

## Childcare System in Japan

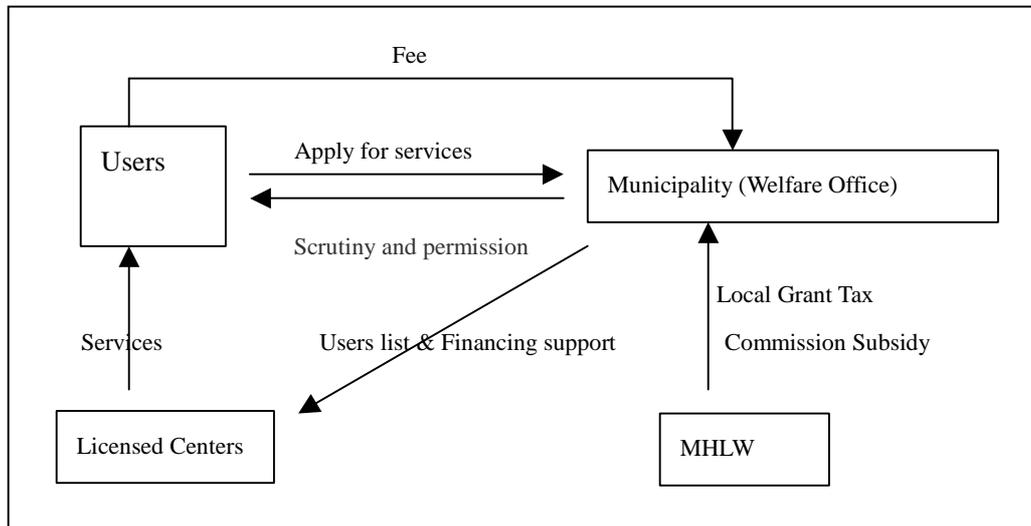
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### 1. Overview of the Japanese Childcare System

Government plays a principle role in running of childcare system in Japan. In specific, Ministry of Health, Labour and Welfare (MHLW) is responsible for regulating new entries into the market by setting a minimum standard in staff-child ratio, space of nursery room per child and capacities etc. Moreover, about 70% daycare centers are licensed ones who must receive strict supervision from the government as an exchange of its financial supports. For example, it is not the licensed daycare centers but the municipality's welfare office that can decide who can use the service, how much the service should be charged, and how to distribute the profit (see Graph 1 for details).

#### Graph 1 Mechanism of Licensed Daycare System



Not until the amendment of Child Welfare Law in 1997, no users were able to select a particular licensed daycare center by themselves. It was the local welfare office that examined each applicant's need for childcare and decided who should be approved of with a consideration of the applicant's working status and family resources. The amendment enabled parents to select preferable daycare centers, but in areas with obvious shortage of daycare services, the local welfare office still plays decisive role.

As of April 2001, there are 22,272 licensed daycare centers in Japan, which were taking care of 1.83 million, or 26 percent of preschool children. Furthermore, 55.8% of the licensed daycare centers were running by local governments directly, others running by private organizations (see Graph 2). Charge for licensed daycare services ranges between 0 and 80,000 Yen per month, depending on the household income, age of the child, number of siblings<sup>1</sup>, and residing municipalities. Besides these facilities, there exist 9,437 non-licensed daycare centers taking care of 222 thousand preschool children on December 2000. Non-licensed daycare centers generally have more freedom in management but few financial supports from the government. As a result, fee of the non-licensed centers is uniform for all users and the charges are averagely much higher than those of the licensed centers<sup>2</sup>.

**Graph 2 Childcare Facilities in Japan (As of April 2001)**

		Competent authority	
<b>Daycare centers</b>	Licensed (22,272)	Publicly-run (12,437)	<b>MHLW</b>
		Privately-run (9,835)	
	Non-licensed (9,437*)		
<b>Kindergartens (14,375)</b> (for children 3 years old and over)		Publicly-run (5,932)	<b>MEXT</b>
		Privately-run (8,443)	

MHLW: Ministry of Health, Labour and Welfare  
MEXT: Ministry of Education, Culture, Sport, Science and Technology  
\*As of Dec. 31, 2000.

On the other hand, there are 14,375 kindergartens, 58.7% of them were running by private organizations. They are supervised by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and provide care and education for more than 1.75 million preschool children aged 3 years and older. Fee of the public kindergartens is generally lower (at most 10,000 Yen per month), while the private kindergartens usually charge 20,000 to 30,000 Yen per month. However, working mothers are less likely to use these kindergartens primarily because their open time is too short (4 hours a day for example).

## 2. Childcare Arrangement of Preschoolers: Descriptive Statistics

### 2.1 Who Are Taking Care of the Preschool Children?

Table 1 outlines the primary childcare arrangements in the daytime by the

<sup>1</sup> Fee for the second or third child using licensed daycare center is discounted up to 50% in most municipalities.

<sup>2</sup> Charge for non-licensed daycare centers ranges between 50,000 and 100,000 Yen per month, depending on the length of service utilization, service content, convenience of its location and so on.

mother's working status. According to the results, 44.6% of the working mothers are using licensed daycare centers for childcare in the daytime, and only 4.9% of them choose to use non-licensed daycare centers. For household with working mothers, grandparents also play an important role as caregiver, especially when the child is under 1 year old.

