

Chapter 3

STRUCTURAL CHANGES IN KANSAI'S ECONOMY DUE TO THE COVID-19 PANDEMIC

Section 1

MIGRATION DYNAMICS IN OSAKA PREFECTURE DURING THE COVID-19 PANDEMIC

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1. Introduction

According to the National (Population and Housing) Census (preliminary figures) published in June 2021 by the Ministry of Internal Affairs and Communications (MIC), the total population of Japan as of October 1, 2020, decreased 0.7% from 2015 to 126.2 million people, but the rate of decrease (2015/10: -0.8%) was slightly smaller than that of the previous Census. This was due to an increase in the number of foreigners living in Japan and an increase in the number of Japanese who returned to Japan from abroad due to the spread of COVID-19 infection, although the natural decrease in the number of deaths exceeding the number of births increased¹⁾. By prefecture, the population of Tokyo increased 4.1% from the previous Census, exceeding 14 million people for the first time and accounting for approximately 11% of the nationwide population. On the other hand, Kansai was down 0.8% from last time to 20.5 million. Within Kansai, the population increase rate declined in Shiga prefecture while Osaka changed from a decrease to an increase, and the remaining prefectures increased their decrease rates (Table 3-1-1).

While the population continues to decrease in Japan, a state of emergency declaration was issued four times due to COVID-19, forcing people to significantly modify their behavior. The flow of people was suppressed in an effort to control the spread of infections, which had a great impact on migration dynamics. In particular, while net migration to Tokyo where population is concentrated

1) See The Yomiuri Shimbun (2021).

Table 3-1-1 Population increase/decrease in the six prefectures of Kansai, Tokyo, and nationwide

Prefecture	Total : thousands people	Increase-decrease rates (2020/15) : %	Increase-decrease rates (2015/10) : %
Shiga	1,414	0.09	0.15
Kyoto	2,580	-1.17	-0.98
Osaka	8,843	0.03	-0.29
Hyogo	5,469	-1.19	-0.95
Nara	1,325	-2.85	-2.60
Wakayama	923	-4.21	-3.85
Kansai	20,554	-0.83	-0.85
Tokyo	14,065	4.07	2.70
Nationwide	126,227	-0.68	-0.75

Source: Created by the author based on the Statistics Bureau, the Ministry of Internal Affairs and Communications' (MIC) 2020 National (Population and Housing) Census and 2015 National (Population and Housing) Census.

shrank, net migration to Osaka increased, showing different dynamics. Looking at the migration dynamics of 2021 by month, we see changes in the migration dynamics due to the COVID-19 pandemic, such as the trend of a net loss continuing in Tokyo, with the population decreasing for four consecutive months to 14,037,872 as of September 1²⁾.

Thus in this section, we will focus mainly on Osaka and provide an outline and analysis of how the trend in migration dynamics over the last few years has changed due to the impact of the COVID-19 pandemic. We will also look at how the four state of emergency declarations impacted migration dynamics on a monthly basis.

2. Change in Migration Dynamics in Osaka Prefecture

(1) Change in Migration Dynamics in 2020: Tokyo vs. Osaka

Before looking at the migration dynamics in Osaka Prefecture, let's look at the situation in Tokyo. According to MIC's Report on Internal Migration in Japan Derived from the Basic Resident Registration, in 2020, in-migrants to Tokyo were 432,930 and out-migrants were 401,805. As a result, net migration was 31,125, down 51,857 from 2019. This was the lowest since 2014 when they began including foreign nationals in their records, showing a shift away from the social structure of so-called "overconcentration in Tokyo" up until that time (Figure 3-1-1). Possible factors include people not being able to move to advance into higher education or to start a new job due to the state of emergency declaration,

2) See Nikkei (2021-b).

etc., and an increase in people moving out of Tokyo due to the spread of teleworking.

