THE DISTRIBUTION OF INDIVIDUAL STOCKHOLDERS IN THE PHILIPPINES BY SELECTED SOCIO-ECONOMIC CHARACTERISTICS *

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A recent contribution to the analysis of the economic development problems of the Philippines is an empirical investigation into saving and its components during the previous decade. Concentrating on flows, this study arrived at two conclusions: that saving has increased rapidly in all sectors of the Philippine economy, and that the composition of household saving has tended to shift from tangibles to financial claims.[1] The inability of financial markets to develop was singled out as the weakest element in the changing destination of saving in this country, the segment of the financial market in greatest need of accelerated growth being the equities market. Corporate equities remain the least important among the assets that compose the major outlets for saving. Out of an estimated ₱975.5 million gross household saving in 1960, ₱245 million went to residential dwellings, ₱187 million to consumer durables, ₱185 million to insurance policies, and ₱94.8 million to equities.[2] During the same year, the (deflated) peso volume of transactions in equities was only ₱27 million, in contrast to approximately ₱450 million household saving in the form of financial claims.[3]

THE PROBLEM AND ITS IMPORTANCE

What factors account for the narrow equities market in the Philippines? Available literature on this field is limited to periodic evaluations of stock market transactions and manuals on the operations of firms that trade in organized exchanges. Though undoubtedly useful for their specific purposes, such studies carry economic significance only to the extent that they show aggregate investment in this form of asset, in the same manner that research into income and saving can only suggest some broad potentials of the equities market, without delving into the facts of stock ownership.

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* This article is based on a master's thesis submitted by the author to the School of Economics of the University of the Philippines.

[1] Richard W. Hooley, *Saving in the Phiippines,* 1951-1960 (Quezon City: U.P. Press, 1963), pp. 58-59.

[2] *Ibid.,* p. 109.

[3] *Ibid.,* p. 68.

So far there has been no attempt to probe into the equities market by describing the people who compose it. What are the economic and social characteristics of these individuals, and how do such characteristics correlate with their investment holdings? In a country where corporations are fast assuming a leading role in economic development, where there are in operation two organized stock exchanges and a fairly active over-the-counter securities market, half a dozen government institutions floating various types of bonds, a Securities and Exchange Commission established over thirty years ago, and other such evidences of efforts toward financial market sophistication, some inquiry into equity ownership should find at least pragmatic value.

Firms in need of new capital may, at one time or another, have to tap the individual investor by offering him a share of the business. The same groups who provided funds in the past are likely sources of funds in the future. A firm that has peculiar characteristics as to product, location, size, and age, will be especially interested in the distribution of its own outstanding shares and of the shares of other companies with the same characteristics. Furthermore, the nature of a company's stock distribution may influence management policies on the form and frequency of dividend payments.

Studies of this sort could also show, though in a rather general way, the incidence of a tax on dividend income. In a broader sense, the significance of dividend income as a source of revenue and the possibility of subjecting property income to special tax rates in consonance with the ability-to-pay principle, could be investigated through the same kind of data gathered here. Lastly, a study of stock ownership makes its own contribution to the body of knowledge on the capital market already compiled and available.

COVERAGE AND METHOD OF ESTIMATION USED

The main concern of this study is the ownership of stock by individuals in the Philippines. Because the choice of universe is governed by available sources of data, the scope of this study is qualified to include only individuals resident in the Philippines, subject to Philippine tax laws, and owning stocks in corporations doing business here. The inquiry is limited to *direct ownership* and excludes indirect ownership through trusts, life insurance companies, pension funds, banks and other financial intermediaries, although, for comparative purposes, some attention was given to ownership by these institutions.

Based on available sources of data, this cross-section study consists of two samples:

1. A sample of dividend recipients, constituting approximately 1.5

per cent of the estimated stockholding population and based on individual income tax returns, is the principal source of information. Inasmuch as ownership of stocks generally leads to the receipt of dividend income, the number and distribution of dividend recipients not only provide a lower limit to the number of stockholders, and a rough approximation of their distribution, but is also one step towards the determination of the number and distribution of stockholders. Dividend income and other forms of property income (interest and rent) being components of total income, the concentration and distribution of dividend income among social and economic groups is definitely related to total income distribution.

Stock exchange reports show that, although only around 50 per cent of traded companies declared dividends in 1964, 80 per cent of the estimated number of stockholders were involved. The sample of tax returns includes stockholders of at least 50 per cent of the top 100 industrial, commercial, banking and financial institutions in the country in 1964-65. Six major regions are represented, consisting of the Greater Manila area and 30 provinces, including 13 other chartered cities. The sample of tax returns comprises 543 dividend recipients. Since income tax returns often pertain to households in which there may be more than one shareholder, the ratio of sample size to population could reach around 4:100.

The dividend recipients surveyed represent ownership of shares in at least 400 firms whose outstanding capitalization totaled 50—75 per cent of the outstanding capital of all firms registered under Philippine laws. Because investors generally own stock in more than one company, the sample represents approximately 1,500 shareholdings.

