EXPENDITURE DISTRIBUTION AND PATTERNS OF THE POOR IN KOREA

Do Hyung KIM

Any attempt to make reasonable estimates of the poverty level must take account of the unequal distribution of expenditures among income groups. Although various aspects of poverty can be considered, there is no doubt that consumption is the most important indicators identifying the poor.

The first section examined the expenditure distribution, thereby describing the pattern of the change in inequality of different expenditures and their relative usefulness as poverty indicators in relation to income growth within households. This analysis is applied to judge what indicators are useful to defining poverty cutoff points according to the stage of economic development. The second section presents the pattern of poverty defined variously, in terms of the indicators identified in Section I.

I. EXPENDITURE DISTRIBUTION AND INDICATORS OF POVERTY

Historically, interest in development patterns has centered on sectoral shifts in consumption and production over time. One of the principal direct effects of development has been the rise in non-food consumption as predicted by Engel's law.[1] This can be measured directly from cross-country data, assuming that the consumption pattern is determined primarily by the level of income. Consumption patterns in each country have been treated systematically so as to bring out their similarities. In this section, attention was focused on the relationship between the pattern of inter-temporal changes in inequality in consumption expenditures and the level of income.

A. *Method of Analysis and Classification of Expenditures*

The concept of income elasticity has played an important role in the demand analysis. Therefore, we must consider the relationship of this concept to our method. The orthodox approach using income elasticity has a long history. The Engel curve is still widely used to show variations in family expenditures in connection with the distribution of household income. Nevertheless, an alternative

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[1] The second effect is the change in factor proportions resulting from the growth of physical and human capital in relation to population. Changing factor proportions are evidenced, for example, in the shifting of export patterns between primary and manufactured goods.

approach shall be used in analyzing expenditure distribution. The method used here is to adopt the concept of pseudo-Gini coefficients for each category of consumption expenditures.

Suppose that total income Y is the sum of K-components, such that its component is denoted as $X(i)$, $(i=1,2,\ldots,K)$. Then, the Gini coefficient for Y, G, can be decomposed into categories as follows:

$$G=\sum W(i)G(i)\,, \tag{1}$$

where $W(i)$ is the ratio of means of X to$Y$ and $G(i)$ is the pseudo-Gini coefficients for $X(i)$.[2]

Let us begin with the relationship between total consumption expenditure and the i-th expenditure. Generally, the Engel function is defined as

$$\log X(i,\ j)=a+b\ \log C(j)+u(i,\ j), \tag{2}$$

where $X(i,\ j)$ is the expenditure on the i-th category by households belonging to the j-th group and $C(j)$ is total expenditures or income of the j-th group. To obtain income elasticity, b can be estimated by the weighted least squares method. The least squares estimate of b is given as

$$\begin{aligned}\hat{b}&=(\text{covariance between } \log X \text{ and } \log C)/(\text{variance of } \log C)\\&=(\text{correlation between } \log X \text{ and } \log C)\ (\text{standard deviation of } \log X)/(\text{standard deviation of } \log C).\end{aligned} \tag{3}$$

Experience shows that the correlation is usually high and near to unity. Thus, we can approximate income elasticity, $\hat{b}$, by

$$\hat{b}=(\text{standard deviation of } \log X)/(\text{standard deviation of } \log C). \tag{4}$$

Income elasticity is determined mainly by the ratio of two distribution statistics. If we replace these statistics with pseudo-Gini coefficients for $X(i,\ j)$ and $C(i,\ j)$, the essence of the income elasticity approach can be integrated into ours. Furthermore, the ratio becomes more meaningful when the relationship shown in equation (1) is recalled.

Mizoguchi and Saeki suggested a strong correlation between income elasticity and the ratios of pseudo-Gini coefficients (i.e., pseudo-Gini coefficients of X divided by those of C) [4]. Further, Saeki clarifies the relationship between income elasticity and expenditures (income) distribution [6, pp. 10–13]. Supposing the log normal distribution of income, he obtained the basic relationships as shown in equation (5) and (6). Each of them is derived, using the different form of Engel function.

$$G_i=\eta_i G\,, \tag{5}$$

[2] The data are arranged in ascending order for the calculation of Gini coefficient, but not necessarily so for that of pseudo-Gini coefficient. For the details, see V. M. Rao, "Two Decompositions of Concentration Ratios," *Journal of the Royal Statistical Society*, Series A, 132, Part 3 (1969); J. C.H. Fei, G. Ranis, and S. W.Y. Kuo, "Growth and the Family Distribution of Income by Factor Components," *Quarterly Journal of Economics*, Vol. 42, No. 1 (February 1978); and N. C. Kakwani, "Applications of Lorenz Curves in Economic Analysis," *Econometrica*, Vol. 45, No. 3 (April 1977).

$$G_i = 2N\left(\frac{b_i\sigma}{\sqrt{2}} \mid 0, 1\right) - 1, \tag{6}$$

where

G_i: Gini concentration ratio of expenditure,
η_i, b_i: income elasticity in linear and double log form,
G: Gini concentration ratio of income, and
$N(0, 1)$: normal distribution.

They indicate that when income elasticities and inequality of income are given, inequality of expenditures is uniquely determined.

As evident from equation (5), income elasticity is equal to the ratio of pseudo-Gini coefficients. For equation (6), using the double-log form of the consumption function, theoretically, it is difficult to verify these relationships except the case, $b_i = 1$. However, the empirical results on income elasticity and pseudo-Gini coefficients using the equations (1) and (2) showed that pseudo-Gini coefficients are a satisfactory indicator of income elasticity.

The data used here are from the *Family Income and Expenditure Survey* (FIES) [2] available in Korea. These data cover all non-agricultural households, and contain detailed figures on consumption expenditures grouped by income (or expenditure) classes. Here, the New Standard System of National Accounts method is used. Consumption expenditures are retabulated into eight categories: (G1) food and beverages; (G2) clothing; (G3) rent,[3] fuel, and light; (G4) household appliances and equipment; (G5) health and medical care; (G6) transportation and communication; (G7) recreation and education; and (G8) others. These categories are further grouped into four types according to the nature of expenditures: non-durable (N-D), semi-durable (S-D), durable (D) goods, and service (S). In this section, we will make use of the former eight-category classification mainly.

Using these data, both the proportion of each category of expenditures in total expenditures and the inequality in their distribution over the period 1964–75 have been estimated. We have thus tried to examine the expenditure structure and its distribution. But this study is inadequate in the sense that it still lacks a picture of the process of longer-run change spanning over more than a decade.

