

# INTER-GENERATIONAL OCCUPATIONAL MOBILITY IN THE PHILIPPINES

MELINDA M. BACOL

**ABSTRACT.** This paper investigates trends and directions of social mobility occurring within the Philippine occupational structure. To measure mobility it employs occupations of father and son as reference points, data being taken from the National Demographic Survey (1968). An occupational-ranking scheme based on indexes such as education, income, and prestige is developed to give meaning to concepts of "upward" and "downward" movements. Three approaches to the study of mobility are utilized, starting with the most conventional, percentage-distribution analysis, and proceeding to the application of a "perfect" and a "quasi-perfect" mobility model. Various determinants of son's occupational success are scrutinized, and interrelationships among these determinants are explained with the help of Blalock's technique for evaluating causal models.

Economic development and social mobility can be viewed as functional interdependents. Concomitant with the process of economic development, large numbers of individuals are loosened from traditional roles and shuffled through the emergent social structure. On the other hand, social mobility per se hastens the modernization of the old social structure. Change in socioeconomic orientation and considerable mobility are themselves important components for furthering economic development (Davis 1966:384-391). Occupation in this study is utilized as the single indicator of social mobility.

Most investigations of occupational mobility have been conducted in the economically developed societies. A codification of these studies for purposes of a comparative analysis of mobility trends was attempted by Miller (1960). More recently, studies have been done for Australia (Broom and Jones 1969), the United States (Blau and Duncan 1967), and Italy (Lopreato 1965). Comparatively few studies have been attempted in developing societies. Two of them were conducted in urban areas: Poona, India

(Sovani and Pradhan 1966), and Sao Paulo, Brazil (Hutchinson 1958). The only national study available at the present time is that of Puerto Rico (Tumin and Feldman 1961).

Very little empirical research on mobility has been accomplished in the Philippines. As late as November 1964 Lynch could write (1965:173):

Our knowledge of the national system of social stratification and mobility is, in the final analysis, largely impressionistic. There is agreement that what exists is a widespread two-class structure within which placement is predominantly on the basis of wealth. Further distinctions are made according to subsidiary markers such as language, race, and religion. Only in the large cities does a genuine middle class appear to be emerging, a change that augurs well for the development of the Philippine economy. Our knowledge of mobility is limited: we know that upward movement occurs with relative ease and frequency, most commonly by means of advanced education obtained in Manila and other large cities. But empirical research on a national scale is clearly called for if we are to have a solid comprehension of social stratification and mobility in the Philippines.

No mobility studies to date have filled this need, for where the research was empirical it was

restricted in scope. Guillergan's study (1969) revolved around the extent and quality of female employment. Inter-generational mobility was given only slight treatment in her thesis. Comparatively, Beltran (1962) dealt with inter-generational mobility more extensively. However, her sample was restricted to undergraduate and graduate students who had full-time work experience prior to or during their studies. The inclusion of disproportionately many upper-class people made her sample population unrepresentative of the nation's labor force. Similarly, studies conducted by Carroll (1965) and Bennett (1971) were restricted to "top brass," i.e., managers and entrepreneurs.

This study, based on a nationwide sample of married males within the age range of 25 to 64 years, attempts to analyze Philippine occupational mobility and its determinants. Given the paucity of mobility data for developing countries, this investigation may prove helpful to suggest clues for the evaluation of occupational dynamics not only in the Philippines, but in similarly situated developing countries as well.

#### *Data*

The data utilized for this study were obtained from the National Demographic Survey (henceforth referred to as NDS), a joint undertaking of the Philippine Bureau of the Census and Statistics (BCS) and the Population Institute, University of the Philippines, which was conducted in May 1968. The sampling design included somewhat separate procedures for urban and rural areas, where urban areas were delineated in accordance with criteria provided by the OSCAS committee on urban definition (OSCAS 1965). For urban areas a simple, stratified, two-stage design was employed with the electoral precinct and the household serving as basic sampling units. Strata (groups of cities and municipalities) were formed on the basis of the number of urban precincts. For rural areas likewise a simple, stratified, two-stage design was used. Barrios were stratified on the basis of their 1960 populations. The first stage of sampling was of barrios within strata; in the second stage households were sampled

within barrios. Overall, one out of four urban households was sampled as against one out of 12 rural households. In order to adjust for the rural-urban ratio of the sample, weighting factors of 12 and 4 were applied to rural and urban households for purposes of analysis.

For this study, the sample was streamlined by a process of elimination. First of all, the population included was confined to married males 25-64 years of age because men at these ages are generally believed to have completed formal education and gained relative occupational stability. The study excludes also unmarried males whose income data, employed here as criteria for occupational stratification, were not available. Females were excluded since their participation in the labor force was comparatively low, a fact which is particularly true for married women (BCS 1970, Table 7). In addition, occupations held by women tend to be of lower status than those which men of comparable background and education would be willing to accept (Guillergan 1969:56-73). The second restriction called for the disqualification of the unemployed, of students, and of members of the armed forces in order to confine the study to economically active members of the labor force. The weighted size of the streamlined sample was 36,472.

#### *Occupational Classification Scheme*

In the following analysis the parental generation is utilized as a baseline against which the occupational achievement of the sons is evaluated. Operationally, social origin or social background of the son was defined in terms of occupation of the son's father at age 40, and son's social status was measured in terms of his occupation as of May 1968.

The original research plan was to utilize Tiryakian's prestige evaluation of Philippine occupations. Unfortunately, his research design called for only 30 occupational titles which were supposed to give a cross-sectional representation of Philippine occupations. Since this study deals with an exhaustive list of occupations, Tiryakian's occupational classification scheme could

only provide a general but insufficient guide in the attempt to stratify occupations obtained in the NDS.

