

# DEMOGRAPHIC AND REGIONAL ASPECTS OF AGING AND LONG-TERM CARE IN JAPAN

*Ralph LÜTZELER*

## 1. INTRODUCTORY REMARKS

In 2000, the proportion of people aged 65 years or older reached 17.3% in Japan (KOKURITSU SHAKAI HOSHŌ JINKŌ MONDAI KENKYŪJO 2002: 30), thus already surpassing Germany, which has been experiencing a comparable level of population aging since as early as 1970. In the same year, Japan set up a long-term care insurance system much like the one Germany adopted in 1995. It should be interesting, therefore, to study similarities as well as differences in the demographics of aging processes in both countries.

This article will give an overview of the causes of population aging in Japan and some of its more general implications. Comparisons with Germany (and other countries) are included whenever suitable. The basic questions are:

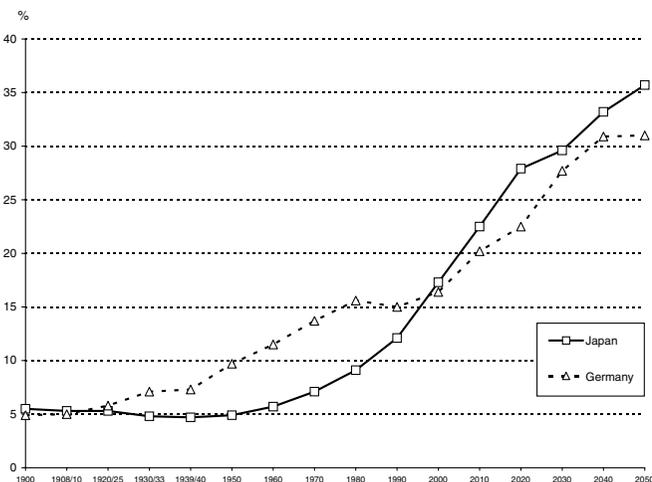
1. How quickly does the demographic process of aging proceed and how urgent is it to introduce social policy measures designed for an aging society?
2. Since it is the municipalities or other regional units (prefectures, *Länder*) who are implementing those measures, are there any remarkable regional differences in the proportion of the elderly, in their living arrangements, or in other life circumstances that should be taken into account?
3. Long-term care insurance plans point to both the family and to old age institutions as potential care suppliers. But who will actually care? Is the family (or other persons close to the elderly) still capable of performing its traditional care role, or is long-term care to be supplied more and more by institutions?

## 2. THE DEMOGRAPHY OF AGING: TRENDS AND CAUSES

Figure 1 gives insight into the dynamics of the aging process in both Japan and Germany. It can be seen that in Germany substantial population

aging started around the Second World War. The rate of the elderly population (over 65 years of age) doubled from slightly over 7% in the late 1930s to 15% in 1980, after which a period of stagnation set in. From 2000 onwards, however, increase has begun anew, presumably leading to 31% in 2050. While this trend may sound dramatic, it is still moderate compared to the Japanese situation. Up to the 1960s, Japan still displayed proportions of the elderly below 7%, thereby resembling Third World countries rather than industrialized ones. From 1970, however, an unprecedented high speed of aging set in. From 1997 onwards, Japan has displayed higher proportions of the elderly than Germany. From this it can be concluded that, in comparison to Germany, much less time is left in Japan for social policy-making as well as for value adjustments suited for an aging society.

Figure 1: Changes in the proportion of elderly population (65+) in Japan and Germany, 1900–2050



Sources: MARSCHALCK (1984: 173); KOKURITSU SHAKAI HOSHŌ JINKŌ MONDAI KENKYŪJO (2002: 38).

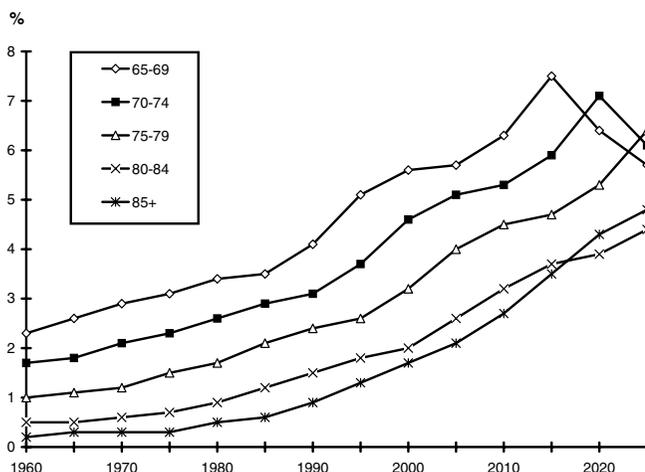
What are the demographic causes that triggered this astounding development? In both countries, there are basically four factors that can be specified: the aging of a numerically strong generation, birth-rate decline, the rise in longevity of elderly people, and the effects of war losses.

It is a basic demographic assumption that the level of natural population movements changes in close relation to a transition from an agrarian to an industrialized society. In such cases, a so-called demographic tran-

sition from high birth and death rates to low ones can be observed (see, for instance, MACKENSEN 1974). Between 1925 and 1950, Japan went through the middle stage of its demographic transition, i.e., the population still displayed high birth rates while mortality levels had already started to decline. Hence, age groups were born who surpassed the size of any other age group born before or after it. At first, as there were more young people alive, this contributed to a slightly declining proportion of elderly persons. Since around 1975, however, the proportion of the elderly has started to rise quickly due to the aging of this generation (ITŌ 1994: 188–191). In Germany, on the other hand, high birth rates and falling death rates were prevalent during the so-called Second Empire (1871–1918), which contributed decisively to a rising level of elderly people from around 1950 to 1980. The short and moderate recovery of the birth rate during the 1950s and early 1960s produced another robust generation, the effects of which will be felt from 2020 onwards.

The succession of different-sized age groups also has important repercussions on the internal age structure of the elderly population. This is important to know because the so-called “younger elderly” between the ages of 65 and 75 may be considered by and large as still healthy and thus able to contribute actively to society and the economy.

Figure 2: Changes in the proportion of Japan’s elderly population by age groups, 1960–1995 (actual figures) and 1995–2025 (estimated figures)



Sources: Own calculations, based on SŌMUCHŌ TŌKEIKYOKU (1993: 48; 1996: 6–7); KOKURITSU SHAKAI HOSHŌ JINKŌ MONDAI KENKYŪJO (1997a: 74–77).

Figure 2 shows how the relative sizes of different elderly age groups in Japan have changed during the course of general population aging. It can be seen that, as a result of the aging of the large generation born between 1920 and 1935, the proportion of 65–69-year-olds has increased between 1985 and 2000, whereas the 70–74, 75–79, and 80–84 age groups will grow stronger from 1990 to 2005, 1995 to 2010, and 2000 to 2015 respectively. By contrast, the residual category of persons over 84 years of age will increase continuously from 1985 onwards. The postwar baby boom will have an effect on aging after 2010 by again raising the proportion of the “younger elderly”. From 2015 onwards, however, there will be no further large-size generation entering old age, thus indirectly contributing to a marked “aging of the aged” that will aggravate the strains on both the health care and long-term care systems.