**Table 1 Primary Childcare Arrangement by Mothers' Working Status (%) N=3,781**

Primary care arrangement	Total	Not Working			
		working	Total	Employed	Self-employed, etc.
Parent	49.7	68.3	12.9	8.6	23.5
Grandparent	9.1	5.8	15.5	17.2	11.4
Licensed daycare centers	19.8	7.2	44.6	48.8	34.6
Non-licensed daycare centers	2.1	0.7	4.9	5.9	2.4
Kindergartens	16.4	16.9	15.4	13.3	20.5
Other arrangements	1.1	0.8	1.8	1.9	1.6
Unknown	1.8	0.3	4.8	4.3	5.9
Total	100.0	100.0	100.0	100.0	100.0

Source: Oishi(2002)<sup>3</sup>

Note: 34% of mothers are working and 24% of the working mothers are salaried workers.

On the other hand, although most (68.3%) non-working mothers are taking care of the children in the daytime by themselves, there also exist a significant proportion (7.2%) of non-working mothers who are using licensed daycare centers regularly. The probable reasons could be as follows: (1) Admission to licensed daycare centers could be forwarded for reasons other than the working status of mothers such as sicknesses of parents, nursing care needs of other household members and so on; (2) Some mothers are taking a childcare leave; (3) Some non-working mothers pretended that they were working somewhere; (4) some areas, especially rural areas, have enough capacity to admitting use of licensed daycare centers without strict work requirement.

Kindergartens account for 16.4 percent of childcare arrangement of all preschool children, but the ratio is lower when the mother is employed (13%). It is interesting to see that self-employed mothers are more likely to use kindergartens than employed mothers. This may be because self-employed mothers have more freedom to arrange their working hours than other working mothers do.

Table 2 demonstrates the primary care arrangement by age of the youngest child. In a word, the younger the child, the less likely to use daycare centers, the more likely mothers care the child by themselves. For instance, only 4.3% of child under 1 year old are cared by licensed daycare centers, while more than 30% of children older than 3 years old are cared by centers in the daytime.

<sup>3</sup> Oishi (2002) employed 3,781 household samples with two parents and at least one preschool children from 1998 *Basic Survey on People's Life*, which is conducted by MHLW every 3 years.

**Table 2 Primary Childcare Arrangement by Age of the Youngest Child (%)**

Primary care arrangement	Total	Age of the youngest child						
		0	1	2	3	4	5	6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Parent	49.7	78.7	68.4	64.0	36.5	14.4	11.7	12.7
Grandparent	9.1	14.5	13.7	11.7	6.0	2.2	1.4	1.4
Licensed daycare centers	19.8	4.3	12.8	17.8	31.3	31.5	32.5	23.9
Non-licensed daycare centers	2.1	0.9	2.6	3.6	1.5	2.6	1.8	0.0
Kindergartens	16.4	0.0	0.0	0.0	22.5	45.3	47.4	56.3
Other arrangements	1.1	0.8	1.7	1.6	1.3	0.8	0.6	0.0
Unknown	1.8	0.9	0.9	1.3	0.9	3.2	4.5	5.6

Source: Oishi(2002).

## 2.2 Who Are Richer? Users or Non-users of Daycare Centers

Table 3 summarizes average income of the households by the category of childcare arrangement. Households using non-licensed centers or kindergartens are relatively richer not only in the absolute value but also in the relative value of income adjusted by equivalence scale. On the other hand, incomes of other three kinds of household do not differ with each other significantly.

**Table 3 Household Income, by Primary Childcare Arrangement**

	No. of obs	Average	Average	Father's	Mother's
		income	income, EQV		
million Yen					
Total	<b>3819</b>	<b>6.793</b> (4.662)	<b>2.296</b> (1.430)	<b>4.938</b> (3.248)	<b>0.697</b> (1.509)
Parent / Grandparent	<b>2232</b>	<b>6.596</b> (4.648)	<b>2.241</b> (1.240)	<b>4.960</b> (2.820)	<b>0.411</b> (1.133)
Licensed daycare centers	<b>757</b>	<b>6.774</b> (4.533)	<b>2.225</b> (1.562)	<b>4.051</b> (3.050)	<b>1.430</b> (1.894)
Non-licensed daycare centers	<b>81</b>	<b>7.212</b> (5.056)	<b>2.561</b> (1.609)	<b>4.923</b> (3.727)	<b>1.554</b> (2.491)
Kindergartens	<b>628</b>	<b>7.341</b> (4.707)	<b>2.517</b> (1.641)	<b>6.003</b> (4.315)	<b>0.577</b> (1.486)
Other arrangements	<b>45</b>	<b>7.239</b> (4.397)	<b>2.333</b> (1.087)	<b>4.338</b> (2.393)	<b>0.683</b> (1.197)

Source: Oishi(2002)