2. A sample of record shareholders of corporations doing business in the Philippines, constituting 14 to 24 per cent of the estimated shareholding population based on company lists, is the secondary source of information that provided auxiliary data and served as a check to the estimates arrived at in the first sample.

DISTRIBUTION ACCORDING TO SEX, MARITAL STATUS AND HOUSEHOLD SIZE

Sex—Because most households in the Philippines file consolidated income tax returns, it is difficult to pinpoint the ownership of stocks among the members of the household, and even more difficult to ascertain who made the decision to buy the security. In the light of this limitation, it would be more realistic to interpret the sex distribution on Table I as referring to the sex of the heads of families that count with one or more stockholders. Probably because there are more male heads of families, our survey disclosed only 20 per cent of the stockholding population to be women, a far

TABLE I

Percentage Distribution of Stockholders by Sex, Marital Status, Age and Size of Household

Characteristic and Class	Distribution of Individual Stockholders					
	Total	Northern Luzon	Central Luzon	Greater Manila	Southern Luzon	Visayas & Mindanao
Sex						
Male	79.37	90.0	77.42	77.91	81.01	80.88
Female	19.71	10.0	22 48	20.61	18.99	19.12
Unspecified	.92	—	—	1.49	—	—
Total (Per cent)	100	100	100	100	100	100
Marital Status						
Single	18.42	23.33	16.13	19.70	18.99	10.29
Married	72.38	70.00	74.19	71.04	73.42	77.94
Widowed	7.37	6.67	9.68	7.46	6.33	7.35
Unspecified	1.83	—	—	1.80	1.27	3.80
Total (Per cent)	100	100	100	100	100	100
Estimated Age						
Below 20 years	1.47	—	3.23	2.09	—	—
20–29 "	14.73	33.33	19.35	16.42	11.39	—
30–39 "	16.39	16.67	19.35	16.72	26.58	1.47
40–49 "	26.15	36.67	38.72	29.85	22.78	1.47
Over 50 "	14.36	10.00	—	16.42	25.32	—
Unspecified	26.90	3.33	19.35	18.50	13.92	97.06
Total (Per cent)	100	100	100	100	100	100
Size of Household						
One	5.89	3.33	6.45	5.67	6.33	7.35
Two	17.68	20.00	9.68	18.21	21.52	13.24
Three	9.58	13.33	6.45	7.76	11.39	16.18
Four	8.10	10.00	19.35	7.76	3.80	8.82
Five	9.96	10.00	16.13	8.96	7.59	13.24
Six	9.62	6.67	6.45	11.04	7.59	2.94
Seven	8.47	6.67	3.22	7.76	8.86	14.71
Eight	6.44	3.33	3.22	6.27	7.59	8.82
Nine	1.84	—	—	2.39	2.53	—
Ten	1.84	3.33	6.45	1.49	2.53	—
Over 10	.55	—	—	.90	—	—
Unspecified	20.23	23.34	22.60	21.79	20.25	14.71
Total (Per cent)	100	100	100	100	100	100

Source of raw data: Income Tax Returns of 543 Dividend Recipients, 1964.
Note: Some figures may not add up to 100 due to rounding.

cry from the adult population distribution reported by the 1960 Census, which shows an almost 50-50 proportion, women slightly outnumbering men in the 20-44 years class, and men slightly outnumbering women in the 45-years-and-over category.[4] A cursory inspection of the lists of stockholders on hand, particularly that of Meralco which has over 6,000 owners, reveals that the figure for women stockholders is actually closer to the 30—40 per cent range. But again, stockholders of record are not necessarily the same persons who make the investment decisions. It is highly possible that a husband or a father chose to register some stocks in the name of his heirs to avoid the payment of death taxes later on. For that matter, even the (mostly single and widowed) women stockholders, estimated to make up 20 per cent of the shareholding population based on tax returns, include scions of wealthy parents (who, in order to land in a lower tax bracket, filed separate returns for their children), as well as heirs of rich deceased persons. It would, therefore, be inaccurate to interpret this study's findings on sex distribution in a manner other than as earlier suggested.

Marital status.—The data on marital status are less subject to misinerpretations than those on sex. As shown in Table I, less than 1/5 of stockholders are single, less than 4/5 are married, and the rest are widowed. But again, the figures for single persons include offspring of stockholders, who may or may not have had a hand in the purchase of the securities registered in their names. The Census findings on marital status of persons over 20 years old (the cut-off age for our study) show an approximate distribution of 19 per cent for single persons, 73 per cent for married, and 7 per cent for widowed.[5] In view of the close similarity between our findings and Census results, one is inclined to attribute the marital status distribution of stock ownership to the population factor.

Age.—Age refers to the age of the person under whose name the tax return is filed. Oftentimes, this is not expressly stated on the form and had to be estimated on the basis of the age of other members of the family, marital status, and other related information. The Bureau of Census and Statistics finds this method of estimation acceptable.[6] In a good number of cases, the stockholders are known personages—business tycoons, civic leaders, top government officials, and prominent professionals —and it was not difficult to establish their age brackets. However, in view of the strong probability of an error of estimation in the other cases, the age brackets had to be widely ranged to minimize the effect of inaccuracies.

