

## Methodological paper Japan 1800

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### Estimation of entire population

Basic evidence for population figures are censuses taken by the Shōgun rulers. The entire number of censuses is not clear. The first dates 1721, subsequent ones are from 1750, 1756, 1786, 1798, 1804, 1822, 1828, 1834, and 1846.<sup>1</sup>

Those applied for the database are from 1804, as cited in Taeuber, p. 22. Preference was given to the 1804 edition over 1798 since the totals for men and women are stated for 1804, but not for 1798.

The censuses do not include the number of warrior-administrators (*samurai* or *buke*), their families, and their attendants. Moreover, „the age at which children were included was left to the discretion of the individual *daimyō* and past customs of the *han* [domain or fief].“<sup>2</sup>

Therefore, following the estimate by Eijiro Honjo<sup>3</sup>, which is also cited in Taeuber and Hanley and Yamamura<sup>4</sup>, I have added a total of 3 mio people for samurai (between 350,000, as quoted by Honjo, to 450,000, as given by Rozman<sup>5</sup>), their families and servants (average 3 servants per samurai), the outcast groups Eta and Hinin, vagrants, beggars, and other unregistered persons. The population of 1804 thus adds up to 28.621.957 persons, which divided into the M/F ratio of 110:100 yields a proportion of 14,992,455 men and 13,629,502 women.

### Estimation of Economically Active Population

The population reports of the Shoguns, as quoted in Irene Taeuber, *The Population of Japan*, p. 22, include figures for male and female population in the year 1804, but no age distribution. Estimates of age distribution start in 1888. Taeuber, *op. cit.* p. 46 cites these, but only for the age groups 0-14, 15-64, 15-19, 20-34, 35-44, 45-64, and 65 and over.

Applying the ratios of 1888, I have determined the age groups.

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<sup>1</sup> Hanley and Yamamura, p. 40.

<sup>2</sup> Hanley and Yamamura, p. 40. 270-odd domains existed in Tokugawa Japan. Hanley and Yamamura, *op. cit.* p. 335.

<sup>3</sup> Honjo, p. 65-66.

<sup>4</sup> Taeuber, p. 27; Hanley and Yamamura, p. 46.

<sup>5</sup> Rozman, p. 81.

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|             |        |            |  |             |            |                        |
|-------------|--------|------------|--|-------------|------------|------------------------|
| Japan       | 1888   | % of total |  | Japan       | 1804       |                        |
| Total       | 39,607 | 100%       |  | Total       | 28,621,957 | Taeuber p. 46          |
| 0-14        | 13,360 | 33.73%     |  | 0-14        | 9,654,186  | Calculated by compiler |
| 15-64       | 24,069 | 60.77%     |  | 15-64       | 17,393,438 | Calculated by compiler |
| 15-19       | 3,397  | 8.58%      |  | 15-19       | 2,454,838  | Calculated by compiler |
| 20-34       | 9,008  | 22.74%     |  | 20-34       | 6,509,622  | Calculated by compiler |
| 35-44       | 5,151  | 13.01%     |  | 35-44       | 3,722,365  | Calculated by compiler |
| 45-64       | 6,513  | 16.44%     |  | 45-64       | 4,706,613  | Calculated by compiler |
| 65 and over | 2,178  | 5.50%      |  | 65 and over | 1,573,929  | Calculated by compiler |

|             |        |          |  |             |            |                        |
|-------------|--------|----------|--|-------------|------------|------------------------|
| Japan       | 1888   | % of men |  | Japan       | 1804       |                        |
| Male        | 20,008 | 100%     |  | Male        | 14,992,455 | Taeuber p. 46          |
| 0-14        | 6,753  | 33.75%   |  | 0-14        | 5,060,178  | Calculated by compiler |
| 15-64       | 12,272 | 61.34%   |  | 15-64       | 9,196,372  | Calculated by compiler |
| 15-19       | 1,723  | 8.61%    |  | 15-19       | 1,291,084  | Calculated by compiler |
| 20-34       | 4,588  | 22.93%   |  | 20-34       | 3,437,894  | Calculated by compiler |
| 35-44       | 2,668  | 13.33%   |  | 35-44       | 1,999,194  | Calculated by compiler |
| 45-64       | 3,292  | 16.45%   |  | 45-64       | 2,466,771  | Calculated by compiler |
| 65 and over | 983    | 4.91%    |  | 65 and over | 736,585    | Calculated by compiler |