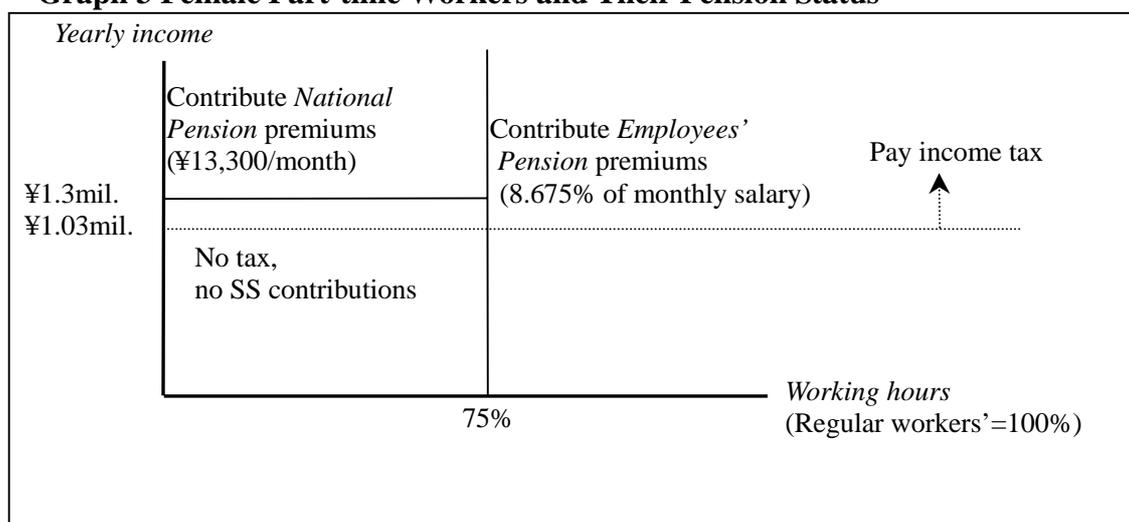
Note: (1) Standard errors in parentheses. (2)EQV adjusted income=(average household income)/EQV, where EQV= 1+ 0.7\*(number of adults -1) + 0.5\*number of children.

Turning to the contribution of mother and father to the household income, we find that mothers using daycare centers averagely earn more than mothers in other categories. For example, mothers using licensed daycare centers contribute to 21.1% of overall household income, while mothers with the children cared by themselves or grandparents contribute to only 10.3% of overall household income,

and mothers using kindergartens earn only 7.9% of overall household income.

Average incomes of mothers, users or non-users of daycare centers, are quite low in Japan partly because of the tax system. Specifically, under the current tax system, most mothers have strong incentives to work less than 1.03 million Yen per year otherwise the income deduction for dependent spouse (0.38 million Yen) will no longer be applicable to their husbands and they must pay income tax as well. Moreover, if she makes more than 1.3 million Yen a year, or if her working hours reach 75% of the regular workers, she could no longer enjoy exempt from social insurance premium (Graph 3).

**Graph 3 Female Part-time Workers and Their Pension Status**



For fear of losing these tax and social security benefits, many housewives choose to work part-time in Japan<sup>4</sup>. Table 4 verifies the above hypothesis by showing that only one-third of mothers using licensed daycare centers are paying income tax and social insurance premiums.

**Table 4 The Taxation Condition of Mothers' Incomes, by Primary Childcare Arrangements (%)**

	Total	Parent/ Grandparent	Licensed daycare centers	Non-licensed daycare centers	Kindergartens
No earnings	<b>67.4</b>	<b>79.6</b>	<b>33.1</b>	<b>38.8</b>	<b>73.7</b>
With earnings	<b>32.6</b>	<b>20.4</b>	<b>66.9</b>	<b>61.3</b>	<b>26.3</b>
Paying income tax	16.3	10.7	31.2	38.8	11.9
Paying SS premiums	18.4	12.1	36.5	41.3	12.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Oishi(2002)

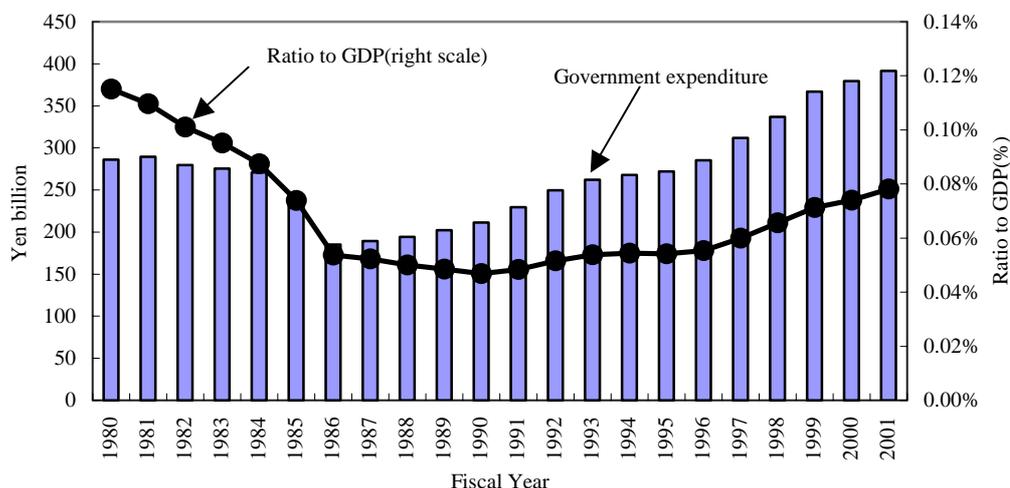
<sup>4</sup> Hourly wage rate of part time workers is, on average, 67% of that of the female regular workers, and in comparison with that of male regular workers, it is 44%. (Wage Census 2002 by MHLW)