After the postwar baby boom of the late 1940s, fertility fell dramatically in Japan. The birth rate almost halved between 1949 and 1960, plunging from 33.0‰ to 17.2‰. Since infant mortality, too, declined during that period, the reduction in the number of surviving children was only moderate at first. Nonetheless, from the 1950s onward, the proportion of the elderly rose due to the relative decline of the younger age groups. Since the mid-1970s, a second baby bust has contributed further to aging. In Germany, as far as can be judged from the graph, such indirect aging effects due to declines in fertility seem to be less important causes in aging. There was a steep decline from around 1910 into the 1920s and again during the 1970s. In both cases, however, the correspondence with rising aging proportions is only moderate at best.

Until recently, the influence of mortality reductions, or the increase in life expectancy on population aging, has tended to be neglected by demographers (HÖHN and STÖRTZBACH 1994: 198–199). In part, at least, this was due to the fact that up to the 1960s life expectancy gains in industrialized countries were mostly attributable to declining infant and adolescent mortality. As a result, more children and young adults survived, thereby increasing the proportion of young people and softening the aging trend. Since then, however, both in Japan and Germany, it has been predominantly the older age groups that have contributed to the further rise in life expectancy (see Table 1 for Japan). As more older people can expect to survive to very advanced ages, aging will increase especially in the growing proportion of the often disabled “older elderly”. This is particularly so in Japan, currently the country with the highest life expectancy in the world. VAUPEL (1997) suggests that the trend of enhanced survival at older ages over the next decades will by far outstrip current expectations and warns that “[b]ecause the belief [that old-age mortality is intractable] is so prevalent, forecasts of the growth of the elderly

population are too low, [and] expenditures on life-saving health-care for the elderly are too low [...].” Since the enhancement of old-age survival is proceeding gradually, however, its effect on population aging cannot be detected from graphs like Figure 1, and hence may have contributed to the underestimation to which Vaupel refers.

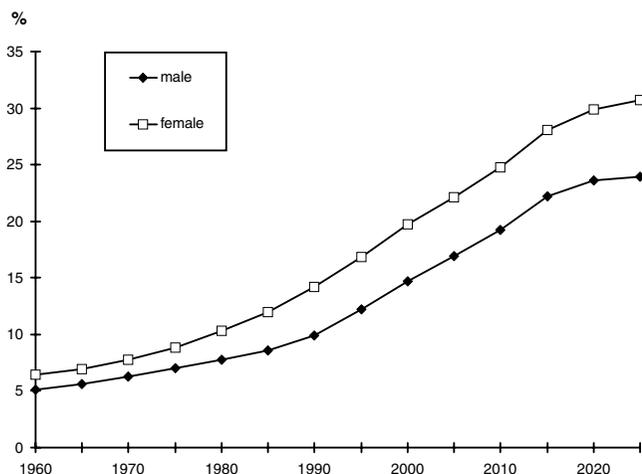
Table 1: Contributions of mortality reductions by age groups to the increase in female life expectancy in Japan, 1947–2000 (%)

Period	Average life expectancy (in years)		Contributions of different age groups (%)					
	Starting point	Increase	0–1	1–4	5–14	15–39	40–64	65+
1947–1950/52	53.96	9.02	18.5	24.0	6.2	31.0	13.2	7.1
1950/52–1955	62.98	4.77	18.0	20.7	6.0	26.9	17.6	10.8
1955–1960	67.75	2.45	27.6	18.6	6.9	26.3	21.4	-0.8
1960–1965	70.19	2.73	29.6	10.5	5.2	20.2	21.6	12.9
1965–1970	72.92	1.73	20.8	4.9	2.5	11.2	24.0	36.6
1970–1975	74.66	2.23	9.5	2.4	2.2	10.3	29.5	46.1
1975–1980	76.89	1.88	8.9	2.5	2.0	10.1	24.7	51.8
1980–1985	78.76	1.72	7.0	2.4	1.4	4.8	18.5	65.9
1985–1990	80.48	1.42	5.2	1.0	0.6	4.5	19.6	69.1
1990–1995	81.91	0.95	2.7	0.4	-0.6	2.9	6.3	88.3
1995–2000	82.85	1.75	3.8	1.8	2.4	1.4	12.7	77.9

Source: KOKURITSU SHAKAI HOSHŌ JINKŌ MONDAI KENKYŪJO (2002: 84).

Substantial war losses can also influence the aging process. While it is true that the Second World War claimed an unprecedented number of civilian deaths, it is the casualties among the military, mostly young men, which distorted the age structure of the population. As the war generation entered old age, the aging problem became associated predominantly with elderly women. Figure 3 shows that in Japan from 1975 until 1990, when the veteran generation born between 1910 and 1925 entered advanced ages, male aging proceeded much slower than did female aging. By contrast, it is the increasing gap between female and male life expectancy that will be responsible for the continuance of the trend in the feminization of old age from 2000 onwards (see KOKURITSU SHAKAI HOSHŌ JINKŌ MONDAI KENKYŪJO 1997a: 22).

Figure 3: Changes in the proportion of the elderly by sex in Japan, 1960–1995 (actual figures) and 1995–2025 (estimated figures)



Sources: Own calculations, based on SÔMUCHÔ TÔKEIKYOKU (1993: 48; 1996: 6–7); KOKURITSU SHAKAI HOSHÔ JINKÔ MONDAI KENKYÛJO (1997a: 74–77).

Compared to Japan, Germany's losses were even higher and may be partly responsible for the halt in the increase of proportions of the elderly during the 1980s and 1990s (the generation born around 1920; see Figure 1).

### 3. THE REGIONAL DIMENSION OF AGING

Since modern populations are highly mobile, and population migration tends to be age-selective, demographic aging is not spread evenly across the territory of an industrialized country. Japan is a particularly striking example for this rule. There it is the remote rural areas that display the highest proportions of aged people, clearly the result of the strong migration flows from rural to urban areas during the era of rapid economic growth (ca. 1956–1973). In those days, the cities offered many employment opportunities for young adults (mostly younger male siblings) who could not find jobs in an overcrowded countryside. Consequently the proportion of the elderly rose in rural areas, further increased by the fact that a lack of young adults meant a deficit in births and a surplus of deaths. In 2000, the rural southwestern prefecture of Shimane already displayed a high proportion of elderly at 24.8%, while in suburban Saita-

ma-ken, part of the Tōkyō conurbation, no more than 12.8% of the population was 65 years or older.