Next, looking at the situation in Osaka Prefecture, in-migrants were 172,563 and out-migrants were 159,207. As a result, net migration was 13,356, up 5,292 from 2019. Looking at the trend, since shifting to net migration in 2015, net migration has continued for six consecutive years (Figure 3-1-2). In Kansai, inbound tourism demand has increased mainly centered on Osaka since 2014,

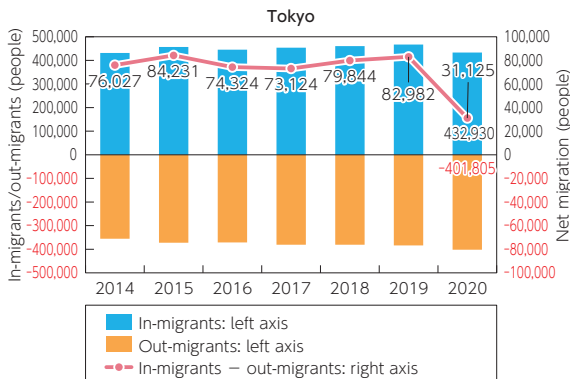


Figure 3-1-1 Shifts in in-migrants and out-migrants in Tokyo: 2014-2020

Note: Includes foreign migrants.

Source: Created by the author based on the Ministry of Internal Affairs and Communications' (MIC) Report on Internal Migration in Japan Derived from the Basic Resident Registration.

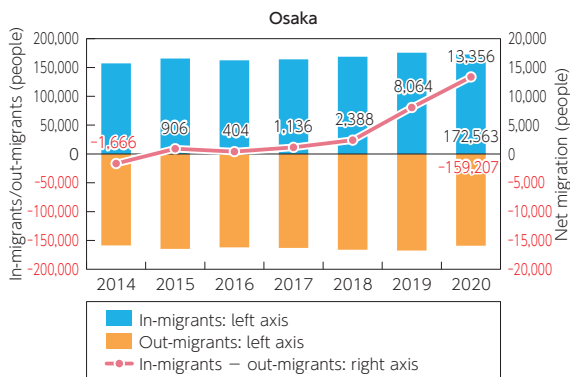


Figure 3-1-2 Shifts in in-migrants and out-migrants in Osaka: 2014-2020

Note: Includes foreign migrants.

Source: Created by the author based on the Ministry of Internal Affairs and Communications' (MIC) Report on Internal Migration in Japan Derived from the Basic Resident Registration.

which may have led to people working in services such as restaurants and accommodation³⁾. However, in 2020, due to the impact of the COVID-19 pandemic, both in-migrants and out-migrants decreased for the first time in four years. The decrease in out-migrants was greater than that of in-migrants, resulting in net migration.

(2) Migration Dynamics in Osaka Prefecture: Characteristics by Region and Age Group: 2018 to 2020

First, let's look at the characteristics of migration dynamics in Osaka Prefecture by region. Figure 3-1-3 shows net migration in Osaka by region⁴⁾.

As shown in the figure, net migration from Kansai was the largest, increasing from 6,293 in 2018 to 8,385 in 2019. In 2020, even though the flow of people was suppressed due to COVID-19, net migration was 10,665, increasing further from 2019.

The migration dynamics within Southern Kanto show a continuing net loss trend although contracting somewhat, from 12,116 in 2018 to 11,852 in 2019. In 2020, it contracted even more to 8,567. The fact that relocations for higher education or to start a new job were restricted due to the state of emergency declarations, etc., may have played a role.

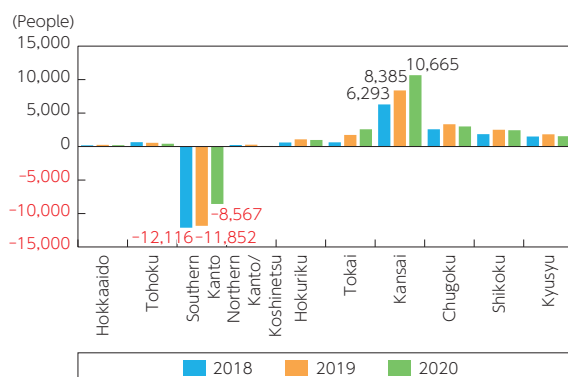


Figure 3-1-3

Comparison of net migration in Osaka by region: 2018–2020

Note: Includes foreign migrants. For Kansai, migration within Osaka Prefecture is excluded.

Source: Created by the author based on the Ministry of Internal Affairs and Communications' (MIC) Report on Internal Migration in Japan Derived from the Basic Resident Registration.

3) The high employment capacity of these industries is described in detail in Chapter 4 Section 4 of this book.

4) The regional classifications are in accordance with the definitions by MIC. Kinki has been changed to Kansai. (https://www.soumu.go.jp/main_content/000611949.pdf)

In other regions, net migration increased in Chugoku, Shikoku, and Kyusyu from 2018 to 2019, but it somewhat decreased in 2020. It is possible that migrants from far away were also influenced by the above-mentioned factors, such as the issuing of the state of emergency declarations.