### 3. Costs of Childcare Services

#### 3.1 The Shifts of Government Expenditure for Childcare Services

Because of the financial difficulty caused by the two oil crises, the government spending on childcare business shrank sharply during the early 1980s. It was not until 1989 when the total fertility rate of Japan renewed a historically low record that the government began to allocate more resources in childcare business in order to promote birth rate (Graph 4). Along with the declining birthrate, the national budget for licensed daycare business has been climbing up and reached as high as 407.1 billion Yen in 2002<sup>5</sup>. However, in terms of the ratio of childcare spending to GDP (0.08%), it is still below the level of early 1980s. In addition, as we will see in section 3.3, only a small portion of total daycare expenditure is financed by national budget.

**Graph 4 Trends of National Spending on Licensed Daycare Centers**



Source: *White Paper on Child Care 2002*, p.23

#### 3.2 Composition of Childcare Costs

A large amount of expenditures happen when running the licensed daycare centers. The commonest expenditures are labor cost, equipment maintenance cost, management cost, and cost for lunch services. Although there is no national aggregate statistics on the composition of childcare costs, labor cost is obviously the largest item in overall expenditures of licensed daycare centers in many municipalities. For example, in Chiyoda-city, Tokyo, the share of labor cost was 80% in FY2000. Because many of the licensed daycare centers in Japan were established in the 1960s and 1970s, and because most childcare workers,

<sup>5</sup> Besides the running cost, government also subsidized licensed daycare centers for the maintenance of building and facilities. For example, central government has provided 20 billion yen and local governments have provided a total of 10 billion Yen to licensed daycare centers for facility maintenance.

especially those in public daycare centers, were hired at a seniority-based wage system, labor cost rises with the average age of childcare workers (see Section 4 for details).

### 3.3 Who Afford the Childcare Costs?

According to an estimate of MHLW, total childcare expenditures for licensed daycare services in 2001 amounted to 1,600 million Yen, or 0.32% of GDP. These childcare expenditures are shared among central government, local government and users. Specifically, 50% of the deficits (A-B) are covered by national budget, 25% by prefecture budget, and 25% by municipality budget (Graph5).

**Graph 5 Burden Sharing of Running Costs for FY2001 (Yen billion)**

Total Expenditures: 2000 or more (estimated value)							
Standard Cost Settled by MHLW (A) <b>1600</b>					Additional Municipality Budget		
<b>Real Charge for Users</b>	Additional Municipality Budget	National Budget (D)	Prefecture Budget (E)	Municipality Budget (F)			
<b>470</b>	<b>220</b>	<b>450</b>	<b>230</b>	<b>230</b>			
<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;"><b>Nominal Charge for Users (B)</b></td> </tr> <tr> <td style="text-align: center;"><b>690</b></td> </tr> </table>						<b>Nominal Charge for Users (B)</b>	<b>690</b>
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<b>690</b>							

Note: National Budget (D)=(A-B)\*50% ; E=F=(A-B)\*25%

To be emphasized, although the central government (MHLW) has set a standard expenditure criterion for each licensed daycare centers, many municipalities have been infusing additional budget to lessen the burden of users and to subsidize labor costs of daycare centers in hiring temporary staffs<sup>6</sup> and improving benefits of childcare workers. Taking a consideration of the additional subsidies from municipalities, we found that the total operating expenses for licensed daycare services could exceed 2 trillion Yen<sup>7</sup>, while the exact number is not known.

### 3.4 Heavy Burden of Municipalities: The Case of Chiyoda-city

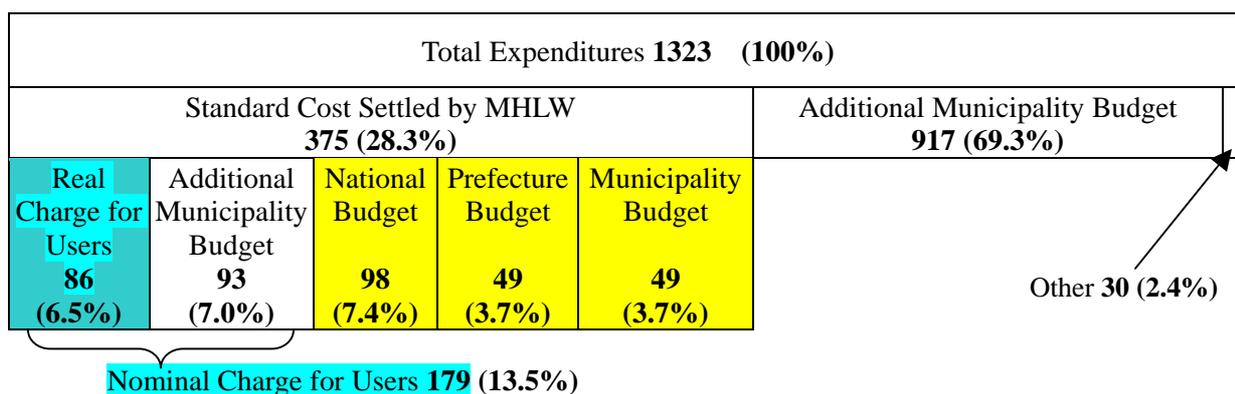
In Chiyoda-city, actual running costs are 3.5 times of the standard costs criterion set by MHLW. Contributions of national budget, prefecture budget, Chiyoda-city budget, and users' charges to the actual running costs are 7.4%, 3.7%, 80.0%, 6.5% respectively (Graph6). Dividing total operating expenses by

<sup>6</sup> Because the minimum staff-child ratio set by the government is low by international standard, especially for children aged 3 years and older.