Three approaches to occupational classification were employed and evaluated against one another. The initial step consisted in classifying Philippine occupations in accordance with the ranking scheme developed for Australia (Broom and Jones 1969:650–658), assuming that prestige evaluation of occupations is similar for all countries regardless of level of development (Tiryakian 1958:143; Hodge, Treiman, and Rossi 1966:309–334). A high correlation (using the Spearman Rank Correlation test) was obtained between NDS occupations classified and ranked according to the Tiryakian occupational classification scheme and NDS occupations classified and ranked according to the Australian scheme. The overall correlation coefficient obtained was .875, which increased to .939 when agricultural occupations were disregarded.

The second approach employed two objective status indexes, education and income, and led to the assignment of agricultural occupations at the bottom of the occupational hierarchy. Third, preliminary socioeconomic status (SES) scores independently developed by Pullum (1971) using the same indexes, education and income, served to evaluate the occupational ranking obtained through the second approach. Using Spearman's rho-b, corrected for ties (Kendall 1948:29), Pullum found a high correspondence (.928) between the preliminary SES that he had devised and the second ranking scheme. By assigning fishermen and loggers ranks higher than those of farm owners and farm managers, and by reorganizing blue-collar occupations into upper-skilled, transportation, and lower-skilled workers, the rank correlation between scores based on approach number two and Pullum's SES scores could be increased to .950.

The 14 occupational groups used as the standard classification in this study were the following.

#### I UPPER PROFESSIONAL

Chemists  
Professors

Physicians  
Lawyers  
Clergymen  
Social scientists  
Engineers, Pilots

#### II LOWER PROFESSIONAL

Teachers  
Nurses, Technicians  
Artists

#### III ADMINISTRATIVE

Government officials  
Directors

#### IV CLERICAL AND RELATED

Bookkeepers  
Steno-Office machine and Telecom operators  
Clerical NEC's (Not Elsewhere Classified)  
Mail carriers  
Policemen  
Inspectors

#### V SALES WORKERS

Proprietors  
Commercial travelers  
Salesmen

#### VI SKILLED (UPPER)

Tailors  
Precision instrument operators,  
Machinists  
Electricians, Compositors  
Painters  
Bricklayers

#### VII TRANSPORTATION

Drivers  
Conductors

#### VIII SKILLED (LOWER)

Furnacemen  
Carpenters  
Millers, Bakers  
Craftsmen  
Spinners, Footwear Makers  
Potters, Chemical workers, Tobacco preparers  
Lifting equipment operators, Firemen, Ship crews

**IX SERVICE**

- Janitors
- Barbers
- Housekeepers, Launderers
- Market vendors
- Service station attendants, Waiters, Service NEC's

**X UNSKILLED (NON-FARM)**

- Packers
- Laborer NEC's

**XI FISHERMEN, LOGGERS**

**XII FARM OWNERS AND MANAGERS**

**XIII FARM TENANTS**

**XIV FARM LABORERS**

Two collapsed versions of the standard groupings were employed:

	<i>Version 1</i>	<i>Version 2</i>	
Elite	I, II, III	Non-Manual Occupations	I - V
Middle Class	IV, V	Working Class	VI - X
Working Class (Upper)	VI, VII	Manual Occupations	VI - XIV
Working Class (Lower)	VIII, IX, X	Farm Occupations	XI - XIV
High Farmers	XI, XII		
Low Farmers	XIII, XIV		

*Hypotheses*

The main guiding propositions of the study were five in number.<sup>1</sup>

1. Sons have a propensity to inherit the social strata of their fathers.
2. A significant proportion of sons in any occupational group is of farm origin (because of the agrarian nature of the Philippine economy in the past).
3. Top-ranking and low-ranking occupations are relatively closed to mobility, while middle-range occupations are relatively open. More specifically:

*Supply*

*Recruitment*

- |   |  |
|---|--|
| a. Sons coming from elite strata tend to remain | the elite strata tending to recruit new members from |
|---|--|

within their strata of origin rather than leave, their own ranks rather than from the lower strata;

- b. Sons of agricultural workers tend to maintain the occupational strata of their fathers. the agricultural strata tending to recruit new members from their own ranks rather than from non-farm strata;
- c. Sons from within the lower white-collar and upper blue-collar strata are more likely to move out, the lower white-collar and upper blue-collar strata being more likely to recruit new members from other strata rather than from within.

4. Vertical mobility is characteristically short-distant.

- a. The closer the affinity between occupational ranks, the more intensive is the interchange of their members.
- b. Sons of high social origins who experience status decline are more likely to fall into the middle ranks rather than into the lower ranks.
- c. Sons of low social origins who rise in status are more likely to terminate in the middle ranks rather than in the top ranks.

5. Son's education is more important than father's social status in determining son's occupational success at the upper and lower ends of the educational continuum, while father's social status is a more important determinant in the mid-grade levels.

- a. Among sons coming from high social origins, the higher the level of educational attainment, the less likely is a fall in status below their fathers'.
- b. Among sons coming from low social origins, the higher the level of educational attainment, the greater the opportunity for upward mobility.

*Procedures and Findings*

*Descriptive analysis.* Tables 1 to 3 provide an initial description of Philippine occupational mobility. In Table 1 occupations of sons are classified by occupation of father. Table 2 con-

tains outflow percentages which describe the supply patterns of sons from a common paternal occupational origin to various occupational destinations. The diagonal of this table (bold figures) indicates the proportion of sons who have remained within the occupational strata of their fathers. As can be observed from Table 1, nearly half of the sons are in the same occupational strata as their fathers, while the other half are mobile. With respect to occupational stability differentials, inheritance is most prevalent in the farm sector, intermediate in the working class (except service), and least prevalent in the non-manual sector and in service occupations. More specifically, three out of five sons of farm tenants have remained in the positions of their fathers, in contrast to only one of 17 sons of lower professionals.

Table 3 presents inflow percentages which depict the heterogeneity of occupational origin of sons in a given occupational stratum. The diagonal (bold figures) describes the extent of occupational or stratum self-recruitment. The inflow or recruitment percentages reveal very clearly the agrarian nature of the labor force and the infiltration of non-farm occupations by sons coming from farm origins. Non-farm occupational recruitment from the farm-owner and manager stratum is higher than from any other occupational grouping. By and large, the degree of recruitment of sons of farm tenants is inversely related to the level of occupational rank, i.e., the higher the rank, the smaller the proportion of sons of farm tenants found in it. The higher occupational groups within the non-farm sector are least likely to draw new members from low non-farm origins.