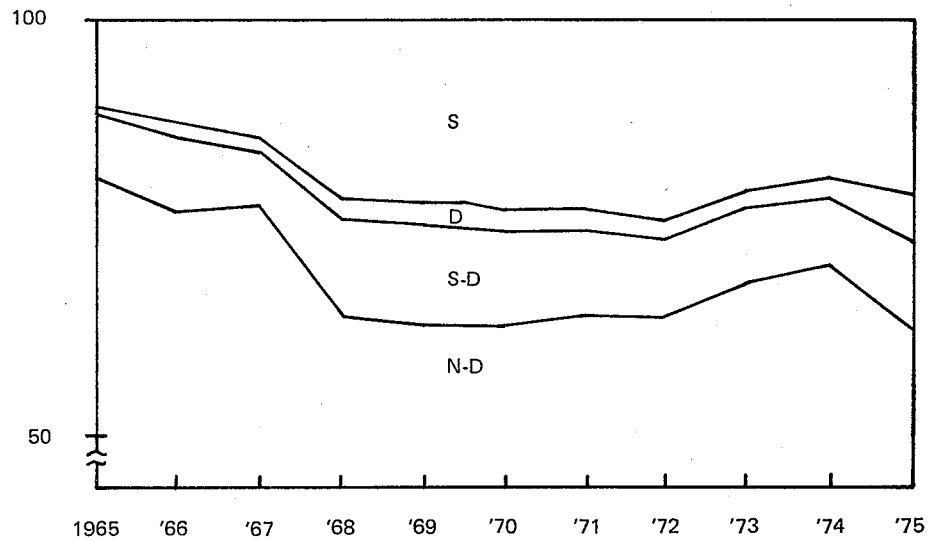
B. *Some Structural Changes in Expenditures and Inequality*

Evidence of structural change in expenditures can be examined by analyzing (a) the composition of expenditures (b) their contribution to total inequality in relation to development. Some variations are apparent in the composition of expenditures as shown in Figure 1.

In Korea, the share of N-D declines rapidly from 1965 to 1970, but this trend reverses itself from 1971 to 1974. The share of N-D is especially high for the years 1973 and 1974. With this exception, the trends seem to follow Engel's law. The share of S has significantly increased such that services now comprise about 20 per cent of total expenditures. This shows that people have a strong preference for recreation, education, and personal care which are usually luxuries for low

[3] Excluded an estimated rent for owner occupied dwelling.

Fig. 1. Percentage of Consumption by Four Groups of Expenditures



Source: [3, various issues].

income families. The shares of both D and S-D have gradually increased. It appears that the remarkable changes that took place in Korea from 1965 to 1970 were caused by rapid economic development, and were not stable.

The next task is to examine the pseudo-Gini coefficients for each of the eight categories shown in Table I.

(a) Food and beverages (G1): The inequality narrowed until 1971 but has fluctuated thereafter.

(b) Clothing, rent, fuel and light, and household appliances and equipment (G2–G4): The inequality for these items has been consistently low when compared to other countries. It decreased until 1971 and then increased.

(c) Health and medical care (G5): Even though there have been ups and downs in the trend in inequality, it may be observed that, on the average, the distribution of these expenditures has been somewhat more equal in the early 1970s than in the 1960s.

(d) Transportation and communication (G6): There seems to have been fluctuations in inequality after 1971.

(e) Recreation, education, and others (G7–G8): There seems to have been no distinct narrowing in disparities for almost all of the expenditures.

To discuss the relationship between the distribution of total consumption expenditure and expenditures by categories, the total Gini coefficient must be decomposed by Rao's decomposition formula. In Table II, the contribution of G1 to total inequality is seen to be the greatest, as expected. And Korea's contribution of G1 and G2 seems to have increased until the early 1970s.

To use the decomposition formula more fruitfully, there ought to be some means of analyzing the share effects as well as the pseudo-Gini effects. Consider the following definition:

TABLE I

PSEUDO-GINI COEFFICIENTS

	G1	G2	G3	G4	G5	G6	G7–G8
1965	0.2559	0.4459	0.2662	0.5832	0.3903	0.4409	0.5198
1966	0.2386	0.4134	0.2597	0.5688	0.3803	0.4311	0.5175
1968	0.2214	0.3996	0.2508	0.5210	0.4119	0.3726	0.3977
1970	0.2339	0.3096	0.2347	0.5056	0.3067	0.3259	0.3555
1971	0.1956	0.2853	0.2121	0.5148	0.3458	0.3504	0.3585
1972	0.1967	0.2220	0.2257	0.5559	0.2922	0.3532	0.4089
1973	0.2161	0.3005	0.2947	0.4977	0.3329	0.3102	0.3898
1974	0.2281	0.3184	0.2187	0.5365	0.3203	0.3500	0.3984
1975	0.2035	0.3908	0.3773	0.5928	0.4401	0.3564	0.4065

Source: [3, various issues].

TABLE II

RAO'S DECOMPOSITION

(%)

	G1	G2	G3	G4	G5	G6	G7	G8
1965	58.78	11.09	9.27	2.57	1.63	3.52	12.12	—
1966	51.52	13.54	10.13	3.42	2.05	4.99	14.30	—
1968	37.97	16.06	9.64	6.84	4.41	5.25	19.83	—
1970	41.00	12.20	10.17	8.07	3.70	6.41	18.48	—
1971	38.78	11.73	9.76	7.91	3.93	6.68	21.22	—
1972	38.14	7.47	9.66	8.55	3.37	7.18	25.61	—
1973	33.37	9.44	24.83	5.18	3.03	4.64	19.51	—
1974	44.82	11.32	6.22	6.81	3.53	6.61	20.67	—
1975	30.11	11.74	17.22	14.43	5.75	4.80	15.93	—

Source: [3, various issues].

$$G(t)=\sum\{W(i,t)-W(i,1970)\}G(i,t)+\sum W(i,1970)G(i,t). \tag{7}$$

The first term on the right-hand side indicates mainly the effects of share changes and the second term that of pseudo-Gini coefficients. Table III indicates that the effects of inequality exceed that of shares, the latter being almost negligible. The levels of inequality of G1 and G7 in Korea are changeable.

This table shows that the effects have declined until the 1960s but thereafter were unstable in all groups. In Japan, it is apparent that the effect of G1 decreased but that of G2 was constant throughout the period concerned.

In Korea, G3, G4, and G5 seem to explain better the change in total inequality as compared to other groups. These results of decomposition of change in inequality seem to produce the same as the previous ones. Thus, it appears that the effect of the change in inequality in G1 is not only the largest but also the significant one in explaining the change in total inequality.

