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Urban-Rural Contrast of Consumer Patterns and Consumer Preferences in Post-War Japan

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The structural transformation of the Japanese economy in the 1950's was epitomized by the beginning of the absolute decline in the agricultural labor force and by the emergence of highly sophisticated industrial complexes in Japan. This transformation coincided with radical changes in consumption patterns of the Japanese people. As the level of income grew rapidly, the institutional and technological framework of Japanese life changed apace. Moreover, rapid urbanization of Japese life, not only in the usual sense of the shift of population from rural to urban areas, but in the sense of all that modern urban life and technology connote, has helped in shaping new consumption patterns. Recently increasing prosperity of the Japanese economy has permitted imports of foreign consumer goods in increasing amounts. It is apparent that these changes have had a profound impact on the development of Japanese consumption patterns in the past decade or so.

It is safe to say that there have been few empirical studies of consumer behavior especially designed to deal with a rapidly changing economy. Empirical attempts at measuring demand functions have typically assumed away the problem of changes in consumer behavior. The usual procedure is to assume constant consumer preferences or to arrange available data in such a way that the influences arising from the changes in preferences can be minimized a

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priori. Because the factors that determine consumer preferences (geographic, racial, and cultural traits among others) are apparently strong and persistent, it seems reasonable to work with the assumption of constant tastes so long as the population to be studied is well defined and the time periods to be covered are adequately delineated. In a rapidly developing country, however, where socio-cultural arrangements as well as economic variables are changing very rapidly, the use of the familiar procedures seems quite unsatisfactory.

In this paper I suggest a statistical procedure for measuring the effects of changes in consumer preferences and apply it to the data from postwar Japan. Attention will be focused on urban workers' households and rural farm households during the period 1952 through 1962. Contrasting of urban-rural consumption behavior is interesting in its own right. The present study will prove instructive in understanding the consequences of population movement from rural to urban areas.[1]

The paper is organized as follows: In the first section I shall construct a basic regression model for measuring empirical demand functions by combining cross-section and time-series observations. The second section will explain briefly the basic data used. In the third section I shall derive empirical

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[1]Although Japan's agricultural sector employed only 26 percent of the total labor force in 1964 and urban workers are more important in influencing aggregate demand for commodities today, a study of Japanese consumption patterns cannot be complete without examining also the rural patterns of consumption. If in fact there are differences in urban and rural consumption patterns, a rapid change in the geographic distribution of the population has a large impact on the pattern of aggregate demand. Furthermore, significant changes in the patterns of income distribution (as a result of movements of people from rural areas to improve their income positions) influence the aggregate consumption patterns. For instance, if an average income rise in a given economy resulted mainly from an improvement in the level of the lower income groups, food demand would be expected to increase more rapidly than otherwise.

estimates of the relevant parameters of the demand functions. In the fourth I shall estimate the variable reflecting the shifts in the function due to changes in consumer preferences.

1. The Basic Statistical Model

Suppose that the real expenditure on commodities reflect the real differentials in the size of household and real income as well as the influences of variables that change over time. Assume, further, that the demand function shifts over time autonomously.

Write the demand function in the general form as follows:

(1) $D = f(N, Y, P, t)$,

where D is the real expenditure on commodities, N the size of household, Y the real income, P the relative price, and t denotes the shift of the function over time. The demand function above may be specified as:

(2) $D = G(P, t)AN^{\alpha}Y^{\beta}$,

where A, α and β are parameters, and G(P, t) is an unspecified function of price and time reflecting the autonomous changes influencing demand. This means that at a given point in time the consumption units face the same prices and the same influences of time including those of consumers' tastes. In other words, N and Y vary over cross-sectional observations as well as over time-series, whereas P and t vary over time only. If the influences of time (including the effects of changing relative prices) are the only unspecified factors at work in the demand situation, it is possible to formulate a statistical model for estimating these effects of time as well as the parameters of the demand function.

Let lower case letters denote logarithms of the variables and introduce a stochastic term in the above equation. We obtain a regression equation

(3) $d = a + \alpha n + \beta y + g(p, t) + u.$

All that is necessary for statistical estimation of the parameters then is to specify the method by which the function $g(p, t)$ can be dealt with.