<sup>7</sup> Fukuda (2001) estimates that the total operating expenditures of licensed daycare centers in 1998 should be around 2,000 billion Yen, or 0.4% of GDP in that year.

the number of children cared at licensed daycare centers in Chiyoda-city, we get the average yearly cost per child of 3.0 million Yen, which is about 15 times of the actual childcare charge. In other words, households using licensed daycare centers in Chiyoda-city receive a total of 2.8 million Yen benefit in-kind per year. Because of this heavy fiscal burden, many municipalities are reluctant either to expand admission to licensed daycare centers or to build new daycare centers.

**Graph 6 Share of Running Costs in FY2000: the Case of Chiyoda-city (Unit: million Yen)**

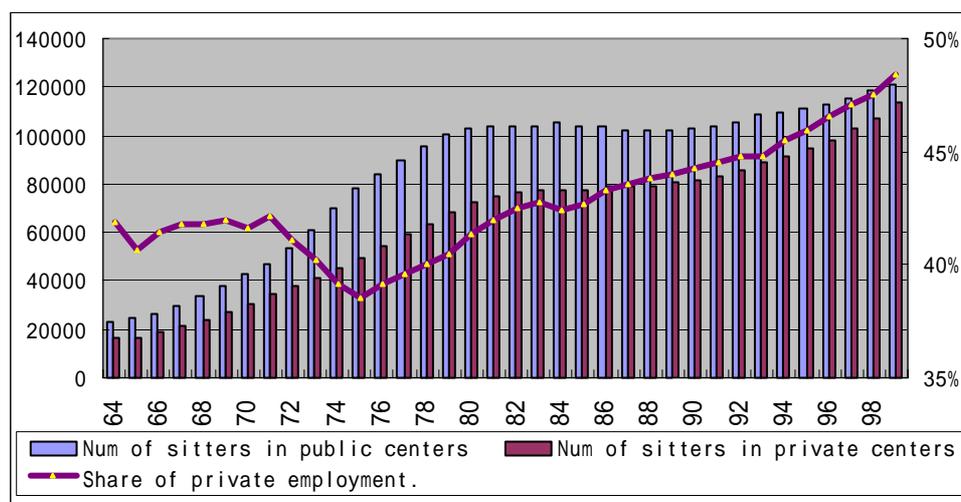


#### 4. The Childcare Labor Market in Japan

##### 4.1 Introduction

Child minder has been one of the most longed-for jobs of little girls in Japan. According to the survey on primary school students by Daiichi Life Insurance Company, child minder has always been the most or second most adorable profession of small Japanese girls since 1990.

**Graph 7 Number of full-time child minders in public and private child-care centers**



Source : "Investigation Report of Social Welfare Facilities", MHLW, 1964-1999

Graph 7 shows that there are more than 232 thousand child minders working fully time at 12,849 licensed daycare centers<sup>8</sup> around the country in 1999. Graph 1 also informs us that the ratio of child minders employed by the private daycare centers has been increasing since the end of 1970s. In consequence, private daycare centers employ almost half (48.4%) of the total childcare labors in 1999. On the other hand, part time child minders, whose number is also increasing recently, account for only about 10% of the overall employment of licensed centers<sup>9</sup>. Like many other countries, 95% of the child minders are female in Japan.

#### **4.2 Qualification System of Child Minders in Japan**

98% of the child minders in Japan retain a qualification of childcare. Childcare Qualification System launched in 1949, and it provides two absolutely different paths for qualification acquisition. The first way is to graduate from some 2-year Childcare Training School<sup>10</sup> authorized by the Ministry of Health, Labor and Welfare (MHLW), where childcare qualification will be awarded automatically with the graduation. The second way is to receive a qualification test held in each prefecture annually. The examination pass rate differs from 8 to 15%, depending on the test year and the test area. 90.8% people obtain childcare qualification by the first way in 1999, and the other 9.2% obtain it by examination.

Soon after the first (1973) and second (1979) oil shocks, childcare qualification acquisition was unprecedented popular among young women and more than 50 thousand persons claimed the qualification each year. Since 1990, however, the childcare qualification has been offered on a quite stable pace, ranging from 35 thousand to 40 thousand per year.

#### **4.3 Motivation of Qualification Acquisition**

Many people acquire childcare qualification not only for future employment as a child minder. We suppose that young women pursuing the childcare qualification could also be motivated by some other reasons such as investment in self-value at the marriage market, hobbies, insurance for uncertainties, or simply preparation to be a mother.