|             |        |            |  |             |            |                        |
|-------------|--------|------------|--|-------------|------------|------------------------|
| Japan       | 1888   | % of total |  | Japan       | 1804       |                        |
| Female      | 19,599 | 100%       |  | Female      | 13,629,502 | Taeuber p. 46          |
| 0-14        | 6,606  | 33.71%     |  | 0-14        | 4,593,933  | Calculated by compiler |
| 15-64       | 11,798 | 60.20%     |  | 15-64       | 8,204,544  | Calculated by compiler |
| 15-19       | 1,675  | 8.55%      |  | 15-19       | 1,164,826  | Calculated by compiler |
| 20-34       | 4,420  | 22.55%     |  | 20-34       | 3,073,749  | Calculated by compiler |
| 35-44       | 2,482  | 12.66%     |  | 35-44       | 1,726,028  | Calculated by compiler |
| 45-64       | 3,220  | 16.43%     |  | 45-64       | 2,239,247  | Calculated by compiler |
| 65 and over | 1,195  | 6.10%      |  | 65 and over | 831,025    | Calculated by compiler |

LTES, vol. 2, p. 81, has estimates of the economic participation since 1872, divided into groups of five years. I have taken the total average for men and women and calculated the

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figures of economic participation for 1803. Since the age group 10 to 14 is not contained in Taeuber, I isolated it by applying the ratio as in 1875 cited in LTES, p. 81.

From the – very high – estimated level of total of economic participation in 1880, and the male (92.53 percent) and female (69.25 percent) percentages, I calculated an estimate of the economically active population in 1804: 20,351,682 million in total, 9,694,215 women and 10,657,467 men.

### Estimation of Labour Relations

The point of departure for this operation are the ascribed proportions of the Japanese population according to four “estates” or “occupational groups”, scholar-officials, farmers, artisans, and merchants that was taken over from the Chinese model. However, while in the Chinese case, these groups are considered to be relatively open, in the feudal Japanese society, a person was considered born into an estate and supposed to remain in it. Moreover, the definition of the elite, “scholar-officials” in China, a meritocracy that was recruited in official examinations basically open to all males of either occupational group, in Japan was adapted to include the hereditary military elite, the samurai. Samurai received emoluments in the form of grains.

The relation of samurai to farmers, merchants, and artisans, and the outcast group Eta and Hinin, which are not ethnically different, but were required to work in low esteemed occupations such as slaughtering and tanning, and to settle separately from the rest of the civilian population, is cited by Rozman as follows<sup>6</sup>:

6-7 % samurai families;

85% farmers<sup>7</sup>, including 2% fishers, 1% transport workers, and 4 to 5 percent of the population that had hired out to the cities.

7% merchants and artisans together

1.5% ± 0.5 % outcasts Eta and Hinin, often working in trades thought of as defiling, such as tanning and slaughtering.

Taeuber, referring to Sekiyama. *Nihon jinkō shi* (Demographic history of Japan), gives a different overall estimate of 7% samurai, 87% farmers, 2% artisans, and 3% merchants.<sup>8</sup>

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<sup>6</sup> Rozman, p. 82-90.

<sup>7</sup> Rozman, p. 83, quoting from Sekiyama Naotarō, *Nihon no jinkō*, Tōkyō: Shibundō 1966, Chapter 5, Section 4, 29-55, „Mihun betsu oyobi shokugyō betsu jinkō“ (Population according to status and population).

Following Rozman, I have divided the economically active population to the categories and in the percentages outlined above.

☉ Samurai: 350,000 to 450,000. Marius B. Jansen refers to Meiji counts in the 1870s of 408,823 samurai households with a total of 1,892,449 persons when dependents were included. We give the range of figures quoted in Endo and Rozman since they may show fluctuation over time, calculate the figure of 6.5% of the total population of 1804, and deduct 350,000 and 450,000 from this in order to arrive at the number of retainers (Lab-Rel 6).<sup>9</sup>

☉ Their retainers: 873,000 to 973,000, Lab-Rel 6.

☉ The group of emperor, courtiers, and functionaries of the central government, which was more formal and ritual than wielding actual power, consisted of the 137 families of the high nobility who divided the highest government positions among themselves.<sup>10</sup> Together with their retainers, I assume a figure of max. 10,000 persons.