Let the observations from cross-section and time-series samples be combined. Then, equation (3) assumes the form

(4) $d_{rt} = a_r + \alpha n_{rt} + \beta y_{rt} + g(p, t) + u_{rt},$

where r is the index of the cross-sectional observations, of which there are R, and t is that of time-series observations, of which there are T. Assume that the stochastic term is destributed normally with

$$E\left(\sum_{r=1}^{R} u_{rt}\right) = 0, \text{ for } t = 1, \ldots, T, \text{ and}$$

$$E\left(\sum_{t=1}^{T} u_{rt}\right) = 0, \text{ for } r = 1, \ldots, R.$$

For each time period separately, average all the variables over the R cross sections. Let this average value be denoted by a dot in place of the r subscript, e.g., $d_{.t}$, $y_{.t}$, and $n_{.t}$. With the assumption that the "time" function affects all cross-sectional observations equally at any moment of time, and, therefore, that the average value of $g(p, t)$ is the same for all cross-sectional observations, we obtain

(5) $d_{.t} = a_{.} + \alpha n_{.t} + \beta y_{.t} + g(p, t).$

Now subtracting (5) from (4), we obtain a regression equation involving only the variables measured from their respective (logarithmic) means of period t,

(6) $d'_{rt} = a'_r + \alpha n'_{rt} + \beta y'_{rt} + u_{rt},$

where the prime indicates the variables measured from the cross-sectional means.

Equation (6) contains only those parameters that can be estimated by the use of the ordinary least squares method. The function g(p, t) can be estimated from equation (5), after the parameters are ascertained, according to the assumption to be made about the nature of a_r. Assume here that $a_r = a_.$, that is, the "influences of prices and time" are the only unspecified factors at work in the demand situation. This means that the same values of n_{rt} and y_{rt}, the values of d_{rt} are the same for all observations covering the cross-sections. Then g(p, t) can be computed numerically as a residual from equation (5).[2]

There are two important assumptions involved in the procedure as adopted here. The first is that the structure of "tastes," to be measured by the partial elasticities, remains the same over the years for all the cross-sectional observations. The second crucial assumption is that the "influences of time" (including relative prices and consumers' "tastes") are the same for all cross-sectional observations at any moment of time. That is to say, all the households, regardless of their geographic locations or income positions, are assumed to share the same "preference" patterns in any given year. When a change occurs in the "influences of time" its effects are assumed to

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[2]The statistical procedure adopted in this paper is an adaptation of a model I used for my earlier studies.

Hiromitsu Kaneda, "Substitution of Labor and Non-Labor Inputs and Technical Change in Japanese Agriculture," Review of Economics and Statistics, Vol. 47, No. 2 (May 1965), pp. 163-171.

_____, "Regional Patterns of Technical Change in U.S. Agriculture, 1950-1962," Journal of Farm Economics, Vol. 49, No. 1 (February 1967), pp. 199-212.

These studies, in turn, owe much to C.E.V. Leser, "Production Functions and British Coal Mining," Econometrica, Vol. 23 (October 1955), pp. 442-446. The same estimates of g(p, t) can be obtained by the use of dummy variables.

prevail over all cross-sections equally. On the basis of these assumptions the parameters α and β are first estimated and then numerical values of the time function $g(p, t)$ are obtained as residuals.

Thus $g(p, t)$'s of any pair of years would differ depending on the values of the independent variables and real expenditure for a given commodity, since the parameters α and β are assumed to be the same for all years. In other words, it means that for any commodity, if all three variables are the same at two points in time, the resulting $g(p, t)$ would also have to be the same. If we observe differences over time in the real expenditure for a commodity, therefore, a part of the difference would be attributed to changes in the size of family and in the level of real income and the rest to the residual measure of the influences of time (including changes in relative prices and consumer preferences).

Of course, it is not easy to isolate the influences of consumers' tastes from other influences of time. Little is known about the factors that shift consumption functions over time. Although the factors that determine consumers' tastes (such as geographic, racial, and cultural traits among others) are apparently strong and persistent, the changes in the socio-cultural determinants and in the technological-institutional arrangements of consumption may very well be significant when the economy sustains a real growth rate of some ten percent per annum.

The unspecified function $g(p, t)$ need not be a simple, regular function of the relative price and time. For the sake of simplicity, however, let us

specify the function as follows:[3]

(7) $g(p, t) = b + \gamma p_t + \lambda t + e_t$.

The parameter λ measures a constant rate of shift in the original demand function after adjustment for changes in relative prices. If this regression equation works well with the data, therefore, λ may be regarded as indicating a measure of change in consumer preferences.

