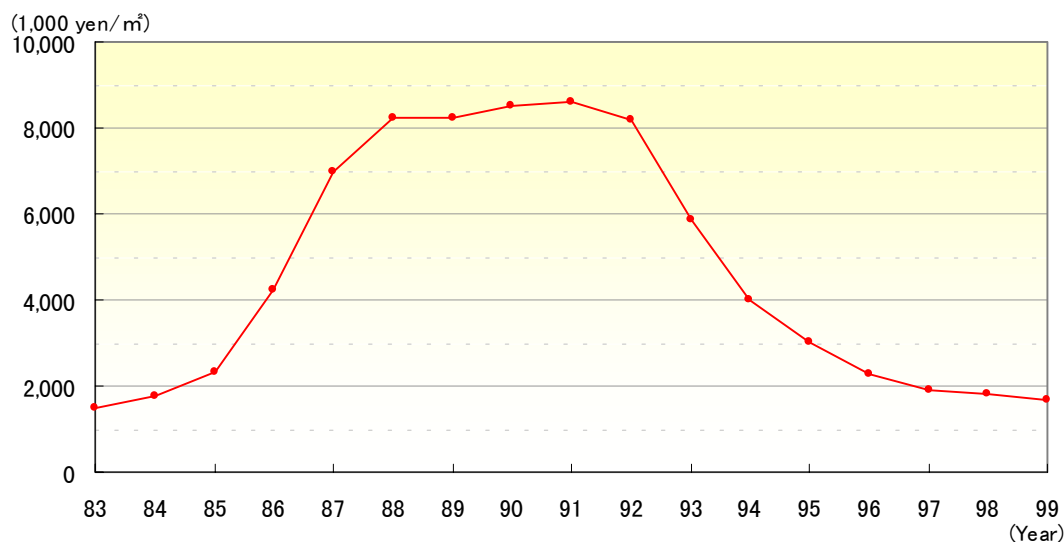
Factors contributing to the supply expected in 2003 are: 1) resumption of many redevelopment projects that had been frozen following the bursting of the economic bubble; 2) the large number of owner-occupied buildings; 3) the feeling that land prices and rents have bottomed out; and, 4) falling construction costs (Figures 1-3, 1-4-1 and 2). The supply of large tracts of developable land in the second half of the 1990s also served to accelerate the reactivation of frozen projects.

(Figure 1-3) Changes over time in unit cost of building construction (Tokyo)

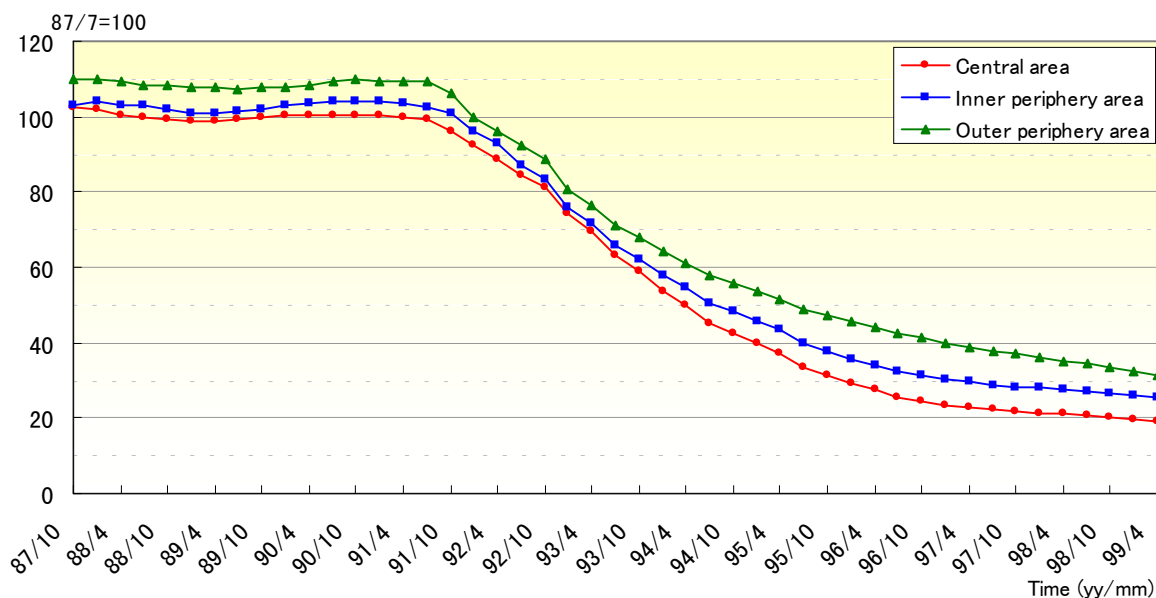


Source: Tokyo Metropolitan Government, Building Statistics Yearbook (in Japanese)

(Figure 1-4-1) Changes over time in posted prices of commercial land (23 wards of Tokyo)



(Figure 1-4-2) Changes over time in posted prices of commercial land (23 wards of Tokyo; by area)



Examples of such projects include large-scale mixed-use projects on tracts of land previously owned by the now privatized Japan National Railway, such as the ongoing projects for the redevelopment of the Shiodome and Iidamachi areas and the Shinagawa Station east exit district.

In 1987, the Japan National Railways (JNR) was privatized. Excess land owned by JNR, including large, extremely well-located tracts in central Tokyo, was transferred to the Japan National Railways Settlement Corporation (now Japan National Railways Settlement Headquarters of Japan Railway Construction Public Corporation) for disposition within 10 years. The lands were not offered for sale during the "economic bubble period" to prevent land price hikes, but were sold in 1996 and 1997, immediately before the dissolution of JNR Settlement Corporation. As a result, the buyers formulated development plans at about the same times and, as a result, a number of large-scale projects will be completed around 2003. These three projects (Shiodome, Iidamachi and Shinagawa) alone will supply about 950,000 m² of office space, which accounts for more than half of the total office space to be supplied in 2003. About two-thirds of office space in these three projects will be owner occupied.

In addition to development of these and other projects, many large buildings in central Tokyo are being renovated or redeveloped. An example is the Marunouchi Building in the Tokyo Station area. Projects of this type indicate that building owners have a sense of crisis about the dwindling competitiveness of their

buildings in the leasing market.

The Great Hanshin Earthquake (Hanshin Nanbu Earthquake) of 1995 helped to raise public awareness of the importance of buildings' earthquake resistance. Under the economic conditions that cannot be expected to bring about dramatic growth in demand, it is now essential to be the first to meet emerging demands, and to attract non-Japanese tenants who consider earthquake resistance one of the most important requirements. The fall of rents and construction costs was another factor contributing to the initiation of many development plans. About half the office buildings in the heart of Tokyo's business district are designed in accordance with old seismic standards. The reconstruction efforts currently underway can be justified, considering the fact that nearly 50 percent of the buildings in the Marunouchi and Yurakucho areas are more than 30 years old (source: Tokyo Metropolitan Government).

Resumption of waterfront development, many of it mixed-use, that had been frozen because of the cancellation of the World City Expo will also contribute to the supply of office buildings coming in the market in 2003.

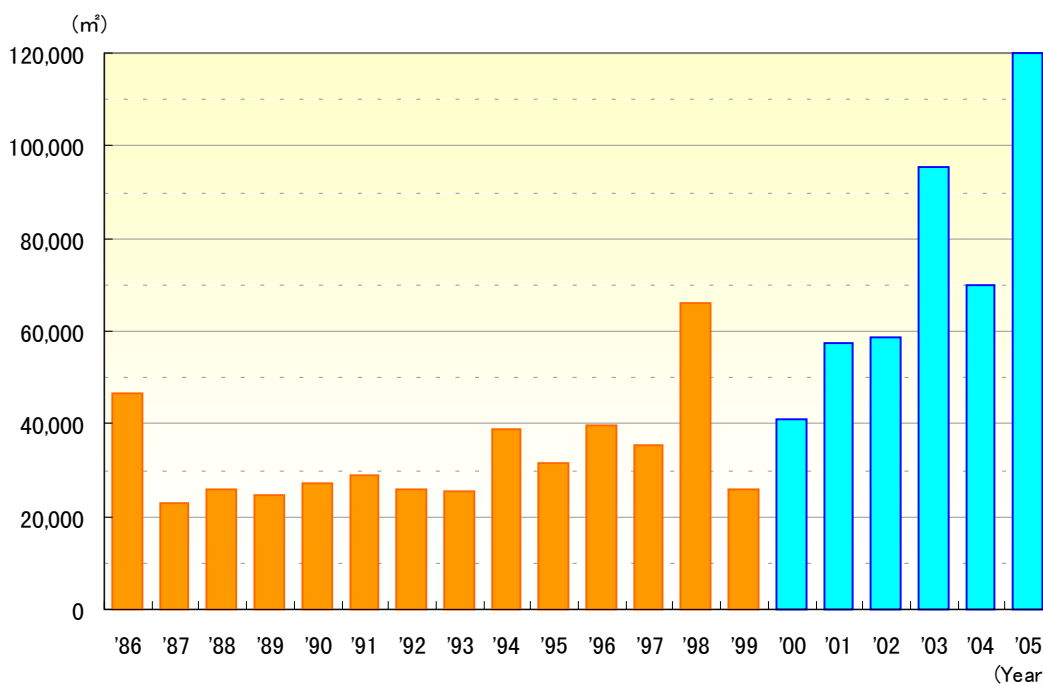
(4) Characteristics of large-scale development

The preceding three examples of large-scale development projects have a number of common characteristics.

First, the planned office buildings are invariably very well located mostly in Tokyo's urban center, where, developable land is limited. For the reason described in the preceding section, the trend in the supply of large office space may be shifting from urban sprawl to return to Tokyo's urban center.

Another characteristic is that the size of office buildings (total floor area) is becoming larger. This is thought to reflect the fact that the recent tendency to combine separate offices to form larger ones for more efficient business operation.

(Figure 1-5) Changes over time in avg. size of large office building (23 wards of Tokyo)



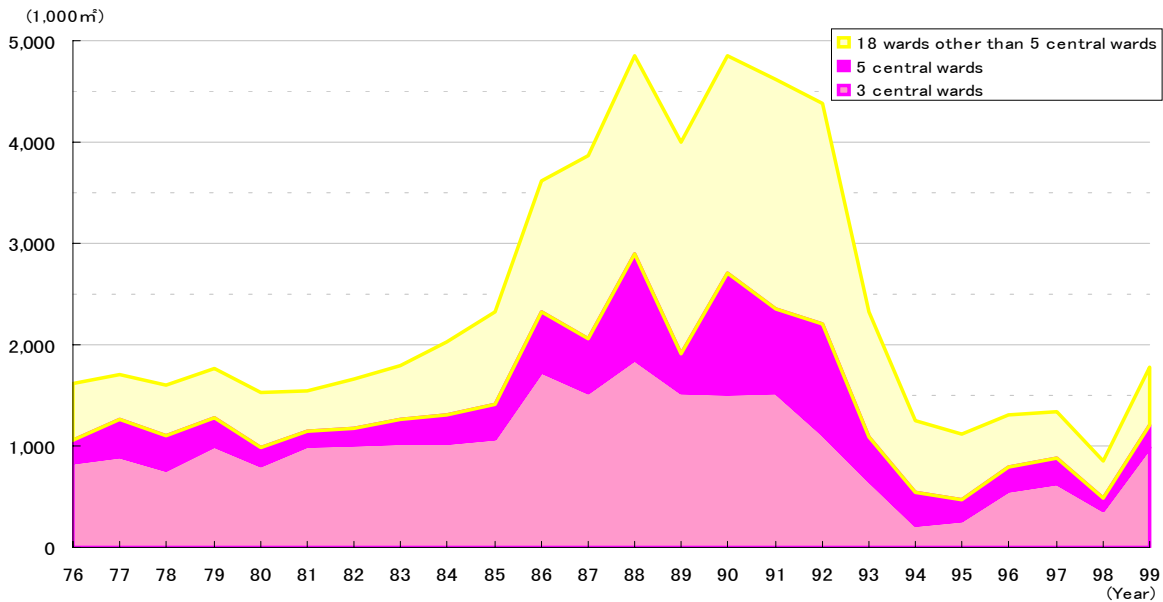
Source: Based on data provided by Mori Building Co., Ltd.

