## Population Hollowing–out and the Condominium Market in Three Central Tokyo Wards

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#### Introduction

During the asset bubble period of the 1980s, there was concern that surging land prices would lead to a "hollowing-out" of the population in central Tokyo. In the past two years, however, the populations of two central Tokyo wards, Minato-ku and Chuo-ku, have turned around and started growing once again. Meanwhile, amid the continued decline in land prices, the condominium supply has reached record highs.

Against this backdrop, this paper examines the relationship between population change and condominium supply in three central Tokyo wards.

### 1. Population Trends in Three Central Tokyo Wards

Between 1983, the year land prices in central Tokyo began surging, and 1996, the population of three central Tokyo wards fell steadily from 348,000 to 263,000, with a particularly sharp drop occurring from 1988 to 1992. The pace of decline then began slowing down in 1993, and by 1997 the population actually increased by 1,372, followed by another increase of 1,298 in 1998, bringing the population to 265,000 (Figure 1 ).

The population index (1983 = 100) presents a clear picture of population trends in the three central wards. Since 1994, the index has stood at approximately 76 percent of the 1983 level. However, there has been a slight shift recently, led by Minato-ku, which began growing in 1996, while Chuo-ku has increased by 640 persons in 1998. Chiyoda-ku remains unchanged (Figure 1).

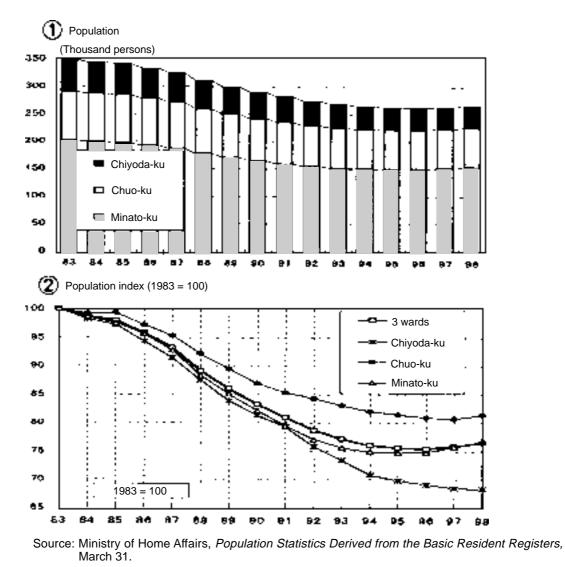
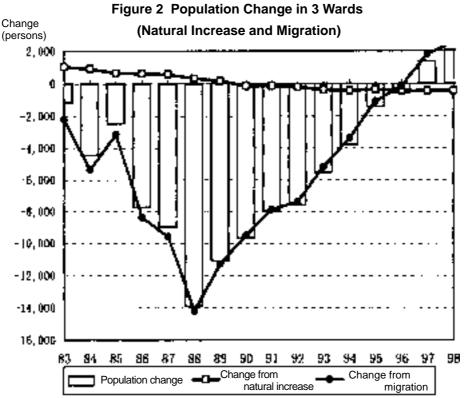


Figure 1 Population Trends in 3 Central Tokyo Wards

A breakdown of the population change reveals that migration has accounted for most of the change. The slow natural increase diminished until it disappeared in 1989 and turned into a net

decrease. On the other hand, migration has fluctuated greatly, as the outflow accelerated from 1983 to 1988, but then slowed down and became a net inflow in 1997 and net increase of 1,820 in 1998. Thus migration has played a major role in the population change of the three central wards (Figure 2).



Source: Ministry of Home Affairs, Population Statistics Derived from the Basic Resident Registers.

### 2. Factors Affecting Population Change in the 3 Wards

(1) Factors Causing Natural Decrease (Lower Birthrate)

Looking at the natural increase in population for the three wards since 1983, deaths have been fairly constant at approximately 2,200 persons, while births have declined gradually from approximately 3,300 per year to 1,600 births (Figure 3). While the declining birthrate is part of a national trend, Tokyo is said to be a decade ahead of the nation because its total fertility rate consistently undercuts the national average by 0.3 point. 1997 was no exception: Tokyo was 1.05, compared to the national average of 1.39.