Table 2: Changes in the proportion of the elderly by municipality size groups in Japan, 1970–1990

Population of municipality	65–74 years		≥75 years		Change (1970=100)		Dependency ratio (≥75/20–64)×100		
	1970	1990	1970	1990	65–74 y.	≥75 y.	1970	1990	Change
1 M and over	4.0	6.4	1.5	4.2	160	280	2.3	6.5	283
500,000–1 M	3.4	5.6	1.4	3.7	165	264	2.2	5.9	268
300,000–500,000	4.2	6.1	1.7	4.0	145	235	2.8	6.4	229
200,000–300,000	4.2	6.4	1.7	4.3	152	253	2.8	6.9	246
100,000–200,000	4.2	6.3	1.7	4.1	150	241	2.8	6.6	236
50,000–100,000	4.6	7.0	2.1	4.5	152	214	3.5	7.4	211
40,000– 50,000	5.2	7.7	2.3	5.2	148	226	3.9	8.8	226
30,000– 40,000	5.7	7.9	2.7	5.3	139	196	4.6	8.9	193
20,000– 30,000	5.9	8.6	2.7	5.9	146	219	4.7	10.1	215
10,000– 20,000	6.3	9.5	3.0	6.7	151	223	5.3	11.6	219
5,000– 10,000	7.1	10.9	3.4	7.8	154	229	6.1	13.8	226
under 5,000	7.7	12.7	3.9	9.1	165	233	7.0	16.3	233
“DID”-areas	4.1	6.3	1.5	4.0	154	267	2.4	6.3	263
Depopulated areas	7.0	12.0	3.6	8.5	171	236	6.2	15.2	245
<b>Japan</b>	<b>5.0</b>	<b>7.2</b>	<b>2.1</b>	<b>4.8</b>	<b>144</b>	<b>229</b>	<b>3.5</b>	<b>7.8</b>	<b>223</b>

Sources: Own calculations, based on SŌRIFU TŌKEIKYOKU (1975: 278–279, 622–625); SOMUCHŌ TŌKEIKYOKU (1995a: 73, 600–603); KOKUDOCHŌ CHIHŌ SHINKŌKYOKU KASO TAISAKUSHITSU (1998: 39–40).

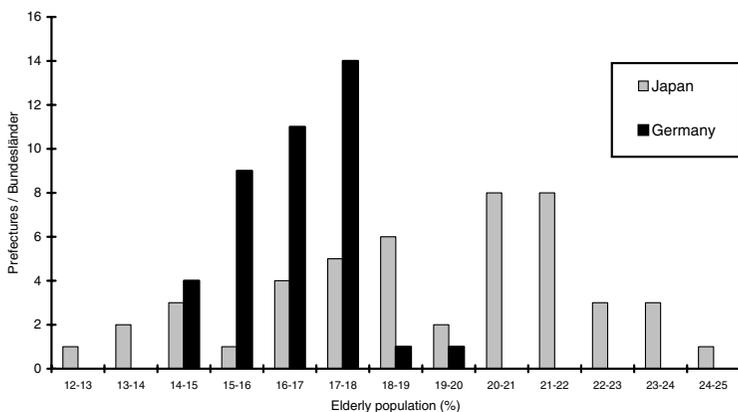
The aging gap between the rural and urban parts of Japan can be further specified by looking at the proportions of aged people by municipality size groups (see Table 2). From this it becomes apparent that it is the smaller metropolises, ranging from 500,000 to 1,000,000 inhabitants, that up to 1990 were the least confronted with aging. In general, however, all municipalities from 50,000 inhabitants upwards show below-average proportions of the elderly, a fact that applies to the “Densely Inhabited Districts” category as well.<sup>1</sup> Starting with towns in the category of 40,000

<sup>1</sup> “Densely Inhabited Districts” or “DIDs” denotes an alternative measurement of urbanization employed in Japan since the 1960 population census. DIDs combine all area units with a total population of 5,000 or more that show population density rates of at least 4,000 inhabitants per sq.km. In 1995, the proportion of the aged (65 years and over) living in DIDs had increased to 12.5% (from 10.3% in 1990), thus remaining markedly below the Japanese

to 50,000 residents, aging gradually becomes more severe as one moves down through each smaller municipality size group. In villages of 5,000 inhabitants and below, there were on average 16.3 older-elderly of 75 years of age and older to 100 persons of employable age (1990).

In Germany, by contrast, regional disparities in the proportion of the aged are not that pronounced (see Figure 4 to compare with Japan). This is mainly due to the fact that rural-urban mass migrations had taken place around the turn of the 20th century, i.e. much earlier than in Japan. Contrary to Japan, there is a slight tendency for urbanized regions to have higher proportions, due to both low fertility and the suburbanization and counterurbanization processes of the 1960s and 1970s.

Figure 4: Regional dispersion of the proportion of elderly population in Japan (2000, by prefecture) and Germany (1999, by *Bundesland*, *Regierungsbezirk*)



Sources: Own calculations, based on 2000 Population Census of Japan (<http://www.stat.go.jp/data/kokusei/2000/kihon1/00/13.htm> (12.03.2002)); [http://www.brandenburg.de/statreg/daten\\_02/173-11.htm](http://www.brandenburg.de/statreg/daten_02/173-11.htm) (12.03.2002).

The massive outflow of population from rural areas in Japan had the dual effect of both raising the proportion of the elderly and weakening the financial (tax) base of the municipalities and prefectures concerned. In

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average of 14.5% (see SAGAZA 1997: 45). In depopulated areas, the aged accounted for 25.0% of the population in 1995, compared to 20.5% in 1990 (KOKUDOCHŌ CHIHŌ SHINKŌKYOKU KASŌ TAISAKUSHITSU 1998: 39-40). As for municipality size groups, no actual figures are available.

Japanese regional policy, the term *kasō chiiki* [depopulated areas] has been established and points to municipalities with very high aging rates due to past outmigration (see Table 2). Based on the Special Implementation Law for the Vitalization of Depopulated Areas (*Kasō chiiki kasseika tokubetsu sochi-hō*; 1990) some efforts have been made to subsidize the poorest depopulated areas in order to help them establish and improve elderly-oriented services and facilities (e.g., medical emergency infrastructure, day-care services, public nursing homes) (KOKUDOCCHŌ CHIHŌ SHINKŌKYOKU KASŌ TAISAKUSHITSU 1998: 9–13). Other considerations refer to the revitalization of agriculture as an outlet for the elderly who wish to continue working, as well as social activities (YAMAZAKI 1994: 134–137).

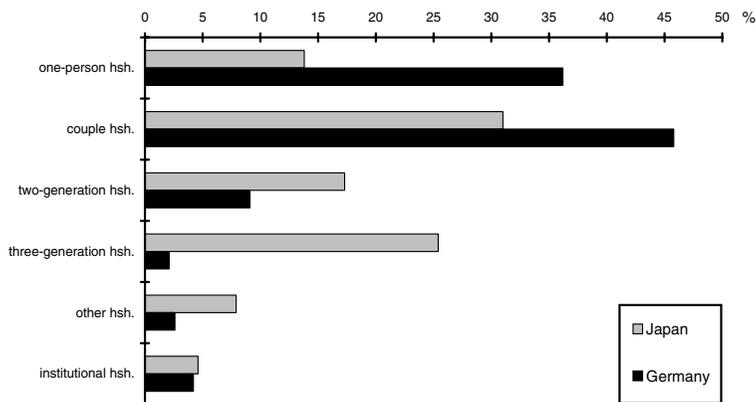
As rural-urban population shifts have almost subsided, however, aging will soon become a problem in the urban agglomerations as well (see NAKAGAWA 1994: 25; ŌE n.d.: 2–4). From Table 2, it can be seen that between 1970 and 1990 it was the larger cities and metropolises from 500,000 inhabitants and upwards which saw the strongest increase in the proportion of aged. In absolute numbers, urban regions are already burdened with the larger share of the elderly. The latest detailed projection figures show that between 1995 and 2025, the proportion of the elderly population will more than double in the urban and suburban regions of Kantō, Tōkai, and Kinki, while the prefectures already affected by high rates of the aged will face an increase of “only” around 50%. As a result, it is expected that while the pattern itself will remain largely unchanged, by 2025 regional differences will have decreased proportionally, probably showing a range from 22.8% in Shiga Prefecture (located between Kyōto/Ōsaka and Nagoya) to 33.8% in northern Akita Prefecture (KOKURITSU SHAKAI HOSHŌ JINKŌ MONDAI KENKYŪJO 1997b: 13, 32). Since most cities will need their financial resources for further consolidating their general infrastructure (especially traffic, sewerage, and housing infrastructures which are often still inadequate), these areas might be equally unable to cope with the problem by themselves.

