

Mizuho Economic Outlook & Analysis

October 24, 2007

Population Growth in the Tokyo Metropolitan Area in Recent Years and its Background --- Women of Reproductive Age Increasing in the Tokyo Metropolitan Area ---

<Summary>

The population in the Tokyo metropolitan area (the prefectures of Tokyo, Kanagawa, Chiba and Saitama) has been rising substantially since the latter half of the 1990s, while declining in most other prefectures. This paper explores the background of this increase, the largest since the period of the economic bubble in the latter half of the 1980s. The paper will focus on regional population migrations, which exert a large influence on regional demographic trends.

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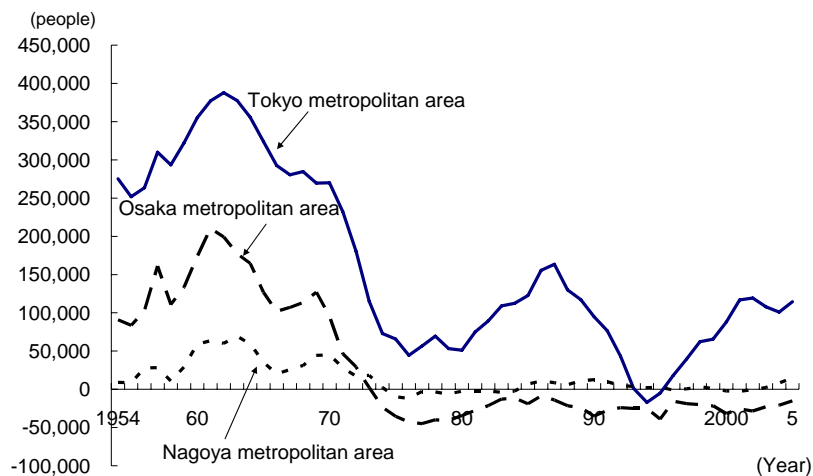
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1. The population growth in the Tokyo metropolitan area in recent years due to social increases

Regional demographic trends are affected by two factors: natural increase or decrease, which is the difference between births and deaths, and social increase or decrease, or the difference between the numbers of people moving into and leaving an area. The population grows, for example, if there are more births than deaths, or if more people move into an area than leave. Regional demographic trends in recent years have been affected substantially more by social than natural factors. This can be seen in the Tokyo metropolitan area, where the population has been growing substantially for years. In fiscal 2006, for instance, the Tokyo metropolitan area had a natural increase of about 4,000 people, but a social increase of about 86,000 people.

Demographic trends in the three major metropolitan areas in Japan (Tokyo, Nagoya and Osaka) reveal a net migration during the high-economic-growth era from 1960 to 1970 (**Chart 1**). During this era, many jobs were created especially in the secondary industry in all three areas and their vicinities, attracting people seeking jobs from other areas. From then onward, net migration declined in the three areas, due primarily to the deterioration of business conditions accompanying the two oil crises during the 1970s. The Nagoya metropolitan area (Aichi, Gifu and Mie prefectures) and the Osaka metropolitan area (Osaka, Kyoto, Hyogo and Nara prefectures) experienced net migration losses. From the end of World War II in 1945 through the first half of the 1980's, the three metropolitan areas repeated similar demographic trends, though to different degrees.

Chart 1: Trends in Net Migrations in the Three Major Metropolitan Areas



Source: Ministry of Internal Affairs and Communications, *Report on Internal Migration in Japan*.

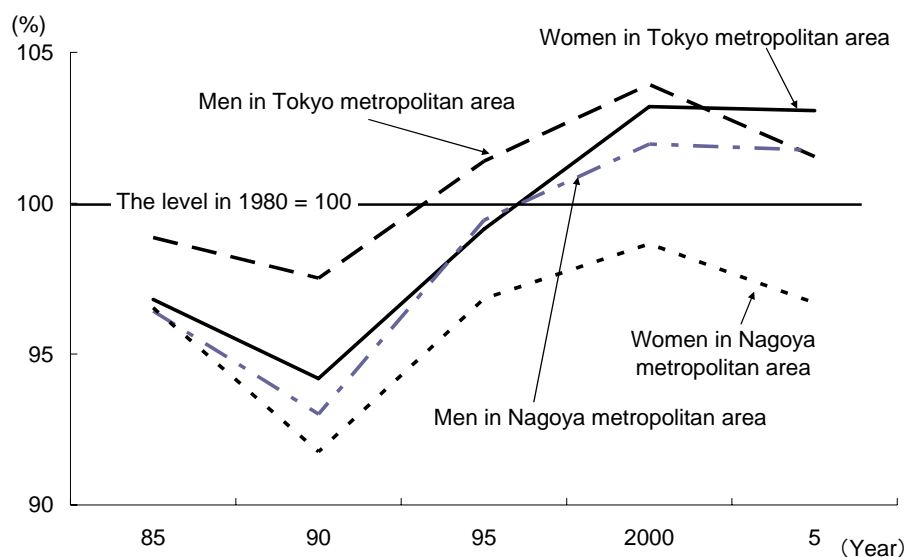
However, drastic changes have occurred since the latter half of the 1980's. In the Nagoya metropolitan area, net migrations have stabilized at around plus or minus zero. In the Osaka metropolitan area, moderate net migration losses have continued. In contrast, the Tokyo metropolitan area reveals a starkly different picture. As in the two other areas, the Tokyo metropolitan area had a large migrations during the economic boom years, and experienced a net outflow at one time after the end of the boom. Note however that since the latter half of the 1990's, the Tokyo metropolitan area has seen a recurrence of massive population inflows, comparable to those during the boom years.