The modal age bracket is 40—49 years, followed by the 30—39 group. The over–50 group has just about an equal number of frequencies as

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[4] *Census of 1960: Population and Housing.* Bureau of Census and Statistics, Manila, p. xxiii.
[5] *Ibid.*
[6] *Ibid.*, p. xiii.

the below-30 group. Due again to the practice of registering stocks in the name of children, the figures for the younger age brackets bear little significance. However, the concentration of stock ownership in the 30—49 bracket is a healthy and encouraging sign that may signify the emergence of a young and dynamic group of industrialists and a growing tendency among younger men and women to assume the risks of financing business enterprise. The findings are also significant in the light of Census figures which show the concentration of population in the very young (children) age group, diminishing with increasing age. The high incidence of stock ownership in the 30—49 age group cannot, therefore, be imputed to demographic factors.

Size of Household.—The number of individuals comprising the household was deduced from the list of dependents claimed as exemptions by the taxpayer. The figures are understated to the extent that they do not include members of the family who do not qualify as exemptions, and are overstated by imaginary exemptions.

The Bureau of Census and Statistics survey of family income and expenditures in 1961 places the model family size at 4—6 persons.[7] Our findings, on the other hand, show the largest number of stockholders in the two-member family and a more or less even distribution among households of other sizes. In almost all cases, the two-member families are made up of persons in the over-50 age group whose children have grown up and are self-supporting. A few cases were single or widowed persons with one dependent, or childless couples. The one-member category includes single persons, usually young adults with no dependents, or widowed persons, usually old or middle-aged, with grown-up and independent children.

There seems to be no discernible pattern of relationship between family size and stock ownership, except for a higher incidence among smaller families that should not, however, be confused with families with few children.

DISTRIBUTION ACCORDING TO OCCUPATION AND PROFESSION

There is a predominance of proprietors and executives of private firms among the stockholders surveyed. Particularly noticeable is the comparatively low incidence of stock ownership among government employees and persons engaged in farming activities. There also appears to be a substantial "rentier" class, people "not gainfully employed," who depend on income from property (stocks, real estate, lending capital) either as the only or as a major source of income. These characteristics are more pronounced among stockholders in the Greater Manila area and nearby provinces.

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[7] *Family Income and Expenditures,* Philippine Statistical Survey of Households, April 1961, p. 4.

TABLE I-A

Percentage Distribution of Stockholders by Occupation and Profession

Characteristics and Class	Percentage Distribution of Individual Stockholders											
	Total		N. Luzon		C. Luzon		Greater Manila		S. Luzon		Vis. & Mind.	
Occupation												
1. Employee		36.28		46.67		9.66		39.70		29.12		35.30
Government	7.18		6.67		3.22		4.78		12.66		14.71	
Private Firm	29.10		40.00		6.14		34.92		16.46		20.59	
2. Self-employed		63.72		43.33		90.33		60.31		70.89		64.70
Business (Prop.)	27.62		23.33		41.94		22.09		32.91		42.65	
Farm Operators	7.18		16.66		29.03		2.69		15.19		5.88	
Professionals	9.39		—		9.68		10.15		12.66		5.88	
Rentiers	12.71		3.34		9.68		16.12		7.59		7.35	
Brokers												
Real Estate	3.50						5.37		1.27		—	
Insurance	.18										1.47	
Stock	.37						.60					
Merchandise	.18											
Students	1.66						2.69		1.27			
Others	.37						.60					
Not Specified	.56		10.00		.01						1.47	
Total		100.00		100.00		100.00		100.00		100.00		100.00

TABLE I-A (Continued)

Characteristics and Class	Percentage Distribution of Individual Stockholders					
	Total	N. Luzon	C. Luzon	Greater Manila	S. Luzon	Vis. & Mind.
Profession						
Physician	5.34	3.34	3.22	4.48	10.13	5.88
Dentist	1.10		3.22	.90	1.27	1.47
Engineer	2.94	16.66		2.39	2.53	
Mining	.92					
Civil	1.10			1.19	2.53	
Electrical	37			.60		
Chemical	.55	3.34		.60		
Architect	.37			.60		
Lawyer	3.31			4.48	1.27	2.94
Accountant & Related Professions	1.47			2.39		
Teacher	1.84			2.39	2.53	
Writer	.18			.30		
Military	.37		3.22	.30		
Agriculturist	.18			.30		
Religious	.37			.30	1.27	
Not Specified	82.73	76.66	90 34	81.17	79.75	89.71
Total	100.00	100.00	100.00	100.00	100.00	100.00

Unlike information on occupations which were almost always determinable from tax declarations, the data on profession could be determined from less than 1/5 of the cases studied. Among the professionals, the largest number of shareholders were found in the physician, lawyer and engineer groups, in that order, with teachers, graduates of business courses, and dentists lagging a few percentage points behind (Table I-A).