Next, let's look at the change in net migration over time by age group (Table 3-1-2).

The age group with the most net migration in 2018 was the 20 to 24 group, with 4,472 in Kansai, 1,710 in Chugoku, 1,364 in Kyusyu, and 1,299 in Shikoku.

Furthermore, in 2019, net migration in the 20 to 24 age group in the four regions above all increased compared to in 2018. Additionally, net migration in the 25 to 29 age group also increased, with Kyusyu shifting from a net loss in 2018 to net migration.

However, looking at the net migration for the 20 to 24 age group in 2020,

Table 3-1-2

Net migration and net loss by age group and region: 2018–2020:
Osaka Prefecture

(Unit : people)

		2018									
Age	Nationwide	Hokkaido	Tohoku	Southern Kanto	Northern Kanto / Koshinetsu	Hokuriku	Tokai	Kansai	Chugoku	Shikoku	Kyusyu
Total	2,388	189	642	-12,116	218	606	636	6,293	2,569	1,845	1,506
15-19	2,034	8	52	-902	31	123	199	336	597	545	1,045
20-24	5,778	96	182	-3,904	2	449	108	4,472	1,710	1,299	1,364
25-29	548	103	128	-2,897	46	135	-190	2,704	268	299	-48
		2019									
Age	Nationwide	Hokkaido	Tohoku	Southern Kanto	Northern Kanto / Koshinetsu	Hokuriku	Tokai	Kansai	Chugoku	Shikoku	Kyusyu
Total	8,064	253	553	-11,852	278	1,064	1,739	8,385	3,321	2,504	1,819
15-19	2,344	46	46	-708	-22	126	260	362	640	605	989
20-24	6,783	65	154	-4,332	82	557	360	4,710	2,007	1,648	1,532
25-29	2,327	149	136	-2,748	46	187	284	3,382	434	263	194
		2020									
Age	Nationwide	Hokkaido	Tohoku	Southern Kanto	Northern Kanto / Koshinetsu	Hokuriku	Tokai	Kansai	Chugoku	Shikoku	Kyusyu
Total	13,356	199	420	-8,567	82	986	2,585	10,665	3,002	2,448	1,536
15-19	2,846	24	53	-516	25	114	352	633	591	669	901
20-24	8,768	121	181	-4,018	68	652	634	6,392	1,901	1,549	1,288
25-29	3,737	65	67	-2,143	50	143	466	4,160	402	307	220

Note: Includes foreign migrants. For Kansai, migration within Osaka Prefecture is excluded.

Source: Created by the author based on the Ministry of Internal Affairs and Communications' (MIC) Report on Internal Migration in Japan Derived from the Basic Resident Registration.

Kansai saw an increase while Chugoku, Shikoku, and Kyusyu saw decreases.

Meanwhile, looking at the situation for southern Kanto, there was an outflow of the younger age group, with net loss increasing from 2018 to 2019 for the 20 to 24 age group. However, due to the effect of the COVID-19 pandemic suppressing the flow of people, the net loss to Southern Kanto in the above age group decreased in 2020.

From the above, we can see the net migration to Osaka is mainly from western Japan and that many of the migrants are from a generation that move for work. This is possibly due to Osaka having been supported by strong inbound tourism demand, which increased the number of people working in the service industry. However, due to the flow of people being limited as a measure to prevent the spread of COVID-19, in-migrants, particularly those in the younger generation, decreased.

(2) Migration Dynamics within Osaka Prefecture

Having discussed the characteristics of the migration dynamics by region and by age group, we will now look at them by municipality in Osaka Prefecture. During the three years from 2018 to 2020, 16 municipalities experienced net migration while 27 municipalities experienced a net loss in Osaka Prefecture. Among them, net migration to Osaka City expanded from 12,081 in 2018 to 13,762 in 2019 and 16,802 in 2020. Migration dynamics vary depending on the area within Osaka Prefecture. Many of the municipalities with net migration are in the northern part of Osaka Prefecture, with more areas having an increase in net migration. Meanwhile, many of the municipalities with a net loss are in the southern part of Osaka Prefecture, with a continuing trend of a net loss.