2. Inflows of women in their 20s and 30s with higher educational attainment

During the boom years, economic activity in the Tokyo metropolitan area surpassed other regions, accelerating the concentration of business and central government functions in Tokyo, which in itself was conceived as a problem. Given this concentration, it was natural that many people moved to the city. Even so, the economic situation has changed since the latter half of the 1990's. With its automobile industry as the prime mover, the Nagoya metropolitan area now enjoys a booming economy surpassing that of the Tokyo metropolitan area. Nevertheless, it is the Tokyo metropolitan area alone that is experiencing substantial population inflows. Why?

To answer this question, we shall look more closely at the demographic trends in the Tokyo and Nagoya metropolitan areas. In terms of age and gender, one distinctive feature of the Tokyo population growth in recent years, compared to the boom years, is a substantial increase of women in their 20s and 30s (**Chart 2**). In contrast, in the Nagoya metropolitan area, there are fewer women in their 20s and 30s than men, and the gap is widening. A comparison of gender-based demographic trends with 1980 (before the boom years) as the base year (=100), reveals a downtrend of women in the 20s and 30s and an uptrend among men in the same age group in the Nagoya metropolitan area.

Chart 2: Changes in Population Levels of the 20 to 39 Age Group (Tokyo and Nagoya metropolitan areas)



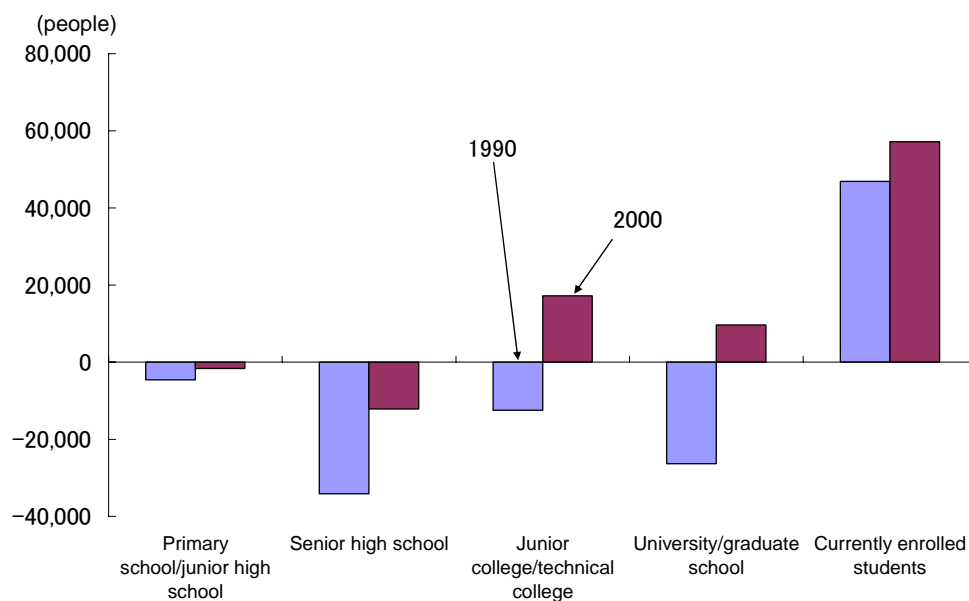
Source: Ministry of Internal Affairs and Communications, *Population Census of Japan*.

Demographic trends in the Tokyo metropolitan area during the same period differ from those in the Nagoya metropolitan area. While shifts among the male population in the Tokyo metropolitan area in their 20s and 30s are similar to demographic trends in the Nagoya metropolitan area, the population of women in the same age group in the Tokyo metropolitan area continued to increase, narrowing the gap with the male population. By 2005, the female population overtook the male population in terms of number. The foregoing reveals that the female population in the 20s and 30s is increasing sharply in the Tokyo metropolitan area in comparison to the Nagoya metropolitan area.