Graph 8 suggests some likely correlation between the employment rate of childcare qualification obtainers and the business cycle: The better the economic condition, the fewer qualification obtainers choose to work as a child minder. For instance, the employment rate dropped significantly (see, around 30-40%) during the period of bubble economy in 1980s, and rebounded after the crash of

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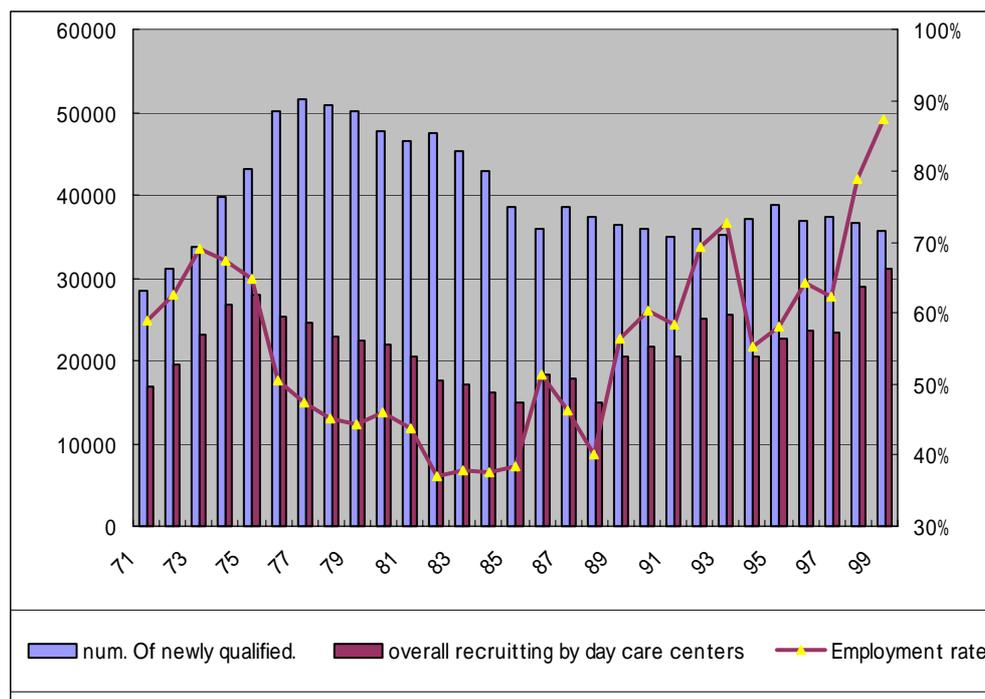
<sup>8</sup> If not specially mentioned, the following discussions are all about LICENSED childcare centers. Non-licensed daycare centers account for only a small portion (around 10%) of the overall childcare labor market.

<sup>9</sup> Source: "White Paper on Child Care"(2001), Institute of Child Care Research, P.268

<sup>10</sup> These childcare training schools include college, junior college, higher vocational school, and other facilities, which have given training to 3.4%, 81.1%, 13.2% and 2.2% of the overall school-path childcare qualification obtainers respectively in 2000.

bubble economy. Moreover, we can also read a significant rise of employment rate either before or after the oil shock of 1974. Today, more and more young people choose to work at the daycare center soon after acquiring the childcare qualification. In 1999, while the Japanese economy was still in a big recession, the proportion of qualification obtainers choose to work at daycare centers was as historically high as 87.2%.

**Graph 8 Proportion of childcare qualification obtainer working at daycare centers**



Source of recruiting data : "Investigation Report of Social Welfare Facilities(IRSWF)", MHLW, 1964-1999

Source of employment rate: Investigation data, Bureau of Children and Family, MHLW.

Note: Employment Rate=(overall recruiting by day care centers)/(number of new qualification obtainer)

#### 4.4 Economic Status of Childcare Workers- Comparing With Other Professions

Although child minder has been one of most favorite profession among Japanese young women, childcare workers are not necessary in a better economic status than their counterparts. Table 5 gives a comparison of average yearly income and working hours per month of child minders in private daycare centers with those of nurse and female junior college graduate working in the service sector.

**Table 5 Comparison of the economic status of child minder and other career labors**

	Child minder	Hospital Nurse	Female junior college graduate in service sector
Average age	31.9	34.1	32
Average tenure	7.9	6.7	-
Average working hours per month	188	178	-
Average yearly income (¥1,000)	3646.8	4837.7	4814.4
Wage rate (Yen/Hour)	1616.5	2264.8	-