A third characteristic is that, as mentioned in connection with the waterfront development, most of the plans are mixed-use including housing, hotels and retail facilities. These plans give the impression that they treat office buildings as important components of mixed-use developments, rather than principal components as in conventional mixed-use developments. The Marunouchi area, a typical business district, is no exception to this tendency. Conventional office-centered developments cannot meet the needs of tenants who seek not only space but a sense of place. A mixed-use development, therefore, is more competitive in the market than a group of office buildings designed and constructed independently.

2. Supply trends in the office building market

Let us take a look at changes in construction starts (floor area) of office buildings in the 23 wards of Tokyo (Figure 2-1) to analyze supply trends in the office building market. As shown, office building construction starts have fallen sharply since 1992. In 1998, they fell to about a quarter of the peak level.

(Figure 2-1) Changes over time in total floor area of office construction starts (23 wards of Tokyo)

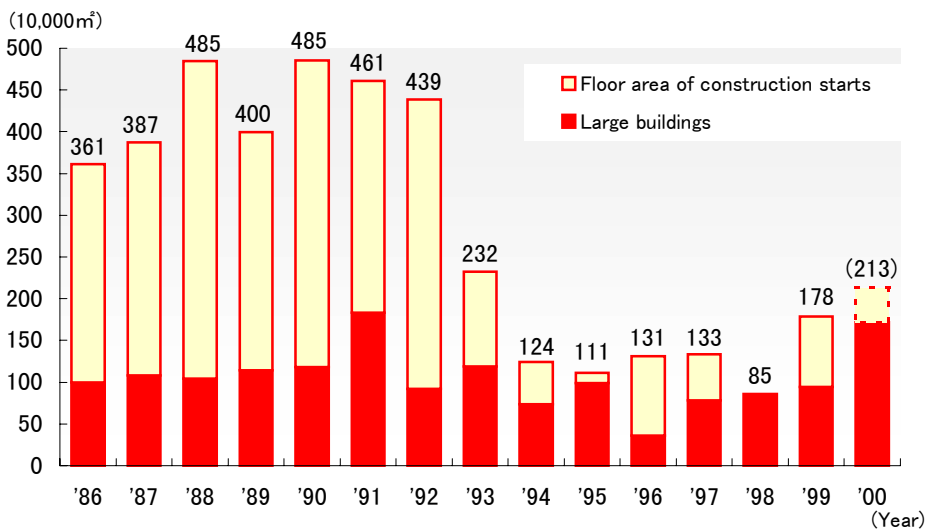


Source: Tokyo Metropolitan Government, Building Statistics Yearbook (in Japanese)

- 3 central wards: Chiyoda, Chuo and Minato
- 5 central wards: 3 central wards + Shinjuku and Shibuya

Examination of the changes in the total floor area of construction starts and the supply of large office buildings (Figure 2-2) reveals that while in the early '90s during the bubble economy period the supply of large office buildings was only about 25% of the total floor area of construction starts, in the second half of the '90s almost all of the construction starts were large office buildings

(Figure 2-2) Changes over time in total floor area of office construction starts (23 wards of Tokyo)



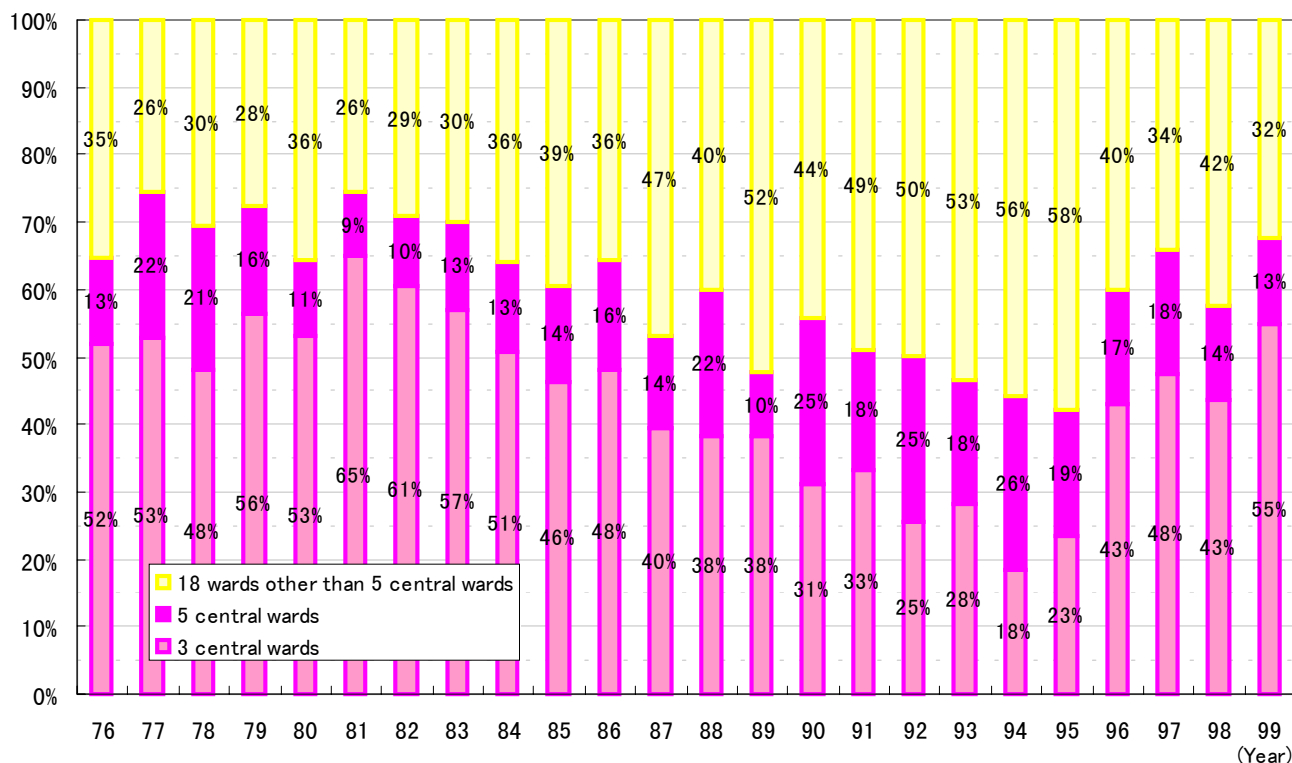
Source: Tokyo Metropolitan Government, Building Statistics Yearbook (in Japanese)

* (data is based on completions adjusted back in time three years. For example if 100 of large office space was completed in 1998, 100 of construction start is shown in 1995)

The "return to urban center" tendency can be seen clearly from construction starts data. The percentage of

construction starts in three central wards fell to 18% in 1994, but it recovered to 55% (i.e., more than half) in 1999. The percentage of construction starts in five central wards is approaching 70% (Figure 2-3).

(Figure 2-3) Changes over time in percentage of office construction starts (floor area)



Source: Tokyo Metropolitan Government, Building Statistics Yearbook (in Japanese)

- 3 central wards: Chiyoda, Chuo and Minato
- 5 central wards: 3 central wards + Shinjuku and Shibuya

This means that although the total supply of office buildings has decreased since the bubble economy years, the percentage of large office buildings out of all new construction has increased. In view of the current economic conditions, it is unlikely that the total floor area of office buildings including smaller office buildings will increase sharply, and the possibility of office buildings becoming in abundant supply early in the 21st century is very slim. It is likely, therefore, that supply in the office building market will be low.

3. Demand trends in the large office building market

(1) Average annual demand estimated at 1,000,000 m²

According to a survey conducted by Mori Building Co., Ltd., new demand for new large office buildings during the five years from 1986 to 1990 averaged about 800,000 m². During the five years from 1991, in the midst of the bubble economy period, to 1995, when the economy was on the decline, new demand for large office buildings averaged 1,090,000 m², and it averaged 990,000 m² in the three years from 1996 to 1998. This means that there has always been new annual demand for about 1,000,000 m², regardless of the economic climate. It can be said, therefore, that there is steady demand for new large office buildings.

(2) Analysis of demand-generating factors

It is generally believed, in view of the present economic conditions, that recent demand for new large office buildings comes from tenant needs for earthquake resistance and IT-related needs, rather than from expansion of the office market.

Among the more noticeable phenomena is relocation due to the reconstruction/renovation of occupied buildings. Many reconstruction projects are currently in progress in the Otemachi and Marunouchi areas. Being the traditional office market in Tokyo, many large companies are located there. Hence, there is a high concentration of large, well-known buildings that are old and out-of-date. It is often necessary, therefore, to move all head office functions when the building is reconstructed. Relocation, even if temporary, will involve extensive work. Since relocation of the head office of a large firm often is accompanied by the relocation of affiliated or related companies, the percentage of demand due to the relocation of occupied buildings of total demand in the office building market is quite high.

About 50 percent of office buildings located in Tokyo's urban center are designed and constructed in accordance with old seismic design standards, and are not equipped to support the latest information technologies. It is expected that these companies will be redeveloping/renovating their buildings resulting in demand for office space from them, and affiliated and related companies, during the redevelopment work.

(3) A sense of scarcity will continue to be felt

Although it is difficult to predict future demand because of changing economic conditions and other factors, it is not unreasonable to assume that because there has been annual demand of about 1,000,000 m² per year for large office space over the past 10 years as noted in Item (1) above, similar levels of demand will continue to exist in the years to come. If, for example, there is an annual demand of 1,000,000 m², demand will be slightly greater than supply in the five-year period from 1999 to 2003. If demand is as low as about 800,000 m² as in the second half of the '80s, demand and supply will be in balance until 2002. Last year large office supply was only 360,000 m², and almost all new buildings, including the Sanno Park Tower, were fully leased before completion. As a result there is a sense of scarcity of new large office buildings felt in the market. It is likely that these market conditions will continue in the years to come.