To explore the background to the rise of the female population in the 20s and 30s, we shall examine the characteristics of the social increase in the Tokyo metropolitan area, which is considered the main factor behind the recent population growth. **Chart 3** shows the educational backgrounds of the women in their 20s and 30s who moved out of or into Tokyo during the past five years. According to statistical data in 1990, substantially more female students moved into Tokyo than moved out. But among graduates from institutions of higher education (junior colleges, technical colleges, universities and graduate schools), substantially more moved out than moved in. This is perhaps because during the boom years, a large number of women in their 20s and 30s came to Tokyo to study but after graduating many moved out of Tokyo to return to their parents' home or for other reasons. But the statistics taken in 2000 presents a different situation. The

Tokyo metropolitan area continues to have a large net inflow of female students, even larger than in 1990. However, the net outflow of women graduates was reversed to a net inflow. In contrast to 1990, one distinctive feature that emerges from the 2000 survey is a substantial net inflow of women with higher educational attainments into the Tokyo metropolitan area. Aichi prefecture has experienced no such trend.

Chart 3: Net Migrations of Women of the 20 to 39 Age Group by Educational Attainments (Tokyo Metropolitan Area)



Source: Ministry of Internal Affairs and Communications, *Population Census of Japan*.

At the back of this phenomenon is the much larger concentration of service and government posts in Tokyo, which is attracting qualified women. In general, female graduates tend to obtain jobs in the services industry, which includes medical, welfare and educational fields. Not many work in the manufacturing industry. Also, such women tend to be employed by large companies, government or other public offices rather than by small and medium-sized companies. The Tokyo metropolitan area has a well-developed services sector, and many government and other public offices and organizations. It therefore offers more attractive job opportunities for women with higher educational attainments than the Nagoya metropolitan area, whose economy is led by the automobile and other manufacturing industries.

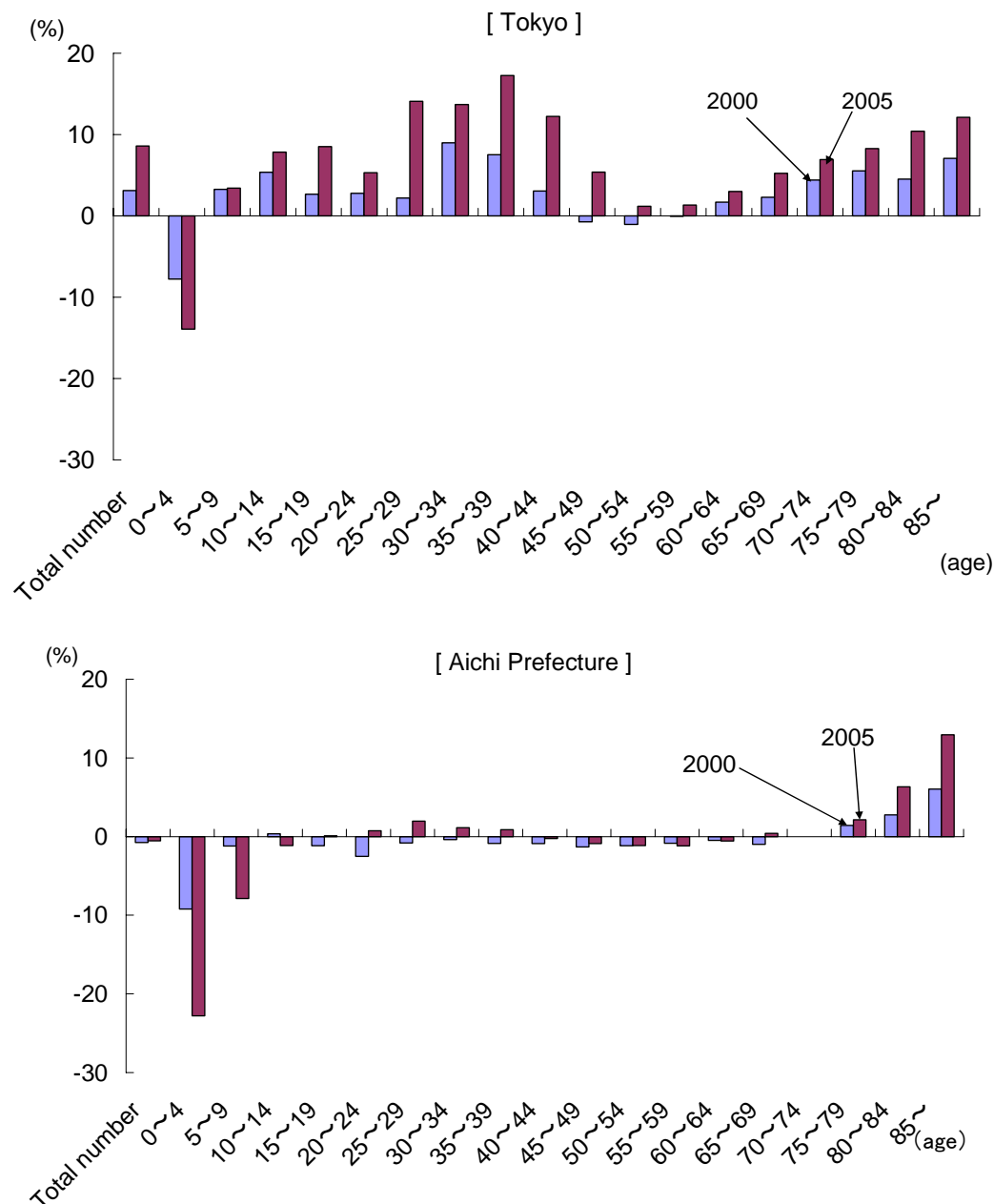
3. Impact on population of the social increase of women of reproductive age