While percentage distribution analysis is useful in depicting the actual state of affairs, it is a weak measure of opportunity differentials for two important reasons. First, structural conditions impose limitations. Thus, within the Philippine occupational pyramid, even if every position in the upper professions were to be filled by the son of an independent farmer, given the occupational distribution of the filial generation, only 6.6 per cent of the sons of independent farmers could be upwardly mobile in this spec-

ific way. A second bias is introduced through the hierarchical positioning of occupations. There is no way of measuring the occupational success of men who come from top-ranking origins, and the status decline of men who come from bottom-ranking origins. To obviate these biases, a second measure is utilized wherein actual mobility is compared with a norm of perfect mobility.

*Perfect-mobility model.* A perfect-mobility model postulates statistical independence between parental and filial generations off and on the diagonals. Rogoff ratios, i.e., ratios of observed mobility values to expected values under the assumption of perfect mobility, are computed. A Rogoff ratio of 1.00 indicates a one-to-one correspondence between actual and expected movement, i.e., perfect mobility. Ratios of more or less than 1.00 indicate areas of concentration or dispersion of movement. The degree of departure of the observed from the expected values (italicized for values 1.01–1.99 and printed in bold type when 2.00 or over) demonstrates the extent of permeability of the Philippine stratification system.

For example, reading down the column of the upper-professional stratum (I) in Table 4 reveals that 16 times more sons than expected were drawn, or recruited, from within the stratum, seven times more than expected came from the lower-professional and administrative ranks (Rows II–III), four times as many from the clerical and sales ranks (Rows IV–V), and almost three times as many from the upper-skilled rank (Row VI). By contrast, no sons were recruited from the unskilled-non-farm and farm-labor ranks (X, XIV). For the rest of the farm ranks, the amount of recruitment into the upper-professional stratum was less than expected. These findings indicate that the upper-professional stratum is highly accessible only to sons coming from proximal origin strata.

Reading down the columns of Table 4 gives immobility values which denote entry into a stratum relative to expectation. Reading along the rows gives out-mobility values denoting exit from a stratum of origin relative to expectation.

Table 1  
Employed married males 25-64 years of age, classified by father's occupation when he was 40 years old,  
crossclassified by own (son's) occupation as of May 1968 (Philippines)<sup>a</sup>

Father's occupation (at age 40)	Son's occupation in May 1968														Total
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	
I Upper professional	92	8	52	68	8	20	16	32	8	0	0	12	12	0	328
II Lower professional	52	24	40	80	28	28	8	48	36	0	12	40	4	0	400
III Administrative	28	12	60	32	16	16	16	8	0	0	12	16	12	0	228
IV Clerical and related	72	52	88	276	36	68	88	60	28	4	16	72	48	24	932
V Sales workers	96	36	96	132	308	96	84	84	56	24	72	124	72	24	1304
VI Skilled (upper)	32	24	12	60	24	268	52	60	48	8	8	4	40	0	640
VII Transportation	8	8	4	20	24	52	124	16	32	0	4	12	12	4	320
VIII Skilled (lower)	20	52	36	100	92	120	160	692	84	20	104	228	192	88	1988
IX Service	16	20	32	60	32	72	68	76	156	12	24	28	52	20	668
X Unskilled (non-farm)	0	0	0	4	0	12	16	4	4	36	0	0	12	0	88
XI Fishermen, Loggers	12	12	36	88	84	76	72	176	116	16	1232	308	204	96	2528
XII Farm owners and Managers	192	216	184	552	364	392	388	588	296	44	596	7820	2732	452	14816
XIII Farm tenants	32	40	56	208	228	240	316	560	244	36	416	1096	6464	596	10532
XIV Farm laborers	0	0	4	32	36	60	112	108	96	20	96	184	320	632	1700
Total	652	504	700	1712	1280	1520	1520	2512	1204	220	2592	9944	10176	1936	36472

<sup>a</sup>Excludes members of the armed forces. Numbers are absolute frequencies in hundreds. Source of table is the National Demographic Survey (NDS), 1968.

Table 2  
Outflow percentages indicating mobility of employed married males 25-64 years of age  
from father's occupation to own (son's) occupation (Philippines, May 1968)<sup>a</sup>

Father's occupation (at age 40)	Son's occupation in May 1968														Total
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	
I Upper professional	28.04	2.44	15.85	20.73	2.44	6.10	4.88	9.76	2.44	0.0	0.0	3.66	3.66	0.0	100.00
II Lower professional	13.00	6.00	10.00	20.00	7.00	7.00	2.00	12.00	9.00	0.0	3.00	10.00	1.00	0.0	100.00
III Administrative	12.28	5.26	26.32	14.03	7.02	7.02	3.51	0.0	0.0	0.0	5.26	7.02	5.26	0.0	100.00
IV Clerical and related	7.72	5.58	9.44	29.62	3.86	7.30	9.44	6.44	3.00	0.43	1.72	7.72	5.15	2.58	100.00
V Sales workers	7.36	2.76	7.36	10.12	23.64	7.36	6.44	6.44	4.29	1.84	5.52	9.51	5.52	1.84	100.00
VI Skilled (upper)	5.00	3.75	1.88	9.38	3.75	41.87	8.12	9.38	7.50	1.25	1.25	0.62	6.25	0.0	100.00
VII Transportation	2.50	2.50	1.25	6.25	7.50	16.25	38.75	5.00	10.00	0.0	1.25	3.75	3.75	1.25	100.00
VIII Skilled (lower)	1.01	2.62	1.81	5.03	4.63	6.04	8.05	34.80	4.22	1.01	5.23	11.46	9.66	4.43	100.00
IX Service	2.40	2.99	4.79	8.98	4.79	10.78	10.18	11.38	23.36	1.80	3.59	4.19	7.78	2.99	100.00
X Unskilled (non-farm)	0.0	0.0	0.0	4.54	0.0	13.64	18.18	4.54	4.54	40.92	0.0	0.0	13.64	0.0	100.00
XI Fishermen, Loggers	0.48	0.48	1.42	3.48	3.32	3.01	2.85	6.96	4.59	0.63	48.73	12.18	8.07	3.80	100.00
XII Farm owners and Managers	1.30	1.46	1.24	3.72	2.46	2.65	2.62	3.97	2.00	0.30	4.02	52.77	18.44	3.05	100.00
XIII Farm tenants	0.30	0.38	0.53	1.98	2.16	2.28	3.00	5.32	2.32	0.34	3.95	10.40	61.38	5.66	100.00
XIV Farm laborers	0.0	0.0	0.24	1.88	2.12	3.53	6.59	6.35	5.65	1.18	5.65	10.82	18.82	37.17	100.00
Mean	1.79	1.38	1.92	4.69	3.51	4.17	4.17	6.88	3.30	0.60	7.10	27.29	27.89	5.31	100.00