DISTRIBUTION ACCORDING TO INCOME

At the outset, it might be appropriate to mention this limitation of income tax data:

Under-reporting is a highly prevalent practice among tax filers. By under-reporting is meant "the failure of a person who received a particular type and amount of income to report it when the law required him to do so."[8] It would, indeed, be a big step forward if our tax authorities could establish, possibly on the basis of test cases, the extent of under-reporting and non-reporting among the income-earning population, and come up with a factor or percentage by which income information contained in the returns may be adjusted to arrive at more realistic conclusions. Up to the time of this writing, the degree of under-reporting is anybody's guess.

Table II below shows that incomes of stockholders are generally much higher than that of the ordinary household of all regions. This observation tends to discount any direct influence of general income distribution on stockholders' incomes—except, possibly, insofar as urban incomes are comparatively higher than rural incomes.

TABLE II

Comparison Between PSSH 1961 Household Income Data with Income of Dividend Recipients as Reported in Income Tax Returns of 1964 (For Selected Regions)

Region	Average Income (in Thousand Pesos)	
	PSSH, 1961 [1]	ITR, 1964 [2]
Northern Luzon	1.20	38.40
Central Luzon	1.70	17.10
Greater Manila	4.80	96.70
Southern Luzon	2.10	22.05
Eastern Visayas	1.20	68.90
Northeastern Mindanao	1.50	45.80
Arithmetic Mean	2.10	42.00

Sources: [1] *Income and Expenditure*, Philippine Statistical Survey of Households, 1961, p. 2, Table 1.
[2] Income Tax Returns, 1964.

[8] Edwin B. Cox, *Trends in the Distribution of Stock Ownership* (Philadelphia: University of Philadelphia Press, 1963), p. 113.

TABLE III

Distribution of Dividend Recipients by Income Groups and Regions

Summary		Gross Income (P000)	Percentage Distribution of Shareholders by Region											
Total SH	%		Northern Luzon		Central Luzon		Greater Manila		Southern Luzon		Visayas		Mindanao	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
2	.37	Less than 2	1	3.3	—	—	1	.30	—	—	—	—	—	—
11	2.02	5– 6	—	—	1	3.2	5	1.49	2	2.74	1	2.0	—	—
9	1.66	2– 3	—	—	1	3.2	2	.60	—	—	—	—	3	12.5
8	1.47	3– 4	1	3.3	2	6.5	4	1.19	1	1.37	1	2.0	1	4.2
8	1.47	4– 5	—	—	1	3.2	4	1.19	5	6.85	1	—	1	4.2
8	1.47	6– 7	1	3.3	1	3.2	1	.30	4	5.48	1	2.0	—	—
7	1.29	7– 8	—	—	1	3.2	2	.60	1	1.37	1	2.0	2	8.3
13	2.39	8– 9	2	6.7	2	6.5	3	.90	6	8.22	—	—	—	—
11	2.02	9– 10	1	3.3	1	3.2	5	1.49	1	1.37	2	4.0	1	4.2
62	11.42	10– 15	7	23.4	6	19.3	26	7.76	14	19.18	5	10.0	4	16.7
46	8.47	15– 20	1	3.3	5	16.1	23	6.86	10	13.69	6	12.0	1	4.2
75	13.81	20– 30	5	16.7	2	6.5	49	14.63	12	16.44	5	10.0	2	8.3
40	7.37	30– 40	1	3.3	1	3.2	23	6.86	7	9.59	7	14.0	1	4.2
40	7.37	40– 50	3	10.0	—	—	31	9.25	1	1.37	4	8.0	1	4.2
21	3.87	50– 60	1	3.3	1	3.2	16	4.77	—	—	3	6.0	—	—
29	5.34	60– 70	3	10.0	2	6.5	17	5.08	3	4.11	2	4.0	2	8.3
16	2.95	70– 80	—	—	1	3.2	8	2.39	1	1.37	4	8.0	2	8.3
13	2.39	80– 90	—	—	—	—	11	3.28	—	—	1	2.0	1	4.2
17	3.13	90– 100	1	3.3	1	3.2	14	4.18	—	—	1	2.0	—	—
29	5.34	100– 120	1	—	—	—	25	7.46	2	2.74	1	2.0	1	4.2
14	2.58	120– 140	1	3.3	1	3.2	10	2.99	1	1.37	1	2.0	—	—
5	.92	140– 150	—	—	—	—	5	1.49	—	—	—	—	—	—
16	2.95	150– 200	—	—	1	3.2	13	3.88	1	1.37	1	2.0	—	—
19	3.50	200– 300	—	—	—	—	17	5.07	1	1.37	—	—	1	4.2
8	1.47	300– 400	1	3.3	—	—	6	1.79	—	—	1	2.0	—	—

TABLE III (Continued)

Summary		Gross Income (P000)	Percentage Distribution of Shareholders by Region											
Total SH	%		Northern Luzon		Central Luzon		Greater Manila		Southern Luzon		Visayas		Mindanao	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
4	.74	400– 500	—	—	—	—	3	.90	—	—	1	2.0	—	—
9	1.66	500–1,000	—	—	—	—	8	2.39	—	—	1	2.0	—	—
2	.37	1,000–2,000	—	—	—	—	2	.60	—	—	—	—	—	—
1	.18	Over 2,000	—	—	—	—	1	.30	—	—	—	—	—	—
543	100.00	Totals	30	100.00	31	100.00	335	100.00	73	100.00	50	100.00	24	100.00
₱41,958		Mean Income	₱38,445		₱17,083		₱96,653		₱22,959		₱35,837		₱45,763	
31,308		Median Income	25,144		10,295		36,995		14,707		30,252		29,989	
10,000–20,000		Modal Income	10,000–20,000		10,000–20,000		20,000–30.000		10,000–20,000		10,000–20,000		10,000–20,000	

Source of raw data: Income Tax Returns, 1964.