In general, total inequality of expenditure is supposed to increase mainly due to the increase in inequality of non-food expenditures and their share in total expenditures in the earlier stages of development. Afterwards, when income rises, the share of non-food increases whereas that of food decreases. In addition, the decreasing inequality of almost all items would result in the decrease in inequality

TABLE III
DECOMPOSITION OF THE CHANGE IN INEQUALITY

(%)

	T.E.	G1	G2	G3	G4	G5	G6	G7–G8
(1) Share effects								
1965	0.3041	17.72	−5.52	−1.25	−5.92	−2.80	−4.62	−12.56
1966	0.2960	12.20	−2.33	−0.37	−5.10	−2.40	−3.24	−10.95
1968	0.2948	1.32	−1.12	−0.61	−0.98	−0.31	−1.73	0.31
1970	0.2781	0	0	0	0	0	0	0
1971	0.2551	1.37	−0.55	−0.24	−0.16	−0.63	−0.86	0.86
1972	0.2626	1.60	−1.94	−0.69	−0.84	−0.42	−0.30	3.08
1973	0.2815	4.05	−2.45	12.18	−2.66	−0.99	−1.49	−0.50
1974	0.2820	5.35	−1.42	−3.12	1.63	0.39	0.39	0.21
1975	0.3146	−1.40	−1.34	2.77	6.04	−1.34	−1.37	−2.73
(2) Pseudo-Gini effects								
1965	0.3041	41.01	16.47	10.52	8.48	4.41	8.12	24.70
1966	0.2960	39.29	15.68	10.54	8.51	4.43	8.14	25.27
1968	0.2948	36.60	15.23	10.24	7.84	4.82	7.09	19.50
1970	0.2781	40.99	12.47	10.14	8.05	3.78	6.54	18.48
1971	0.2551	37.36	12.54	10.00	8.94	4.66	7.68	20.31
1972	0.2626	36.48	9.48	10.32	9.37	3.81	7.54	22.51
1973	0.2815	37.41	11.97	12.61	7.82	4.05	6.18	20.00
1974	0.2820	39.40	12.66	9.33	8.44	3.90	6.95	20.43
1975	0.3146	31.53	13.95	14.43	8.36	4.80	6.33	18.66

Source: [3, various issues].

of total expenditure.[4] Our discussion is valid for the case of the growth pattern which preserves the existing distribution of income.[5]

[4] Assume that total inequality of expenditure T is the weighted average of the inequality for food and non-food as shown in the following equation (a):

$$T=\sum w_i\eta_i G. \quad (i=1,2) \tag{a}$$

Further, it is assumed that the distribution of income can be accurately measured by the Gini coefficient defined in the following equation (b):

$$G=N_2/(N_2+N_1)-N_2Y_2/(N_2Y_2+N_1Y_1), \tag{b}$$

where N_i is the number of households in sector i and Y_i is the income per households in sector i.

[5] Houthakker shows that the condition for the growth pattern depends exclusively on the income and price elasticities of food (H. S. Houthakker, "Disproportional Growth and the Intersectoral Distribution of Income," in *Relevance and Precision,* ed. J. S. Cramer, A. Heertje, and P. Venekamp [Amsterdam: North Holland Publishing Co., 1976]). Applying our estimates on these elasticities which satisfy the Engel's law, we can find the fact that the productivity in non-food sector must increase more rapidly than that in food sector if the distribution of income is to be preserved.

Totally differentiating (b) in footnote 4 yields

$$\frac{dG}{dt}=\left(N_1\frac{dN_2}{dt}-N_2\frac{dN_1}{dt}\right)[(Y_1-Y_2)(N_1^2Y_1-N_2^2Y_2)/(N_2+N_1)^2(N_2Y_2+N_1Y_1)^2]$$
$$-\left(Y_1\frac{dY_2}{dt}-Y_1\frac{dY_1}{dt}\right)[N_2N_1/(N_2Y_2+N_1Y_1)^2]. \tag{c}$$

Here, assuming that there is no migration from the low income food sector to high income non-food sector, and the natural growth rate of population is zero, the second term in the right hand side of equation (c) must be zero if the distribution of income is to be preserved ($dG=0$).

C. *Inequality of Expenditure as Indicator of Poverty*

Engel was definitely concerned with absolute standards and framed it more broadly: "The proportion of the outgo used for food, other things being equal, is the best measure of the material standard of living of a population" [1, p. 45]. Here, an alternative technique of identifying poverty in the various items of expenditures including food, was employed. For this purpose pseudo-Gini effects will be used over the period 1965–75, as shown in Table III.

It is assumed that for the one item of expenditures to be an indicator of poverty its pseudo-Gini effects must be non-decreasing. If all the items satisfy this condition, the one which has a higher effect is assumed to be the indicator of poverty.

Considering these two conditions for the indicators, the results are summarized as follows:

(a) In Korea, the expenditure items which have been in a decreasing trend in the earlier stage of our period are: G2 (clothing), G4 (household appliance and equipment), G5 (health and medical care), G6 (transportation and communication), and G7 (recreation and education). This implies that even though most items, except food and beverage, show an unequal distribution, their pseudo-Gini effects have decreased due to their relatively small share in total expenditure. Correspondingly, food and beverage expenditures seem to be the more appropriate basis to conceive a situation of poverty for the period.

(b) During the latter period, the structure of expenditure seems to have considerably changed. Food and beverage expenditures ceased to be a basis for identifying poverty. Transportation and communication is less useful as an indicator of poverty.[6] Thus, health and medical care, recreation and education expenditures are useful as indicators of poverty during the period 1970–75.

(c) Considering the relative usefulness of each indicator with respect to the level of income, one observes that in the earlier stages of development, food, beverage, and clothing are significant, and health and medical care and recreation and education are appropriate in indicating poverty. Due to the lack of data on imputed rent and transfer payments, it is difficult to carry out a strict analysis of rent or health and medical care expenditures.

II. EXPENDITURE PATTERNS OF THE POOR

In the last section to help to suggest where a line should be drawn between the poor and non-poor, we examined every component of the whole expenditure distribution and the living standards based on the individual expenditures. We now turn to examination of the mix of goods and services consumed by the poor. This may throw some light on the quality of life of those in poverty and improve our understanding of the effects of low income.

We trace in a summary fashion the manner in which consumption patterns of

[6] A powerful administrative control on the prices of these items, as well as the provision of specific goods by mainly the public sector have induced this tendency which would be eliminated in the near future, given a reduction of the share of this sector in each industry.