<sup>a</sup>Excludes members of the armed forces. Numbers are percentages. Source of table is the National Demographic Survey (NDS), 1968.

Table 3  
Inflow percentages indicating mobility of employed married males 25-64 years of age  
from father's occupation to own (son's) occupation (Philippines, May 1968)<sup>a</sup>

Father's occupation (at age 40)		Son's occupation in May 1968														
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	Mean
I	Upper professional	14.11	1.59	7.43	3.97	0.62	1.32	1.05	1.27	0.66	0.0	0.0	0.12	0.12	0.0	0.90
II	Lower professional	7.98	4.76	5.72	4.67	2.19	1.84	0.53	1.91	2.99	0.0	0.46	0.40	0.04	0.0	1.10
III	Administrative	4.29	2.38	8.57	1.87	1.25	1.05	1.05	0.32	0.0	0.0	0.46	0.16	0.12	0.0	0.62
IV	Clerical and related	11.04	10.32	12.57	16.12	2.81	4.47	5.79	2.39	2.33	1.82	0.62	0.72	0.47	1.24	2.56
V	Sales workers	14.72	7.14	13.72	7.71	24.06	6.32	5.53	3.34	4.65	10.91	2.78	1.25	0.71	1.24	3.57
VI	Skilled (upper)	4.91	4.76	1.71	3.50	1.88	17.63	3.42	2.39	3.99	3.64	0.31	0.04	0.39	0.0	1.75
VII	Transportation	1.23	1.59	0.57	1.17	1.88	3.42	8.16	0.64	2.66	0.0	0.15	0.12	0.12	0.21	0.88
VIII	Skilled (lower)	3.07	10.32	5.14	5.84	7.19	7.90	10.53	27.55	6.98	9.09	4.01	2.29	1.89	4.54	5.45
IX	Service	2.45	3.97	4.57	3.50	2.50	4.74	4.47	3.02	12.96	5.45	0.93	0.28	0.51	1.03	1.83
X	Unskilled (non-farm)	0.0	0.0	0.0	0.23	0.0	0.79	1.05	0.16	0.33	16.36	0.0	0.0	0.12	0.0	0.24
XI	Fishermen, Loggers	1.84	2.38	5.14	5.14	6.56	5.00	4.74	7.01	9.63	7.27	47.54	3.10	2.00	4.96	6.93
XII	Farm owners and Managers	29.45	42.85	26.29	32.26	28.44	25.78	25.52	23.41	24.58	20.01	22.99	78.65	26.85	23.35	40.64
XIII	Farm tenants	4.91	7.94	8.00	12.15	17.81	15.79	20.79	22.29	20.27	16.36	16.05	11.02	63.52	30.79	28.87
XIV	Farm laborers	0.0	0.0	0.57	1.87	2.81	3.95	7.37	4.30	7.97	9.09	3.70	1.85	3.14	32.64	4.66
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>a</sup>Excludes members of the armed forces. Numbers are percentages. Source of table is the National Demographic Survey (NDS), 1968.

Table 4  
Rogoff ratios indicating mobility of employed married males 25-64 years of age  
from father's occupation to own (son's) occupation (Philippines, 1968)<sup>a</sup>

Father's occupation (at age 40)		Son's occupation in May 1968														
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	Mean
I	Upper professional	16.00	2.00	8.67	4.53	0.67	1.43	1.14	1.39	0.73	0.0	0.0	0.14	0.13	0.0	1.60
II	Lower professional	7.43	4.00	5.00	4.21	2.00	1.65	0.47	1.71	2.77	0.0	0.43	0.37	0.04	0.0	2.01
III	Administrative	7.00	4.00	15.00	2.91	2.00	1.60	1.60	0.50	0.0	0.0	0.75	0.26	0.19	0.0	1.60
IV	Clerical and related	4.24	4.00	4.89	6.27	1.09	1.74	2.15	0.94	0.90	0.67	0.24	0.28	0.18	0.48	1.68
V	Sales workers	4.17	2.00	3.84	2.16	6.70	1.78	1.56	0.93	1.30	3.00	0.77	0.35	0.20	0.35	1.72
VI	Skilled (upper)	2.91	2.67	1.00	2.00	1.09	9.93	1.93	1.36	2.29	2.00	0.17	0.02	0.22	0.0	1.36
VII	Transportation	1.33	2.00	0.67	1.33	2.18	4.00	9.54	0.73	2.91	0.0	0.17	0.14	0.14	0.24	1.22
VIII	Skilled (lower)	0.56	1.86	0.95	1.08	1.31	1.45	1.93	5.05	1.27	1.67	0.74	0.42	0.35	0.83	1.11
IX	Service	1.33	2.22	2.46	1.94	1.39	2.57	2.43	1.65	7.09	3.00	0.50	0.15	0.28	0.57	1.58
X	Unskilled (non-farm)	0.0	0.0	0.0	1.00	0.0	3.00	4.00	0.67	1.33	36.00	0.0	0.0	0.50	0.0	0.81
XI	Fishermen, Loggers	0.27	0.34	0.75	0.74	0.80	0.72	0.69	1.01	0.24	1.07	6.84	0.45	0.29	0.72	0.62
XII	Farm owners and Managers	0.72	1.05	0.65	0.79	0.70	0.64	0.63	0.58	0.85	0.49	0.57	1.94	0.66	0.58	0.68
XIII	Farm tenants	0.17	0.27	0.28	0.42	0.62	0.55	0.72	0.77	0.70	0.56	0.56	0.38	2.20	1.07	0.54
XIV	Farm laborers	0.0	0.0	0.12	0.40	0.60	0.84	1.58	0.92	1.70	2.00	0.79	0.40	0.68	7.02	0.77
Mean		2.32	1.72	2.25	1.81	1.11	1.69	1.60	1.01	1.31	1.11	0.44	0.26	0.30	0.37	1.24