The emperor/empress personally stands in no dependent labour relation to anybody else. He could be categorized as “non-working” and “affluent.” From another perspective, he/she works or is active in exerting his/her power and therefore stands in a kind of reciprocal labour relation with his/her subjects. The courtiers and high-level government officials, however, receive emoluments by the emperor or state. Thus, they work for a non-market institution (Lab-Rel 18). The group is small in size, but especially the emperor/empress’s function is interesting for reasons of taxonomy.

☉ Farmers: 85% (Lab-Rel 04, 05). This sets out from the figure of 85% of registered farmers, minus the fishers, transport workers, and hired labour in the cities.<sup>11</sup>

☉ Fishers 2%: Lab-Rel 04, 05, 12.

☉ Transport Workers 1%: Lab-Rel 12, 14.

☉ Hired Labour that migrated to the cities: 4-5%: Lab-Rel 14.

For lack of sources, the further division of the farmers and the understanding of the percentage of hired out temporary urban labour that was officially registered as farmers is difficult. Some isolated cases exist that sometimes yield astonishing results. One of these is the village Nishijō in Central Honshū, 30 km northwest of the trading post Nagoya. For this

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<sup>8</sup> Taeuber, p. 28.

<sup>9</sup> Jansen, p. 105.

<sup>10</sup> Jansen, p. 100-101 mentions the 137 *kuge* (court nobility) families. In 1905, after two major reforms, the nobility numbered 781 families and about 4,000 members. See „Some Information on nobility, peerage and ranks in ancient and Meiji-Japan“.

<sup>11</sup> The figure of 85% is also quoted in Jansen, p. 111.

village of 300 to 400 inhabitants, during a period of almost one hundred years (1773-1867), yearly reports of the migrational movements are recorded in detail.<sup>12</sup> These show amazingly high rates of temporary hiring out to the cities:

Between 1773 and 1800, 53.5 % of the men and 63.0 % of the women had experienced hiring out (*dekasegi*), and between 1801 and 1825, 46.7 % of the men and 60.8 % of the women. In total, this is 50.3 % for the men 62.0 % for the women between 1773 and 1825.<sup>13</sup>

Can such high rates be assumed to apply on average for entire Japan? Scholars such as Osamu Saitō have raised doubts about this. As Saitō points out, too little is understood about migration in other Japanese regions; Nishijō is a singular case, and similar sources have never been found.<sup>14</sup> He also stresses that much of the „hiring out“ (some cases for children starting at age 5 or 6!) refer to unpaid household jobs, such as child-minding in the cities.

Therefore, from this source, spectacular as it is, no generalizations seem possible. Rozman gives no evidence for the figure of 4 to 5 percent of temporary labour in the cities that was officially registered as farmers. He also cites other figures, which offer glimpses, but an overall understanding is as yet difficult to gain.

Another aspect that is being widely discussed in Japan as well as in China is the percentage of the farmers who worked for the market in by-occupation. The case in point is the relatively large evidence from the domain of Chōshū in Western Honshū<sup>15</sup>, facing the Japanese Inland Sea. It has been intensively studied, and the general opinion is that it represents not an exceptional, but an average case.<sup>16</sup> For our purposes, the important insight is that half of the farmers farmed only, while the other half had by-occupations in non-agricultural sectors.<sup>17</sup>

Report on the occupational distribution in Mitajiri saihan, Tajima village, according to the *Fudō chū shin'an*

|    | Occupations | 戸数 (%)<br>Household<br>numbers<br>and<br>percentages |
|----|-------------|--|
| 農人 | Farmers     | 303 (36.6%)  |

<sup>12</sup> Hayami, p. 120.

<sup>13</sup> Hayami, p. 139.

<sup>14</sup> Saitō, p. 110.

<sup>15</sup> *Bōchō fūdo chūshin'an* 防長風土書注進案 (Reports on the customs and economy of the Suō and Nagato provinces, edited by the Yamaguchi Prefectural Archives (Yamaguchi, 1960-66). 22 vols. Ca. 1840.

<sup>16</sup> Smith, p. 82, assumes that in one fifth to one fourth of the country, by-employment was about as well developed as in his case study for Kaminoseki. Saitō, p. 174, takes Smith's case Kaminoseki to be an average sample.