TABLE IV

EXPENDITURE PATTERNS OF THE POOR

(%)

	Tenth Percentile			Twentieth Percentile			Median		
	1965	1970	1975	1965	1970	1975	1965	1970	1975
Employee household:									
Food & beverages	75.6	58.8	60.9	71.5	59.4	56.6	70.4	52.3	53.8
Clothings	3.7	8.9	7.3	5.6	9.2	7.9	6.0	11.6	8.9
Rent, fuel, & light	12.1	13.8	14.9	13.0	12.7	14.6	9.5	12.4	12.3
Household appliance & equipment	0.4	1.6	3.5	0.5	2.0	4.0	0.7	3.0	5.1
Health & medical care	0.9	2.8	3.0	1.1	2.8	3.8	1.3	3.4	4.2
Trans. & comm.	1.1	4.0	1.7	1.5	4.3	4.1	1.5	5.2	4.5
Recreation & educ.	1.8	4.2	5.2	2.8	4.7	5.4	3.7	6.9	7.6
Others	4.3	5.1	3.5	3.9	5.0	3.8	6.9	5.2	3.5
Non-farm self-emphold:									
Food & beverages	73.7	52.2	59.8	75.4	53.6	57.5	73.1	52.6	55.8
Clothings	4.1	9.7	7.5	4.3	10.2	7.9	5.5	11.3	9.3
Rent, fuel, & light	13.1	17.1	15.1	11.9	14.4	14.3	10.3	11.9	11.5
Household appliance & equipment	0.5	1.8	2.2	0.5	2.2	2.7	6.6	2.7	3.3
Health & medical care	0.6	3.3	2.9	0.8	3.2	3.1	9.9	3.5	3.4
Trans. & comm.	1.6	4.3	4.4	1.5	5.3	4.2	1.7	5.2	4.5
Recreation & educ.	1.6	5.9	3.3	2.2	6.1	3.6	3.7	7.5	6.3
Others	4.8	5.7	4.4	3.3	5.1	6.7	3.9	5.3	5.9

Source: [3, various issues].

TABLE V

COMPARATIVE EXPENDITURE LEVELS OF THE POOR

(%)

	Tenth Percentile/Median					
	Employee Households			Non-Farm Self-Employed		
	1965	1970	1975	1965	1970	1975
Food & beverages	50.81	68.44	59.53	56.20	48.99	48.28
Clothings	29.48	46.38	42.97	33.96	42.69	36.32
Rent, fuel, & light	60.23	68.22	63.40	57.74	70.96	60.87
Household appliance & equipment	31.25	33.22	35.91	34.09	32.99	30.75
Health & medical care	32.58	50.41	37.76	28.78	45.96	37.91
Trans. & comm.	34.86	46.34	20.03	43.24	40.84	44.54
Recreation & education	22.77	37.36	35.80	19.60	39.08	23.41
Others	29.30	58.78	52.57	55.89	52.69	33.46
Non-durables	49.08	61.33	57.64	46.35	51.23	47.75
Semi-durables	29.40	45.13	40.23	47.09	42.91	36.10
Durables	37.50	39.29	26.54	27.02	41.23	31.94
Services	42.05	71.70	45.97	40.12	48.09	42.16

Source: [3, various issues].

the poor compared with those of the non-poor have changed over the past ten years. This enables us to look at the hypothesis that the expenditure patterns of the poor today resemble those of the non-poor at some previous date. For the comparison, those in poverty are defined as the tenth and twentieth percentile. And it is assumed that consumption can be approximately measured by current expenditure.

The methods for deriving the patterns of expenditure are the same as that of estimating the expenditure distribution, the data from which were used in Section I, necessarily involve some approximations, implicit in the procedure of data adjusting and linear interpolation.

Tables IV and V show the pattern of household expenditure for the tenth and twentieth percentiles and median for 1965, 1970, and 1975 at current prices. Over the period 1965 to 1970, the proportion of expenditure on non-durables—food and beverages, etc.—has declined more than 20 per cent for all three groups of employee households. The fall for the tenth percentile was much higher than that for the twentieth percentile but somewhat equal to that for the median households, as this was to be expected. Even this by 1970 the tenth percentile still devoted 59 per cent of expenditure to food and beverages, compared with 52 per cent by the median households.

However, the differences were in semi-durables, durables and services, where the proportion of expenditure for the poorer groups rose much more than for the median groups. In fact, we showed that during this period there has been a drastic decline in inequality for clothing, recreation and education, and other services, and very little change in that on food and beverages.

Accordingly, all items including food and beverages have become more elastic than that of the non-poor, as evident from estimates of pseudo-Gini effects in

Table III. Our results seem to be consistent with that of estimates of income elasticities of consumption by commodity group by K. S. Kim and D. Y. Kim [2, p. 25]. It is very important to note that these changes in comparative levels of expenditure, particularly during the latter period, present a contrast to that of the former period. In fact, the inequality of all items except food and beverage increased so that these items became less elastic than that of the non-poor. Thus, it appears that the position of the poor has improved much greater in the former period, but deteriorated relatively in the latter period.

III. POVERTY UNDER PURCHASING POWER PARITY

In the previous section, we showed a clear pattern of change in the relative position of the poor. This section considers the standards of living as a magnitude of the utility gained from the consumption of goods and services. Although utilities are certainly difficult to measure, the expenditures of each goods and services will be substituted for them. It is assumed that utilities are proportionate to the consumption of goods and services.

In this respect, it would be better to take the purchasing power parity rather than the exchange rate to do the comparison.[7] The estimate was done by groups of expenditures, using the following well-known Laspeyres's formula (1) and Passhe's formula (2):

$$\frac{\sum \frac{P_i}{P_j} P_j Q_i}{P_j Q_j}. \quad (i: \text{Korea},\ j: \text{Japan}) \tag{1}$$

$$\frac{\sum P_i Q_i}{\sum \frac{P_j}{P_i} P_i Q_i}. \quad (i: \text{Korea},\ j: \text{Japan}) \tag{2}$$

Then we calculated their geometric mean. These estimates are for Japan. In terms of Korea, the two formulas must be reversed. Every comparative study based on international cross-section data has to make commensurable the value expressed in the various local currencies. The usual practice is to convert all domestic values into a common measure (U.S. dollars as a rule) through the exchange rate for foreign trade. The method used here is to convert them into Japanese yen only through effective exchange rates. Thus, without exaggerating the true differences in real income, the "relative" price effects can be considered.

The detailed information on the data needed here are reported in the Appendix Table I. Two hundred and one items were selected from the *Annual Report on the Price Survey* in Korea. These items can be considered homogeneous to the two countries. After the collection of the basic data followed the problem of constructing the distribution of weights. For this, the distribution of weights used

[7] T. Noda analyzed the level of living using the same methodology (T. Noda, "Seikatsu suijun no kokusai hikaku" [An international comparison of the standard of living], *Keizai kenkyū*, Vol. 19, No. 1 [January 1968]).