<sup>a</sup>Excludes members of the armed forces. Numbers are Rogoff ratios. Source of table is the National Demographic Survey (NDS), 1968.

The table marginals represent in-mobility and out-mobility averages, the summary of which is a single score indicating actual overall mobility relative to expected mobility. Likewise, the summary of stability values is a single score called overall stability.

Summary measures derived from the Rogoff ratios shown in Table 4 are reproduced in Table 5 (cf. Tumin and Feldman 1961:371-375). The latter table contains the average in-and out-mobility. The ratio of stability to average in-mobility measures the extent to which an occupational stratum recruits new members from its own rank relative to recruitment from other ranks. The ratio of stability to average out-mobility measures the degree to which sons remain in the occupational stratum of their fathers relative to departure from the fathers' stratum.

As shown in Table 5, overall mobility is one-and-one-fourth times larger than expected. By contrast, overall stability is nearly 10 times expectation, indicating a highly immobile occupational structure. Column 5 of Table 5 shows

that the lower professions and the clerical occupations have the strongest tendency to recruit sons from other strata relative to recruitment from within the stratum. The amount of self-recruitment in the remaining strata is at least five times as extensive as external recruitment. A markedly high degree of self-recruitment is demonstrated by the unskilled-non-farm (32.43), farm-laborer (18.97), and fisherman and logger (15.54) occupations. Generally speaking, it appears that clerical and sales strata are relatively accessible, and unskilled-non-farm, farm-laborer, and fisherman and logger strata, relatively impermeable.

Column 6 of Table 5 shows that sons of lower professionals (1.99), farm owners (2.85), clerical workers (3.73), and sale workers (3.90), have the least propensity for stability relative to out-movement. Distinct from the sons of other origins are the sons of unskilled-non-farm workers (44.44), who are comparatively more inclined to inherit the occupational stratum of their fathers rather than move. Manifesting a similar inclination, but to a lesser extent, are the sons

Table 5

*Summary measures derived from Rogoff ratios, classified by occupation  
(Philippines, May 1968)*

Occupation (1) <sup>a</sup>	Average in-mobility (2)	Average out-mobility (3)	Stability (4)	Stability/ in-mobility (5)	Stability/ out-mobility (6)
I Upper professional	2.32	1.60	16.00	6.90	10.00
II Lower professional	1.72	2.01	4.00	2.33	1.99
III Administrative	2.25	1.60	15.00	6.67	9.38
IV Clerical and related	1.81	1.68	6.27	3.46	3.73
V Sales workers	1.11	1.72	6.70	6.04	3.90
VI Skilled (upper)	1.69	1.36	9.93	5.88	7.30
VII Transportation	1.60	1.22	9.54	5.96	7.82
VIII Skilled (lower)	1.01	1.11	5.05	5.00	4.55
IX Service	1.31	1.58	7.09	5.41	4.49
X Unskilled (non-farm)	1.11	0.81	36.00	32.43	44.44
XI Fishermen, Loggers	0.44	0.62	6.84	15.54	11.03
XII Farm owners and Managers	0.26	0.68	1.94	7.46	2.85
XIII Farm tenants	0.30	0.54	2.20	7.33	4.07
XIV Farm laborers	0.37	0.77	7.02	18.97	9.12
Overall	1.24	1.24	9.54		

<sup>a</sup>Numbers within parentheses are column numbers. The slant line (/) following "Stability" in the heading of columns 5 and 6 is to be read as "divided by."



of fishermen and loggers (11.03), upper professionals (10.00), administrators (9.38), and farm laborers (9.12). By way of inference it can be stated that sons coming from lower-professional, farm-owner, and clerical and sales origins are relatively mobile, and sons coming from polar origins, namely, the upper-professional, administrative, unskilled-non-farm, fisherman and logger, and farm-laborer ranks, are relatively stationary.

If Columns 5 and 6 are looked at simultaneously, the lower-professional stratum appears to be most open and the unskilled-non-farm stratum most closed. The clerical stratum likewise is relatively open, i.e., it exhibits a stronger tendency for external recruitment compared to self-recruitment and shows more occupational out-movement than inheritance. The unskilled-non-farm stratum exhibits the highest degree of rigidity, followed by the upper-professional and administrative groups. The latter is less receptive of sons coming from lower social origins, and sons coming from these high origins are less likely to move down. Sons of farm tenants and farm owners are less prone to remain in their stratum of origin than are farm laborers.

It was found that weighted in-and-out-mobility averages fitted the highly unequal Philippine occupational distribution better than Tumin and Feldman's unweighted averages.<sup>2</sup> For example, self-recruitment and mean in-mobility values for the upper professional stratum, using the Tumin and Feldman method, were higher than expected (16.00 and 2.32, respectively), whereas corresponding values obtained through the alternative method were more complementary (16.00 and 0.87). Overall, however, occupational differentials obtained by both methods were highly comparable.