#### 4. WHO WILL CARE FOR THE AGED?

It is still widely assumed – and demographers are no exception to this – that it is normal and socially accepted for Japanese to live with their parents (see, for instance, OGAWA and ERMISCH 1994: 203). Until recently, this notion even formed the basis of Japanese social policy-making. By promoting the slogan of a “Japanese-type welfare society” (*Nihon-gata fukushi shakai*) during the 1980s, the government reduced social expenditures and instead called upon the population to recall the traditional virtue of caring for their aged in the family without public support

(LÜTZELER and MATHIAS [1990]: 57). There are other factors, of course, such as extremely high housing costs or the economic distress of many elderly, which may explain the high prevalence of extended households in Japan. Whatever the reasons may be, however, compared to Germany (and to all other Western industrial countries as well), many elderly in Japan are indeed still living with their children (see Figure 5 and KOJIMA in this volume). Thus, it might seem that in Japan many families are still capable to perform old-age care functions alone, while in Germany the situation calls for stronger non-family or public commitment. On the other hand, some qualifications must be made to show that these differences between the two countries are in fact diminishing:

Figure 5: **Elderly population by type of household in Japan (2000) and Germany (1998) (%)**



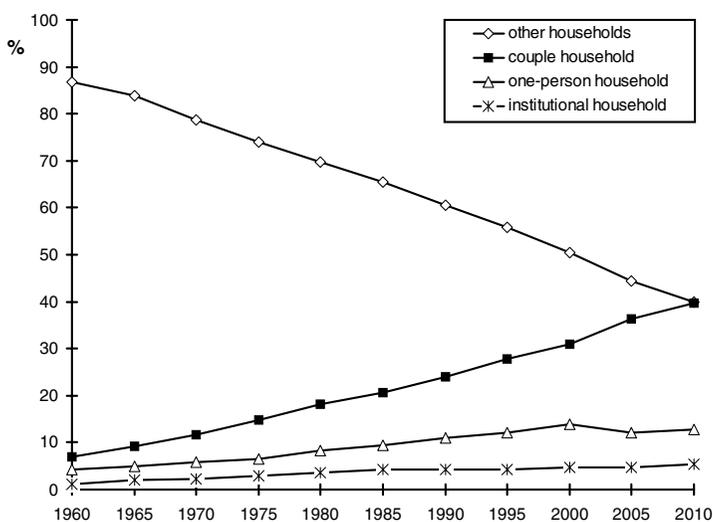
Sources: Own calculations, based on *2000 Population Census of Japan, Vol. 2-1, Table 25* (<http://www.stat.go.jp/data/kokusei/2000/kihon1/00/zuhyou/a041-1.xls> (12.03.2002)), *Vol. 2-1, Table 9* (<http://www.stat.go.jp/data/kokusei/2000/kihon1/00/zuhyou/a011.xls> (12.03.2002)); SACHVERSTÄNDIGENKOMMISSION "DRITTER ALTENBERICHT DER BUNDESREGIERUNG" (2000: 267); PRAHL and SCHROETER (1996: 158-159).

First, there is a clear trend which points to a reduction in the proportion of extended households in Japan. According to a projection made by the Institute of Population Problems (Jinkō Mondai Kenkyūjo) of the Japanese Ministry of Health and Welfare (Kōseishō)<sup>2</sup>, by 2010 couple house-

<sup>2</sup> The two institutions have been reorganized as the "National Institute of Population and Social Security Research" (Kokuritsu Shakai Hoshō Jinkō Mondai

holds will replace “other households” (most of them two- or three-generation households) as the dominant form of old-age living arrangements (see Figure 6). While this is in part the outcome of increased male longevity, which raises the probability of couples still existing in old age, on the whole non-demographic factors seem to be more important in effecting this change:

Figure 6: Changes in the proportion of the elderly population by type of household in Japan, 1960–2000 (actual figures) and 2000–2010 (estimated figures)



Sources: Own calculations, based on KŌSEISHŌ JINKŌ MONDAI KENKYŪJO (1996: 42, 75); KOKURITSU SHAKAI HOSHŌ JINKŌ MONDAI KENKYŪJO (2002: 131); 2000 Population Census of Japan, Vol. 2–1, Table 25 (<http://www.stat.go.jp/data/kokusei/2000/kihon1/00/zuhyou/a041-1.xls> (12.03.2002)), Vol. 2–1, Table 9 (<http://www.stat.go.jp/data/kokusei/2000/kihon1/00/zuhyou/a011.xls> (12.03.2002)).

On the one hand, Japanese elderly no longer expect to be cared for by their children in any case. This holds especially true as long as their spouses are still alive. Already in 1990, 69.1% of surveyed aged persons 60 years or older regarded their spouses as their first-choice caregivers in

Kenkyūjo; 1997) and the “Ministry of Health, Labor and Welfare” (Kōsei Rōdōshō; 2001), respectively.

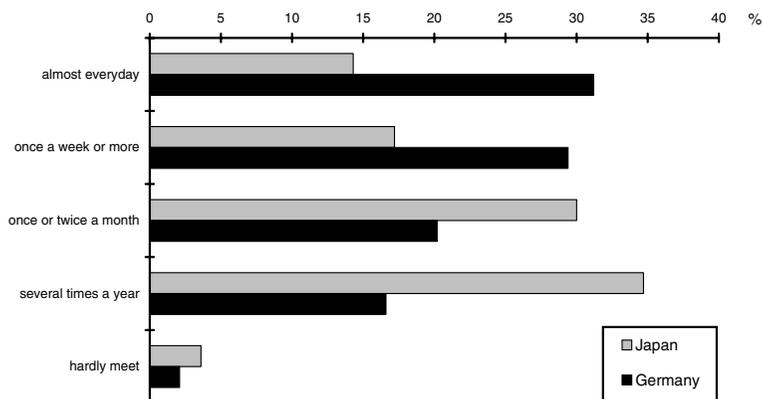
case they became bedridden, whereas 42.9% named those children who lived with them. Another 31.0% counted on children living apart from them (multiple answers possible). This conforms fairly closely to the German pattern (39.8%, 10.9%, 31.5%) but contrasts with neighboring South Korea, where children were regarded as more important (43.9%, 50.7%, 48.9%; SÖMUCHŌ CHŌKAN KANBŌ RŌJIN TAISAKUSHITSU 1992: 20).

On the other hand, there are obvious signs of a value change among the younger generation, who no longer seem to be willing to support their parents at all costs. Asked whether they will take care of their parents in their old age, in 1998 only 25.4% of 18- to 24-year-old Japanese answered with an unconditional "yes", far less than same-age respondents in the U.S. (66.0%) or France (56.8%). It is telling that the Japanese figure displayed a marked plunge from 35.0% in 1983 to today's level in 1988, i.e., exactly during the period when the "Japanese-type welfare society" idea was propagated. Under the condition that the financial situation would allow it, another 65.5% were willing to take care of the elderly in Japan, but even with these respondents included, the overall inclination toward providing care was rather lower than in most other fully industrialized societies. It is only the German youth who fell even below the Japanese level (14.7%; 59.6%; SÖMUCHŌ SEISHŌNEN TAISAKU HONBU 1999: 18, 100–101). Since care responsibilities were felt more strongly in earlier surveys, one might speculate that – in part at least – these recent low figures have been affected by the introduction, in Germany, of long-term care insurance.