2. The Data

Table 1 summarizes the variables and their definitions used in the present study. The data for the rural patterns of consumption were taken from the Ministry of Agriculture and Forestry, Nōkakeizai Chōsa Hōkoku [The Report on the Farm Household Economy], which annually publishes living expenditures of the farm household among other economic data. The expenditures are for family members only and exclude those attributable to hired hands. Farm household expenditure as defined is the sum of (i) cash expenditure, (ii) value of barter transactions, (iii) imputed value of home consumption of products, and (iv) depreciation of residential buildings. For each of the five scales of

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[3] Although this is a linear function directly estimable by the ordinary least-squares regression, the combination of equations (4) and (7) is not. This is so because the variables n and y vary over cross-sections as well as over time while the variables p and t vary only over the time periods. The present statistical procedure first measures the impact of changes in family sizes and income levels abstracting from the effects of annual changes in relative prices and consumers' preferences. This is mathematically identical to a method in which the estimated two elasticity values, α and β, are imposed on an equation of the form

$$d_{.t} = c + \bar{\alpha} n_{.t} + \bar{\beta} y_{.t} + \gamma p_t + \lambda t + \varepsilon_t,$$

where c is a constant term.

operation, classified according to operating acreage, district averages are the cross-section observations over ten years from 1952 through 1961. Data are drawn from ten agricultural districts (out of eleven in Japan, excluding northernmost Hokkaido). Thus, the total number of observations amounts to 500 over all years (10), the districts (10), and the scales (5).

For the urban consumption patterns the data were taken from the Office of the Prime Minister, Kakei Chōsa Sōgō Hōkokusho [General Report on the Family Income and Expenditure Survey, 1946-1962]. The observations used here refer only to urban workers' households, whose income and expenditures in cash only were recorded for the ten year period between 1953 and 1962. In the annual surveys 28 cities were covered and the sample households were classified into quintile groups according to money income. For this set of data, therefore, the cross-section observations are quintile group averages over the ten year period; and the entire set of observations numbers 50.

Except for minor variations in the concepts and procedures used over the years, each set of data is composed of a fairly homogeneous group of observations. The lack of parallelism is more of a problem when comparisons are made between urban and rural expenditure surveys. It is thought nonetheless that these sectoral differences are not serious enough to change the conclusions drastically. For the urban workers' households weighting of observations is unnecessary, because each cross-section represents a fifth of the entire sample for a given year. In the following, however, observations entering into the regressions for farm households are all weighted according to the number of households represented in each group average.

Table 1

List of Variables and Their Definitions

Variables	Name	Definition
N_t	Persons per household	Not adjusted for sex, age, or other attributes.
Y_t	Real total expenditure	For Farm Households: Total of household living expenditures, kakei-hi, including value of barter transactions, imputed value of home consumption of products, depreciation as well as cash transactions. Deflated by the rural cost of living index (1957 = 100). For Urban Households: Total of household living expenditures, defined as shohi-shishutsu in the source, including cash expenditures only. Deflated by the all-urban cost of living index (1960 = 100).
D_{it}	Real Expenditure	Deflated by p^r_{it} or p^u_{it}, where the scripts refer to the i-th component of the rural or urban cost of living index at year t, respectively. i = 1 -- Total Food Expenditure, excluding beverages and meals away from home. 2 -- Expenditures on starchy staples, including cereals and starchy roots for farm households, but including cereals only for urban workers' households. 3 -- Expenditures on meat, milk, eggs, and fish. 4 -- Expenditures on other food items. 5 -- Housing, excluding Furniture (6). 6 -- Furniture, Appliances, Utensils. 7 -- Household light and Fuel. 8 -- Clothing, Footwear, Accessories. 9 -- Miscellaneous Expenditures, including (10), (11), (12) as well as others. 10 -- Medical and Hygene Expenditures. 11 -- Educational Expenditures, including expenditures on stationary. 12 -- Reading and Recreation Expenditures.

Source: Japan, Ministry of Agriculture and Forestry, Nōka Keizai Chōsa Hōkoku (The Report on the Farm Household Economy), annual editions, 1952 through 1961. For p^r_{it}: Japan, Ministry of Agriculture and Forestry, Nōson Bukka Chingin Chosa Hokokusho (The Report of Prices and Wage Rates in Farm Villages), 1962.

For urban data: Japan, Office of the Prime Minister, General Report of the Family Income and Expenditure Survey: 1946-1962 (Tokyo, 1964).