TABLE VI

PURCHASING POWER, EXPRESSED IN TERMS OF DOMESTIC AND FOREIGN CURRENCY, 1978

Groups	Weight		Index (Japan=100)			Index (Korea=100)		
	Japan	Korea	Japanese Weight	Korean Weight	Geometric Average	Japanese Weight	Korean Weight	Geometric Average
Total	7,614.0	9,904.0	132.2	77.5	101.2	75.6	129.0	98.0
1. Cereals & bakery products	454.0	2,111.0	95.0	63.6	77.7	105.3	157.2	128.7
2. Meat	319.0	409.0	101.6	84.8	92.8	98.4	117.9	107.7
3. Fish & shellfish	447.0	329.0	96.3	59.5	75.7	103.8	168.1	132.1
4. Dairy products, eggs	211.0	154.0	155.3	175.2	165.0	64.4	57.1	60.6
5. Vegetables	286.0	555.0	113.4	82.5	96.7	88.1	121.2	103.4
6. Fruits	235.0	174.0	460.3	25.5	108.3	21.7	392.4	92.3
7. Condiments	116.0	435.0	114.9	154.0	133.0	87.0	64.9	75.2
8. Cakes & candies	275.0	151.0	177.1	93.4	128.6	56.5	107.0	77.7
9. Non-alcoholic beverages	121.0	48.0	123.8	91.5	106.4	80.8	109.3	44.0
10. Alcoholic beverages	140.0	89.0	171.6	117.4	141.9	58.3	85.2	70.5
11. Processed food	143.0	77.0	261.3	287.6	274.1	38.3	34.8	36.5
12. Food away from home	561.0	128.0	156.0	143.4	149.6	64.1	69.8	66.9
13. Tobacco	140.0	576.0	83.3	83.3	83.3	120.0	120.0	120.0
14. Men's apparel	258.0	361.0	100.9	94.0	97.4	99.1	106.4	102.7
15. Women's apparel	216.0	189.0	100.2	65.0	80.7	99.8	153.9	123.9
16. Footwear	161.0	194.0	69.3	52.2	60.2	144.3	191.4	166.2
17. Cloth & thread, bedding	78.0	86.0	69.0	78.2	73.5	144.9	127.9	136.1
18. Rent, fuel, & light	837.0	961.0	103.6	80.2	91.1	96.6	124.7	109.7
19. Repairs & maintenance	103.0	60.0	125.9	84.5	103.1	79.4	118.3	97.0
20. Furniture & utensil	25.0	112.0	90.5	65.0	76.7	110.5	153.8	130.4

TABLE VI (Continued)

Groups	Weight		Index (Japan=100)			Index (Korea=100)		
	Japan	Korea	Japanese Weight	Korean Weight	Geometric Average	Japanese Weight	Korean Weight	Geometric Average
21. Electric goods	197.0	284.0	170.7	188.6	179.4	58.6	53.0	55.7
22. Medical care	302.0	450.0	158.2	98.8	125.0	63.2	101.2	80.0
23. Personal care	233.0	240.0	133.4	113.8	123.2	74.9	87.9	81.1
24. Trans. & comm.	671.0	587.0	134.8	59.8	89.8	74.2	167.2	111.4
25. Education	477.0	762.0	113.4	96.8	104.8	88.2	103.3	95.5
26. Stationery	25.0	52.0	83.4	71.1	77.0	119.9	140.7	129.9
27. Reading & recreation	188.0	193.0	97.3	98.8	98.1	102.8	101.2	102.0
28. Others	385.0	137.0	84.1	92.3	88.1	118.9	108.3	113.5
(G1) Food & beverages	3,448.0	5,236.0	153.6	72.9	105.9	65.1	137.1	94.5
(G2) Clothings	723.0	830.0	90.2	71.8	80.5	110.8	139.3	124.3
(G3) Rent, fuel, & light	837.0	961.0	103.6	80.2	91.1	96.6	124.7	109.7
(G4) Household appliance & equipment	325.0	456.0	150.3	115.8	131.9	66.5	86.4	75.8
(G5) Health & medical care	535.0	690.0	147.7	103.5	123.5	67.8	96.6	81.0
(G6) Trans. & comm.	671.0	587.0	134.8	59.8	89.8	74.2	167.2	111.4
(G7) Recreation & educ.	690.0	1,007.0	107.9	95.4	101.5	92.7	104.8	98.6
(G8) Others	385.0	137.0	84.1	92.3	88.1	118.9	108.3	113.5

TABLE VII

RATIO OF PURCHASING POWER PARITY TO EXCHANGE RATE FOR FOREIGN TRADE (JAPAN:KOREA)

	Exchange Rate	G1	G2	G3	G4	G5	G6	G7	G8
1966	1.34	1.09	0.94	1.59	0.88	0.90	1.19	1.03	1.44
1970	1.13	1.09	1.19	1.45	0.80	0.83	1.11	0.85	1.42
1975	0.63	1.60	2.14	1.95	1.18	1.32	1.57	1.47	2.11

TABLE VIII

STANDARD OF LIVING PER HOUSEHOLD

(Japan=100%)

	G1	G2	G3	G4	G5	G6	G7
1966	53.32	26.20	55.67	7.18	7.04	19.60	20.24
1970	61.09	55.05	74.35	25.86	24.99	28.04	26.56
1975	55.40	53.20	74.72	39.91	42.50	18.69	20.18

TABLE IX

NUMBER AND CHARACTERISTICS OF THE "ABSOLUTE" POOR BELOW THE FIRST DECILE OF JAPAN, 1966

(%)

	1966	1970	1975
G1	100.00	86.70	10.79
G2	100.00	52.66	16.60
G3	100.00	48.27	0.00
G4	100.00	94.00	74.06
G5	100.00	100.00	92.00
G6	100.00	79.96	57.78
G7	100.00	92.00	66.31

in these surveys was adopted. The techniques by S. Nagayama and K. Inahashi [5] were used as a basis for the analysis: (a) the weight of items which were dropped in the price comparison was distributed among similar kind (or nature) of goods, and (b) the items considered inadequate to classify into any group were excluded. The resulting weights are as follows: the Japanese weight is 76.14 per cent (Korean weight, 99.04). The estimated domestic values of each group of goods expressed by Japanese yen are given for Korea in the Appendix Table I.

Table VI shows the purchasing power expressed in terms of domestic and foreign currency for the twenty-eight groups of expenditures. In Korea, dairy products and eggs (165.0), processed food (274.1), and electric goods (179.4) are relatively high-priced items, but the indices of clothing (80.5), transportation and communication (83.8) are much lower than those in Japan (100.0). The results of the former high-priced items reflect the fact that their prices have been increasing and the expenditures for them rapidly increased.

To compare the standards of living, it is necessary to get these purchasing power parity for every year. For this, the consumer price index data are available. Table VII shows the results of the calculation, presented in the form of ratio to

official exchange rate. The ratio considerably increased, especially in the 1970s. Accordingly, the real value of the Korean currency has been overestimated by official exchange rate over this period.