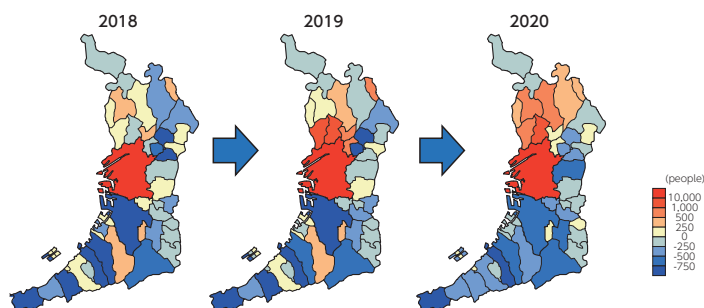


Figure 3-1-4

Comparison of net migration by municipality: 2018-2020

Note: Includes foreign migrants.

Source: Created by the author based on the Ministry of Internal Affairs and Communications' (MIC) Report on Internal Migration in Japan Derived from the Basic Resident Registration

Thus, Osaka Prefecture as a whole may show net migration, but by municipality, net migration figures vary between the Osaka City area, and the northern and southern areas (Figure 3-1-4).

3. Impact of the Declaration of State of Emergency on Migration Dynamics

In the previous section, we looked at the migration dynamics during the COVID-19 pandemic by region and age group on an annual basis. In this section, we will look at the impact of the state of emergency declarations, which were issued four times, on the migration dynamics of Osaka Prefecture on a monthly

Table 3-1-3

Comparison of in-migration/out-migration situation by gender during the state of emergency declaration in Osaka Prefecture

(Unit: people)

Men	In-migrants	Out-migrants	Net migration (loss)	In-migrants: Difference from same period (month) in previous year	Out-migrants: Difference from same period (month) in previous year	In-migrants: Difference from same period (month) in 2019	Out-migrants: Difference from same period (month) in 2019
1st (Apr to May 2020)	20,548	19,462	1,086	-1,758	-2,963		
2nd (Jan to Feb 2021)	11,541	11,572	-31	81	528	429	138
3rd (2021 Q2)	25,959	26,172	-213	-1,213	556	-2,522	-2,136
4th (Aug to Sep 2021)	11,562	11,528	34	-916	-3	-1,076	-828
Women	In-migrants	Out-migrants	Net migration (loss)	In-migrants: Difference from same period (month) in previous year	Out-migrants: Difference from same period (month) in previous year	In-migrants: Difference from same period (month) in 2019	Out-migrants: Difference from same period (month) in 2019
1st (Apr to May 2020)	15,893	14,285	1,608	-2,738	-3,203		
2nd (Jan to Feb 2021)	9,715	9,625	90	-524	207	-257	104
3rd (2021 Q2)	21,115	20,034	1,081	131	1,076	-2,505	-2,223
4th (Aug to Sep 2021)	9,695	9,743	-48	-479	240	-1,030	-706

Note: Includes foreign migrants.

Source: Created by the author based on the Ministry of Internal Affairs and Communications' (MIC) Report on Internal Migration in Japan Derived from the Basic Resident Registration.

basis (Table 3-1-3).

Looking at April to May of 2020, the period when the first state of emergency declaration was issued for Osaka Prefecture (April 7 to May 21, 2020), there were 20,548 men and 15,893 women in-migrants. April is when in-migrants tend to increase to advance into higher education or to start a new job, but compared to in the same period in the previous year (April to May of 2019), there was a 1,758 decrease in men and 2,738 decrease in women. Similarly, looking at out-migrants, there were 19,462 men (-2,963 YoY) and 14,285 women (-3,203 YoY), both decreasing. In-migrants and out-migrants both decreased significantly, and the impact of restrictions on movement across prefectures due to the issuing of the state of emergency declarations was more apparent among women.

In 2021, state of emergency declarations were issued three times. Looking at the period when it was issued for the second time (January 14 to February 28, 2021), in-migrants for the January to February 2021 period were 11,541 men (+81 YoY) and 9,715 women (-524 YoY), with a bigger decrease among women than men compared to in the previous year. On the other hand, looking at out-migrants for the same period, 11,572 were men (+528 YoY) and 9,625 were women (+207 YoY).