3. The Results of Regression Analyses

Table 2 presents the estimated elasticities with respect to family size and income as obtained from the basic regression equation (equation (6)). Although the R-squares are not formally given in the table, the coefficients of determination are generally good.

With regard to the magnitudes of the estimated partial elasticities several points of interest emerge from the table. The elasticities of demand for food with respect to income are significantly below unity and, therefore, confirm Engel's law that the proportion of income spent on food declines as income rises. The elasticities for starchy staple food are substantially below those for total food. They corroborate indirectly M. K. Bennett's hypothesis that the proportion of food calories contributed by starchy staples declines as income rises.[4] This decline of the "starchy staple ratio" as income rise reflects the tendency of people to consume increasingly large quantities of meat, dairy products and other relatively costly foods (per a unit of calorie) as enlarged purchasing power allows them to modify their dietary pattern. It is interesting to note that the difference is quite small between the urban and the rural size elasticities of total food expenditure. On the other hand, the estimated partial elasticities of food demand with respect to income indicate a significant difference between the rural households and the urban households. This means that the difference between the two samples in their consumption behavior is attributable not so much to differing family sizes as to

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[4] M. K. Bennett, The World's Food (New York, 1954).
The proportion of total food expenditure devoted to starchy staples declined from 9 to 13 percentage points for farm households from around 55 percent of total to 45 percent over the period covered.

Table 2

Estimated Elasticities with Respect to Family Size and Total Expenditures
Urban and Rural Households, 1952-1962
(Standard errors of estimate are in parentheses)

Expenditure Category	Farm Households		Urban Workers' Households	
	Size Elasticity	"Income" Elasticity	Size Elasticity	"Income" Elasticity
Food	.455 (.022)	.555 (.016)	.405 (.083)	.462 (.024)
Starchy Staples	.921 (.036)	.343 (.026)	.461 (.168)	.216 (.050)
Animal Proteins	-1.125 (.089)	1.299 (.065)	.327 (.130)	.722 (.038)
Other Foods	.274 (.037)	.579 (.027)	.394 (.097)	.591 (.029)
Housing	-.473 (.079)	1.480 (.057)	1.259[a] (.728)	.480 (.211)
Furniture	-.669 (.069)	1.548 (.051)	-.609[a] (.799)	1.386 (.521)
Light and Fuel	.122 (.046)	.594 (.033)	-.494 (.201)	.945 (.058)
Clothing	-.515 (.040)	1.278 (.029)	.973 (.343)	1.073 (.099)
Miscellaneous	-.352 (.039)	1.528 (.028)	.024[a] (.105)	1.387 (.030)
Medical	.003[a] (.060)	.915 (.043)	1.209 (.362)	.367 (.105)
Education	-.007[a] (.117)	1.187 (.085)	-.035[a] (.499)	1.569 (.144)
Recreation	-.757 (.070)	1.441 (.051)	-.374[a] (.310)	1.432 (.090)

[a]Not significantly different from zero at 5 percent.

Source: Sames as Table 1.

income levels.

For farm households the present results indicate housing and clothing expenditures to be luxury items. Along with the evidence of higher income elasticity for food in the rural sector, they reflect in part lower income levels of farm households. The higher elasticity for rural housing, however, may in part be attributed to the fact that there is a strong correlation between the size of operating acreage and the size (and value) of residential buildings of farm households. By the same token, the higher income elasticity for clothing in the rural sector may be accounted for by the exclusion of work clothes from the rural household expenditure accounts.[5]

Expenditures for medical and hygiene needs and also educational expenditures are dependent not so much on household size as on income level. The results for the rural sector reveal that expenditures for these categories rise almost proportionally with the rise in income regardless of the size of the household. In the urban households, however, medical and hygiene expenditures respond more strongly to family sizes than to income levels.

H. S. Houthakker classifies the influences of family size on consumption into two effects, (1) the specific effect, resulting from the increase in the "need" for various commodities when family size increases, and (2) the income effect, that is, an increase in family size makes people relatively poorer.[6] Following Houthakker we may say that if the specific effect is stronger than

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[5] Instead, work clothes are included in the production cost accounts.