To compare the standards of living, the ratio (share) of the household income in Korea to that of Japan is used. The results shown in Table VIII suggest that even though the shares of almost all items in Korea are very low compared to those for Japan, they have considerably increased during the period, 1965–70. But it should be noted that after 1970 the standard of living in terms of G1, G4, and G5 showed about the same pattern in Table IV in Section II.

It is assumed that the first decile of Japan in 1966 is within the "absolute" poverty level. Following this assumption, Table IX illustrates one of the most important characteristics of people falling below this poverty line as well as the number of the poor. It appears that about 50 per cent of the Korean population in G2 and G3 are living below the level of Japan in 1966. However, the absolute poverty in terms of these expenditures including G1 decreased after 1970. At the same time, a large downward shift in the proportion of the absolute poor in other expenditures is not evident in Korea.[8]

[8] It must be considered that the drastic change in the inequality of non-food expenditures for Japan are noticeable especially from 1974 to 1975. This may be reflective mainly of the unusual oil crisis-induced price increases of these goods with high elasticities, resulting in the average propensity to consume reversal. In fact, Koga, Fujinaka, and Hara show that since 1973, the average propensity to consume of the first quintile decreased, but that of the fifth quintile increased (M. Koga, S. Fujinaka, and T. Hara, "Kinrōshakakei no shōhikansū no bunseki" [An analysis of the consumption functions for worker household], *Keizai bunseki*, No. 65 [February 1977], p. 1).

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APPENDIX TABLE I

COMPARISON OF CONSUMER PRICE BETWEEN JAPAN AND KOREA, 1978

Item	Unit	(1) Price for Japan (¥)	(2) Price for Korea (₩)	(3) (2)/(1)	(4) Japanese Weight	(5) Korean Weight
1. Cereals & bakery products						
Non-glutinous rice	10 kg	4,020.0	2,450.0	60.9	277.0	1,843.0
Glutinous rice	1 kg	576.0	400.0	69.4	3.0	14.0
Rolled barley	100 g	196.0	135.0	68.9	1.0	52.0
Wheat flour	100 g	159.0	132.0	83.0	4.0	88.0
Instant noodles	100 g	52.0	58.0	111.5	57.0	87.0
White bread	100 g	287.0	494.0	172.1	112.0	27.0
2. Meat						
Beef (loin)	100 g	533.0	400.0	75.0	91.0	249.0
Pork (loin)	100 g	196.0	240.0	122.4	170.0	111.0
Chicken	100 g	101.0	83.0	82.2	58.0	49.0
3. Fish & shellfish						
Horse mackerel	100 g	164.0	233.0	142.1	117.0	64.0
Mackerel	100 g	38.0	100.0	263.2	19.0	64.0
Saury	100 g	149.0	18.0	12.1	38.0	31.0
Cuttlefish	100 g	120.0	100.0	83.3	93.0	30.0
Dried cuttlefish	100 g	507.0	300.0	59.2	134.0	84.0
Dried laver	10 sheets	322.0	350.0	108.7	35.0	42.0
Wakame ("seaweed")	100 g	74.0	100.0	135.1	11.0	14.0
4. Dairy products, eggs						
Hen eggs	1 kg	292.0	581.0	199.0	72.0	94.0
Powdered milk	1,200 g (1 can)	1,510.0	2,280.0	151.0	7.0	50.0
Fresh milk	1,000 ml	214.0	277.0	129.4	112.0	8.0
Butter	225 g	345.0	500.0	144.9	20.0	2.0
5. Vegetables						
Radishes	1 kg	167.0	133.0	79.6	34.0	84.0
Onions	1 kg	89.0	203.0	228.1	15.0	15.0

APPENDIX TABLE I (Continued)

Item	Unit	(1)	(2)	(3)	(4)	(5)
Chinese cabbage	1 kg	183.0	187.0	102.2	27.0	202.0
Welsh onions	1 kg	212.0	213.0	100.5	18.0	44.0
Spinach	1 kg	417.0	300.0	71.9	14.0	22.0
Cabbage	1 kg	85.0	160.0	188.2	11.0	2.0
Pumpkins	1 kg	216.0	255.0	118.1	4.0	17.0
Cucumbers	1 kg	202.0	50.0	24.8	38.0	33.0
Eggplants	1 kg	361.0	700.0	193.9	18.0	5.0
Tomatoes	1 kg	262.0	540.0	206.1	35.0	12.0
White potatoes	1 kg	175.0	213.0	121.7	27.0	29.0
Sweet potatoes	1 kg	360.0	240.0	66.7	9.0	18.0
Azuki ("red beans")	100 g	94.0	46.0	48.9	30.0	29.0
Bean sprouts	1 kg	40.0	80.0	200.0	6.0	43.0
6. Fruits						
Watermelons	1 kg	303.0	120.0	39.6	28.0	15.0
Apples	1 kg	512.0	100.0	19.5	36.0	63.0
Pears	1 kg	308.0	70.0	22.7	15.0	21.0
Peaches	1 kg	1,100.0	1,260.0	114.5	10.0	21.0
Grapes	1 kg	2,000.0	160.0	8.0	15.0	16.0
Bananas	1 kg	178.0	2,500.0	1,404.5	17.0	5.0
Mandarin oranges	1 kg	200.0	1,680.0	840.0	94.0	25.0
Strawberries	1 kg	832.0	800.0	96.2	20.0	8.0
7. Condiments						
Soy sauce	2 *l*	498.0	440.0	88.4	20.0	60.0
Soy bean paste	1 kg	292.0	267.0	91.4	25.0	4.0
Vinegar	500 m*l*	134.0	280.0	209.0	4.0	11.0
Margarine	225 g	197.0	154.0	78.2	39.0	3.0
Sugar	1 kg	234.0	458.0	195.7	26.0	237.0
Salt	1 kg	60.0	90.0	150.0	2.0	120.0
8. Cakes & candies						
Biscuits	100 g	78.0	300.0	384.6	26.0	8.0
Shio sembei ("rice crackers")	100 g	86.0	133.0	154.7	44.0	4.0

APPENDIX TABLE I (Continued)