Specific directions of supply and sources of recruitment can be assessed by re-examining Table 4 in the light of the above findings. Looking at the columns of this table it can be observed that recruits for the upper ranks of the occupational hierarchy come first of all from within the strata, and secondarily, from contiguous ranks. Self-recruitment into the upper pro-

fessions is 16 times larger than expected; seven times more recruits than expected came from the administrative and lower-professional ranks, and four times more than expected came from the clerical and sales ranks. Self-recruitment into the administrative rank is 15 times larger than expected. In addition, the upper professions (8.67), the lower professions (5.00), the clerical group (4.89), and the sales group (3.84) constitute the prime recruitment sources for the administrative rank. Clerical and sales ranks have more proclivity for self-recruitment and recruitment from contiguous upper ranks than from contiguous lower ranks. The concentration patterns of recruitment for upper-skilled blue-collar and transportation groups suggest that these ranks function primarily as the termini for sons coming from lower working class origins who had gained in status, and as depositories for sons dislodged from high social origins.

For the lower professionals, inspection of the row ratios of Table 4 reveals a heavier influx of supply into occupations off the diagonal than on the diagonal. Inheritance within this stratum is relatively high (4.00), but movement from this stratum to adjacent ranks, namely, the upper-professional (7.43), administrative (5.00), and clerical (4.21) groups, is even higher, signifying a lack of staying force in the lower professions. The supply patterns for clerical and sales indicate that sons from these origins have a greater opportunity to rise than to fall in status. Mobile sons of upper professionals are most likely to enter the administrative stratum (8.67) and the clerical (4.53) and lower professional (2.00) ranks. On the other hand, the predominant destination of mobile sons of administrators is the upper-professional stratum (7.00). Downward movements of these sons tend to terminate in the lower-professional stratum (4.00) and, to a lesser extent, in the clerical (2.91) and sales (2.00) ranks.

An examination of the Rogoff-ratios for agricultural occupations reveals that movements out of these ranks into other strata are below expectation in almost all cases. There are only a few exceptions. The fisherman and logger rank

met its quota of expected supply for the lower-skilled blue-collar group (1.01) and exceeded it slightly for the unskilled non-farm stratum (1.07). Likewise, the farm-owner and manager rank somewhat exceeded its quota of expected supply for the lower professions (1.05) as did the farm tenant group for farm laborer stratum (1.07). The supply of farm laborers into the unskilled non-farm sector is twice expectation, into transportation one-and-three-fifths expectation, and into service one-and-two-thirds expectation. Generally speaking, the higher the non-farm rank, the less the tendency to draw new members from the agricultural sector. Recruitment patterns of agricultural occupations disclose that these ranks are definitely not the destination of any kind of movement coming out of the non-farm ranks. The Rogoff-ratios always fall short of 1.00.

Mobility trends just describe appear to contradict the previous findings. Whereas in percentage-distribution analysis inheritance rates progress from least inheritance in the non-manual sector to greatest inheritance in the farm sector, in Rogoff-ratio analysis the reverse trend emerges. The stability patterns arrived at through

the use of percentage-distribution analysis gain support when Goodman's "quasi-perfect-mobility" model (Goodman 1969:831-850), a more sophisticated measure, is introduced.

*Quasi-perfect-mobility model.* The Goodman model differs from that of Rogoff in only one aspect. It recognizes the empirical propensity of sons to assume the occupational stratum of their fathers. Otherwise, it postulates statistical independence between parental and filial generations among occupationally mobile sons.

The stability index derived from the Goodman model is an Index of Status Persistence which measures the degree to which an individual's origin status "persists." A positive index of persistence indicates the proportion of sons who have no chance to move. A negative index gives the proportion of sons who have an "additional chance" or a "second chance" to move. The indexes of persistence for all occupations in Table 6 are positive. To mention extreme cases, among the sons of farm tenants who remained within the occupational stratum of their fathers, a maximal proportion (.99) had no chance to move, as opposed to the sons of upper professionals who inherited the occupational stratum

Table 6

*Stability indexes calculated by three different methods, classified by occupation  
(Philippines, May 1968)*

Occupation (1) <sup>a</sup>	Inheritance (descriptive) (2)	Persistence (Goodman) (3)	Immobility (Rogoff) (4)
I Upper professional	28.04	.35	16.00
II Lower professional	6.00	.04	4.00
III Administrative	26.32	.32	15.00
IV Clerical and related	29.62	.32	6.27
V Sales workers	23.64	.25	6.70
VI Skilled (upper)	41.87	.62	9.93
VII Transportation	38.75	.53	9.54
VIII Skilled (lower)	34.80	.39	5.05
IX Service	23.36	.24	7.09
X Unskilled (non-farm)	40.92	.68	36.00
XI Fishermen, Loggers	48.73	.82	6.84
XII Farm owners and Managers	52.77	.77	1.94
XIII Farm tenants	61.38	.99	2.20
XIV Farm laborers	37.17	.49	7.02

<sup>a</sup>Numbers in parentheses are column numbers.

of their fathers. Among the latter only a minimal proportion (.04) had no chance to move.

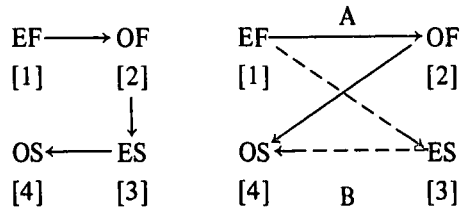
For comparative purposes, Table 6 also shows the stability values calculated with the Rogoff method (Index of Immobility) and the descriptive method (Index of Inheritance). As mentioned earlier, the general-stability trends arrived at separately by the use of percentage distribution analysis and Goodman's model correspond fairly well, progressing from least persistence in the non-manual to greatest persistence in the agricultural ranks. By contrast, the Rogoff model indicates the reverse trend, i.e., least mobility in the non-manual sector. Interpretation of this latter trend requires an understanding of what Rogoff-ratios are measuring. Rogoff-ratios have to be interpreted in the context of scarcity and availability of a social position: "The smaller category 1 is, the smaller the opportunity for a son whose father is in category 1 to stay there, the greater his opportunity for moving elsewhere, the greater the "achievement" of remaining in category 1" (Scott 1955:102-03).