[6] H. S. Houthakker, "An International Comparison of Household Expenditure Patterns, Commemorating the Centenary of Engel's Law," Econometrica, 25, 4, (October 1957), p. 544.

the income effect the size elasticities will be positive. Otherwise they will be negative. The present results show that for food the specific effect is stronger than the income effect of family size. The basic need for food calories is reflected in the very high size elasticities for the starchy staples in the rural sample.[7] In the urban sample the high size elasticities are observed for clothing and medical expenditures. Presumably the specific effect of family size is stronger with respect to these expenditure items in the urban sector. On the other hand, the category of miscellaneous expenditures, except for urban medical expenditures, shows that the income effect of family size weighs more heavily than the specific effect.

Housing expenditures provide an important instance of this contrast between the urban and the rural samples. The drastic disparity of elasticities seems to reflect the peculiar situation in urban centers in postwar Japan, in addition to the explanations offered above. Cities grew rapidly by retaining urban population as well as drawing rural people (recently at the rate of 4 percent per year) without corresponding increases in private residential capital formation. It has been observed aptly that a part of the explanation for the spectacular rate of growth of the Japanese economy in the postwar years was due to her concentration on private capital formation (plant and equipment) and the relative neglect of private residential capital formation. S. Ichimura observes that the composition of the total gross capital formation in Japan was such that government capital formation and private residential capital formation were roughly 50 percent and 14 percent, respectively, of private capital

[7] The responsiveness of starchy staple consumption to the rise in income is small, whereas the size of family is very much responsible for determining the magnitude of such a consumption. On the other hand, animal proteins are luxury foods, and their size elasticity indicates the strength of the income effect over the specific effect.

formation in 1962.[8] Over crowding and, hence, the dire necessity to accommodate additional family members with quarters are a part of the urban circumstances reflected in the present result.

4. Changes in Consumer Preferences

Although equation (7) works well for some expenditure categories in explaining the variations in the values of $g(p, t)$, for others it does not. As can be seen in Table 3, the equation produces better results for subgroups of food and miscellaneous expenditures. Since it is true that the influence of price tends to appear smaller when aggregate consumption is considered than in the case of single items, the results obtained here are not surprising.

Under the specification adopted in this study of the function $g(p, t)$ we shall henceforth focus our attention only on those expenditure categories for which the regression equation produced significant results. The other categories of expenditure are considered here as having been explained by the changes in the variables, family size and income, included in the basic equation (6). In other words, it is assumed the structure of consumers' preferences did not change for these expenditure categories during the period covered in this study.

In equation (7) the parameter λ measures a constant rate of shift in the original demand function (2) after adjustment for changes in relative price. The estimated values of λ for the selected expenditure categories were used to obtain the implied annual rate of change in consumers' preferences. The

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[8] Shinichi Ichimura, "Postwar Recovery of the Japanese Economy," mimeographed (May 1966).

It is said that the three categories had about the same share of the total in West Germany.

Table 3

Measured Coefficients of Time-Series Regression, Equation (7)
Urban and Rural Households, 1952-1962
(Standard errors of estimate are in parentheses)

Expenditure Category	Farm Households					Urban Workers' Households				
	b	γ	λ	R	D-W	b	γ	λ	R	D-W
Food	.430	- .172 (.178)	.00097 (.00163)	.463	.997	.099	- .762 (.074)	-.00063 (.00014)	.969**	2.636
Starchy Staples	1.123	- .187 (.466)	-.00231 (.00236)	.347	1.131	- .018	.358 (.331)	-.00589 (.00245)	.927**	.975
Animal Proteins	-1.571	- .619 (.210)	.00999 (.00161)	.928**	1.582	- .912	- .536 (.089)	.00916 (.00034)	.995**	3.050
Other Food	.054	- .816 (.306)	.00432 (.00145)	.933**	1.511	- .683	-2.110 (2.267)	.04440 (.02297)	.606	2.626
Housing	-1.952	-2.935 (2.404)	-.01101 (.00787)	.789*	.798	-1.251	1.753 (2.299)	-.00107 (.02960)	.626	.965
Furniture	-2.212	2.885 (2.298)	.01206 (.01407)	.670	.656	-2.588	3.470 (11.150)	.11931 (.10398)	.589	1.053
Light and Fuel	- .399	- .843 (.691)	-.00091 (.00243)	.627	.937	- .871	-1.303 (.411)	-.00684 (.00155)	.907**	1.952
Clothing	-1.267	1.149 (.741)	.00176 (.00480)	.818*	1.114	-2.074	3.964 (1.098)	.05250 (.01092)	.964**	1.923
Miscellaneous	-1.658	.004 (.299)	-.00090 (.00211)	.281	2.068	-1.049	- .186 (.545)	-.00370 (.00235)	.828*	1.594
Medical	-1.255	-1.224 (.432)	.01152 (.00169)	.941**	1.624	-1.222	-1.274 (.636)	.01668 (.00249)	.988**	1.517
Education	-2.023	1.305 (.446)	.00227 (.00449)	.890**	2.569	-2.138	- .257 (1.180)	-.02802 (.02014)	.974**	1.934
Recreation	-2.153	- .370 (.488)	.02697 (.00679)	.955**	1.344	-1.626	- .844 (.694)	-.00105 (.00720)	.846*	2.417