Distortions in the mean incomes computed for each region and for the aggregate population are due to the presence of extreme values, particularly in the upper brackets. As Table III illustrates, the distribution is highly skewed to the right, most items lying below the general average. For instance, the three millionaires (in terms of reported annual income) in our sample of 543 individuals accounted for some 30 per cent of aggregate income. Even for the regions, the fact that median and modal incomes lie below the respective means points to positive skewness in all cases. Since we are dealing with an abnormal distribution subject to wide variations, it is difficult to set confidence limits for the arithmetic means obtained for each region.

A bimodal distribution of stockholders by income class is observed from Tables III, IV and V. For incomes below ₱100, the concentration is in the ₱10,000 to ₱20,000 range, which accounts for 20 per cent of total stockholders. For incomes above ₱100,000, the highest incidence (12 per cent) is in the ₱100,000—₱200,000 bracket. The majority of those who comprise the first group are professionals, while those in the latter group are executives, rentiers, and proprietors.

TABLE IV

Income Distribution of Dividend Recipients Compared with Distribution of Taxable Individuals, 1964

Gross Income (In P000)	Dividend Recipients [1]		Taxable Individuals [2]	
	No. of SH	% of Total	No. of Taxpayers	% of Total
Under 2	2	.37	95,938	57.54
2– 4	17	3.15	28,575	17.14
4– 6	19	3.49	13,001	7.79
6– 8	15	2.76	7,145	4.29
8– 10	24	4.41	5,230	3.14
10– 20	108	19.89	7,170	4.30
20– 30	75	13.81	2,263	1.38
30– 40	40	7.37	1,148	0.69
40– 50	40	7.37	613	0.37
50– 60	21	3.87	406	0.24
60– 70	29	5.34	239	0.14
70– 80	16	2.95	176	0.11
80– 90	13	2.39	132	0.08
90–100	17	3.13	82	0 05
100–120	29	5.34	104	0.06
120–140	14	2.58	70	0.04
140–200	21	3.87	107	0.06
200–300	19	3.50	59	0.03
300–400	8	1.47	19	0.01
400–500	4	.74	15	0.01
Over 500	12	2.21	34	0 02
NR Aliens			656	0.39

TABLE IV (Continued)

Only Tax Due Stated			237	0.14
Compromises			3,312	1.99
TOTALS	543	100.00	166,734	100.00
Mean Income	₱40 000		₱16,000	
Median Income	30,000		Under 2,000	
Modal Income	10,000		Under 2,000	
	20,000			

Sources: (1) Income Tax Returns, 1964.
(2) Income Tax Statistics, 1964.

Fifty-eight (58) per cent of the taxpayers come from the "under ₱2,000" group, which accounted for only .37 per cent of the stockholders. Seventy-six (76) per cent of the stockholders are in the "above ₱10,000" bracket, which includes only 10 per cent of taxpayers. This, notwithstanding the fact that the mean income of taxpayers is ₱16,000, several times over the national average.

Size and Distribution of Dividend Income by Income Groups.—The high degree of inequality in the distribution of dividend income among stockholders is apparent from Tables V and VI. Dividend income and gross income definitely move in the same direction, though the former increases at a much faster rate, reaching the heaviest concentration in the higher levels. Closely approximating the spread of gross income among dividend recipients, the highest 1 per cent of the sample ranked by gross income received 30 per cent of total dividend income. Such upward concentration is not, however, confined to the Philippines. In the United States, in 1957, the highest 1 per cent of dividend recipients received 39 per cent of all dividends paid to individuals.[9]

Table VII shows that only 16 per cent of the stockholders had dividends as their main source of income and, in 41 per cent of the cases sampled, dividend income was less than 5 per cent of total income. On the other hand, the sum of dividend incomes of the individuals surveyed made up 58 per cent of the sum of their gross incomes. The evidence tends to show that, though dividends are generally not an important component of total income, they assume an increasingly major role as the recipient moves up the income ladder. As is to be expected, dividend income plays a much more positive role among stockholders in Metropolitan Manila, which has a higher incidence of rentiers. Of course, all the foregoing percentages are overstated to the extent that gross income is underreported.

[9] Cox, *op. cit.*, p. 126.