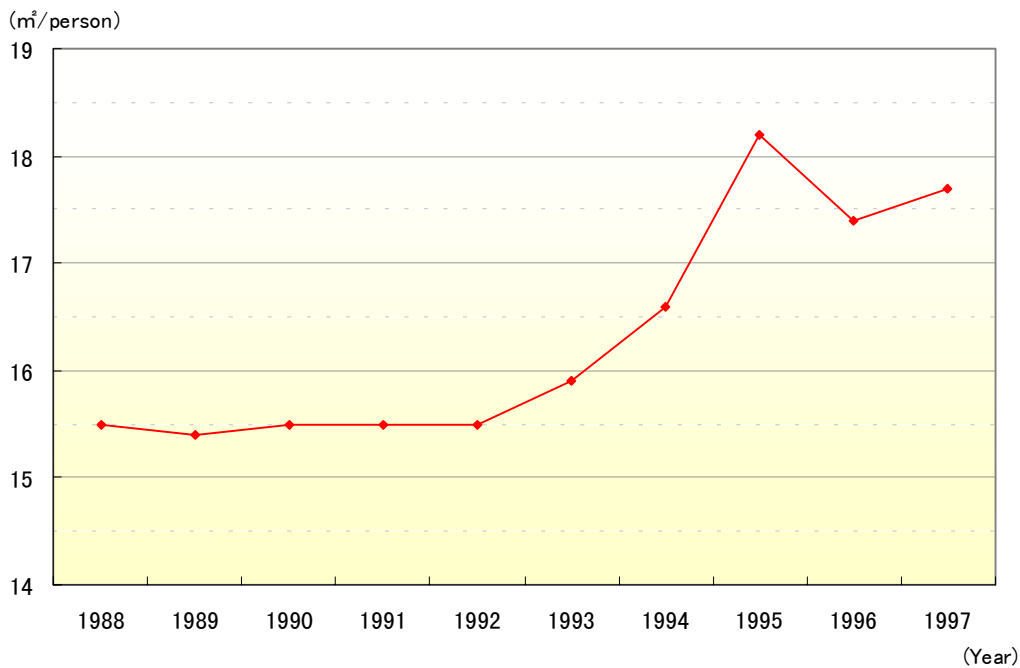
4. The "Office recession" of the first half of the 1990s will not occur again

(1) Why did the office recession of the first half of the 1990s occur?

Before discussing the so-called "year 2003 problem," it is necessary to review the cause of the office recession in the first half of the '90s.

Many office buildings were built in the second half of the '80s not because of the bubble economy but because of actual demand due to an increase in the number of office workers. Reorientation of the economy from heavy industry to service and information technology resulted in increases of office workers at a rate of about 200,000 per year. If the floor area per office worker is assumed to be 16 to 17 m², an increase of 120,000 to 180,000 office workers per year means the creation of new demand of 2,000,000 to 3,000,000 m² per year. It is natural, therefore, that the rate of creation of new supply, which had been 1,500,000 to 2,000,000 m² per year until the mid '80s, should have increased to 4,000,000 to 5,000,000 m² per year. Even at that rate of new supply creation, it was felt that office space was in short supply.

(Figure 4-1) Office floor area per person (23 wards of Tokyo)



Source: Japan Building Owners and Managers Association

Partly because of the pressing demand-supply situation, the increase in office space became one of the factors contributing to increases in the unit cost of building construction (Figure 1-3) and land prices (Figure 1-4-1). Given the demand the vacancy rate remained less than 3 percent for eight consecutive years, and businesses had no choice but to relocate to urban periphery or suburban buildings or to expand into multiple locations due to a lack of large floor plate buildings. In the meantime, real estate firms and even non-real-estate firms (e.g., firms in other industries, individuals) who lacked know-how built many office buildings, so that there were many buildings that were not capable of satisfying tenant needs.

The office building market peaked in the second half of the '80s. With the bursting of the economic bubble burst in the '90s, a sense of excessiveness grew rapidly in the office building market, resulting in the office building recession.

There were other factors that aggravated the office recession. Construction of a large office building usually requires at least several years for permitting, infrastructure and actual construction of the building. This time lag in office development accelerated the rise in land prices and the unit cost of building construction during the economic bubble period, and aggravated the office recession in the post-bubble years in which the demand-supply situation improved.

(2) There will be no recurrence of office recession in the first several years of the 21st century

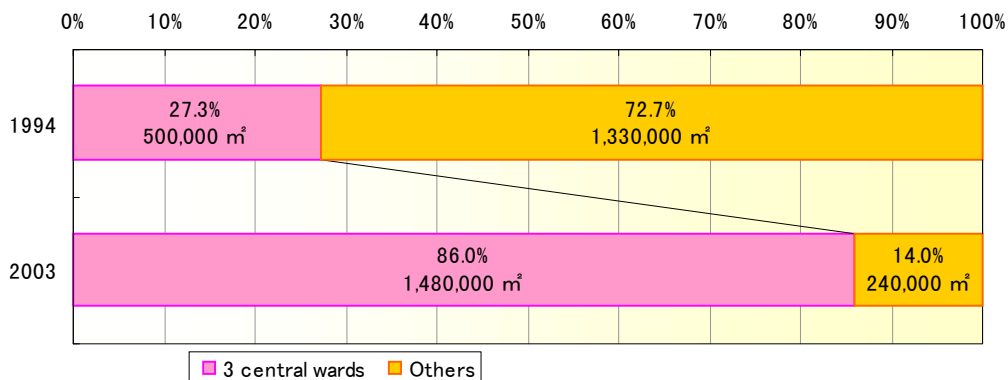
An office recession like the one that occurred in the first half of the 1990s will not occur in the first several years of the 21st century. The supply of a large number of new large buildings expected in the years to come will not cause increases in the vacancy rate or declines in rents like those that were brought about by the supply of many large office buildings in 1994. Why? Because the type office buildings to be constructed differs considerably, both in quality and quantity, from those in 1994. What will happen is not an office recession, but polarization of office buildings into buildings that can stay competitive and ones that cannot do so. Our conclusion is based on the following:

- Location

First of all, as mentioned in Section 2, most new development is in the urban center as opposed to the suburbs as was the case in the bubble years. As can be seen from the graph of Figure 4-2, this tendency is particularly clear with large buildings. Of the buildings completed in 1994, the buildings located in three central wards (Chiyoda, Chuo and Minato) accounted for only 30 percent of all buildings supplied; of the buildings to be completed in 2003, buildings located in the three wards account for about 90 percent.

The number of new buildings located in Tokyo's urban center, which lends itself to business efficiency and facilitates commuting, is increasing. This tendency agrees with tenants' "return to urban center" tendency and indicates that new office buildings that will be located in the central urban districts will be highly competitive. While there are obviously a greater number of existing buildings, even if they are built to the latest earthquake standards, they rarely are competitive in other specifications such as free access flooring, power supply, etc. Office buildings, however, that were constructed in or around the economic bubble period and are located in suburbs will not be very competitive in attracting tenants now that rent differences have narrowed, unless there are unique features to the building that would permit, for example, conversion to a data center. Another factor is access to broadband communications. Most of newly planned office buildings are located adjoining Tokyo's sewer trunk lines or optical cable networks laid by Teito Rapid Transit Authority, which are said to be less expensive than NTT facilities. These are important features that cannot be ignored (Figure 4-3).

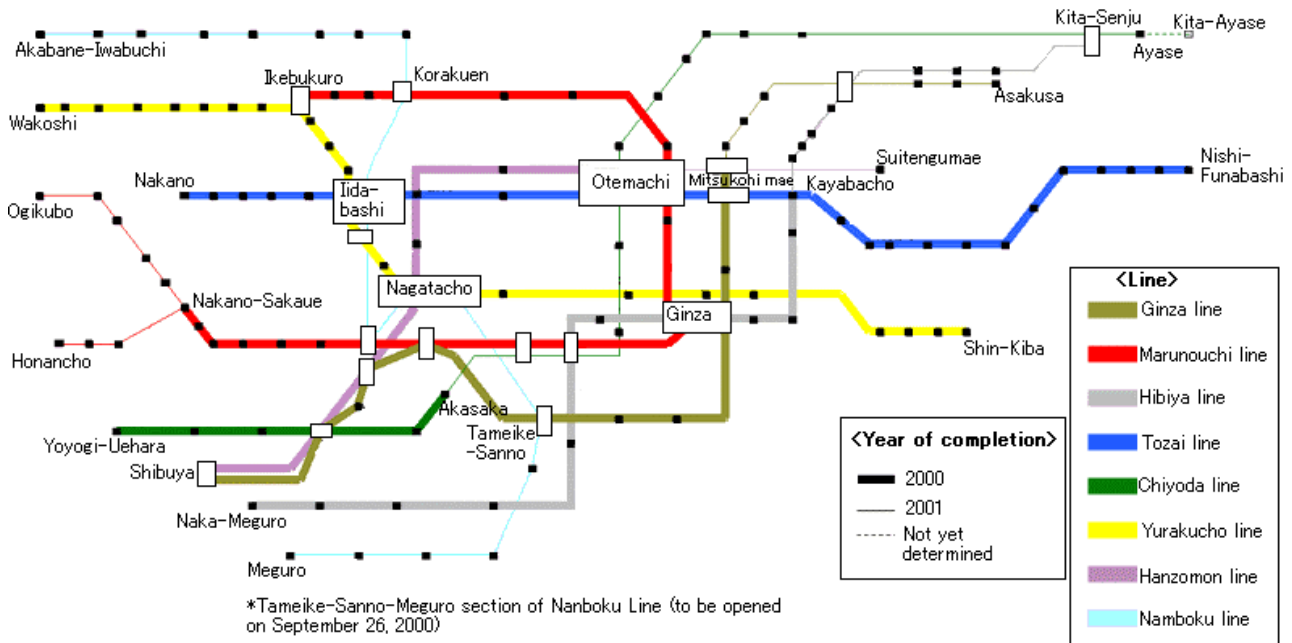
(Figure 4-2) Supply of large office buildings by area



Source: Mori Building Co., Ltd.

* 3 central wards: Chiyoda, Chuo and Minato

(Figure 4-3) Optical cable network planned by Teito Rapid Transit Authority



Source: Teito Rapid Transit Authority

Size

The number of new large office buildings in the first half of the 1990s was around 45. The number of new buildings to be supplied in 2000 is only 15 and in 2003, 18. The floor area per office building is about 2.5 times as large as the 1994 level.

(Table 4-1) Supply of large office buildings by size (1994 vs. 2003)

	Buildings with floor area of 30,000 m ² or more		Buildings with floor area of 10,000 m ² or more and less than 30,000 m ²		Area per building
	Total floor area	Percentage	Total floor area	Percentage	
1994	1,230,000 m ²	62.7%	6,000,000 m ²	32.8%	39,000 m ²
2003	1,670,000 m ²	91.7%	50,000 m ²	2.9%	96,000 m ²

Source: Mori Building Co., Ltd.

From the standpoint of tenants, integration of offices scattered among a number of office buildings is naturally an obvious way to reduce cost and improve work efficiency. This also applies to the building floor plates. During the bubble economy period, there was no choice but to secure the required office space by using a combination of separate offices arranged in a more or less radial pattern because the rents were high and the supply of office buildings in the urban center was limited. The tendency toward office integration is likely to continue in the years to come. Buildings, therefore, with a larger total floor area and a larger floor plates will better meet tenant needs. Smaller buildings may need to have a special feature to attract tenants or target companies that do not need large offices, e.g., venture.

Grade

Most of the buildings to be completed in the first several years of the 21st century will be well-located, large, mixed-use developments combining, for example, retail and residential with office. To meet increasingly sophisticated tenant needs for office building specifications, most of those buildings will be designed for information technology capabilities and for vibration control or seismic isolation. Low seismic performance buildings designed to old seismic design standards and buildings with outdated (or no) IT capability will be unable to stay competitive.