It is highly probable that these changing circumstances among women in their 20s and 30s

will affect not only current demographic trends but the future as well. This is the age when most women are likely to bear children. When women in this age group move to Tokyo, they are likely to bear children in the city or to bring children they have already given birth to elsewhere. This means that other areas are not only losing women of reproductive age but also existing and prospective children. For the Tokyo metropolitan area, the odds are high that the inflow of women in their 20s and 30s will also lead to the increase of prospective children, thus doubling the merit for the region.

Situations like this are already evident in Tokyo and Aichi prefecture. During the economic boom years, the inflow of women in their 20s and 30s into the Tokyo metropolitan area was not as evident as it is now. Projections of future population growth made during that time were based on the assumption that this trend would continue. When we compare such projections with actual population counts for 2000 and 2005, we can clearly see how population changes that took place after the latter half of the 1990's have affected demographic trends in the two areas. Only 15 years after the projections were published, there are marked deviations. We can see that despite some similarities, the demographic trends in the two areas are already showing significant differences (**Chart 4**). The similarities are seen among the elderly and children younger than ten years old. Both in Tokyo and Aichi prefecture, the deviations of the actual counts from the projections are considerably large among those age groups. This is apparently because the aging of the population and a trend for fewer children are progressing faster than projected in the two areas. The differences are conspicuous among women in their 20s and 30s and also among people from ten to 19 years of age. In Tokyo, the population counts are significantly larger than projected among these people. This is believed to be because many women moved into Tokyo bringing children with them or producing children afterwards. All told, the total population counts of Aichi prefecture are considerably smaller than the projections. In Tokyo, on the other hand, the actual counts are considerably larger than the projections. In 2005, the actual count was nearly 10 percent larger than the projection. We can safely say that women of reproductive age with higher education are moving into Tokyo to seek job opportunities, and that this is contributing to a significant population growth in Tokyo.

Chart 4: Disparities Between Projections and Actual Population Counts by Age Group



Note: $(\text{actual counts} - \text{projections}) \div \text{actual counts} \times 100 (\%)$

Sources: Ministry of Internal Affairs and Communications, *Population Census of Japan*,

National Institute of Population and Social Security Research, *Population Projections for Japan 1992*.

Among institutions of higher education, the number of women enrolling in universities or graduate schools has been constantly rising since the 1990s, though they still lag behind men. More women are expected to go on to universities or graduate schools from now on, eventually putting them on a par with men. This gives rise to the prospect that more

women of reproductive age with higher educational qualifications will be moving into the Tokyo metropolitan area. There are many regions, mostly other than the Tokyo metropolitan area, that are suffering from declining birthrates, aging and shrinking populations. Deciding what to do is an important policy task. At present, government measures to deal with fewer children seem to be focused on women living in local areas. The measures appear to be centering on creating more work-friendly environments for mothers, and on reducing child-rearing costs. But even if all those government measures are enriched and implemented, it will be difficult to keep women graduates of child-bearing age in local areas, where job opportunities are fewer. A major switch in perspective is called for, with a new emphasis on how to keep women of reproductive age in local areas. The central and local governments should come up with measures to create and secure job opportunities in local areas to attract highly educated women. This should be a priority policy goal to deal with the current problems of declining birthrates, aging and shrinking populations in areas other than the Tokyo metropolitan area.

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