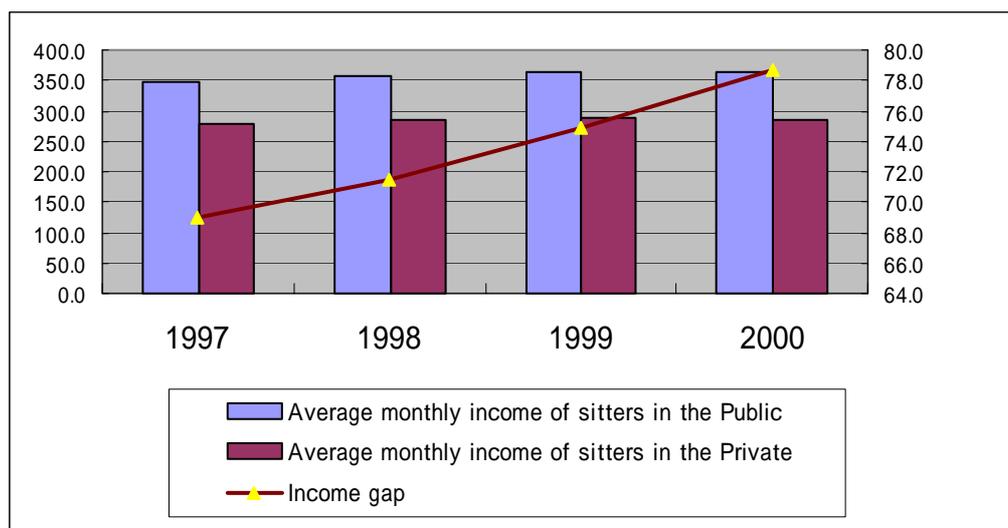
Source: "Wage Census", MHLW, 2001

Although there exists a lot of similarity in career path between child minder and hospital nurse, child minders are definitely worse paid than the hospital nurses. Given the poorer payment, child minders have been working longer than the hospital nurses. In consequence, the average wage rate of child minders is about one quarter lower than that of the hospital nurses. Compared to the overall female junior college graduate in service sectors, the child minders in private daycare centers is also significantly poorly paid.

#### 4.5 Dual Labor Market: Gap Between the Public and Private Sectors

It is well known that there exists huge gap in working condition and cash payment between the child minders in private daycare centers and those in the public ones.

**Graph 9 Income gap between child minders employed in private and public daycare centers (unit: ¥1,000)**

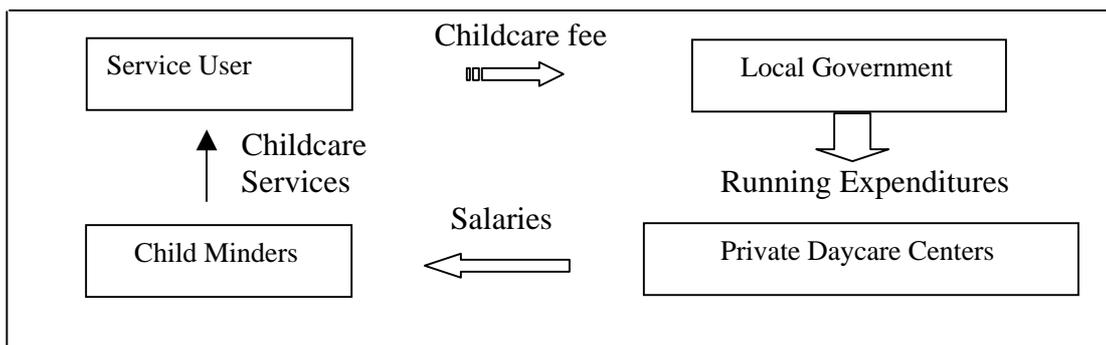


Notes : 1) Average monthly income of child minders in the public day care centers were calculated basing on the income of general administrative jobs from the "Income Survey of Local Civil Servants" (1997-2000). 2) Average monthly income of child minders in private day care centers were calculated from the "Wage Census" (1997-2000).

Graph 9 shows that the average cash payment of child minders in public daycare centers is about 20% higher than that of the private centers. Moreover, this payment gap is expanding year by year, mainly because the income growth of public sector is relatively faster than that of the private sector and because the childcare labors in public centers averagely have longer job tenure than their private counterparts do.

It is not so hard to find out what account for the gap in cash payment between public and private sectors. Not until very recently<sup>11</sup>, child minders in public daycare centers was treated equally in payment with that of the general administrative job of local civil servants, which also means their incomes will rise bit by bit with their age until the retirement. On the other hand, income of child minders in private day care centers is determined in totally different mechanism like follows:

**Graph 10 Mechanism of salary determination of child minders in private sector**



Private daycare center provides services but does not charge the users directly. Local government, as an intermediate agency, decides who will get the service and how much they should pay for the service. Government (MHLW) financed the private daycare centers running expenditures that are substantially commensurate with the number (not the tenure) of staffs. As a result, salaries of most child minders in private daycare centers generally stop rising in the fifth year of employment.

Furthermore, child minders of public sector are enjoying a better security in retirement allowance, medical care services as well as in job stability<sup>12</sup>. In addition, because many municipalities have been subsidizing public daycare centers in hiring temporary childcare workers, upon the standardized labor by the central government, public daycare centers could employed relatively more child

<sup>11</sup> MHLW decided to reform the income system of child minders in public sector in 2000, and their income base are turned from the administrative job to the welfare job whose income profile is a flatter one with age.

<sup>12</sup> Turnover rate of childcare labors in private centers (14.1%) is about 2 times higher than that of the childcare labors in public centers (5.6%). Source: Investigation Report of Social Welfare Facilities 1999, WHLW.

minders to take care a fixed number of children.

Therefore, we define the public childcare centers as a primary labor market and the private childcare centers as a secondary market. The childcare labor market exhibits the characteristics of dual market not only because of the treatment gap between the public and private sectors, but also because the fluidity of labor between these two sectors is quite rare. It is especially difficult for child minders in private daycare centers turning over to the public employers. Maximum age (no older than 30 in most prefectures) limitation for job application and competitive selection race (see 1 of 20 candidates in Osaka in 2000) are two of the highest hurdles for job switching of childcare labors in private centers.