The decline in births can be attributed to factors such as later marriages among women due to changing values and greater job opportunities, the rising percentage of persons who have never married, lack of a proper child care environment, and housing conditions which force families with children to move away from the city. With regard to the ratio of women who have never married, not only is Tokyo prefecture above the national average, but the 23-ward area of Tokyo is twice the national average (Table 1).

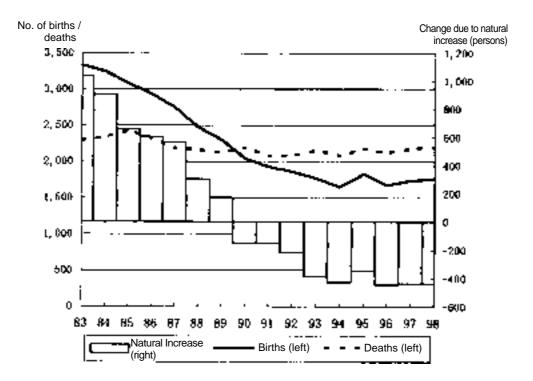


Figure 3 Population Change Due to Natural Increase in the 3 Wards

Source: Ministry of Home Affairs, Population Statistics Derived from the Basic Resident Registers.

	1980	1985	1990	1995
Nationwide	4.5%	4.3%	4.6%	6.2%
Tokyo prefecture	8.5%	8.2%	8.8%	10.7%
Tokyo 23-ward area	9.7%	9.6%	10.5%	12.8%
% pt. difference*	1.2pt	1.4pt	1.7pt	2.1pt

Table 1 Proportion of Women Aged 45-49 Who Have Never Married

Note: \*Between Tokyo pref. and the 23-ward area.

Source: Management and Coordination Agency, Population Census of Japan.

#### (2) Factors Causing a Net Outflow from the 3 Wards

Migration patterns in the three wards from 1983 indicate that the population inflow declined from 41,000 in 1984 to 23,000 in 1993, but then began growing in 1994. Meanwhile, outflow exceeded inflow from 1983, grew until 1988, and then declined such that the net change was nearly zero. Since 1997 there has been a slight but nonetheless positive net inflow (Figure 4).

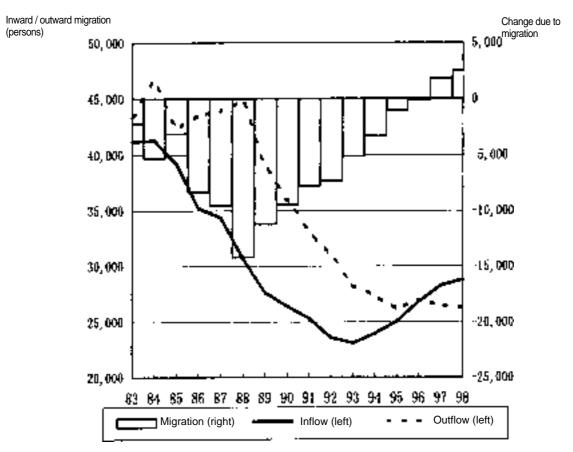


Figure 4 Population Change Due to Migration in 3 Wards

Source: Ministry of Home Affairs, Population Statistics Derived from the Basic Resident Registers.

For the 23-ward Tokyo area, data in 1991 is available on reasons why people moved into or out of the area. Reasons for moving into Tokyo mainly include work, school, and obtaining a better living environment. But this combined inflow is overwhelmed by the outflow from Tokyo to the three neighboring prefectures due to a single factor—housing conditions (Figure 5).

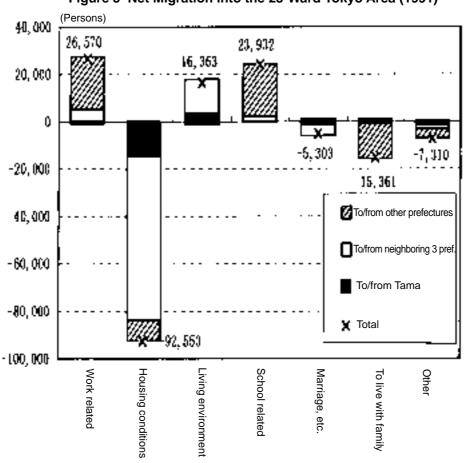
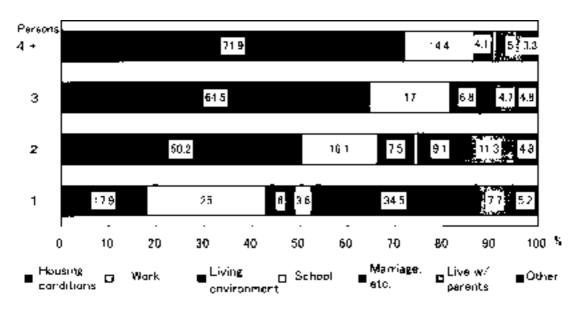