*Significant at 5 percent.

**Significant at 1 percent.

Note: Price variable was defined as P^u_{it}/P^u_t and P^r_{it}/P^r_t for the urban and the rural data, respectively, where P^u_t and P^r_t are aggregate cost of living indices and i varies over expenditure categories.

Source: Same as Table 1.

results of this calculation are as follows:

Implied Annual Rates of Change in Consumers' Preferences
Urban and Rural Households, 1952-1962, Japan[9]

Expenditure Category	Farm Households	Urban Workers' Households
Food	---%	-0.2%
Starchy Staples	---	-1.4
Animal Proteins	2.3	2.1
Other Foods	1.0	---
Housing	-2.6	---
Furniture	---	---
Light and Fuel	---	-1.6
Clothing	0.4	11.0
Miscellaneous	---	-0.9
Medical and Hygiene	2.7	3.9
Education	0.5	-6.7
Recreation	6.4	-0.2

The position of total food in the structure of consumers' preferences did not change in the rural households over the decade, while it declined somewhat in regard to the urban households. Rises were registered by animal proteins for both samples (the rise being a little more with respect to the farm households). The position of starchy staples declined appreciably in the preference scale of the urban households but it did not change in that

[9]The symbol --- denotes that the change is insignificant.

of the farm households. This is particularly interesting since the urban data are concerned only with cereals while the rural data include potatoes as well. The urban consumers' shift away from starchy staples is thus even more pronounced. The change in favor of the "other foods" group is quite significant in the rural households. This reflects the increased acceptance of processed foods, oils and fats and other condiments in the rural households, attesting to the increasing variety of diet and food preparation and to the rural emulation of the urban patterns of consumption.

In non-food categories of expenditure the largest change in preferences occurred in rural recreation expenditures and urban clothing expenditures. Along with the evidence of a large increase in the preference for medical and hygiene items (including cosmetics) the change in the urban preferences leads to an interesting speculation about urban vanity. In the rural sector also the large increase in the position of recreation is followed by medical and hygiene expenditures. This, too, is a reflection of the rural emulation of the urban consumption patterns. In the rural sector the position of housing in the scale of preferences declined appreciably. This is not the case with regard to the urban sector, however, due apparently to the circumstances described earlier in the paper.

5. Concluding Remarks

This study yields the results that medical and hygienic, educational and recreational expenditures as well as food groups changed their positions appreciably in the structure of consumers' preferences. These changes tend to show a process of the rural emulation of the urban patterns of consumption. In view

of the rather unsophisticated patterns of consumption from which the rural households emerged after World War II, the evolution of preferences in favor of medical and hygienic expenditures, recreational expenditures, and animal protein foods consumption attests to this trend. The results concerning food consumption patterns also indicate a further upgrading of consumption from the traditional heavy reliance on starchy staples in favor of animal proteins.

Most of the urban/rural differences in the estimated elasticities can be explained by lower per capita income levels of the rural households. This is hardly a startling finding. By this very reason, however, the present results reinforce the contention that movement of people from rural areas increases "aggregate demand" for food, clothing and housing more rapidly than is otherwise the case. Furthermore, as exodus from rural areas continues, "aggregate demand" for typical items of urban consumption is expected to rise since new arrivals in cities improve their income positions and begin to emulate urban consumption patterns.

One of the problem areas is urban housing. As people move out of the farm sector it is expected that the relative position of rural housing should declin in the structure of consumers' preferences, as indeed it did in the period studied. Because it is not possible to move real estate along with people, during a period of rapid population movements, inevitably there appears a relatively long delay in the provision of urban housing. This situation, however, cannot be expected to persist for long. Future patterns of consumption in urban centers could be anticipated to show a substantial increase in housing expenditures which is not fully accountable by family size and income alone.