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HOUSING CONSUMPTION IN THE PHILIPPINES

by

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Variation in expenditures on housing may be due not just to differences in the quantity bought but to other factors such as the location of the land on which the house is built; the quality and quantity of furnishing; and other complementary facilities such as swimming pool and landscaping. Wilkinson [27] thinks that the expenditure on housing which consists of expenditure on location, land, etc., meet various personal needs. Housing expenditure fulfills the need for shelter, privacy, convenience of location, social prestige, aesthetics, and so on. For this reason, he suggests separating expenditure on housing that is meant to meet the need for shelter or changes in expenditure attributed to quantity changes in shelter from expenditure for the other factors. By controlling location and social group and by excluding furnishing and landscape, a more accurate estimate of the income elasticity of housing expenditure can be obtained.

A question may be raised about such analysis. Housing expenditure is not unique in meeting various human needs. Other consumption items serve varied purposes as well. When we use such broad groupings as expenditures for food, housing, clothing, transportation, and entertainment, we are likely to see that the nature of housing expenditure is not dissimilar from that of the other items. In fact variation in expenditure reflects not merely varia-

tion in quality per se, but of the uses of the items bought. Food as well as clothing can serve various purposes - entertainment, artistic feeling and convenience. It would seem not too meaningful to use this type of analysis. Instead we may look at the question as one of disaggregation. If we are able to disaggregate such expenditure into say, expenditure for the dwelling, furniture, art objects, cost of land, the shelter part of housing expenditure is more accurately observed. The data given by the BCS specifically includes expenditure for dwelling, furnishing, and light, fuel and water. It must include as well, additional expenses for favored location, art objects, etc.. The behavior of this broad expenditure for housing may then be compared with the expenditure for the structure or the dwelling unit. The 1968 National Demographic Survey (NDS) [17] provides data on the number of rooms occupied by households. These data obviously give a clearer picture of the standard of dwelling consumption of Philippine families than data on expenditures on housing. Moreover, the data are available for households, not for families, and this fact permits us to see the extent of crowdedness in a non-nuclear family situation.

BCS data include the average family expenditure on housing for the years 1957, 1961, 1965, and 1971. For 1965 the average family expenditure for housing for the lowest and highest income classes ranged from ₱54 to ₱2,975 and for 1971, from ₱201 to ₱3910. From the NDS survey we were able to get a cross tabulation of the

number of rooms occupied by size and the income class of households (Table 6.1). Households were grouped by size-intervals of 1-2, 3-4 . . . . to 17 or more. The average number of rooms for households whose income was less than ₱500 was 2.4. One also sees that 70% of Philippine households, ie. those with incomes of ₱2,999 or less, lived in houses of less than 3 rooms. Assuming that the first one-and-a-half rooms are all-purpose rooms - ie. for receiving, eating, and other purposes - we are left with just a little over one bedroom per household. The average size of households in thie survey being 6.6, this implies that on the average 6.6 persons in households belonging to the lower 70% of the income stratum (assuming that this figure is the relevant size for such households) share the space of a little over one bedroom.

To what extent does the size of dwelling or number of rooms vary with the size of households? In Table 6.2, we find the average number of rooms occupied by households of various sizes and income. There is little variation in number of rooms as household size increases within each income class. The variation in number of rooms seems to be mostly associated with income. For households with an annual family income between ₱500 to ₱2,000 the number of rooms occupied is almost constant at 2.6 for all household sizes. Households with family income between ₱3,000 to ₱6,000 occupied bigger dwelling, that is, about 3.5 rooms. Again within this income class, the number of rooms does not vary with household size.

But even households with family income of ₱15,000 or more do not occupy houses that gave a lot of privacy. The number of rooms occupied by the largest households in this income group is about 5.5. Moreover, there is a bunching of dwellings in sizes 2.6, 3.5, and 4.0. Such results reflect a custom that is probably a characteristic of Philippine families. Philippine sociologists think that Filipinos place little or no value on privacy. The term privacy is not found in the nation's vocabulary.

Since we already know that household size does not determine the number of rooms of dwellings, we regressed the number of rooms variable on income alone. The following results were obtained:[1]

$$\text{Log } R = -.148 + .192 \log Y \qquad R^2 = .91$$

$$(t = 11.238)$$

where R is average number of rooms for Y income class. The coefficient which is the income elasticiy of demand for rooms (0.192) is much smaller than the income elasticity of expenditure on housing (1.307).[2]

1/The best fit is obtained for the double log specification. The fit of a semi-log function is inferior to that of the double log where the R^2 is only 0.88; that of the linear function is .87; while that for the log inverse is 0.43.

2/This was obtained from the double log regression specification on BCS data, c.f."Consumption Patterns in the Philippines," a study submitted to the ILO, Dec. 31, 1973 of which this paper is a part.