Because of the relative smallness of the non-manual occupational groups, their immobility values tend to be higher. Moreover, the three approaches to occupational mobility (descriptive, quasi-perfect-mobility model, perfect-mobility model) exhibit consistency regarding the lower-professional strata: attraction into the lower professions is apparently weak, while exodus from the lower professions into the neighboring ranks is a more compelling force.

*Determinants.* The occupational success of the son could be a function of at least two determinants other than the social status of the father, namely, the educational attainment of both father and son. The four variables, occupation of the son, education of the son, occupation of the father, and education of the father, fall into a recursive system of relationships with the specified direction of causation being justified in large part by the implicit temporal ordering of the variables. Goodman and Kruskal's gamma coefficient (1954:748-754) was utilized to examine the relationships within this

system on the assumption that partial gamma behaves analogously to partial correlation.

To examine existing causal relationships, two causal models were evaluated in order to determine which one was the most appropriate for the Philippine situation. To facilitate comprehension of the hypotheses to be specified, these models are presented in diagrammatic form below.<sup>3</sup>



For Model I, the three null hypotheses expressed in statistical notation are:

- (1)  $\gamma_{13.2} = 0$
- (2)  $\gamma_{14.23} = 0$
- (3)  $\gamma_{24.3} = 0$

Translated into conceptual terms, the hypotheses are: (1) the educational status of the father (EF) only indirectly influences the educational attainment of the son (ES), through the father's social position (OF); (2) the educational status of the father (EF) indirectly determines the occupational success of the son (OS) through two intermediary variables, social position of the father (OF) and education of the son (ES); (3) the social position of the father (OF) does not determine the occupational success of the son (OS) directly, but indirectly, through the latter's education (ES).

Model II contains two versions, A and B, hypothesizing different paths of influence. Model II-A rejects null hypotheses (1) and (3) of Model I. It predicts that  $\gamma_{14.2} = 0$ , which means that the educational status of the father (EF) only indirectly affects the son's social status (OS), but directly affects the father's social position (OF). On the other hand, Model II-B hypothesizes that  $\gamma_{14.3} = 0$ , or that educational status of the father (EF) directly affects the educational attainment of the son (ES), and that the latter

in turn directly determines the son's occupational success (OS).

Table 7 lists the gamma coefficients used as basis for the calculation shown in Table 8 (Blalock 1961; Chapter III).

Table 7

Gamma coefficients for variables 1-4<sup>a</sup>

Variable	2	3	4
1	.377	.735	.363
2		.432	.593
3			.580

<sup>a</sup>For description of variables, see note 3 following the article.

The expected value is the product of the coefficients of the hypothesized path of determination. For example, the expected value for  $\gamma_{14} = \gamma_{12} \gamma_{23} \gamma_{34} = .377 \times .432 \times .580 = .269$ . If the null hypothesis is valid, the difference between the actual and the predicted values will approach zero.

Table 8

Prediction and quality of fit for causal models<sup>a</sup>

Model	Prediction	Quality of fit		
		Actual gamma	Expected correlation	Difference (actual-expected)
I	$\gamma_{13} = \gamma_{12} \gamma_{23}$	.735	.163	.572
	$\gamma_{14} = \gamma_{12} \gamma_{23} \gamma_{34}$	.363	.094	.269
	$\gamma_{24} = \gamma_{23} \gamma_{34}$	.593	.251	.342
II-A	$\gamma_{14} = \gamma_{12} \gamma_{24}$	.363	.224	.139
II-B	$\gamma_{14} = \gamma_{13} \gamma_{34}$	.363	.426	.063

<sup>a</sup>For description of variables 1-4, see note 3 following the article.

Table 8 clearly shows that Model II-B best fits the data. Based on Blalock's method of evaluating causal models, three preliminary state-

ments can be made about the actual system of relationships between the determinants on the one hand, and occupational success on the other. First, social position of the father does have a direct influence in determining the social status of the son. Second, educational status of the father does have a direct influence in determining the amount of education the son attains. Lastly, the most likely course of causation that emerges is the education of the father having a direct effect on the level of academic attainment of the son and the latter having a direct influence on the son's occupational success.

A more detailed formulation can be obtained by simultaneously considering the three variables involved, i.e., social background, education, and occupation. The gamma coefficients presented in Table 9, which describe the relationships between occupation of father, occupation of son, and education of son, show that the more education the son has attained, the less influence his social background has in determining his social status. Expressed differently, hurdling the elementary level and getting into the secondary level of education results in substantial improvement of the son's chances of becoming socially mobile. His chances tend to be best when he succeeds in acquiring the highest level of education.

Table 9

Gamma coefficients between occupation of father and occupation of son by education of son

Education of son	Gamma
None	.583
Elementary	.571
Secondary	.347
College	.165

That education does not destroy but rather tempers the effect of social origins on the social status of sons is indicated by the gamma coefficients between education and occupation of son and occupation of father (Table 10).

Table 10

*Gamma coefficients between education and occupation of son by occupation of father*

Occupation of father <sup>a</sup>	Gamma
I Elite	.766
II Middle class	.724
III Working class (upper)	.493
IV Working class (lower)	.497
V High farmer	.524
VI Low farmer	.416

<sup>a</sup>I – Upper professional, Lower professional, Administrative; II – Clerical and Related, Sales workers; III – Skilled (upper), Transportation; IV – Skilled (lower), Service, Unskilled (non-farm); V – Fishermen and Loggers, Farm owners and Managers; VI – Farm tenants, Farm laborers.

As a means to achieve mobility, education is a more effective tool for sons belonging to the upper strata of society than it is for those in the lower strata. The gamma coefficients between education and occupation for sons coming from elite (.766) and middle class (.724) origins are above the average gamma (.580), whereas for the rest of the sons, i.e., those coming from lower-status origins, the coefficients are below this average. Likewise, the gamma coefficients between education and occupation for those coming from elite and middle-class origins are above the average gamma between social origin and occupational status of the son (.593), and the coefficients for those coming from lower status origins are below this average. These findings suggest that for individuals coming from elite and middle-class backgrounds education prevails over social origin in determining whether they will retain their high social positions or suffer decline in status. On the other hand, the blue-collar and farm classes are less flexible, in the sense that even with adequate training for higher occupations the individual is handicapped by his low-class origin.