Figure 5 Net Migration into the 23-Ward Tokyo Area (1991)

Source: Tokyo Metropolitan Government, Population Movement in Tokyo, 1993.

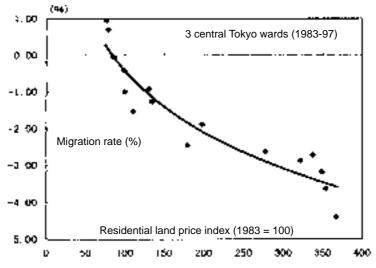
Moreover, by age group, householders aged 30 to 54 cited housing conditions as the single most important reason for moving from Tokyo to the three neighboring prefectures. By household size, housing conditions were also cited more frequently as household size increased. The picture that emerges is one of nuclear families seeking better housing conditions by moving from Tokyo to the suburbs (Figure 6).

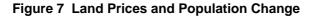


#### Figure 6 Reasons for Leaving Tokyo and Size of Household

Source: Tokyo Metropolitan Government, Population Movement in Tokyo, 1993.

Housing conditions around 1990 were characterized by high rents and property prices due to soaring land prices. As the residential land price index rose for the three wards, the rate of net population outflow clearly increased (Figure 7).





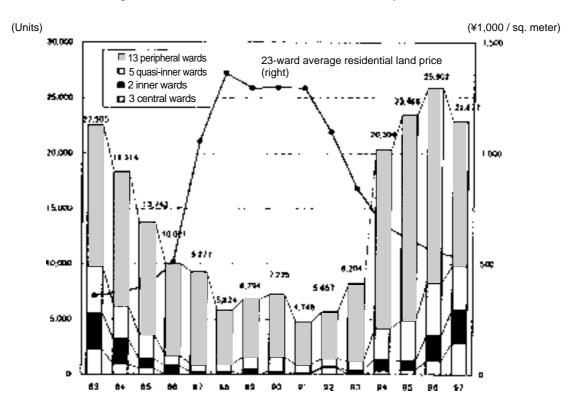
Sources: National Land Agency, *Official Land Prices*; and Ministry of Home Affairs, *Population Statistics Derived from the Basic Resident Registers.* 

#### 3. The Recent Condominium Boom

#### (1) Increase in Built-for-Sale Condominiums in the 3 Wards

When the asset bubble burst and land prices plunged, prices of built-for-sale condominium dropped, and the condominium supply in the Tokyo metropolitan area (Saitama, Chiba, Tokyo, and Kanagawa prefectures) expanded to a record 80,000 units per year from 1994 to 1996 before declining to 70,000 in 1997. This is referred to as the sixth condominium boom and is characterized by a shift in supply from the suburbs back toward central Tokyo. As a result, the condominium supply in the 23-ward area rose from 25 percent of the total Tokyo metropolitan area in 1994 to 32 percent in 1997.

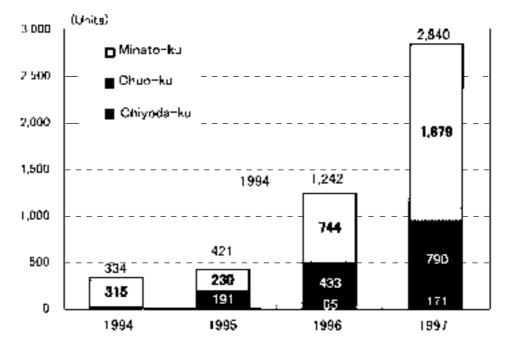
We next look at condominium supply conditions in the three central wards. In the 23-ward area, the outlying wards account for the bulk of the condominium supply. During the several years around the 1990 land price peak, there was practically no supply in the three central wards. But the supply began to increase from 1994, and by 1997 almost reached 3,000 units despite the decline in the 23-ward area (Figure 8).