Although emphasis is placed on the number of large office buildings to be supplied, the total supply of office buildings, both large and small, in 2003 is likely to be much smaller than the supply level during the bubble economy period. Many of the large office buildings that will be supplied in the years to come will be highly

competitive in terms of location, size and equipment. Since demand for these buildings will be steady, large office buildings will continue to be more or less in short supply.

The supply of many new large office buildings will most likely cause large-scale relocation between many office buildings, intensifying competition in attracting tenants. Buildings that are unable to meet tenant needs, such as low seismic performance office buildings designed to old seismic design standards buildings with outdated (or no) IT capability, and inadequately sized or poorly located buildings, will no doubt have hard time competing with new large buildings. Credibility of owners and building management systems are becoming important considerations in selecting office buildings, and this is another factor contributing to polarization.

In short, it is not that the entire office building market will enter a recession. Instead, what will happen is further polarization of the office building market, which will make clear who will win and who will lose.

(Table) Comparison of office buildings by category

		Competitive in market	Not competitive in market	
Location	Macro	5 central wards and some other areas * Particularly areas south of Chuo Line	Other than those shown at left	
	Micro	Within 5 minutes' walk from station		
Grade	Seismic performance		Old seismic design standard (Compliance not possible)	
	New seismic design standard Old seismic design standard (seismic performance comparable to new seismic design standard to be achieved by renewal, etc.)			
	Specifications	IT-related • Office automation floor • Electric power capacity • Backup • Floor loading • Others	Comparable level to be achieved by modifications, renewal, etc.	Compliance not possible
		Others • Ceiling height • Unit air conditioning • 24-hour services • Others	Comparable level to be achieved by modifications, renewal, etc.	Compliance not possible
Size (per floor)		About 100 tsubo	Less than 100 tsubo	
Owner (including operating company)		Other than those shown at left	No creditability (funding capability)	
			Inadequate management system	
Rent level		Other than those shown at left	50,000 (including common area charge)/tsubo or more	

5. Summary

While we have yet to see signs of a full economic recovery, over the next four years until 2003 there will be approximately 4.3 million square meters of large scale office building space supplied to the market. This supply will be most noticeable in 2003 when 1.72 million square meters will be supplied, the largest amount ever in a single year after the 1.83 million square meters supplied in 1994. This supply is not being driven by economic recovery or demand factors. Rather, it is a supply side phenomenon stemming in part from the sale of large tracts of city-center developable land by the Japan National Railways Settlement Corporation ("JNR") in the first half of the 1990s. Having had 360,000 square meters of large office supply in 1999, there is certainly reason for apprehension about an over supply of office space. This is being called "The Year 2003 Problem".

Will supply of office space in the first half of this decade lead to a replay of the office market recession of the first half of the 1990's?

Supply Will Match Tenants' Needs

The supply of office space through 2003 will have the following three special characteristics:

- 1) **Large.** In the first half of the 1990's large office buildings accounted for only 20% of the space supplied. In 2000 the percentage will be 85%. Further, the average size of the large office buildings will be twice that of those built in the early first half of 1990 and average floor plates will also be twice as large.
- 2) **Well Located.** In 1994, less than 30% of supply was in the three main wards. In 2003 this figure will approach 90%. It is quite evident that supply and tenants are returning to city center.
- 3) **Specifications.** There has been a rapid evolution to high-performance buildings in terms of earthquake resistance; IT related infrastructure, high ceilings, individually controlled HVAC systems and other facilities and equipment.

In addition to the above, another noticeable aspect of the coming supply is the large percentage which will be owner-occupied. In 2003 this will be 620,000 square meters, twice the previous record amount supplied in 1994. The background of this phenomenon was the availability of developable city-center land through JNR land sales, a reduction in construction costs and the desire of owners to consolidate into IT ready offices and reduce rental costs.

Demand for Large Office Space Holding Firm

Simply stated, demand for large office space is coming from the following four areas:

- 1) IT companies and the introduction by other companies of information technology into their businesses
- 2) The advance and expansion of foreign financial companies, primarily U.S., in Tokyo
- 3) Latent demand for central Tokyo office space
- 4) Demand from tenants of buildings to be redeveloped

Tenants motivations for moving have changed from negative to positive and that section of the office market that meets tenants' demands is seeing rental increases.

Where is demand headed?

Looking over the past 15 years, including the bubble period, we find that the demand for large office space (including existing stock), has been relatively constant at 1 million square meters a year (data from Mori Building). We expect this trend to continue given that quality of the coming office supply and our belief that there will not be a significant reduction in tenant demand. If we assume demand of 1 million square meters per year, demand for space over the 5 year period 1999-2003 will be 5 million square meters, slightly more than the 4.66 million square meters supplied/to be supplied over the same period.

Impact of supply equal to approximately 10% of existing stock

Relative to the current total rentable floor area of all office buildings in Tokyo's 23 wards of 28 million square meters, the supply of large office buildings alone over the next 4 years will be 2.8 million square meters (anticipated supply x assumed rentable area of 65%). The impact of supply equaling 10% of stock will not be small. While we do not expect to see the same sort of office market recession of the first half of the 1990's, we cannot afford to minimize this issue. The coming supply will prompt tenants to relocate between large office buildings resulting in substantial vacancies in existing office buildings. It is inevitable that for reasons such as consolidation of multiple office locations, IT readiness and rent levels that there will be a movement of tenants to more competitive buildings. There is no doubt that we will see a billiard ball effect in the existing building market. We should pay particular attention to the following three kinds of tenant movements:

- 1) Movement of tenants as companies complete headquarters buildings and consolidate offices there and the movement of related companies to the area of the new headquarters
- 2) Movement of tenants as older buildings are redeveloped or renovated. Especially noteworthy is the Marunouchi area
- 3) Rent adjustment in the higher rent office market and resulting tenant relocations

If a rapid economic recovery does not generate enough demand to absorb the space created by the billiard effect, the polarization of the office market between competitive and non-competitive buildings will accelerate even more.

Accelerating Polarization of the Market

Judging from the direction of the current economy in Japan, we expect an even a clearer distinction between “winners” and “losers” in the office market to appear. Specifically the losers will be those buildings:

- 1) Built before the new earthquake codes or have low seismic resistance*
- 2) Without sufficient facilities to support current IT needs
- 3) Small buildings (both in overall size and size of floorplate)
- 4) Inferior location (macro and micro level)
- 5) Very high rents
- 6) Financially weak owners and owners lacking management ability

With respect the non-competitive office buildings, we cannot expect either overflow demand from the competitive buildings or an economic recovery to help. Rather, renovation/reconstruction and a radical overhaul of building management will be needed.

(*buildings that can be renovated to current standards exempted)

Non-competitive buildings: Vacancy Rates over 10%

As discussed earlier, the supply and demand of competitive office space is essentially balanced and we can expect this sector of the office market to maintain its current rent and vacancy levels. On the other hand, for non-competitive buildings, even if we subtract from the coming 2.8 million tsubo of new office space supply that office space that which will temporarily be lost in connection with redevelopments, especially in the Marunouchi area, we expect the vacancy rate to exceed 10% and, or the office market as a whole, a vacancy rate of around 8%. (For the percentage of non-competitive office buildings, we used the percentage of buildings in the central 5 Wards built before 1980 and with total floor areas less than 3,000 tsubo based on data from Ikoma Data Services.)

High-end Office Rents Will Converge on ¥30,000

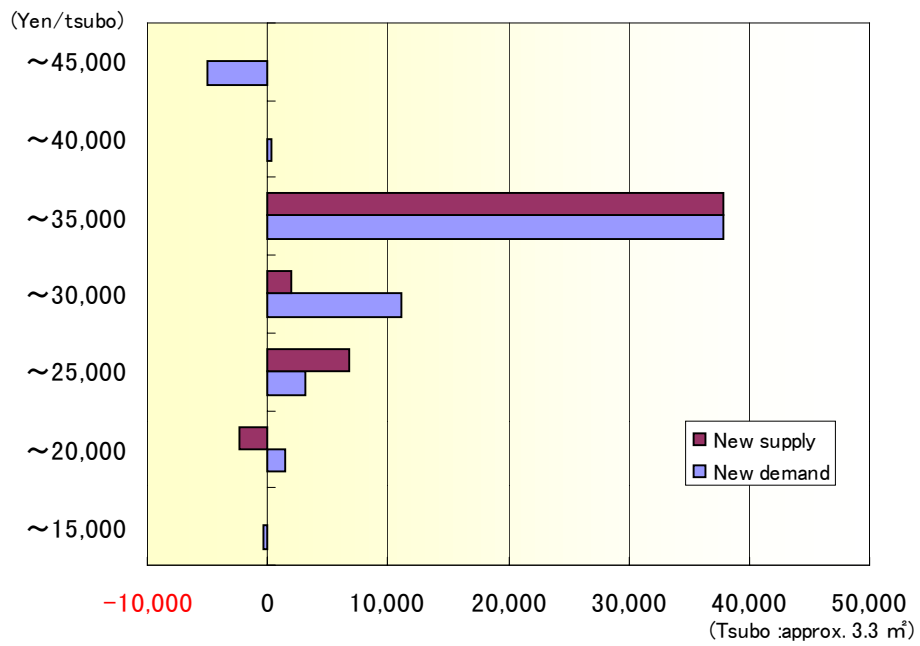
As competition to attract tenants in non-competitive buildings intensifies they will be unable to keep current rent levels. Similar to the middle 1990's we can expect reduction of rent levels of 20-30% over the four-year period, perhaps more for non-competitive buildings. For buildings that are particularly old and poorly located, even lowering rents will not be sufficient to attract tenants leading to still further declines. Further, high-end office buildings getting more than ¥40,000 a month in rent because of the scarcity of this kind of space will lose this advantage and there will certainly be rent competition for tenants. As the number of tenants that can pay high-end rents, for example foreign investment banks, is limited, a significant reduction in rents in this sector of the office market is almost certain.

However, for the competitive buildings given that they are still a relatively small percentage of the overall market and give the expected demand, we expect rents to hold steady or if there are reductions for them to be limited to 10% at most. In conclusion, with respect to the large office building market, we expect the very high-level rent buildings to disappear, and for rents in the Marunouchi- Otemachi areas to be ¥30,000-40,000 per tsubo per month and for the 5 main wards, not including the aforementioned areas, to command rents of ¥20,000-30,000.