The second set of qualifications that must be made refers to changes on the supply side of intra-familial long-term care. The number of children per married couple in Japan has declined to an average of two and is expected to decline further (OGAWA and RETHERFORD 1993: 705–709). Assuming that daughters remain the principal caregivers, this will inevitably create conflicts as the probability of having only male offspring will naturally rise. Even if there is one daughter, not only will her own parents ask for caregiving but, as has been hitherto the custom in Japan, so may her parents-in-law. Further, as the elderly are getting older, the people who are in charge of caring are getting older too. In 1995, 52.5% of all persons who cared for aged bedridden family members were already 60 years or older (KŌSEI TŌKEI KYŌKAI 1997: 56). This is comparable to trends observed in Germany where most caregivers are said to belong to the 45–75 age group (VEITH and BUCHER 1994: 221). Naturally, the question of who will care for the caregivers arises. Finally, as can be deduced from rising female employment rates, women, especially daughters-in-law, are becoming less and less willing to stay at home and perform their traditionally assigned function as caregivers for the aged. While in 1970 only 26.9% of all Japanese females aged 15 years or older worked as employees, this

figure rose to 38.0% in 2000 (SŌRIFU TŌKEIKYOKU 1975: 340–341, 356–357; 2000 Population Census of Japan, <http://www.stat.go.jp/data/kokusei/2000/kihon2/00/zuhyou/a002.xls> [11.03.2002]). About the same level can be observed in Germany (1997: 39.6%; STATISTISCHES BUNDESAMT 1998: 108).

Figure 7: Frequency of contact with children living separately from their aged parents in Japan and Germany, 1990 (%)



Source: SŌMUCHŌ CHŌKAN KANBŌ RŌJIN TAISAKUSHITSU (1992: 17).

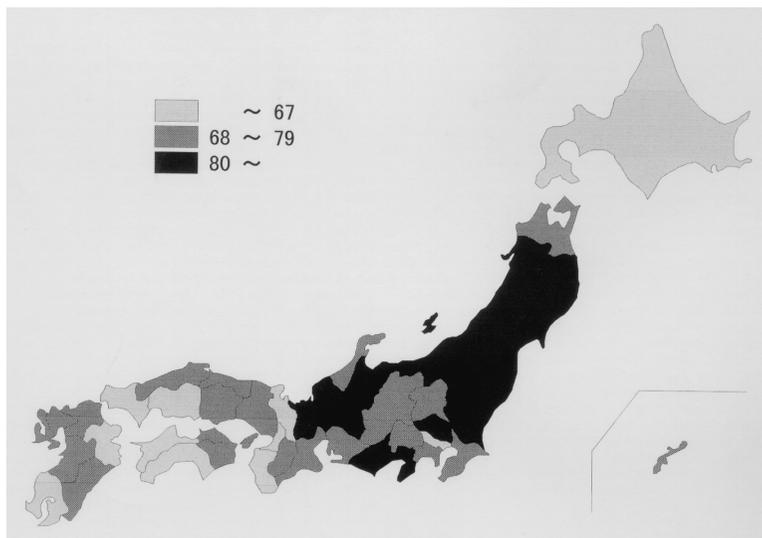
Third, contact with children who do not live with their aged parents is very infrequent in Japan, markedly falling below the level observed in Germany (see Figure 7). This is partly a result of the rural-urban migration shifts mentioned above, which took later-born children far away from their parents' homes. Partly, it is due to the Japanese tradition that only the eldest (male) child is responsible for his parents. Whatever the reasons, however, it becomes clear that the number of potential caregivers in the Japanese family is very limited and will become even more so as trends over time point to an even further reduction in the frequency of contact (SŌMUCHŌ CHŌKAN KANBŌ RŌJIN TAISAKUSHITSU 1992: 17).

## 5. REGIONAL DISPARITIES IN LONG-TERM CARE

In this final section, some remarks on the regional impact of the recent long-term care measures in Japan will be made. Do the measures address regional differences in demand for care sufficiently, and do they thus aggravate or mitigate regional disparities in care supply?

The underlying assumption of the analysis is that there are three possible sources of care for elderly people who need help: the family, the municipality, or the elderly person looking after his or her own care by employing private care services. Since care by close friends or relatives is still not common in Japan (SÔMUCHÔ CHÔKAN KANBÔ RÔJIN TAISAKUSHITSU 1992: 17, 20), it is essential to live together with or close to a spouse or children in order to receive family-like care. In the case of community care, the financial ability of the respective municipalities is a factor which might have an impact both on quantity and quality of care services – notwithstanding the substantial compensatory payments from taxes or contribution fees collected at the national level (see TALCOTT in this volume). Finally, it usually requires a substantial amount of income or capital to be independent of both family and community help and receive purely commercial care services. An interesting feature of the long-term care situation in Japan is the fact that all three factors show distinct regional patterns.

Figure 8: Extended households among all households with people over 74 years of age by prefecture, 1993 (%)



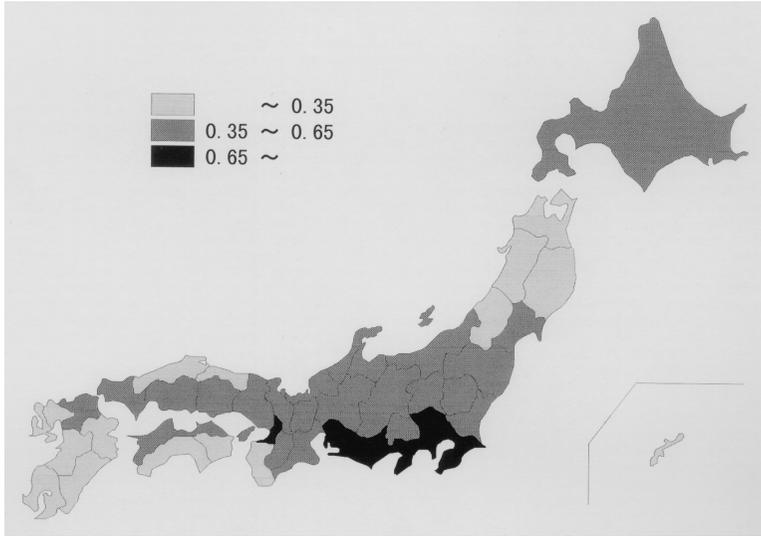
Note: "Extended households" include households located at a walking distance of no longer than five minutes from children's households.

Source: Own calculations, based on SÔMUCHÔ TÔKEIKYOKU (1995b: 3: Tab. 51).

First, it can be seen from Figure 8 that there is a regional pattern in living arrangements among the aged that goes far beyond the simple contrast between rural and urban regions (a contrast still mainly existing in Germany). The countryside itself can be divided into at least two regions with markedly different household structures. That is, extended family households are overwhelmingly dominant in the northeastern rural areas, whereas in some rural parts of southwestern Japan, other, i.e., nuclear or one-person, households prevail due to what may be influences of such historical factors as differing inheritance laws or village society structures (ŌBAYASHI 1995; LÜTZELER 1997: 40–41). While the degree of these differences in living arrangements might diminish in the future, as forecasts show (see KŌSEISHŌ JINKŌ MONDAI KENKYŪJO 1995: 81–82), the regional pattern itself will by and large remain stable.