### **5. Major Problems in Childcare Market**

Residents in Japan's metropolitan areas are suffering from a chronic shortage of licensed childcare services. Although the number of admission to licensed daycare centers has been increasing significantly since 1995, the amount of demand has been climbing in an even faster pace. The major reason is that besides the large number of children in waiting list, there are an even larger group of silent mothers who would otherwise choose to apply for licensed childcare service if the waiting list were not so long. As a result, number of children in the waiting list for licensed childcare did not drop but rise up instead recently. The number of children in waiting list is as many as 35,144 in 2001, a 7% up compared to the number of 1996. According to the estimation results of Zhou & Oishi (2002), given a childcare charge of 25,000 Yen per month, 25-35% preschool children in metropolitan areas could be regarded as underlying demanders of licensed childcare services.

Strategies of Japanese government to shorten the waiting list have been centered on expanding the capacity of licensed daycare centers and upgrading their service contents aiming at reducing waiting because of needs-and-supplies mismatch. Supply expansion is obviously one of the most basic strategies to reduce shortage. Generally supply expansion could be realized by adding public investment, reducing management costs. In particular, privatization of public daycare centers has been advocated by some economists (Hayashi 1996; Fukuda 2000 etc.) to improve the efficiencies of their management. Furthermore, Yashiro (2000) argues that abolition of strict regulation on new entries and competition mechanism should be introduced into the childcare service market in order to reduce running cost of daycare centers. Zhou (2002) suggests that dual childcare labor market and buyer monopoly market structure result in under-equilibrium amount of service supply and implies that supply expansion could be realized by narrowing payment gap between childcare workers of public and private centers and by introducing competitive mechanism into the market.

Price adjustment as a basic method to deal with shortage problem has also been a common sense in economics. Unfortunately, few studies<sup>13</sup> has mentioned or discussed about the efficiency of price adjustment in alleviating excessive demand problem for licensed childcare services primarily because childcare

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<sup>13</sup>Yamashige (2001) is one of the exceptional researches that suggest that service price should be drawn up to shorten waiting list of licensed day care centers.

industry is a strictly governmental regulated market where service prices are fixed at a level far below the real cost and the market price as well. Price adjustment, although an efficient way to deal with shortage problem, implies big surgery to the present system and it could be hard to achieve an agreement from the groups with vested interests. Nevertheless, Zhou & Oishi (2002) proposes a compromise method of replacing subsidy in-kind with subsidy in-cash to reduce inefficient usage of licensed daycare services. More specifically, this compromise system involves several big reforms to the present system as follows: (1) drawing up childcare charge to the equilibrium prices; (2) abandoning means-test of the users and set a uniform price system for daycare services and (3) Increasing child allowance from a uniform amount of 5,000 Yen per month to comparable level of the childcare charge, varying with the household income. Under the proposed new system, rational mothers will compare their expected income with the childcare charge and decide whether work outside or not.

### **References**

- Blau, M. (1990), "The Child Care Labor Market", *The Journal of Human Resources*, 27(1), pp9-39.
- Institute of Child Care Research( 2001), *White Paper on Child Care*.
- Fukuda, Motoo(2000) "Study of Childcare Supply – A Perspective of Cost"(in Japanese) , *Quarterly Journal of Social Security Research (Kikan Syakaihosho Kenkyu)*, 36 ( 1 ) ,pp.90-101
- Hayashi, Y. (1996) "Contemporary Status and Problem of Childcare Business"(in Japanese), *Quarterly Journal of Social Security Research (Kikan Syakaihosho Kenkyu)*, 32 ( 2 ) , pp.158-166
- Katsumata, Yukiko (1995) "User's Charges in Day Nursery Fee and policy on Revenue Source," *Review of Social Policy*, No.4, pp.83-104.
- Komamura, Kohei (2002) "An Analysis about costs of child-care services and supply-demand mismatching," Institute of Population and Social Security Research ed. *Shoshi Shakaino Kosodate Shien*, Tokyo University Press (in Japanese).
- Murakami, Masako (1999) *Economics of Social Security 2nd ed.*, Toyo Keizai Shinpo-sha.
- Oishi, Akiko(2002)."The Effect of Childcare Cost on Mother's Labor Force Participation", *Journal of Population and Social Security*, pp.50-65
- Tsuya, Noriko O. and Chizu Yoshida (2002) "The Need for Childcare Services and Desired Fertility in Contemporary Urban Japan: The Case of Yokohama City 2000," mimeo.
- Yashiro, Naohiro (2000) "Chapter 5 Regulation Reform for Social Welfare System", Yashiro,N. eds. "Economic Analysis to Social Regulations"(in Japanese), Nihon Keizai Xinbunsha
- Zhou,Yanfei (2002), "Shortage of Childcare Service and the Structure of Childcare Labor Market in Japan"( In Japanese), *Nihon Keizai Kenkyu (Japanese Economic Review)*, *Forthcoming*
- Zhou,Yanfei & Akiko. S. Oishi(2002), "Latent Demand for Licensed Childcare Service in Japan"(In Japanese) , paper presented at the 2002 Japanese

Economic Conference, Hiroshima University, Japan

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