Conclusion

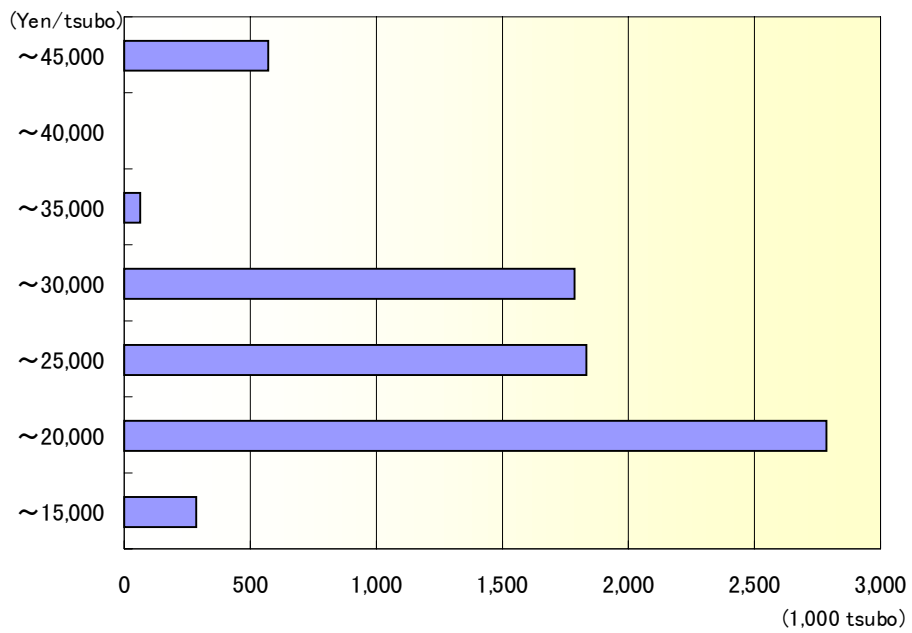
Although it is difficult to make predictions with confidence because the market conditions depend largely on the trends in the Japanese economy, it should be safe to say that the entire office building market will not enter a recession. Further polarization, however, into buildings that are able to stay competitive in the market and those that are not, and adjustment of rents for competitive office buildings, particularly high-rent buildings, will be unavoidable.

(Figure 5-1) New demand and supply in 5 central wards of Tokyo by rent level (FY1999)



Source: Ikoma/CB Richard Ellis Co., Ltd.

(Figure 5-2) Rentable rooms (floor area) in 5 central wards of Tokyo (as of end of March 2000)



Source: Ikoma/CB Richard Ellis Co., Ltd.

II. Economy

1. Japanese Economy

(1) Overview

It is becoming clear that the Japanese economy is on the path to its self-sustaining recovery as corporate earnings improve and capital investment increases.

According to the June Report (preliminary) of Diffusion Index that Economic Planning Agency released on August 4, coincident index has been above 50% for 14 months continuously and leading index surpassed 50% again in 3 months whilst lagging index fell below 50% for the second consecutive month. For coincident index, production related indices remained in the upturn trend and slight improvement is seen in employment related indices. Indices of industrial production, index of monthly hours worked of which overtime (Manufacturing), sales indices of wholesaling, sales index of small businesses (Manufacturing) and ratio of job offers to job seekers continue to be in the positive trend from previous month, and electric energy consumed by large industries has left the negative trend while indices of investment goods shipment (excluding machinery export) and sales of department stores were contrary.

In the Monthly Economic Report released on August 8, it has been revised upward from "movement toward self-sustained recovery is growing gradually" to "steady increase in production". As employment and income environment remains severe, the overall assessment was continuing to move towards self-sustained recovery, centering on the private sector."

Main concerns will be ① whether the employment and income environment indicate improvement and ② whether the increased equipment investment will continue to lead the economy.

In the category of employment and income environment that affects personal spending, the hours worked continues increasing supported by the production improvement and the effective job openings is on the rise at a moderate pace. Also, the total cash-earnings stay in the upward trend indicating brighter outlook. On the other hand, personal spending decreased compared to the previous month in June according to the household survey and sales of large-scale retail stores remain sluggish. Although the employment indices of regular workers remain negative compared to the previous year and adjustment continues on the environment, consumers are relatively stable and therefore personal spending is expected to rise alongside the improvement in the employment and income environment gradually.

Equipment investment will stay in the upward trend. As machinery orders, one of the leading indices rose to 20.2% in April to June period compared to the previous year for private orders (excluding electric powers & ships) and, major improvement is expected at around 30% compared to the previous year in the July to September period. This resulted by ① the increase in Mining & Manufacturing production and improvement on the corporate earnings managed by the restructuring progress and ② the increase in the investment for IT related businesses. Equipment investment is expected to grow continuously.

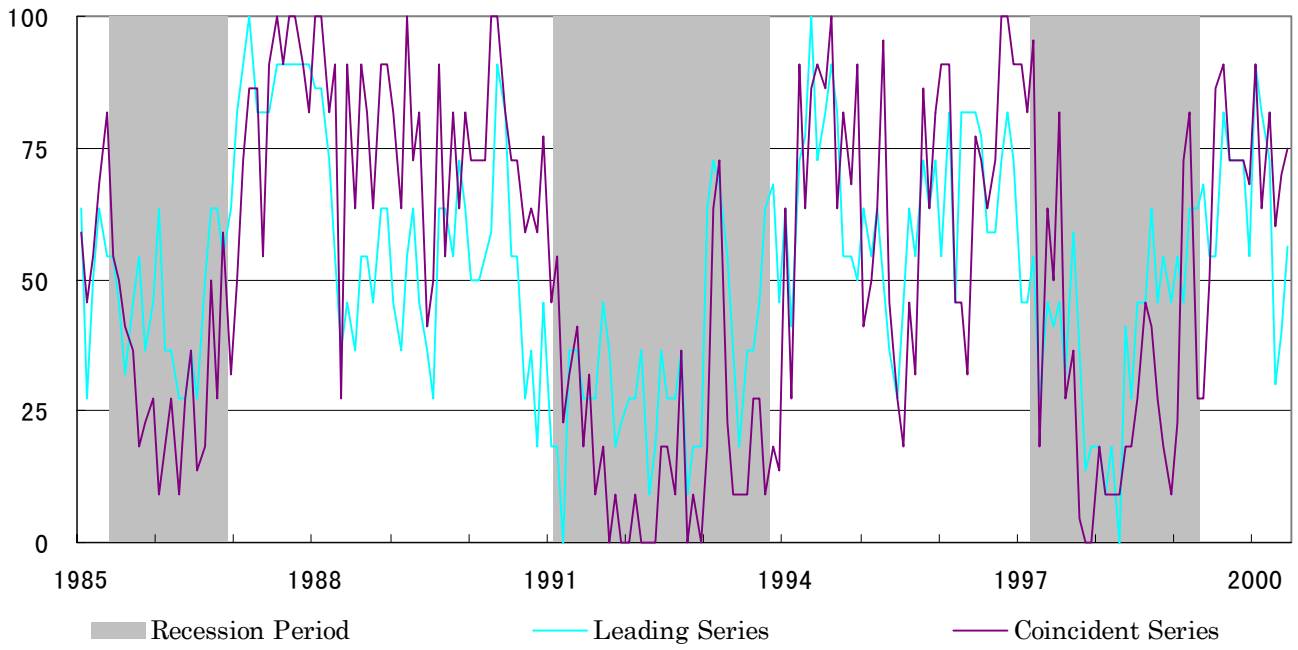
Public investment reflected the concentrated additional budget in March and showed favorable trend in works though expected to turn downward after a while.

Investing in residential housing will likely turn to decreasing trend as the effect of government policy weakens and the number of applicant for the 3rd and the 4th housing loan offering stays low.

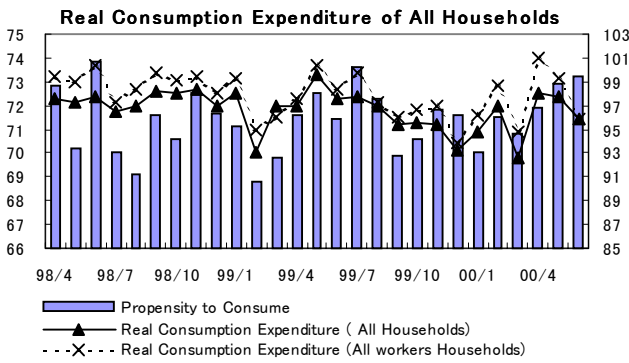
Based upon the healthy condition of foreign economy on top of the recovery of Asian's, the amount of export will stay in the increasing trend as a whole. Amount of import is also thought to be in such a trend, though it is difficult to expect the growth of an international demand. Production, income and employment conditions can count on the pleasant effect by the increase of export.

As such that the corporate sector indicates self-sustaining recovery and the household sector out of the worst condition, the economy is expected to follow the path of recovery.

Trend in the Diffusion Index (DI)



(2) Trends in Indices
Individual Consumption

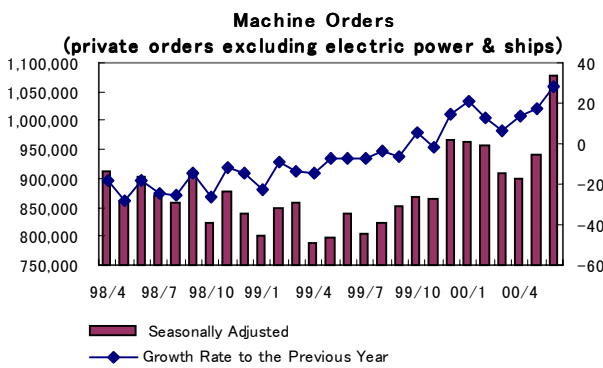


Real consumption expenditure of all households in June fell 1.8% compared to a year earlier and of all workers households also declined 2.6%, two consecutive month of severe fall.

Major decrease in the spending in education, clothing and shoes affected the serious fall of the ratio. Transport and communication spending continues to be in the upturn trend though difficult yet to say that individual consumption is truly recovering as food expenses

Propensity to consume by all workers households (S.A.) rose 0.3 point to 73.2% compared to a month earlier.

Capital Investment

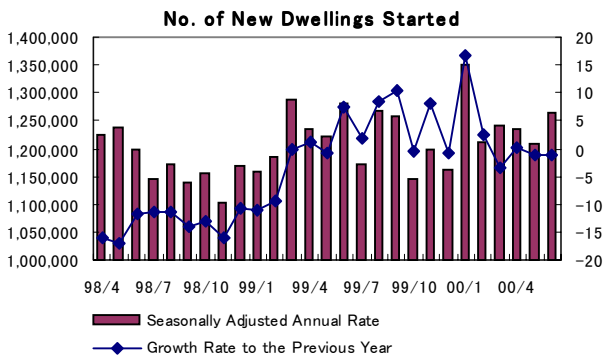


June machine orders (private orders excluding electric power & ships) increased 28.2% compared to a year earlier, up 14.4% from the previous month and this is the seventh consecutive month of gain.

By industries, IT related industry has led the manufacturing industry to boost and the orders increased by 39.6% compared to a year earlier. Also, the orders of non-manufacturing industries (excluding electric power & ships) were up 19.2% from a year earlier.

Capital investment is likely to continue its recovery as the machine orders improve as a whole.

Residential Investment

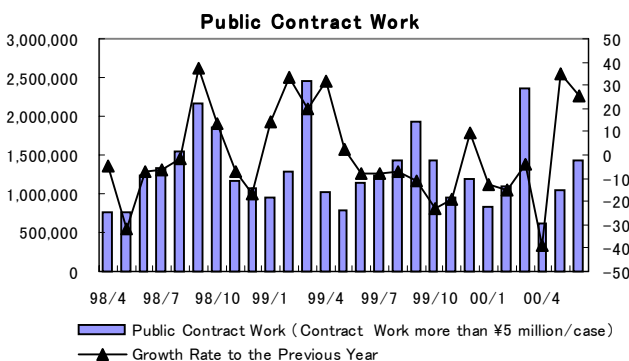


Number of new dwellings started in June decreased by 1.2% compared to a year earlier. Increase of 1.26 million lots annually and its trend in numbers is almost unchanged since the sudden increase in January.