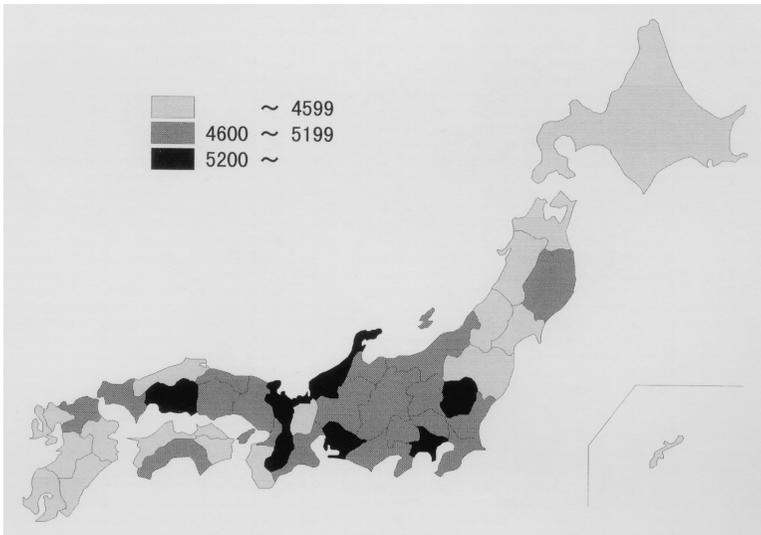
Second, regional differences in the financial potential of prefectural governments, i.e., the ratio between revenues and expenditures, and in the average income of aged couple households are equally striking, as the maps in Figures 9 and 10 show. What becomes obvious in both cases is the fact that highly urbanized prefectures or, more generally speaking, the central parts of Japan show a clear advantage over rural or peripheral prefectures. In the latter regions, public authorities often may only be able to guarantee a minimum standard of care services, while the aged themselves are in general not wealthy enough to afford private services. While in the northeastern rural regions this unfavorable situation might still be mitigated by family care, in large parts of the southwest this is often not possible. Therefore, the rural parts of southwestern Japan might be considered as long-term care problem regions. This judgment becomes even more justified when one takes into account the fact that the regions with the most unfavorable care-supply conditions are by and large identical to those with the highest proportions of the elderly, i.e., regions with the highest demand in care services.

Figure 9: Index of financial potential by prefecture, 1995



Source: SÔMUCHÔ TÔKEIKYOKU (1997a: 38).

Figure 10: Yearly income of elderly couple households by prefecture, 1994 (1,000 yen)



Source: SÔMUCHÔ TÔKEIKYOKU (1997b: 434).

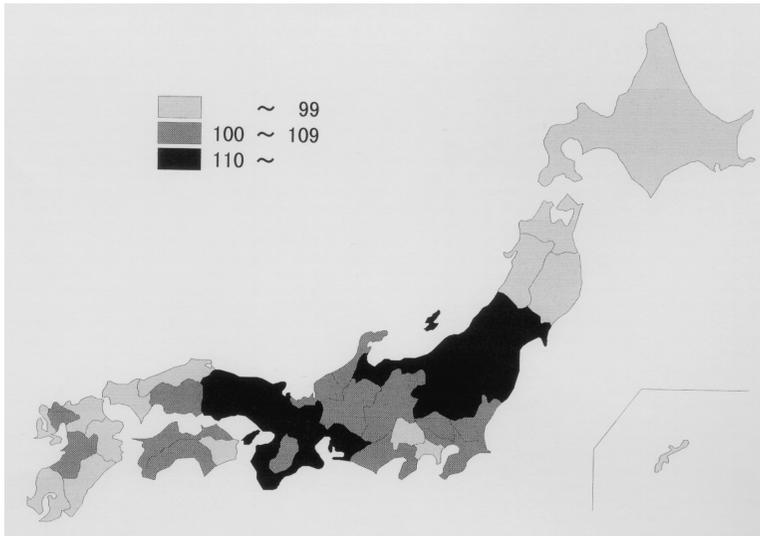
How did the Japanese state and local governments respond to these strong regional disparities? The so-called Gold Plan, set up in 1989 and upgraded in 1994 as a measure to substantially increase the number of old-age services nationwide, has created a new category of nursing homes specially designed for depopulated regions: the *Kōreisha Seikatsu Fukushi Sentā* or Centers for Living and Welfare of the Aged. These are rather small-scale institutions where the disabled aged can live permanently or come in daily for health advice and/or participation in social activities. About 400 such institutions were to be opened for operation in 2000 (KŌSEISHŌ 1996: 458).

Apart from this commitment, however, it does not seem that Japanese welfare policy-making has, so far, taken regional aspects of aging and long-term care into appropriate consideration. The maps in Figures 11 and 12 show the changes from 1985 to 1995 in the regional patterns of institutions and homehelpers for the aged. While the supply of homes for the aged is in fact better at the periphery, it is also evident that most of the new facilities have been built in the central parts of Japan, thereby causing a mostly uniform supply level. Accordingly, between 1985 and 1995 the coefficient of variation<sup>3</sup> dropped significantly from 30.4% to 21.2%. The distribution of homehelpers is more complex, but here too there has been a tendency to extend services in the urbanized prefectures, which already showed a high level in 1985. While this is in part justified on the grounds that the larger cities show rather high proportions of elderly living in one-person households, it is also most likely an outcome of the higher financial potential of these regions, because until 1989 communities had to share in the expenses of home care services to a higher degree than in institutionalized care. Further, the problem of long commuting distances between patients discourages the employment of homehelpers or other ambulant care personnel in remote areas.

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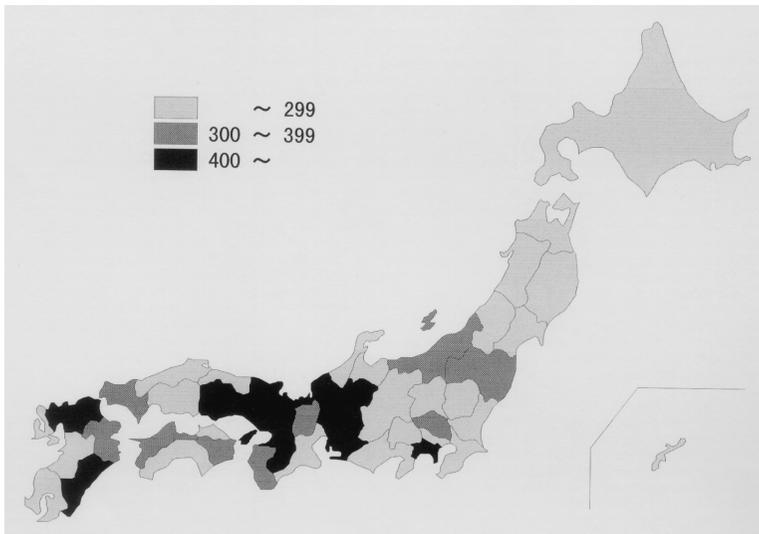
<sup>3</sup> The coefficient of variation is a statistical measure that indicates the relative strength of dispersion for any variable distribution. It is calculated by dividing the standard deviation by the arithmetic mean and multiplying the result by 100. The higher the value, in other words, the higher the dispersion.