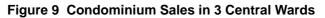




Source: Real Estate Economic Research Institute, National Condominium Market Trends.

In the three wards, Minato-ku accounts for over half the supply, surging from 315 units in 1994 to 744 units in 1995 and 1,879 units in 1997. The increase has been much smaller in Chiyodaku, which had 171 units in 1997, while Chuo-ku increased from 191 in 1995 to 790 in 1997 (Figure 9).



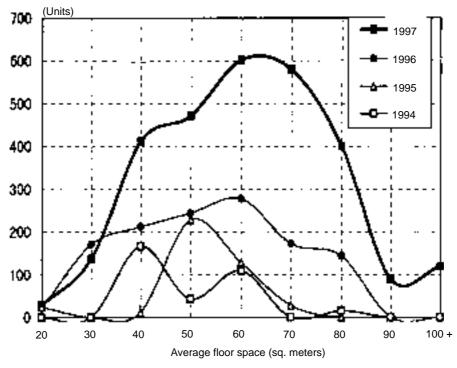


Source: Real Estate Economic Research Institute, National Condominium Market Trends.

The increase in Minato-ku has occurred primarily in the Mita and Shirogane areas, as well as the high rent districts of Azabu, Aoyama, and Akasaka. In Chuo-ku, the increase has centered around Tsukishima and Tsukuda districts.

In terms of floor space, over the years the condominium supply has increased in almost every size category. The most common size has grown from around 40 square meters in 1994 to 50 in 1995 and 60 in 1996, although 40 and 50-square-meter condominiums have also increased. In 1997, the main size was the 60-70 square-meter condominium for families, while 40-50 square-meter and 80 square-meter sizes were also quite plentiful. In addition, over 100 units were supplied of 100-plus square-meter condominiums, which had been virtually nonexistent (Figure 10)

Figure 10 Condominium Sales by Average Floor Space in the 3 Central Wards



Source: Real Estate Economic Research Institute, National Condominium Market Trends.

#### (2) Condominium Supply and Population Change

The populations of Minato-ku and Chuo-ku have recovered in the past two years (more accurately, they are no longer decreasing). While not the only factor involved, the growing supply of lower-priced condominiums has contributed to the recent population increase (Figure 11).

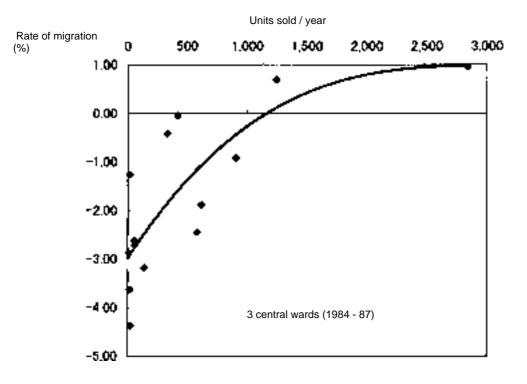


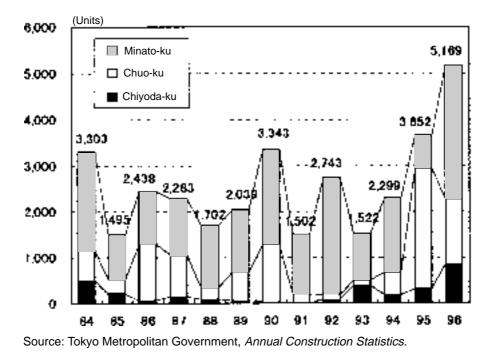
Figure 11 Population Change and Condominium Sales in the 3 Central Wards

Sources: Basic Registry Population Statistics; Real Estate Economic Research Institute.

According to census figures, the change in number of households in the three wards from 1990 to 1995 by type of residence, owned condominiums have increased by 1,196 households. In addition, the number of households living in private sector rented condominiums increased by 2,380 households and public rented housing by 1,799 households.