Number of new dwellings of owned-houses was down 22.6% compared to a year earlier, 5 consecutive month of decline and continues to fall. On the other hand, the rent was up 8.3% for second consecutive months. As for houses built for sale, up 30.9%.

It is expected to continue declining as the numbers applied to the 3rd and the 4th housing loans in fiscal 1999 from the Housing Loan Corporation fell drastically.

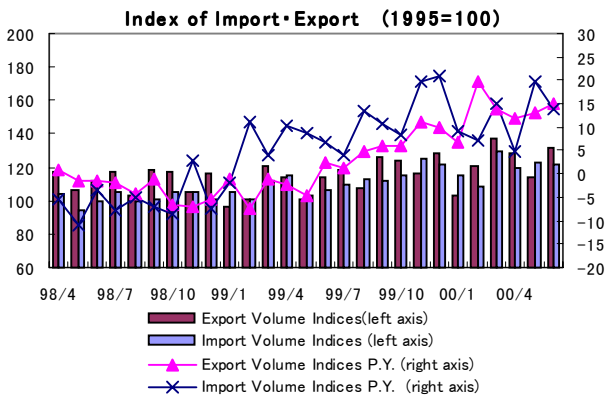
Public Investment



Amount of public contract work in June was high and increased 25.7% compared to the previous year.

Public investment reflected the concentrated additional budget in March and showed favorable trend in works though expected to turn downward after a while.

Import·Export

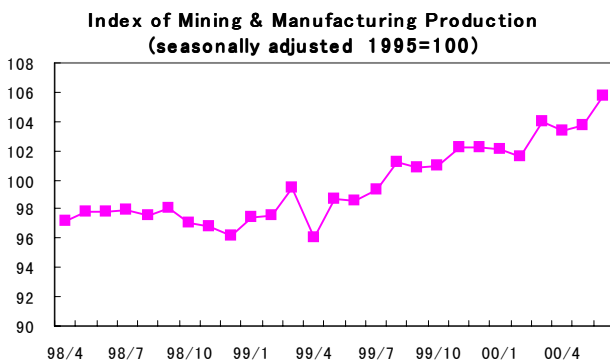


Export increased for the 13th month in June, by 14.9%, compared to a month earlier. Import also grew, up 14.0%.

Export surplus (¥) was up 2.9% in increasing trend, especially to Asian region at 31.5% rise compared to a year earlier. It turned positive to EU, up 11.9% while it decreased to the States, down 1.2%.

Supported by the Worldwide recovery of economics and domestic demands, the increasing trend is expected to last for both import and export.

Mining & Manufacturing Production

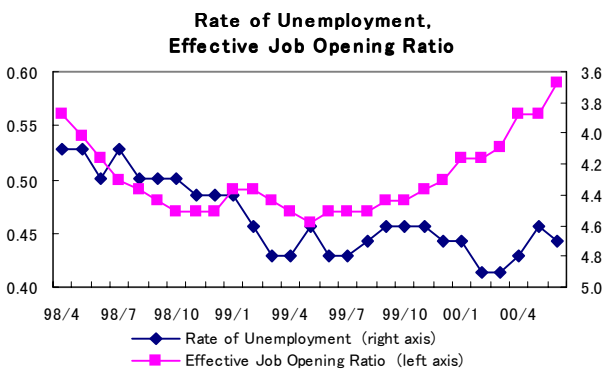


June mining & manufacturing production was up 1.9% compared to the previous month and indices of industrial production was 105.7. Indices of general and export machinery manufacturing and, food and cigarettes production rose and other productions, textile industry, petrol·coal production industries fell. June shipment was up 2.7%, no change in inventory from a month earlier and indices of inventory ratio was 98.5, down 2.0%.

According to a survey of manufacturing production forecast, July production will be down 0.2% compared to the previous month and August production, up 2.8%.

Production continues to rise moderately as a whole

Employment

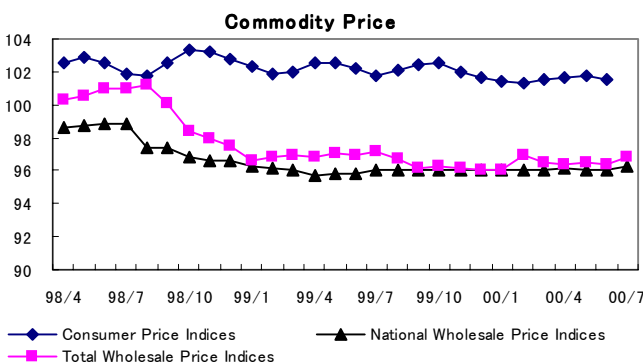


June rate of unemployed (S.A.) was up 0.1 percentage point compared to the previous month at 4.7%. Jobless rate for men rose 0.2 percentage point at 4.8% and for women increased 0.1 percentage point.

Number of unemployed fell 80,000 year on year to 3.21 million for the second consecutive month of decline.

The ratio of job offers to seekers (S.A.) was 0.59, improved 0.03 point compared to the previous month.

Commodity Price



June national consumer price index was down 0.7% compared to the previous year and other indices were down 0.3% apart from perishables while Tokyo mid-July consumer price index was down 0.9%.

July national wholesale price indices were up 0.3% compared to the previous month, 5 consecutive month of increase. Export index was down 6.9% while import index was up 2.3% and as a result total wholesale price index was down 0.4%.

2. Real Estate Market Trend

(1) Condo Market

Tokyo Metropolitan Area

According to the Real Estate Research Institute, as many as 9,081 condominiums were supplied in July (up 17.9% compared to the previous year). This is because of increasing supply of large-scale condominiums on the outskirts of Tokyo. Average price of a condominium is ¥39.73 million (approx. \$368,000, \$1=¥108), down 6.5% from the previous year. Price per square meter is also down 9.2%, ¥513,000 (\$4,750, \$1=¥108)

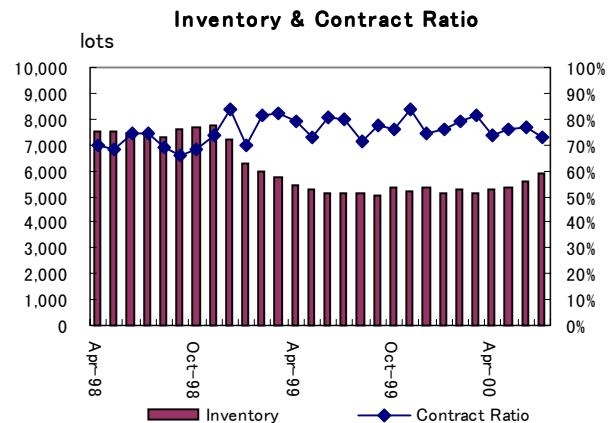
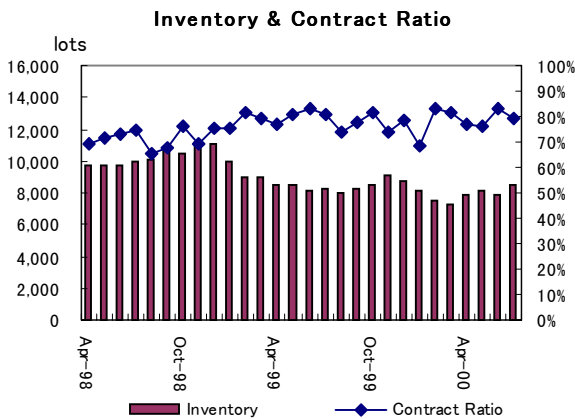
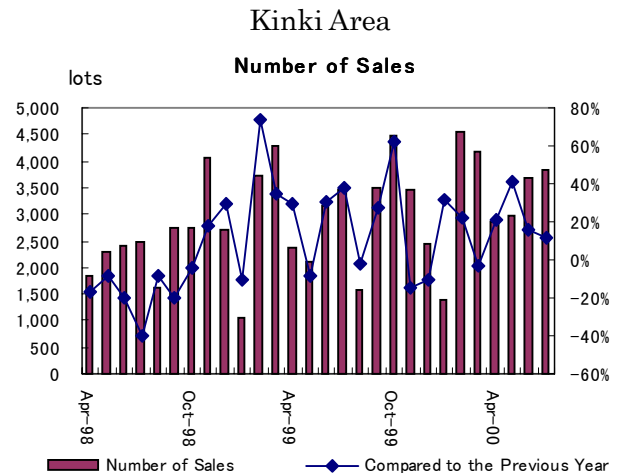
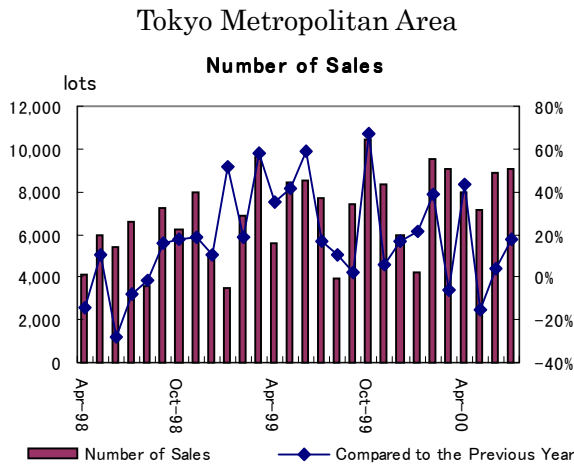
Inventory is 8,450 units as of the end of July, up 515 lots compared to June.

Kinki Area

According to the Real Estate Research Institute, 3,832 condominiums (up 11.1% compared to the previous year) were supplied in Kinki area in June. Sales were satisfactory with the contract ratio at 72.7%. The ratio remained high due to the mortgage interest deduction available to those taking occupancy of a new residence (detached or condominium by June 2001 and lower average prices. Average price of a condominium is ¥32.70 million (approx. \$303,000, \$1=¥108), down 8.4% compared to the previous year. Unit price is also down 8.9%, ¥442,000 per square meters, the third consecutive month of decrease.

Inventory is 5,869 units as of the end of July, up 318 units compared to June and fourth consecutive month of increase.

Currently, supply is a record high, thanks to the extended tax reduction on housing loan until next June and the ultra-low interest rate of the Housing Loan Corporation. But, the demand is expected to decline as the effect of the tax reduction falls and interest rates rises after the end of this year. On the other hand, the number of condominiums under construction continues to increase compared to the previous year and further price decreases are a concern as supply and demand become unbalanced.



Source: Real Estate Research Institute

(2) Distribution Market

Tokyo Metropolitan Area

According to the Real Estate Transaction Modernization Center Foundation, average price of existing condominiums was ¥20.68 million (approx. \$191,500, \$1=¥108), up from the previous month, but down 2.5% compared to the previous year. There were 2,063 transactions (up 70.9% compared to the previous year), the fourth consecutive month of increase.

Average price of a detached house, sold in July, was ¥37.72 million (approx. \$350,000, \$1=¥108), down 6.9% compared to a year earlier and the second consecutive month of decline. Number of contracts signed was 1,023 (up 50.2% compared to the previous year).

The reason for the appearance of a major increase in the number of contract signed in this month is that in July 1999 registrations on the REINS system from which this data was obtained were down 66% because the system was being updated.

Average price of second hand condominiums continues to decline although the number of contracts signed is increasing. According to a July research of the MRD National Real Estate Information Center, 60.7% of surveyed real estate companies are anxious that the price will continue to fall and such trend is expected to last for a while.