Figure 11: Capacity of nursing homes per 100 elderly 75 years and older by prefecture, 1985–1995 (1985=100)



Source: Own calculations, based on SŌMUCHŌ TŌKEIKYOKU (1997a: 390).

Figure 12: Homehelpers per 1000 elderly 75 years and older by prefecture, 1985–1995 (1985=100)



Source: Own calculations, based on SŌMUCHŌ TŌKEIKYOKU (1997a: 394).

The same results can be seen in the distribution policy of long-term care services within prefectures. In my analysis of several "Plans for Health and Welfare of the Aged" (*Rōjin hoken fukushi keikaku*) issued by the prefectural governments, I have found in every case that the distribution of care services for the aged is specified as "based on the characteristics of the region" (*chiiki no tokusei o fumaete*). There is even the case – as stated in the plan prepared by Niigata Prefecture (NIIGATA-KEN HOKEN FUKUSHIBU 1994: 10, 13) – that intermunicipal differences in living arrangements of the aged as well as the problem of great distances in depopulated areas are officially taken into account. The actual figures, however, show that prefectures are aiming at a uniform level of supply regardless of differences in household structure or local income situation of the aged.

It is likely that the implementation of the new long-term care insurance system, too, will maintain existing regional inconsistencies in the care-supply pattern. Unlike the situation in Germany, where premiums are paid to public or private health insurance companies, in Japan it is the municipalities that are in charge of collecting and administering the insurance premiums. While they are obliged to pay a certain amount of benefits depending on the care necessities of the insured, it will depend on the financial ability of each municipality what *additional* benefits and services are given to people in need of care. Thus, some critics even fear the advent "of a new type of social welfare recipient; one which migrates from one local community to another in search of better services" (see KIMURA in this volume). Further, the new law encourages the use of business-oriented welfare services. As these private services will most probably choose locations which promise the highest profits, the peripheral rural areas in Japan will again be left out in the cold.

## 6. CONCLUSION

Population aging is proceeding at a very high pace, especially in Japan, which reflects both a rapid reduction in past fertility rates and a remarkable rise in old-age longevity. Thus, aging should be regarded as a "future that has already happened", a reality that cannot simply be remedied by short- and medium-term policy strategies. All current efforts should be concentrated on improving the quality of life of senior citizens. It appears that population aging poses an even greater problem for Japan than it does for Germany, at least in the short run.

Even more important, the conclusion can be drawn that in Japan – as well as in Germany – the family is more and more losing its capability of

being the prime care-providing institution for the aged. Thus, “who will care?” is a question relevant not only to Germany, with its already high proportions of elderly living in relative isolation, but to Japan as well. It becomes obvious that Japan and Germany, notwithstanding their different cultural and historical backgrounds, have comparable situations when it comes to discussing aging and its related problems.

It could further be shown that unlike Germany, Japan has quite substantial regional disparities in aging as well as in the determinants of care; unfortunately, welfare policy-makers do not seem to consider these sufficiently. The Gold Plan of 1989 and its successor of 1994 tended to create a uniform level of supply without really addressing such local characteristics as differing living arrangements or income levels of the aged. There are fears that the new long-term care insurance system, too, might only insufficiently address regional disparities in demands for care. As a result, the peripheral and depopulated regions of Japan will once again be put at a disadvantage. This holds true for much of the southwestern periphery in particular.

To develop a sufficient level of care services that takes local differences into due account might require a fundamental change in the centralist attitudes and practices of both administrators and the general public, the main reasons why balanced regional development is far from being achieved in Japan. As a first step, local governments should be provided with more financial resources collected by their own in order to build up an adequate care level that would prevent the appearance of a “welfare migration” that could further aggravate the difference between depopulated and overcrowded regions.

#### REFERENCES

- HÖHN, Charlotte and Bernd STÖRTZBACH (1994): Die demographische Alterung in den Ländern der Europäischen Union. In: *Geographische Zeitschrift* 82, 4, pp. 198–213.
- ITÔ, Tatsuya (1994): *Seikatsu no naka no jinkôgaku* [Population Science for Everyday Life]. Tōkyō: Kokon Shoin.
- KOKUDOCHÔ CHIHÔ SHINKÔKYOKU KASO TAISAKUSHITSU (1998): *Heisei 9-nendohan kaso taisaku no genkyô* [Current Situation Concerning Policies against Underpopulation, 1997 Edition]. Tōkyō: Marui Kōbunsha.
- KOKURITSU SHAKAI HOSHÔ JINKÔ MONDAI KENKYÛJO (1997a): *Nihon no shōrai suikei jinkô – Heisei 9-nen 1-gatsu suikei* (Population Projections for Japan: 1996–2100, January 1997). Tōkyō: Kōsei Tōkei Kyōkai.

- KOKURITSU SHAKAI HOSHŌ JINKŌ MONDAI KENKYŪJO (1997b): *Todōfuken-betsu shōrai suikei jinkō – Heisei 9-nen 5-gatsu suikei* (Population Projections by Prefecture, May 1997). Tōkyō: Kōsei Tōkei Kyōkai.
- KOKURITSU SHAKAI HOSHŌ JINKŌ MONDAI KENKYŪJO (2002): *2001/2002 jinkō no dōkō. Nihon to sekai* [Population Trends 2001/2002. Japan and the World]. Tōkyō: Kōsei Tōkei Kyōkai.
- KŌSEI TŌKEI KYŌKAI (1997): *Gurafu de miru setai no aramashi. Heisei 7-nen kokumin seikatsu kiso chōsa no kekka kara* (Graphical Review of Japanese Household – from Comprehensive Survey of Living Conditions of the People on Health and Welfare, 1995). Tōkyō: Kōsei Tōkei Kyōkai.
- KŌSEISHŌ (1996): *Kōsei hakusho (Heisei 8-nenban). Kazoku to shakai hoshō – kazoku no shakaiteki shien no tame ni* [1996 White Paper on Health and Welfare. The Family and Social Security: For Social Support of the Family]. Tōkyō: Kōsei Mondai Kenkyūkai.
- KŌSEISHŌ JINKŌ MONDAI KENKYŪJO (1995): *Nihon no setaisū no shōrai suikei. Zenkoku suikei / todōfuken-betsu suikei – 1990-nen–2010-nen* (Household Projections for Japan by Prefecture: 1990–2010). Tōkyō: Kōsei Tōkei Kyōkai.
- KŌSEISHŌ JINKŌ MONDAI KENKYŪJO (1996): *Kōreisha no setai jōtai no shōrai suikei 1990–2010-nen* (Projection of Living Arrangements of the Elderly in Japan 1990–2010). Tōkyō: Kōsei Tōkei Kyōkai.
- LÜTZELER, Ralph (1997): Alte Menschen und ihre familiäre Situation in Japan. Demographische Entwicklung, ihre Ursachen und Implikationen für eine bedarfsgerechte Pflegepolitik. In: OBERLÄNDER, Christian (ed.): *Altern und Pflegepolitik in Japan*. Berlin and Tōkyō: Deutsches Institut für Japanstudien, pp. 11–53 (= *Miscellanea*; 15).
- LÜTZELER, Ralph and Regine MATHIAS ([1990]): Lange leben. Demographische Entwicklungen und soziale Veränderungen. In: HARDACH-PINKE, Irene (ed.): *Japan – eine andere Moderne*. Tübingen: Konkursbuch-Verlag Claudia Gehrke, pp. 38–63.
- MACKENSEN, Rainer (1974): Entwicklung und Situation der Erdbevölkerung. In: MACKENSEN, Rainer and Heinz WEVER (ed.): *Dynamik der Bevölkerungsentwicklung. Strukturen – Bedingungen – Folgen*. München: Hanser, pp. 20–79 [Second edition].
- MARSCHALCK, Peter (1984): *Bevölkerungsgeschichte Deutschlands im 19. und 20. Jahrhundert*. Frankfurt am Main: Suhrkamp.
- NAKAGAWA, Satoshi (1994): Nihon no shōrai jinkō – jinkō kōreika no shinten [The Future Population of Japan – Progression toward Population Aging]. In: *Rekishi to Chiri* 470, 1994/10, pp. 23–26.
- NIIGATA-KEN HOKEN FUKUSHIBU (1994): *Niigata-ken rōjin hoken fukushi keikaku* [Plan for Health and Welfare of the Elderly in Niigata Prefecture]. Niigata: Niigata-ken Hoken Fukushibu.