TABLE V

Distribution of Dividend Income of Stockholders in 1964, by Selected Income Groups

Gross Income (Y) (In ₱000)	Stockholders		Dividend Income (Y_d)		
	Number	Percentage	Total Y_d		Average Y_d
			Amt. (₱000)	%	(₱000)
Less than 5	27	4.97	32	.37	1.2
5– 10	50	9.21	78	.89	1.6
10– 15	62	11.42	141	1.61	2.2
15– 20	46	8.47	92	1.06	2.0
20– 30	75	13.81	394	4.52	5.2
30– 40	40	7.37	325	3.73	8.1
40– 50	40	7.37	557	6.39	13.9
50– 75	59	10.87	761	8.74	12.9
75– 100	37	6.81	552	6.33	14.9
100– 200	64	11.79	1,338	15.35	20.0
200– 300	19	3.49	804	9.23	42.3
300– 400	8	1.47	737	8.45	92.1
400– 500	4	.74	434	4.98	108.4
500– 750	5	.92	539	6.19	269.6
750–1,000	4	.74	1,483	17.01	370.7
1,000 and over	3	.55	449	5.15	149.7
Totals	543	100.00	8,716	100.00	

Coefficient of correlation between income and dividend income:
$r = .95$

Regression Equation: $Y_d = a + bY$
$= 6.60 + .225Y$

Source of raw data: Income Tax Returns, 1964.

DISTRIBUTION ACCORDING TO ASSETS

Table VIII gives the information that the modal asset group among stockholders, especially in Manila, is ₱100,000 to ₱500,000, followed by the next higher brackets. Assets and income being circularly related, this observation supplements earlier statements that dividend income is concentrated in the higher income groups.

Because the proportion of assets held in the form of stocks varies widely, the distribution of assets among stockholders is much more even than the distribution of stockholdings among stockholders (Table IX). Mean size of assets is a little less than ₱250,000, very much within the modal group (Table X). Fifty (50) per cent of stockholders (in the below ₱40,000 group) own only 4 per cent of outstanding stock. The inequality becomes still more glaring in the light of the fact that 21 per cent of total stock in the sample, equivalent to the holdings of almost a hundred shareholders in the lower income and asset groups, is owned by one person-

TABLE VI

Cumulative Percentage Distribution of Dividend Income and Dividend Recipients

Gross Income (₱000)	Cumulative Percentage of Dividend Recipients	Cumulative Percentage of Dividend Income
Less than 5	4.97	.37
" " 10	14.18	1.26
" " 15	25.60	2.87
" " 20	34.07	3.93
" " 30	47.88	8.45
" " 40	55.25	12.18
" " 50	62.62	18.47
" " 75	73.49	27.21
" " 100	80.30	33.54
" " 200	92.09	48.89
" " 300	95.58	58.12
" " 400	97.05	66.57
" " 500	97.79	71.55
" " 750	98.71	77.74
" " 1,000	99.45	94.75
" " 2,000	99.82	97.04
" " 2,500	100.00	100.00

Source of basic data: Table XIX.

TABLE VII

Dividend Recipients Distributed According to Main Source of Income and Percentage of Dividend Income to Total Income

Main Source of Income	Percentage of Shareholders
Salaries, Commission, etc.	57.07%
Business or Profession	30.02
Farming and Related Activities	7.55
Capital Gains	4.24
Rentals	13.05
Dividends	16.02
Others	2.05
Total	100.00%

Percentage of Dividend Income to Total Income	Percentage of Individual Shareholders
Less than 5%	41.25%
5–10	13.63
10–20	15.26
20–30	6.81
30–40	5.41
40–50	4.42
50–75	6.26
75–99	4.79
100	4.24
Total	100.00%

Source of raw data: Income Tax Returns, 1964.

TABLE VIII

Dividend Recipients of Selected Asset Groups Distributed by Geographical Location

Gross Assets (In ₱000)	Percentage Distribution of Stockholders					
	Total	N. Luzon	C. Luzon	G. Manila	S. Luzon	Vis. & Mind.
Less than 20	2.58	6.67	9.68	1.19	5.06	1.47
20– 30	1.66	3.33	9.68	.30	5.06	—
30– 40	2.76	13.33	—	.90	5.06	5.88
40– 50	2.03	3.33	—	1.19	6.63	1.47
50– 75	4.24	3.33	12.90	2.96	6.33	4.41
75– 100	3.31	3.33	6.45	1.79	10.13	1.47
100– 500	18.23	3.33	12.90	21.79	17.72	10.29
500–1,000	4.60	—	6.45	5.97	1.27	2.94
Over 1,000	3.31	—	2.23	4.78	—	1.47
Not calculable	58.28	63.35	38.71	59.13	43.04	70.59
Totals	100.00	100.00	100.00	100.00	100.00	100.00

Source of raw data: Income Tax Returns, 1964.