The same percentage, 60.7%, answered they thought the prices of detached houses is likely to level off. The trend of the price is expected to stabilize as purchasing demand is firm.

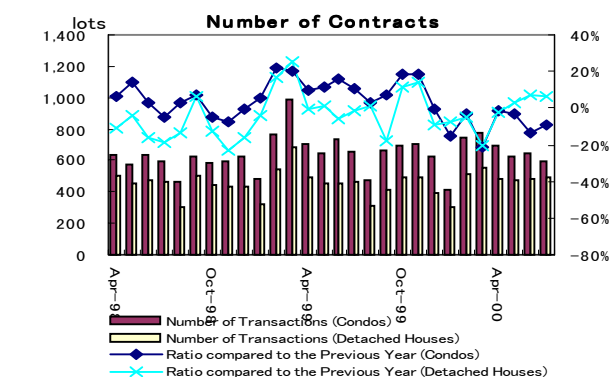
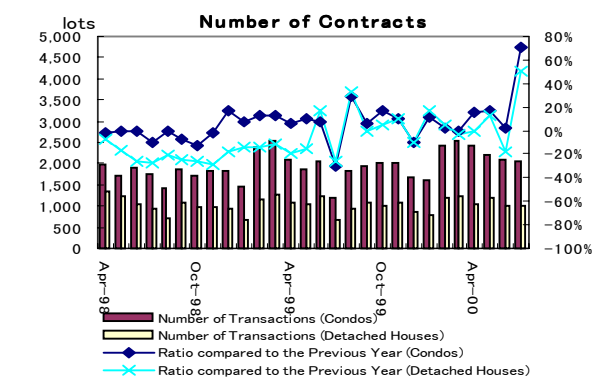
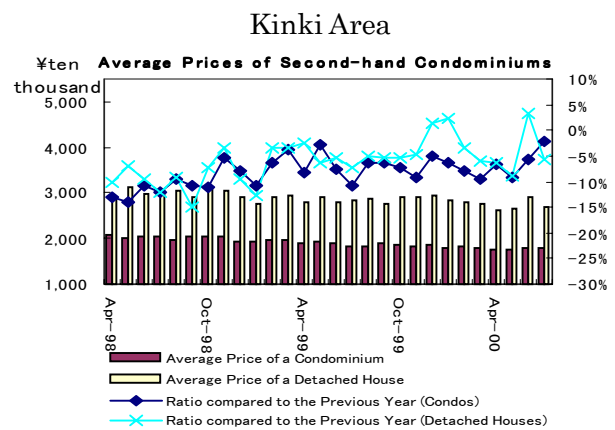
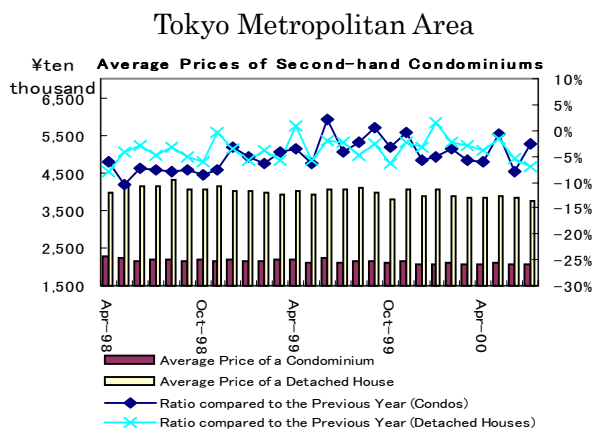
Kinki Area

According to the Real Estate Information Network for Kinki Region, the average price of a second hand condominium, sold in July, was ¥18.02 million, down 2.0% compared to the previous year, second consecutive month-on-month increase. The number of contracts signed was 598 units, down 9.3% compared to the previous year.

Average price of a detached house, sold in July, was ¥26.80 million (down 5.6% compared to the previous year and down from the previous month) The number of units sold, 492 units, was up 6.3% compared to the previous year.

Although the rate of price decline has moderated, purchasing demand continues to be weak and the market is expected to stay sluggish for some time.

As for detached houses, price continues to be in downturn trend and expected to keep falling. Purchasing demand remains weak and is expected to stay sluggish for a while as condominiums.



Source: The Real Estate Transaction Modernization Center Foundation

(3) Office Market

Tokyo (Main 5 Wards)

According to Miki Shoji, average vacancy rate in July improved to 3.97%, up 0.23 percentage point compared to the previous month. This is the fifth consecutive month of improvement. Inventory was reduced by approximately 13,000 tsubo (42,900m²) in the past month and apart from major companies' demand for minimizing offices, expansion of venture businesses and others moving into the city center are the factors of the improvement.

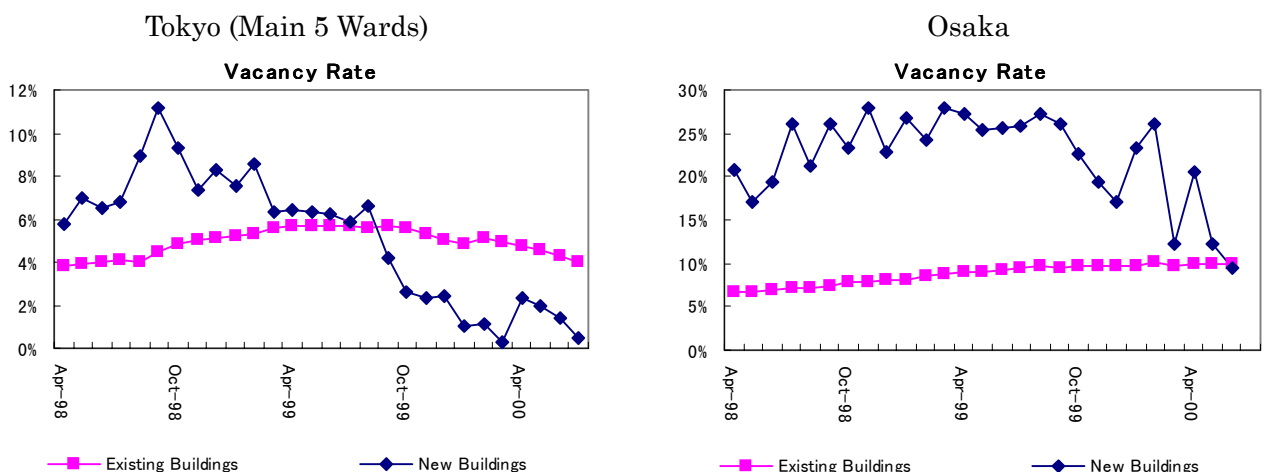
Average rent in July was down 2.96% compared to the previous year, and continues to be in the declining trend. It fell by 0.36% from a month earlier.

As large-scale development continues in the Metropolitan area since the beginning of 2000, demands from foreign owned and IT related companies are becoming stronger. Current pre-leasing condition is that most large-scale buildings which the completion is expected this year are almost all occupied and "Shin Tokyo Sankei Building" (total floor area of 25,186 tsubo, 83,113.8 m²) is already fully pre-leased.

Osaka

According to Miki Shoji, average vacancy rate of Osaka business area improved to 9.77% in July, down 0.08 percentage point compared to the previous month. This is the second consecutive month that the ratio was less than 10%. The vacancy rate of new buildings also recovered to 9.46%, down 0.07 percentage point from a month earlier. Although the average vacancy rate has slightly recovered, it is still at high level. On the other hand, the vacancy rate of new buildings has remained below 10% since May 1997.

"Yasuda Seimei Umeda Building" being fully preleased indicates firm demand for new and large-scale office buildings, which continued from last month. The demand was unchanged for large-scale existing buildings as more tenants moved into them despite the fact that corporate restructuring continues. The vacancy rate is not expected to change dramatically as there is no more supply until next spring.



Source: Miki Shoji

III. Risk Analysis of Rates of Return on Real Estate by City

~Are Local Cities Riskier?~

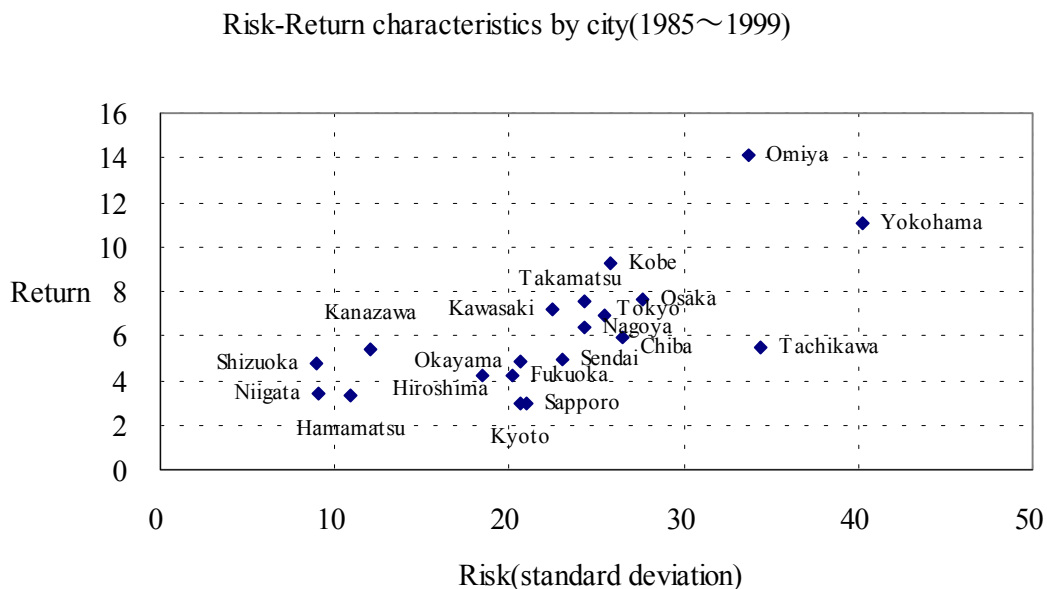
In Japan, efforts have been underway in the last several years to stimulate investment in real estate through various legal and regulatory reform measures. As the real estate investment market evolves as a result of the ongoing reform, it is likely that building a real estate portfolio will become a necessity. The purpose of portfolio building is (1) to distribute risk and (2) to create changes corresponding to risk and return preferences determined on the basis of the portfolio by the use of data on changes in price of many properties and their correlations.

According to portfolio theory, returns can be expressed in terms of factors affecting the entire market and factors affecting only individual properties, and risks are determined by these two types of factors. Risk due to property-specific factors ("non-systematic risk") can be reduced by including many properties in the portfolio. Risk due to non-property-specific factors ("systematic risk") cannot be distributed. An important question here is which factors are non-property-specific and which are not. In market modeling, this is addressed by using the rate of return (market rate of return) of a portfolio weighted to reflect the total market value of all properties.

A market model thus derived was used to divide the risk associated with real estate in different cities into a part corresponding to non-property-specific factors and a part corresponding to city-specific factors, and risk in different cities was analyzed. In the analysis, Sumitomo Life Research Institute(SLRI)'s overall rates of return by city (1985 to 1999) were used.