- ŌBAYASHI, Taryō (1995): Traditionelle Gesellschaftstypen und Kulturprovinzen in Japan. In: *Japanstudien. Jahrbuch des Deutschen Instituts für Japanstudien der Philipp-Franz-von-Siebold-Stiftung* 6, 1994, pp. 165–203.
- ŌE, Moriyuki (n.d.): *Kōreisha no chiiki bunpu hendō to shakai sabisu juyō henka ni kansuru kenkyū* [Research on Changes in the Regional Distribution of the Aged and in the Demand for Social Services]. Tōkyō: Kōseishō Jinkō Mondai Kenkyūjo Jinkō Kōzō Kenkyūbu [Unpublished Manuscript, 1995].
- OGAWA, Naohiro and Robert D. RETHERFORD (1993): The Resumption of Fertility Decline in Japan; 1973–92. In: *Population and Development Review* 19, 4, pp. 703–741.
- OGAWA, Naohiro and John F. ERMISCH (1994): Women's Career Development and Divorce Risk in Japan. In: *LABOUR (Review of Labour Economics and Industrial Relations)* 8, 2, pp. 193–219.
- PRAHL, Hans Werner and Klaus R. SCHROETER (1996): *Soziologie des Alterns. Eine Einführung*. Paderborn, etc.: Schöningh (= Uni-Taschenbücher; 1924).
- SACHVERSTÄNDIGENKOMMISSION "DRITTER ALTENBERICHT DER BUNDESREGIERUNG" (2000): *Alter und Gesellschaft. Dritter Bericht zur Lage der älteren Generation in der Bundesrepublik Deutschland*. Berlin: Bundesministerium für Familie, Senioren, Frauen und Jugend.
- SAGAZA, Haruo (1997): *Jinkō kōreika to kōreisha. Saishin kokusei chōsa kara miru kōreika shakai* [Population Aging and the Aged. The Aging Society as Reflected in the Latest Population Census]. Tōkyō: Ōkurashō Insatsukyoku.
- SŌMUCHŌ CHŌKAN KANBŌ RŌJIN TAISAKUSHITSU (1992): *Rōjin no seikatsu to ishiki. Dai 3-kai kokusai hikaku chōsa kekka hōkokusho* [The Lives and Attitudes of Elderly People. Results of the Third International Comparative Survey]. Tōkyō: Chūō Hōki.
- SŌMUCHŌ SEISHŌNEN TAISAKU HONBU (1999): *Sekai no seinen to no hikaku kara mita Nihon no seinen. Dai 6-kai sekai seinen ishiki chōsa hōkokusho* [The Japanese Youth in Comparison with the Youth of Other Nations. Report of the Sixth World Youth Survey on Attitudes]. Tōkyō: Ōkurashō Insatsukyoku.
- SŌMUCHŌ TŌKEIKYOKU (1993): *Nihon tōkei nenkan, Heisei 5, 6-nen* (1993/94 Japan Statistical Yearbook). Tōkyō: Nihon Tōkei Kyōkai and Mainichi Shinbunsha.
- SŌMUCHŌ TŌKEIKYOKU (1995a): *Nihon no jinkō. Heisei 2-nen kokusei chōsa saishū hōkokusho* (Population of Japan. Final Report of the 1990 Population Census), 2 vols. Tōkyō: Nihon Tōkei Kyōkai.
- SŌMUCHŌ TŌKEIKYOKU (1995b): *Heisei 5-nen jūtaku tōkei chōsa hōkoku* (1993 Housing Survey of Japan), 3 vols. Tōkyō: Nihon Tōkei Kyōkai.

- SŌMUCHŌ TŌKEIKYOKU (1996): *Heisei 7-nen kokusei chōsa hōkoku, dai 2-kan: Jinkō no danjo, nenrei, haigū kankei, setai no kōsei, jūkyo no jōtai, sono 1: Zenkoku-hen* (1995 Population Census of Japan, Volume 2-1: Sex, Age and Marital Status of Population, Structure and Housing Conditions of Households, Japan). Tōkyō: Nihon Tōkei Kyōkai.
- SŌMUCHŌ TŌKEIKYOKU (1997a): *Shakai seikatsu tōkei shihyō 1998 – todōfuken no shihyō* (Social Indicators by Prefecture 1998). Tōkyō: Nihon Tōkei Kyōkai.
- SŌMUCHŌ TŌKEIKYOKU (1997b): *Heisei 6-nen zenkoku shōhi jittai chōsa hōkoku. Dai 5-kan: tokutei setai-hen* (1994 National Survey of Family Income and Expenditure. Volume 5: Specific Households). Tōkyō: Nihon Tōkei Kyōkai.
- SŌRIFU TŌKEIKYOKU (1975): *Nihon no jinkō. Shōwa 45-nen kokusei chōsa no kaisetsu* (Population of Japan. Summary of the Results of 1970 Population Census of Japan). Tōkyō: Sōrifu Tōkeikyoku.
- STATISTISCHES BUNDESAMT (1998): *Statistisches Jahrbuch 1998 für die Bundesrepublik Deutschland*. Stuttgart: Metzler-Poeschel.
- VAUPEL, James W. (1997): *The Remarkable Improvements in Survival at Older Ages* [Unpublished paper, held at the Royal Society/British Academy meeting in London, May 7, 1997].
- VEITH, Karin and Hansjörg BUCHER (1994): Demographische Alterung und Pflegebedürftigkeit in privaten Haushalten Deutschlands im regionalen Vergleich. In: *Geographische Zeitschrift* 82, 4, pp. 214–225.
- YAMAZAKI, Mitsuhiro (1994): Chiiki kōzō no henka to chiiki no kōreika mondai [Changes in the Regional Structure and the Aging Problem of the Regions]. In: SHIMIZU, Hiroaki (ed.): *Kōreika to jinkō mondai* [Aging and Population Problems]. Tōkyō: Hōsō Daigaku Kyōiku Shinkōkai, pp. 129–138.