Item	Unit	(1)	(2)	(3)	(4)	(5)
Caramels	1 carton	48.0	125.0	260.4	2.0	3.0
Peanuts	100 g	152.0	120.0	78.9	10.0	5.0
Chewing gum	7 sheets	46.0	63.0	137.0	3.0	4.0
Ice cream	150 m*l*	80.0	300.0	375.0	32.0	23.0
Chocolate	48 g	94.0	468.0	497.9	15.0	6.0
Kasutera ("sponge cakes")	100 g	158.0	95.0	60.1	129.0	78.0
Candies	100 g	113.0	238.0	210.6	14.0	20.0
9. Non-alcoholic beverages						
Flavored soda	350 m*l*	68.0	119.0	175.0	15.0	8.0
Cola drinks	190 m*l*	60.0	64.0	106.7	24.0	9.0
Fruit juice	200 m*l*	60.0	100.0	166.7	39.0	10.0
Coffee	1 cup	235.0	130.0	55.3	33.0	17.0
Fermented lactic drinks, sterilized	633 m*l*	409.0	600.0	146.7	10.0	4.0
10. Alcoholic beverages						
Shōchū ("distilled spirits")	1,800 m*l*	707.0	650.0	91.9	2.0	53.0
Sake	1,800 m*l*	1,460.0	1,850.0	126.7	54.0	7.0
Beer	633 m*l*	348.0	818.0	235.1	57.0	28.0
Wine	720 m*l*	600.0	800.0	133.3	27.0	1.0
11. Processed food						
Bean curd	100 g	18.0	60.0	333.3	64.0	59.0
Fish sausages	100 g	63.0	111.0	176.2	48.0	11.0
Canned mackerel	220 g	95.0	231.0	243.2	25.0	3.0
Canned mandarine oranges	312 g	100.0	250.0	250.0	6.0	4.0
12. Food away from home						
Chinese noodles	1 bowl	265.0	300.0	113.2	46.0	30.0
Curry & rice	1 dish	352.0	1,000.0	284.1	67.0	23.0
Sushi ("seasoned rice")	1 dish	606.0	800.0	132.0	156.0	22.0
Tendon ("fish tempura on rice")	1 bowl	556.0	700.0	125.9	156.0	14.0
Japanese noodles	1 bowl	239.0	300.0	125.5	56.0	25.0
Hamburg steaks	1 dish	499.0	1,000.0	200.4	80.0	14.0

APPENDIX TABLE I (Continued)

Item	Unit	(1)	(2)	(3)	(4)	(5)
13. Tobacco						
Tobacco	20 cigarets	150.0	125.0	83.3	140.0	576.0
14. Men's apparel						
Men's suits	1 suit	45,600.0	50,000.0	109.6	108.0	114.0
Men's coats	1 suit	28,700.0	30,000.0	104.5	12.0	39.0
School uniforms	1 suit	19,300.0	15,000.0	77.7	16.0	66.0
Men's business shirts (long sleeves wear)	1 piece	2,830.0	3,000.0	106.0	8.0	17.0
Men's business shirts (half sleeves wear)	1 piece	2,550.0	2,500.0	98.0	8.0	25.0
Men's briefs & undershirts (running)	1 pair	1,039.0	1,500.0	144.4	41.0	48.0
Men's undershirts	1 piece	551.0	500.0	90.7	33.0	20.0
Men's socks	1 pair	469.0	230.0	49.0	12.0	15.0
Belts	1 piece	2,190.0	2,000.0	91.3	10.0	11.0
Neckties	1 piece	3,070.0	1,000.0	32.6	20.0	6.0
15. Women's apparel						
Women's dresses	1 suit	11,500.0	12,500.0	108.7	158.0	95.0
Girl's skirts	1 suit	2,430.0	1,050.0	43.2	36.0	85.0
Women's stockings	1 pair	226.0	300.0	132.7	22.0	9.0
16. Footwear						
Men's leather shoes	1 pair	6,970.0	5,000.0	71.7	17.0	32.0
Women's leather shoes	1 pair	5,750.0	6,500.0	113.0	28.0	28.0
Men's synthetic leather shoes	1 pair	4,500.0	495.0	11.0	3.0	5.0
Men's canvas shoes	1 pair	1,040.0	700.0	67.3	16.0	49.0
Rubber boots	1 pair	1,880.0	1,500.0	79.8	2.0	1.0
Men's umbrellas	1 piece	2,070.0	2,300.0	111.1	8.0	4.0
Wrist watches	1 piece	26,300.0	18,000.0	68.4	13.0	40.0
Handbags	1 piece	11,000.0	2,500.0	22.7	46.0	25.0
Spectacles	1 piece	15,700.0	15,000.0	95.5	28.0	10.0
17. Cloth & thread, bedding						
Women's cloth, kimono width	36 cm×12 m	7,600.0	15,500.0	203.9	3.0	3.0
Bleached cotton cloth	35 cm×10 m	827.0	1,579.0	190.9	6.0	9.0
Silk cloth, kimono width	36 cm×12 m	36,500.0	4,333.0	11.9	30.0	3.0

APPENDIX TABLE I (Continued)

Item	Unit	(1)	(2)	(3)	(4)	(5)
Sewing threads	1 reel	700.0	750.0	107.1	2.0	8.0
Woolen yarn	500 g	2,990.0	3,332.0	111.4	7.0	22.0
Towel	1 sheet	290.0	380.0	131.0	3.0	4.0
Cotton wool for quilts	3 kg	5,230.0	5,200.0	99.4	8.0	22.0
Quilts	1 sheet	8,730.0	5,000.0	57.3	19.0	15.0
18. Rent, fuel, & light						
House rent (private)	3.3 m^2/month	4,350.0	3,750.0	86.2	394.0	341.0
Charcoal	6 kg	1,420.0	1,200.0	84.5	1.0	6.0
Kerosene	18 *l*	762.0	1,440.0	189.0	29.0	31.0
Water charges (basic charges)	1 month	300.0	409.0	136.3	45.0	51.0
Electricity (power rate)	1 kwh	14.7	22.1	149.8	186.0	153.0
Gas charges (basic charges)	1 month	690.0	500.0	72.5	179.0	6.0
Briquettes		110.0	65.0	59.1	3.0	373.0
19. Repairs & maintenance						
Shōjigami ("paper for sliding screens")	1 roll	476.0	367.0	77.1	2.0	22.0
Board	1 sheet	1,340.0	1,355.0	101.1	33.0	6.0
Square timber	1 piece	2,690.0	1,144.0	42.5	1.0	2.0
Plywood	1 sheet	384.0	957.0	249.2	2.0	8.0
Sheet glass	1 sheet	4,100.0	11,760.0	286.8	4.0	2.0
Cement	40 kg	691.0	1,048.0	151.7	10.0	6.0
Nails	100 g	76.0	268.0	352.6	7.0	1.0
Blocks	1 piece	110.0	95.0	86.4	44.0	5.0
Paints	0.7 *l*	1,370.0	613.0	44.7	0.0	8.0
20. Furniture & utensil						
Spoons	1 piece	125.0	300.0	240.0	3.0	46.0
Kettles	1 piece	1,920.0	820.0	42.7	2.0	26.0
Pans	1 piece	1,500.0	440.0	29.3	8.0	23.0
Buckets	1 piece	585.0	700.0	119.7	1.0	10.0
Scrubbing brushes	1 piece	124.0	400.0	322.6	2.0	5.0
Thermos bottles	1 piece	3,940.0	2,000.0	50.8	9.0	2.0