Looking at the in-migrants for 2021 Q2, the period in which the third state of emergency declaration (April 25 to June 20, 2021) was issued, partly due to it being a time to advance into higher education or to start a new job, there were 25,959 men and 21,115 women. However, compared to the same period in the year before the previous year (2019 Q2), when the COVID-19 pandemic had no impact, both men and women decreased significantly, -2,522 and -2,505 respectively. Looking at the out-migrants for the same period, there were 26,172 men (-2,136 YoY) and 20,034 women (-2,223 YoY). Consequently, both men and women saw significant decreases in both in-migrants and out-migrants, but because women finished with net migration (1,081), the overall result remained net migration (868).

During the fourth period (August 2 to September 30, 2021), in-migrants in the August to September period decreased for both men and women, of 11,562 (-1,076 compared to the same period of the year before the previous year) and 9,695 (-1,030 of the same period) respectively. Additionally, out-migrants were 11,528 (-828 of the same period) for men and 9,743 (-706 of the same period) for women, with the decrease in in-migrants greater than that of out-migrants, resulting in a shift to a net loss.

Thus, the state of emergency declarations issued four times have influenced migration dynamics. The impact has varied depending on gender, and in general, it has been greater for women in-migrants.

4. Conclusion

As discussed above, migration dynamics are changing due to the impact of the COVID-19 pandemic. In Tokyo, population is flowing out of Tokyo due to the spread of teleworking, etc. and net migration is shrinking. In Osaka Prefecture, there has been a continuing trend of net migration due to people moving there to work in inbound tourism-related industries that have been strong thus far. However, with inbound tourism demand having vanished today due to the COVID-19 pandemic, service industries such as restaurant and accommodation have been hit hard. The impact can be particularly seen among people in their 20s who move to Osaka Prefecture from western Japan to work in these related industries. Additionally, looking at the municipalities in Osaka Prefecture, an increase in net migration in Osaka City is continuing and in the northern part of Osaka Prefecture, areas that previously had a net loss are shifting to net migration. Meanwhile, in the southern part of Osaka Prefecture, net losses are continuing in many areas and migration dynamics vary between areas.

Moreover, two years has passed since the COVID-19 pandemic began, and the state of emergency declarations issued four times for Osaka Prefecture have had a major impact on migration dynamics.

Despite being affected by the COVID-19 pandemic, the net migration trend of Osaka Prefecture continues. As mentioned earlier, this is largely due to the inflow of population not only into Osaka City, but also into the northern part of Osaka. One of the factors behind the expansion of net migration into the northern area is that it is located in the middle of a key transportation hub facing the east and west to the central part of Osaka Prefecture, neighboring Kyoto Prefecture, etc., and it has convenient transportation and redevelopments of residential areas creating a comfortable living environment for local residents⁵⁾.

With many events planned for Osaka Prefecture in the future, including the EXPO Osaka, Kansai, Japan, its migration dynamics will draw more attention. Access to the southern area that has had a net loss until now is expected to improve with the development of a transportation infrastructure network toward the hosting of the EXPO Osaka, Kansai, Japan. With the EXPO Osaka, Kansai, Japan approaching in three and a half years' time, if we can stimulate innovation such as ICT and create new industries and employment to revitalize not only the movement of people between Osaka Prefecture and other prefectures, but also between the north and south within Osaka Prefecture, some impact should be

5) Nikkei (2021-a) also refers to the convenient transportation and comfortable living in the northern area of Osaka Prefecture.

visible in the migration dynamics of Osaka Prefecture in the future.

References

- Nikkei (2021-a), “Kansai’s Population Further Concentrating in City Centers: Marked Increase in Commuter Towns” (Japanese title: *Kansai no Jinko, Toshin Shuchu Ichidan to—Bedtown no Zouka Kencho*), July 16, (<https://www.nikkei.com/article/DGXZQOUF2942W0Z20C21A6000000/>), last viewed: October 6)
- Nikkei (2021-b), “Population in Tokyo in September, Decreased Four Consecutive Months” (Japanese title: *Tokyo no 9 gatsu no Jinko, 4 kagetsu Renzoku de Gensho*), September 30, (<https://www.nikkei.com/article/DGXZQOC305K00Q1A930C2000000/>), last viewed: October 3)
- The Yomiuri Shimbun (2021), “Japan’s Population 126.22 Million: 2020 National (Population and Housing) Census, Down Twice in a Row” (Japanese title: *Nihon no Jinko 1 oku 2,622 man nin: 20 nen Kokusei Chosa 2 kai Renzoku no Gensho*), June 25, evening edition