1. Total risk

Total risk results show that risk is high in Yokohama, Tachikawa and Omiya, where risk exceeds 1,000 points. On the other hand, low-risk areas are Niigata, Shizuoka and Hamamatsu, where risk is around 100 points. All in all, metropolitan areas tend to be riskier than local cities. Exceptions are Takamatsu and Okayama, where risk is relatively high. This is thought to be due to the opening of Seto Bridge, which is a major influence, during the study period.



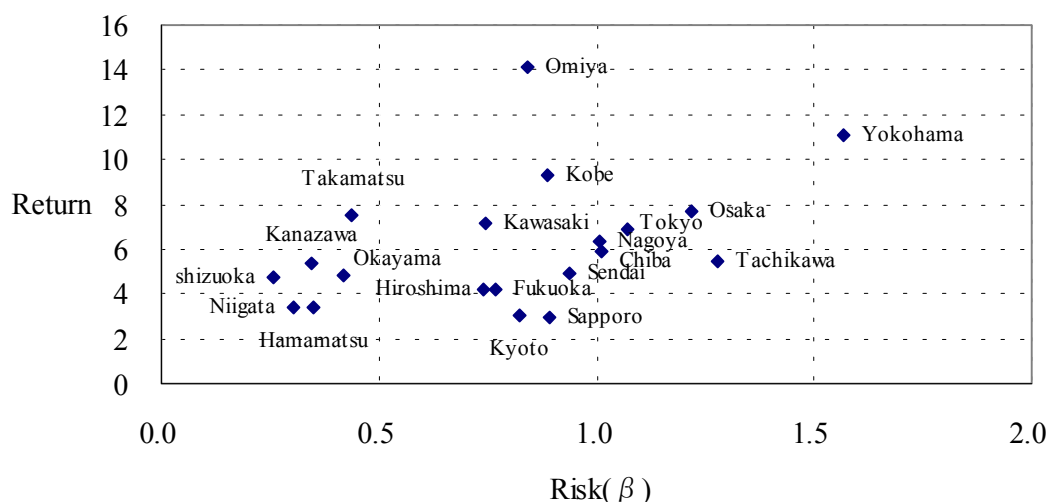
2. Systematic risk

Systematic risk results show a similar tendency: as in the case of total risk, systematic risk in metropolitan areas tends to be higher than that in local cities. Systematic risk in Takamatsu and Okayama, the two areas that showed high total risk in comparison with other local cities, turned out to be more or less the same as that in other local cities.

These results are shown on the graph below, where the β (sensitivity to changes in the market portfolio) value is plotted on the horizontal axis, and expected return (average rate of return) is plotted on the vertical axis. As shown, the β values for the three metropolitan areas and regional core cities are around

1, while those for prefectural core cities are smaller than 0.5, which indicate low risk.

Risk-Return characteristics by city(1985~1999)



3. Non-systematic risk

Non-systematic risk is high in cities that are designated as business core cities, such as Yokohama and Tachikawa, and in the cities of Kobe, which was recently hit by an earthquake, and Takamatsu and Okayama, where a big project, namely the opening of Seto Bridge, is located. In the other cities, non-systematic risk is around 90.

Risk breakdown by city

		Total risk	Systematic risk	Non-systematic risk	Percentage of systematic risk
Tokyo metropolitan area	Tokyo	648.20	549.31	98.88	84.7%
	Yokohama	1,621.76	1,184.44	437.32	73.0%
	Tachikawa	1,183.42	783.96	399.46	66.2%
	Omiya	1,135.56	341.96	793.60	30.1%
	Kawasaki	505.33	266.07	239.26	52.7%
	Chiba	703.40	493.48	209.93	70.2%
Osaka metropolitan area	Osaka	760.70	713.10	47.60	93.7%
	Kyoto	424.46	324.93	99.53	76.6%
	Kobe	666.10	377.78	288.32	56.7%
Nagoya metropolitan area	Nagoya	591.73	485.45	106.28	82.0%
Regional core cities	Sapporo	441.33	380.48	60.86	86.2%
	Sendai	529.71	421.00	108.71	79.5%
	Hiroshima	338.96	262.62	76.34	77.5%
	Fukuoka	405.84	282.15	123.68	69.5%
Prefectural core cities	Takamatsu	592.75	92.10	500.65	15.5%
	Okayama	427.75	84.01	343.74	19.6%
	Niigata	82.97	44.53	38.44	53.7%
	Kanazawa	144.15	56.57	87.58	39.2%
	Shizuoka	79.17	31.83	47.34	40.2%
	Hamamatsu	119.58	59.36	60.21	49.6%

4. Conclusion

It has been found, from the results described above, that both total risk and systematic risk are high in metropolitan areas than in local cities. This means that when a city-based portfolio is built, risk associated with non-property-specific factors (market risk) can be reduced by incorporating prefectural core cities rather than larger cities. However, because correlations between returns associated with non-property-specific factors for prefectural core cities are stronger than those for larger cities and because systematic

risk might have been underestimated, the above finding should be discounted slightly. Needless to say, it should be kept in mind that past risk data do not apply directly in future, and that there are kinds of risk, other than the risk associated with the rate of return, such as liquidity risk, that were not taken into account in the analysis. The finding, however, that, despite a general belief to the contrary, real estate in local cities is less risky, at least in terms of changes in the rate of return, than in larger cities should be helpful in evaluating risk in local cities.

Correlations between changes due to property-specific factors (1)

	Tokyo	Yokohama	Tachikawa	Omiya	Kawasaki	Chiba	Osaka	Kyoto	Kobe	Nagoya
Tokyo	1.0000	-0.1669	-0.1521	-0.7116	-0.6460	-0.8248	-0.7038	-0.5440	-0.8592	-0.5042
Yokohama	-0.1669	1.0000	0.9444	0.0685	0.5291	0.5060	-0.2731	0.2458	-0.0682	-0.6472
Tachikawa	-0.1521	0.9444	1.0000	-0.0211	0.3462	0.3655	-0.2203	0.1899	-0.0749	-0.7084
Omiya	-0.7116	0.0685	-0.0211	1.0000	0.7542	0.7717	0.2350	0.0308	0.4706	0.5219
Kawasaki	-0.6460	0.5291	0.3462	0.7542	1.0000	0.9243	0.1604	0.3723	0.4481	0.2364
Chiba	-0.8248	0.5060	0.3655	0.7717	0.9243	1.0000	0.2778	0.5240	0.6246	0.2984
Osaka	-0.7038	-0.2731	-0.2203	0.2350	0.1604	0.2778	1.0000	0.4966	0.8251	0.5688
Kyoto	-0.5440	0.2458	0.1899	0.0308	0.3723	0.5240	0.4966	1.0000	0.7500	0.2993
Kobe	-0.8592	-0.0682	-0.0749	0.4706	0.4481	0.6246	0.8251	0.7500	1.0000	0.6514
Nagoya	-0.5042	-0.6472	-0.7084	0.5219	0.2364	0.2984	0.5688	0.2993	0.6514	1.0000
Sapporo	-0.0811	-0.6273	-0.6747	0.1806	-0.1199	-0.0943	0.2929	-0.1344	0.1275	0.5922
Sendai	-0.3601	0.5526	0.6269	-0.1614	0.0300	0.2656	0.1438	0.3057	0.1594	-0.4376
Hiroshima	-0.8653	-0.1572	-0.1790	0.7239	0.4871	0.6287	0.7368	0.2732	0.7724	0.6521
Fukuoka	-0.4175	0.0469	-0.0043	0.6149	0.3896	0.4993	-0.1627	0.0197	0.1723	0.3080
Takamatsu	-0.5044	-0.5465	-0.4448	0.3649	-0.1390	0.0742	0.4952	-0.0422	0.3798	0.5727
Okayama	-0.4969	-0.5938	-0.4741	0.2137	-0.2123	-0.0116	0.6829	0.0736	0.4732	0.5775
Niigata	-0.5925	-0.1084	-0.1104	0.6118	0.2333	0.4714	0.1475	-0.0392	0.2900	0.3931
Kanazawa	-0.1466	-0.5526	-0.5417	0.3626	-0.1409	-0.0131	0.0571	-0.3001	0.1075	0.5026
Shizuoka	-0.5679	-0.4189	-0.3567	0.5589	0.0625	0.3146	0.3972	0.0681	0.5466	0.6372
Hamamatsu	-0.6243	-0.5036	-0.4186	0.4219	-0.0056	0.2576	0.6450	0.2692	0.7036	0.7111

Correlations between changes due to property-specific factors (2)

	Sapporo	Sendai	Hiroshima	Fukuoka	Takamatsu	Okayama	Niigata	Kanazawa	Shizuoka	Hamamatsu
Tokyo	-0.0811	-0.3601	-0.8653	-0.4175	-0.5044	-0.4969	-0.5925	-0.1466	-0.5679	-0.6243
Yokohama	-0.6273	0.5526	-0.1572	0.0469	-0.5465	-0.5938	-0.1084	-0.5526	-0.4189	-0.5036
Tachikawa	-0.6747	0.6269	-0.1790	-0.0043	-0.4448	-0.4741	-0.1104	-0.5417	-0.3567	-0.4186
Omiya	0.1806	-0.1614	0.7239	0.6149	0.3649	0.2137	0.6118	0.3626	0.5589	0.4219
Kawasaki	-0.1199	0.0300	0.4871	0.3896	-0.1390	-0.2123	0.2333	-0.1409	0.0625	-0.0056
Chiba	-0.0943	0.2656	0.6287	0.4993	0.0742	-0.0116	0.4714	-0.0131	0.3146	0.2576
Osaka	0.2929	0.1438	0.7368	-0.1627	0.4952	0.6829	0.1475	0.0571	0.3972	0.6450
Kyoto	-0.1344	0.3057	0.2732	0.0197	-0.0422	0.0736	-0.0392	-0.3001	0.0681	0.2692
Kobe	0.1275	0.1594	0.7724	0.1723	0.3798	0.4732	0.2900	0.1075	0.5466	0.7036
Nagoya	0.5922	-0.4376	0.6521	0.3080	0.5727	0.5775	0.3931	0.5026	0.6372	0.7111
Sapporo	1.0000	-0.3528	0.4696	-0.1397	0.3723	0.3657	0.3451	0.6923	0.4668	0.4770
Sendai	-0.3528	1.0000	0.1247	0.0750	0.1279	0.1424	0.3251	-0.2114	0.0259	0.0616
Hiroshima	0.4696	0.1247	1.0000	0.2193	0.5629	0.5749	0.6216	0.4332	0.7310	0.7820
Fukuoka	-0.1397	0.0750	0.2193	1.0000	0.4775	0.2221	0.7038	0.3701	0.4061	0.2057
Takamatsu	0.3723	0.1279	0.5629	0.4775	1.0000	0.9429	0.7258	0.5216	0.6601	0.7179
Okayama	0.3657	0.1424	0.5749	0.2221	0.9429	1.0000	0.5312	0.3462	0.5790	0.7356
Niigata	0.3451	0.3251	0.6216	0.7038	0.7258	0.5312	1.0000	0.6571	0.7631	0.6118
Kanazawa	0.6923	-0.2114	0.4332	0.3701	0.5216	0.3462	0.6571	1.0000	0.7529	0.5750
Shizuoka	0.4668	0.0259	0.7310	0.4061	0.6601	0.5790	0.7631	0.7529	1.0000	0.9075
Hamamatsu	0.4770	0.0616	0.7820	0.2057	0.7179	0.7356	0.6118	0.5750	0.9075	1.0000