TABLE IX

Distribution of Assets Held in the Form of Stocks by Dividend Recipients in 1964 by Selected Income Groups

Income Group (Y) (In ₱000)	Stockholders (SH)		Stockholdings (W_s)		
	Number	% of Total	Total Assets in Stocks		Average Amount (₱000)
			Amount (₱000)	% of Total	
Less than 5	4	3.22	86	.29	21.6
5– 10	10	8.06	135	.46	13.5
10– 15	14	11.29	176	.59	12.6
15– 20	8	6.45	192	.65	24.1
20– 30	15	12.10	415	1.40	27.6
30– 40	10	8.06	221	.75	22.1
40– 50	11	8.87	688	2.32	62.5
50– 75	10	8.06	399	1.35	39.9
75– 100	9	7.26	1,810	6.12	201.2
100– 200	15	12.10	4,245	14.35	283.0
200– 300	10	8.06	5,779	19.53	577.9
300– 400	2	1.61	2,928	9.90	1,464.0
400– 500	—	—	—	—	—
500– 750	2	1.61	2,388	8.07	1,193.8
750–1,000	1	.81	2,267	7.66	2,266.9
Over 1,000	3	2.42	7,860	26.56	2,621.0
Totals	124	100.00	29,958	100.00	

Cofficient of correlation between Income and Stockholdings:

$$r = .967$$

Regression Equation: $W_s = a + bY = -17.61 + 2.03Y$

$$Y = a + bW_s = 26.68 + 46W_c$$

Source of raw data: Income Tax Returns, 1964.

TABLE X

Distribution of Assets Held in the Form of Stocks by Dividend Recipients in 1964, by Selected Asset Groups

Gross Assets (W) (In ₱000)	Stockholders		Stockholdings (W_s)			
	Number	Percentage of Total	Assets in Stocks (Total)		Median Amount (In ₱000)	Average Amount (In ₱000)
			Amount (In ₱000)	Percentage of Total		
Less then 20	9	7.63	37	.13	1.5	4.1
20– 30	5	4.24	34	.12	7.8	6.8
30– 40	7	5.93	96	.32	5.0	13.7
40– 50	4	3.39	71	.24	13.4	17.8
50– 75	7	5.93	90	.31	14.0	12.9
75– 100	9	7.63	221	.75	20.0	24.5
100– 200	21	17.80	696	2.36	28.7	33.2
200– 300	20	16.95	785	2.67	26.1	39.3
300– 600	11	9.32	1,827	6 20	214.2	166.1
600–1,000	7	5.93	2,244	7.62	255.3	320.5
1,000–6,000	18	15.25	23,345	79.29	1,439.7	1,296.9
Totals	118	100.00	29,446	100.00		

Over-all average amount of assets held in stocks: ₱249,541.00

Coefficient of correlation between gross assets and amount of assets held in the form of stocks: $r = .99$

Regression Equation: $W_s = a + bW$
$= -6.41 + .37W$

Source of raw data: Income Tax Returns, 1964.

The regression equations computed from Tables VI, IX and X are recapitulated as follows:

(1) $W_s = a + bW$
$= -6.41 + .37W$ $\qquad s_b = .0056$

(2) $W_s = a + bY$
$= -17.61 + 2.03Y$ $\qquad s_b = .2115$

(3) $Y = a + bW$
$= 26.68 + .46W_s$ $\qquad s_b = .0485$

MULTIPLE CORRELATION BETWEEN STOCKHOLDINGS, INCOME AND ASSETS

Having established a significantly high degree of direct relationship between stockholdings, income and assets when each independent variable is considered without holding the other constant, it may be worthwhile at this point to analyze the effect on the amount of assets held by individuals in the form of stocks, if income and assets are jointly accounted for.

A regrouping of the data used in the preceding tables brought forth the following multiple regression relationships:

$$(4) \quad W_{s_{c_{1.23}}} = -249.59 + .51Y + .26W$$

$$S_{b_{12.3}} = .39 \qquad S_{b_{13.2}} = .062$$

Coefficient of Multiple Correlation:

$$(5) \quad R_{1.23} = .97$$

The impression conveyed by equations (1), (2), and (4) is that income, rather than assets, is the stronger determinant of stock ownership. The high standard errors obtained on the regression coefficients (2.03Y and .51Y) for income have, however, cast doubt on the accuracy of these coefficients, especially when contrasted with the low standard error for both coefficients (.37W and .26W) for wealth. While the degree of dependence of stockholdings on wealth may be said to be in the .27 to .37 range, the corresponding proportions for income cannot be established with confidence. Certainly, a high degree of interdependency exists between income and stockholdings, indicated by the correlation coefficient of .97 from both simple and multiple regression equations, but the resulting dependency values are not very significant. The only hypothesis consistent with our observations on this point is that while the measures of dependency of stockholdings on income cannot be determined conclusively from our data, the evidence, on the other hand, points to a dependence of income on stockholdings of .46 (equation 3), which is highly significant. Since stockholdings are, in turn, highly dependent on wealth, the conclusion is that income is dependent upon wealth, rather than *vice versa*, and this is why Ws is a much more significant fit on W than on Y.

The complicated interaction between income and wealth distributions, as far as the effect of investment income upon those distributions is concerned, is due not only to the gross distribution of wealth but also to the differences in yields of the various types of financial assets, and to the fact that holders of stocks who have some degree of control of the issuing corporation in many cases receive salary incomes whose size may be affected by that control.[10] Out of the 543 individuals sampled, 177 are either officers or employees of the corporation in which they own stocks.