#### 4. Future Condominium Supply

From the late 1980s to early 1990s, condominium construction starts in the three wards fluctuated at around 2,000 units per year, surging to over 5,000 units from 1994 to 1996. Considering the two-year construction period for condominiums, the supply will not decline in the near future. By ward, Chuo-ku had a large number of housing starts in 1995, while Minato-ku saw a large increase in 1996 (Figure 12). Future supply plans are concentrated in Minato-ku and Chuoku (Table 2).



# Figure 12 Housing Construction Starts in 3 Central Tokyo Wards (Residential Condominiums)

	Location	Projects	Units
Chiyoda-ku	Kudan, Kanda, Jimbocho	3	400
Chuo-ku	Tsukishima, Nihombashi, Harumi	12	5,000
Minato-ku	Roppongi, Azabu, Shibaura	15	8,600

 Table 2 Future Planned Condominium Supply

Source: Press releases

### 5. Future Trends in Housing Supply and Population

(1) The Contraction of Housing Supply in Central Tokyo

The three central wards are unique in having a greater stock of commercial property than housing. Growth has been consistent in the commercial stock but only slight in housing stock. Nonetheless, housing stock has been growing recently, and the decline in both population and number of house-holds from 1983 until recently has started to turn around. In a sense, "the hollowing-out of population" has been synonymous with the "the hollowing-out of housing stock" (Figure 13).

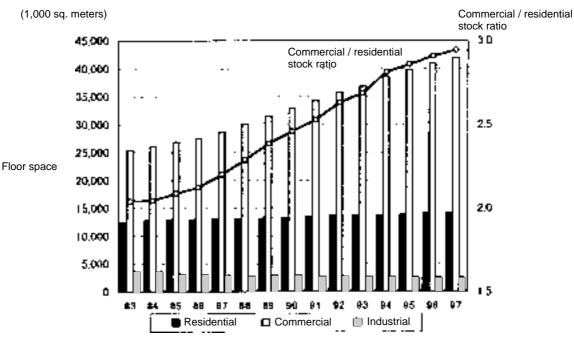


Figure 13 Stock of Commercial and Residential Structures in the 3 Central Wards

Source: Tokyo Metropolitan Government, Land in Tokyo.

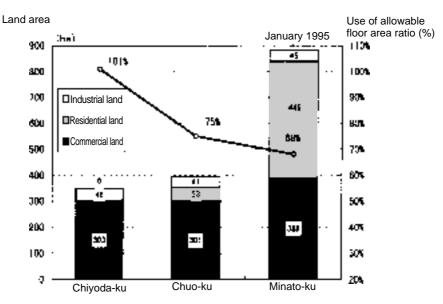
While the hollowing-out of housing stock can be partly attributed to vacancies pending condominium sales and rental, the most obvious factor is the conversion of housing stock for other uses—specifically, the conversion of condominium space into office space. According to a 1987 survey by the Tokyo Metropolitan Government, 49 percent of condominiums in the three central wards were used for office space.

Another factor is the structural problem of residential zoning. While 50 percent of the land in the three wards is zoned for commercial use and 40 percent for residential use, office use is also permitted in over half of the land zoned for residential use. Thus at the time when demand for commercial stock increased, the more affordable residential stock was converted into commercial stock.

#### (2) Future Housing Trend

Thus we could say that the hollowing-out of housing stock was caused by the growing demand for commercial stock, which crowded out the formation and use of housing stock. However, future growth in office demand is expected to decrease as Tokyo's working population peaks out around 2000 and begins to decline. Meanwhile, judging from the fact that the condominium market is moving back into the central wards, the desire to live in central Tokyo appears to remain strongly rooted.

In the future, central Tokyo's housing stock is expected to grow centered around family units. Judging from allowable floor area ratios and the already highly concentrated housing conditions of the three central wards, the growth potential for housing stock is greatest in Minato-ku, followed by Chuo-ku (with high-rise condominiums built on former factory and warehouse lots). In fact, Minato-ku and Chuo-ku already have many redevelopment and condominium projects in progress. While builders in general need to reduce the current oversupply of condominiums, the condominium supply in Minato-ku and Chuo-ku should alleviate the hollowing-out of housing stock in central Tokyo to some extent (Figure 14).





Source: Tokyo Metropolitan Government, Land in Tokyo.