<sup>17</sup> Saitō, p. 164.

|                             |   |                   |
|-----------------------------|---|-------------------|
| 以下六廉意いっ<br>れも農業ニ相添<br>拵候    | By-employment for farmers   |                   |
| 諸職人                         | Artisans  | 30 (3.6)          |
| 廻船乗                         | Shipping  | 3 (0.4)           |
| 上荷乗                         | Transporting (Umschlagsarbeiter)  | 12 (1.4)          |
| 小漁師                         | Fishery (small-scale)   | 2 (0.2)           |
| 塩売日用拵                       | Salt peddlers   | 294 (35.3)        |
| 中師                          | Dock workers  | 8 (1.0)           |
| <b>農家計</b>                  | <b>Total agriculture</b>  | <b>652 (78.6)</b> |
| 諸職人                         | Artisans  | 40 (4.8)          |
| 漁人                          | Fishers   | 33 (4.0)          |
| 商人                          | Merchants   | 7 (0.8)           |
| 商人（醬油屋、<br>酒屋、綿屋、古<br>手屋ほか） | Merchants (soy sauce shops, wine shops, cotton<br>shops, curio shop)            | 15 (1.8)          |
| 小商人                         | Retail merchants  | 16 (1.9)          |
| 肴売                          | Small-scale fish and shellfish merchants,<br>peddlers                           | 16 (1.9)          |
| サービス業                       | Service sector  |                   |
| 質屋                          | Pawnbrokers   | 6 (0.7)           |
| 風呂屋、髪結ほ<br>か                | Bathhouse owners, barbers   | 7 (0.8)           |
| 遊女屋、芸子<br>屋、揚屋、料理<br>屋、揚酒屋  | Female sex workers, actors, restaurants,<br>amusement houses, brothels, taverns | 34 (4.1)          |
| 油板場                         | Oil mills   | 2 (0.2)           |
| 浜人                          | Salt producers  | 1 (0.1)           |
| <b>非農家計</b>                 | <b>Total non-agriculture</b>  | <b>177 (21.4)</b> |
| <b>合計</b>                   | <b>Grand total</b>  | <b>829 (100)</b>  |

Saitō Osamu, *Hikaku keizai hatten ron*, p. 164.

Moreover, as has been calculated by Thomas C. Smith, only about half of the farmers' incomes were gained from agriculture. Considering the high rates of hiring out in one village and the thriving agricultural by-production in the other, we tentatively set one half of the agricultural economically active population into the labour-relations 04 and 05 for self-sufficient labour and the other half into 50% Lab-rel 04 and 05 and 50% into 12 (self-employed labour for the market).

The tentative assumption is thus that half of the farming households could not live on farming alone, but had the choice either to search wage labour elsewhere, as the Nishijo inhabitants

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did, or to engage in production in other sectors, as in Mitajiri. Which option was taken depends on a variety of factors as fertility of land, the ease of communication and transport, and household structures.<sup>18</sup>

☉ Outcasts (Eta and Hinin)<sup>19</sup>: 1,5%, Lab-rel 12.

☉ Priests and servants and their families: 0,5 % of the population. Since the corresponding labour relations are quite different, I have roughly estimated 0,25% for each group.

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<sup>18</sup> For comparison, see Lucassen, *Migrant labour in Europe, 1600-1900*, for a map of Northwestern German regions with predominant labour migration and predominant agricultural by-production.

<sup>19</sup> Rozman, p. 90.

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Rounded off estimates and calculations for cross-section Japan (1804)

|  | Individuals | Min.       | Max.       |
|--|-------------|------------|------------|
| Economically active population                       | 20,359,200  |            |            |
| Samurai  | 400,000     | 350,000    | 450,000    |
| Samurai retainers and dependents                     | 923,000     | 973,000    | 873,000    |
| Farmers  |             | 15,813,400 | 15,986,400 |
| Fishers  | 346,000     |            |            |
| Transport labourers                                  | 173,000     |            |            |
| Temporary workers in the cities                      |             | 865,000    | 692,000    |
| Merchants and artisans                               | 712,300     |            |            |
| Merchants' and artisans' apprentices                 | 237,500     |            |            |
| Merchants' and artisans' journeymen and assistants   | 474,900     |            |            |
| Outcasts: Eta and Hinin (often tanners and butchers) | 305,000     |            |            |
| Courtiers and officials (between 5,000 and 10,000)   | 7,500       | 5,000      | 10,000     |
| Servants   | 50,800      |            |            |
| Priests  | 50,800      |            |            |

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