GEOGRAPHICAL DISTRIBUTION OF INDIVIDUAL SHAREHOLDERS

Based on the records of 24 firms chosen at random, whose lists of stockholders contain addresses, we find that 90 per cent of share-owners

[10] Thomas R. Atkinson, *The Pattern of Financial Ownership* (New Jersey: Princeton University Press, 1956), p. 4.

come from the Greater Manila area. Correlating the distribution obtained with the locations of the respective firms studied yields a very high degree of relationship between location of firms and that of their owners (Table XI). This piece of evidence suggests that stockholders generally prefer local stocks to those issued by firms located at a distance.

TABLE XI

Individual Shareholders of Selected Corporations in the Philippines Distributed by Geographical Location

% of Individual Shareholders	Geographical Distribution						
	North. Luzon	Central Luzon	Greater Manila	South. Luzon	Bicol	Visayas	Mindanao
00	18	19	—	19	20	17	20
.01– 5	6	4	—	5	3	2	2
05–10	—	—	—	—	—	2	—
10–15	—	—	—	—	1	2	—
15–20	—	—	—	—	—	—	—
20–30	—	—	—	—	—	—	—
30–40	—	—	—	—	—	—	—
40–50	—	1	—	—	—	1	2
50–60	—	—	1	—	—	—	—
60–70	—	—	1	—	—	—	—
70–80	—	—	1	—	—	—	—
80–90	—	—	4	—	—	—	—
90–99.9	—	—	3	—	—	—	—
100	—	—	14	—	—	—	—
Total Companies	24	24	24	24	24	24	24
Mean Percentage	.37%	1.97%	90.18%	.21%	.67%	3.42%	3.72%
Stand. Deviation	.33	9.14	58.04	1.24	2.66	9.66(7.14)	12.64
Coef. of Variation	3.59	4.64	.64	5.90	3.97	2.82	3.40
Stand. Error	.27	1.87	11.84	.25	.54	1.97	2.58
Regional Location of Firms in Above Samples:							
No. of Firms	—	1	19	—	1	3	
Percentage	0%	4.16%	78.18%	0%	4.16%	12.50%	
Coefficient of correlation between location of firms and location of stockholders: $r = .997$							

Source of basic data: Stockholders Lists of various years in the 1960's.

SHAREOWNERS DISTRIBUTED BY TYPE OF HOLDER

The stockholders' lists of 49 companies, 18 of which trade their stocks, were analyzed to determine the extent of ownership by individuals, as compared with ownership by other types of holders.

As shown on Table XII, 72 per cent of the value of outstanding shares are owned by individuals, 22 per cent of the value by corporations and financial institutions, and negligible portions by trustees, brokers, and non-profit organizations and foundations. The last category numbered several religious organizations.

TABLE XII

A Group of Philippine Corporations Distributed According to Percentage of Shares and Shareholders of Types of Holders of Record

Percentage	Individuals & Joint		Trustees		Corporations & Fin'l Institutions		Stock Brokers & Dealers		Non-Profit Organizations & Foundations	
	SH	Ws	SH	Ws	SH	Ws	SH	Ws	SH	Ws
00– 5%	—	2	43	43	32	25	48	42	47	44
05– 10	—	—	1	—	7	2	1	1	2	2
10– 15	—	—	—	1	4	—	—	1	—	—
15– 20	—	3	—	—	3	2	—	1	—	—
20– 30	—	1	—	1	1	2	—	1	—	—
30– 40	—	3	—	—	—	3	—	—	—	—
40– 50	—	5	—	—	1	3	—	—	—	—
50– 60	1	3	—	—	—	5	—	—	—	—
60– 70	—	2	—	—	—	2	—	—	—	—
70– 80	3	1	—	—	—	—	—	—	—	—
80– 90	11	3	—	—	1	1	—	—	—	—
90–100	34	23	—	1	—	1	—	—	—	—
Total Companies	49	46	49	46	49	46	49	46	49	46
Mean Percentage		72%		3%		22%		2%		1%
Stand. Deviation		31%								
Coef of Variation		426%								
Stand. Error		4%								

Source of raw data: Stockholders Lists of 49 corporations.

Note: While the dates of above data vary, they are within 1960-66. The number of companies varies slightly among columns because the degree of detail reported differed among companies.

Distinguishing traded from untraded stocks, it was found that individuals own less of the former and more of the latter, while the opposite is true with corporations and financial institutions. Only 50 per cent of the value of the shares of the "traded" firms sampled were owned by individuals, as against 86 per cent of the "untraded" ones. (Of course, brokers are involved only with traded stocks.) The general impression, therefore, that most of corporate equities are held by institutional investors applies specifically to traded issues.

CONCLUSIONS

Individuals represent the single most important group of equity holders, not only in terms of number, but also in terms of value of stocks

implication that differences in economic status produce differences in investment behavior as well as attitudes. That is to say, saving increases wih income and individuals tend to invest first in relatively safe, though low-yielding, assets, and only after obtaining some minimum amount of safe reserves together with, or in lieu of, larger income, do they invest to any great extent on more speculative but higher-yielding assets.[15]

This study can only suggest broad generalizations based on the empirical evidence gathered. The limitation of a cross-section study, as well as the possibility of both sampling and non-sampling errors, preclude the formulation of a theory of investment behavior by individuals.

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[15] Atkinson, *op. cit.*, p. 12.