These results are to be expected. Since our variable for housing expenditure includes the actual outlay on the house plus that on furnishing and basic supplies such as light, water and fuel, the expenditure elasticity is likely to be larger than that for the room elasticity. Thus the difference implies larger size of rooms as family income increases as well as significant improvement in the consumption of other items, including larger and more expensive location, more and better quality furnishing, greater consumption of fuel, light, water and other related items. Such expenditures are likely to be more responsive to income changes than the number of rooms of a dwelling. Hence the room elasticity obtained is probably smaller than the actual dwelling elasticity.

From the data and the regression results we can conclude that in situation of poverty the requirement for dwelling space as distinct from that for all expenditure related to housing is not as urgent as food. The intercept is negative and the elasticity is less than one. Moreover, for both low and high income groups, the number of rooms does not increase significantly with household size and it is not likely that the increase in size of rooms would contribute to most of the increases in expenditure on housing as income increases.

The expenditure elasticity of housing follows the pattern of all non-food expenditures - their intercepts have negative values and the income elasticities are greater than unity. The data show that most of the increases in the expenditure is due to improvement

in the quality of housing, probably in the form of more space per room, better furnishing and construction material, and better location, rather than in a greater number of rooms. While it is a matter of taste how families want to allocate increases in their budget for housing - whether to more furnishing or to more rooms, it is of public concern that the lowest 50 per cent of families occupies a small one - bedroom home.

This chapter provides but a meager empirical information on housing consumption. It is hoped that a more comprehensive set of data will soon be gathered in particular, indicators of the qualitative aspects of housing of the lower classes. We do not know the distribution of families by specific standards of housing though there is uneasiness about the observable extent of poverty in housing.

Table 1

Number of Rooms Occupied by Households
by Number of Members in the Household, by Income Class
1968

	Household Size (number of members)								
	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17 or more
Less than ₱500	2.4	2.4	2.4	2.4	2.8	1.5	3.0	0.0	1.0
₱500-999	2.5	2.6	2.6	2.7	2.7	2.7	2.3	2.0	0.0
₱1000-1499	2.6	2.7	2.6	2.7	2.7	2.7	2.7	1.0	0.0
₱1500-1999	2.2	2.8	2.8	2.6	2.9	3.0	2.8	2.5	0.0
₱2000-2499	2.4	2.7	2.7	2.9	2.8	3.4	4.2	0.0	1.0
₱2500-2999	2.8	3.1	2.8	3.1	3.5	2.8	3.4	3.0	0.0
₱3000-3999	3.5	3.3	3.4	3.1	3.4	3.7	3.4	3.9	4.0
₱4000-4999	3.4	3.3	3.8	3.3	3.[illegible]	3.3	3.5	5.0	0.0
₱5000-5999	2.7	3.7	3.8	3.9	3.7	3.8	3.9	3.4	3.0
₱6000-7999	3.6	3.[illegible]	4.2	4.2	4.3	4.3	4.0	2.5	3.3
₱8000-9999	5.0	4.0	4.0	4.7	4.6	5.0	3.0	4.3	4.2
₱10000-14999	5.0	4.9	4.5	4.6	4.2	4.7	5.4	4.0	0.0
₱15000-19999	0.0	3.5	3.9	4.8	4.4	5.2	5.3	5.3	0.0
₱20000 or more	2.7	3.8	4.5	4.1	4.6	4.8	5.5	5.5	4.0

Source: Unpublished data from the National Demographic Survey, 1968.

Table 2

Distribution of Families
As to Number of Rooms and Income Class

Number of Rooms	1	2	3	4	5	6	7	8	total	average
Income Class										
Less than ₱500	203	306	225	75	38	14	2	2	865	2.4
₱500-999	200	393	359	158	54	21	2	0	1187	2.6
₱1000-1499	157	303	326	132	39	17	5	3	982	2.7
₱1500-1999	110	199	177	101	41	12	3	3	646	2.7
₱2000-2499	102	240	174	118	51	19	4	2	410	2.8
₱2500-2999	35	98	102	66	28	11	7	2	349	3.1
₱3000-3999	50	120	156	138	72	29	9	4	578	3.4
₱4000-4999	16	65	72	89	38	11	7	6	304	3.5
₱5000-5999	4	40	61	70	41	7	5	5	233	3.7
₱6000-7999	10	29	58	72	50	8	10	10	247	4.0
₱8000-9999	6	17	24	40	35	19	6	10	157	4.4
₱10000-14999	2	8	31	42	19	28	9	8	147	4.6
₱15000-19999	1	4	10	11	17	8	4	4	59	4.7
₱20000 or more	5	11	14	12	17	10	5	8	82	4.4

Source: Unpublished data from the National Demographic Survey, 1968, especially abstracted for this study.

References:

1. 1968 National Demographic Survey, The data was specially obtained for this study through the assistance of Porfirio Sazon from the individual samples recorded in tapes.

2. R.K. Wilkinson: "The Income Elasticity of Demand for Housing," Oxford Economic Papers, Vol. 25, No. 3, Nov. Nov. 1973, p.368.