APPENDIX TABLE I (Continued)

Item	Unit	(1)	(2)	(3)	(4)	(5)
21. Electric goods						
Alarm clocks	1 piece	3,500.0	20,000.0	571.4	6.0	2.0
Radios	1 set	6,500.0	16,080.0	247.4	2.0	13.0
Electric irons	1 set	6,680.0	5,250.0	78.6	1.0	2.0
Electric bulbs	1 piece	110.0	110.0	100.0	1.0	2.0
Fluorescent lamps	1 piece	301.0	300.0	99.7	6.0	2.0
Sewing machines	1 set	69,000.0	62,500.0	90.6	20.0	2.0
Desks	1 set	34,800.0	16,000.0	46.0	8.0	15.0
Toasters	1 set	5,110.0	16,240.0	317.8	2.0	6.0
Bicycles	1 unit	36,100.0	33,000.0	91.4	12.0	2.0
Electric fans	1 set	16,600.0	30,000.0	180.7	3.0	16.0
Room airconditioners	1 set	186,000.0	269,980.0	145.2	27.0	1.0
TV sets (monochrome)	1 set	28,100.0	105,370.0	375.0	3.0	95.0
Electric washing machines	1 set	27,100.0	98,550.0	363.7	9.0	3.0
Electric refrigerators	1 set	104,000.0	200,000.0	192.3	40.0	79.0
Wall clocks	1 piece	10,000.0	25,000.0	250.0	7.0	6.0
Stereo phonograph sets	1 set	140,000.0	133,400.0	95.3	18.0	6.0
Tape recorders	1 set	18,000.0	33,640.0	186.9	8.0	14.0
Pianos	1 set	360,000.0	500,000.0	138.9	23.0	2.0
Telephone	1 set	80,000.0	250,000.0	312.5	1.0	16.0
22. Medical care						
Medicine for cold	1 package	626.0	1,200.0	191.7	8.0	72.0
Gastroenteritic medicines	60 g	326.0	1,800.0	552.1	12.0	27.0
Vitamin preparations	1 package	2,100.0	1,200.0	57.1	25.0	123.0
Traumatic medicines	50 m*l*	300.0	60.0	20.0	4.0	11.0
Medical treatment	once	125,400.0	185,400.0	147.5	202.0	151.0
Hospital charges (national)	once	10,450.0	17,000.0	162.7	51.0	66.0
23. Personal care						
Toilet soap	90 g	76.0	200.0	263.2	7.0	70.0
Face cream	85 g	700.0	2,040.0	291.4	25.0	40.0
Foundation	37 m*l*	800.0	2,500.0	312.5	11.0	15.0
Toothpaste	175 g	229.0	263.0	114.8	8.0	13.0

APPENDIX TABLE I (Continued)

Item	Unit	(1)	(2)	(3)	(4)	(5)
Toothbrushes	1 piece	116.0	80.0	69.0	3.0	3.0
Hair tonic	300 *ml*	600.0	400.0	66.7	6.0	1.0
Razor blades	5 sheets	177.0	140.0	79.1	2.0	1.0
Toilet tissue	800 sheets	155.0	35.0	22.6	16.0	6.0
Men's hair cut charges	once	1,950.0	800.0	41.0	30.0	31.0
Permanent wave charges	once	4,830.0	5,000.0	103.5	80.0	20.0
Bathing charges (adult)	once	155.0	240.0	154.8	45.0	40.0
24. Transportation & communication						
National railway fares	1 km	16.9	11.0	65.0	105.0	25.0
Bus fares	once	90.0	50.0	55.6	37.0	429.0
Taxi fares (basic)	once	330.0	250.0	75.8	42.0	62.0
Telegram rate	1 telegram	300.0	200.0	66.7	1.0	3.0
Telephone rate	1 month	1,800.0	1,700.0	94.4	192.0	47.0
Postage rate (sealed letter)	1 sheet	50.0	20.0	40.0	15.0	10.0
Postage rate (parcel)	1 parcel	420.0	280.0	66.7	1.0	3.0
Airplane fares	1 way	10,400.0	12,406.0	119.3	19.0	5.0
Automobiles	1 unit	969,000.0	2,200,000.0	227.0	142.0	1.0
Gasoline	1 *l*	109.0	214.0	196.3	97.0	1.0
Automobile maintenance	once	11,800.0	35,400.0	300.0	20.0	1.0
25. Education						
Sr. high school, public (tuition fees)	1 month	4,000.0	12,147.0	303.7	14.0	145.0
Sr. high schools, private (tuition fees)	1 month	19,100.0	12,566.0	65.8	77.0	338.0
Colleges & universities, national (tuition fees)	1 year	144,000.0	125,568.0	87.2	2.0	10.0
Colleges & universities, private (tuition fees)	1 year	225,000.0	289,560.0	128.7	62.0	133.0
P.T.A. membership fees (elementary school)	1 month	110.0	450.0	409.1	40.0	64.0
Kindergarten, public	1 month	2,230.0	3,237.0	145.2	1.0	9.0
Kindergarten, private	1 month	12,200.0	5,904.0	48.4	186.0	29.0
Juku ("after school tutoring school fees")	1 month	8,420.0	9,840.0	116.9	95.0	34.0
26. Stationery						
Pencils	1 dozen	219.0	440.0	200.9	3.0	6.0
Ballpoint pens	1 piece	49.0	30.0	61.2	2.0	4.0

APPENDIX TABLE I (Continued)

Item	Unit	(1)	(2)	(3)	(4)	(5)
Fountain pens	1 piece	3,000.0	1,800.0	60.0	3.0	6.0
Notebooks	1 volume	85.0	67.0	78.8	11.0	26.0
Letter paper	1 pad	130.0	50.0	38.5	4.0	6.0
Colors paints	1 box	441.0	350.0	79.4	2.0	4.0
27. Reading & recreation						
Newspapers	1 month	1,200.0	900.0	75.0	135.0	93.0
Monthly magazines (general)	1 copy	440.0	775.0	176.1	8.0	11.0
Monthly magazines (women's)	1 copy	640.0	850.0	132.8	7.0	15.0
Admissions, movies	once	1,270.0	800.0	63.0	22.0	24.0
Phonograph records	1 piece	600.0	1,500.0	250.0	10.0	2.0
Films (color)	1 roll	464.0	1,500.0	323.3	6.0	48.0