#### *Summary*

The hypotheses as initially presented can now be restated or reformulated on the basis of the above findings.

1. *Sons have a propensity to inherit the social stratum of their fathers.* About as many sons remain in the occupational stratum of their fathers as move out of it. Magnitudes of stability indexes progress from the non-manual ranks (least inheritance) to the farm ranks (most inheritance), the primary limitation to social mobility coming from the occupational structure itself. Within the Philippine occupational pyramid only a small proportion of the sons of farmers can move into non-farm occupations. Compared to a standard of perfect mobility, overall actual mobility is slightly higher than expected (one-and-one-fourth times expectation); however, overall stability is 10 times expectation. Non-manual occupations are the most stable, and farm occupations the least. In relation to the opportunity structure, sons decidedly are likely to stay within their fathers' social stratum. The higher the rank, the more likely is occupational inheritance to occur.

2. *A substantial proportion of sons in any occupational group are from farm origins because of the agrarian nature of the Philippine economy in the past.* Although farm to non-farm movement is proportionally slight, it is important in absolute terms; this is evidenced by the composition of the labor force by social origin. A considerable fraction of the labor force, including those engaged in non-farm occupations, are sons of farmers.

3. *By and large, top-ranking and low-ranking occupations are relatively closed. Contrariwise, the lower professions and the clerical strata are relatively open.* The polar positions on the occupational scale, i.e., administrative, unskilled-non-farm, fisherman and logger, and farm-laborer positions, are highly stable. Departing from the expectation of closedness are the high-ranking semi-professional occupations. Contrary to expectation, the semi-professional stratum manifests considerable permeability in terms of accessibility and outflow. This stratum displays outstanding permeability in its stratification boundary, being accessible to sons coming from one polar rank origin, farm owners. To surmise, the teaching profession (which dominates the

category of lower professionals) is still very attractive to rural folk for two reasons: (1) the high-prestige valuation of teachers handed down from the Spanish colonizers still dominates the thinking of the people, and (2) the relatively great likelihood of being employed after training as a teacher, which is in turn a consequence of the high premium which Philippine society places on education. On the other hand, the out-mobility trend from the lower professions is reflective of the low-level remuneration of these occupations.

The fluidity of intervening occupational strata is not very evident in the Philippine data. Aside from the lower professions, the clerical grade is the only other which appears relatively open.

4. *Vertical mobility is characteristically short-distant.* This hypothesis gains support from findings regarding inflow and outflow trends. First, recruits for the non-manual ranks (except the lower professions) come mostly from within the stratum and only secondarily from adjacent strata. Recruitment priorities in the upper professions are in the following order: from within the stratum, from the administrative rank, the lower-professional rank, and the clerical and sales ranks. The order of recruitment priorities in the administrative stratum is likewise from within the stratum, from the upper professions, the lower professions, and the clerical and sales strata. Clerical and sales ranks are more inclined to self-recruitment and to recruitment from adjacent upper ranks than to recruitment from adjacent lower ranks. Recruitment trends in the upper skilled blue-collar and transportation strata indicate that these strata function as entry points for upwardly mobile sons coming from lower-working-class origins, and as terminal points for downwardly mobile sons from high-strata origins. Agricultural occupations recruit mostly from their own ranks.

In terms of supply, most sons coming from non-manual origins tend to stay within their stratum of origin, or, to a lesser degree, to move into contiguous strata. Downwardly mobile sons of upper professionals move into the following occupational strata, arranged by order of im-

portance: administrative, clerical, and semi-professional. Similarly, destinations for mobile sons of executives are the upper professions, the lower professions, the clerical, and the sales occupations. Mobile sons from clerical and sales origins are more likely to gain than to lose status. On the other hand, the characteristic upward mobility of sons coming from agricultural backgrounds is into the lower-working-class ranks (lower skilled, service, unskilled). The same is true for the sons of fishermen and loggers, and farm laborers. Sons of farm owners are conspicuous for long-distance climbs into the semi-professions, and mobile sons of farm tenants tend to experience a decline in status by settling in the farm labor group. Recruitment and supply patterns in the middle occupations (working class) are not so marked as in the non-manual and agricultural sectors.

5. *Son's education is more important than father's status in determining son's occupational success.* The higher the level of educational attainment of the son, the greater is the reduction in the strength of association between social origin and social status of the son. Father's status is most useful among sons who have had no formal training of any kind.

6. *In the case of sons coming from high social origins, occupational success is positively correlated with education.* Education is an effective tool by which sons of elite origins (upper professional, lower professional, administrative) and middle class (clerical and sales) retain the high social positions of their fathers. Similarly, with poor academic preparation, sons tend to lose their high social placements. However, sons coming from high-ranking origins are more often than not equipped with the necessary skills and training for keeping their high status.

7. *In the case of sons coming from low social origins, social origin diminishes the importance of education as a vehicle for social mobility.* While education tends to temper the influence of father's social status on the occupational success of the son, it does not eliminate its importance. For people of low-class origin, education does not necessarily remove the obstacle to mobility

rooted in social background. Sons of low-status fathers are trapped in low-status positions in two specific ways: first, they do not have sufficient access to higher levels of education, and, second, even when they do have access, their low-class origins interfere with their chances to rise in status.

### Notes

Miss Bacol bases this article on her master's thesis, which was accepted by the University of the Philippines Population Institute in 1971. An M.A. in demography, the author is an instructor in the department of sociology and anthropology, University of San Carlos (Cebu City). Her article was received December 4, 1971.

1. For a comprehensive discussion of prior theory and research upon which these hypotheses are based, see Bacol 1971, Chapter II.

2. Calculated values using the sons' occupational distribution as weight are not shown in this paper.

3. In Figures 1 and 2, these abbreviations are used: EF - Education of the father, also symbolized here and elsewhere in text and Tables 7-8 by arabic numeral 1; OF - Occupation of the father [2]; ES - Education of the son [3]; and OS - Occupation of the son [OS].

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