THE PHILIPPINE SOCIAL SECURITY SYSTEM (S.S.S.): COVERAGE, COMPLIANCE AND ECONOMIC DEVELOPMENT

By
RICHARD E. ROSENBERG

Social security systems have been established in almost all of the developing countries of the world (only eight countries in the world have no social security system)[1]. The Philippine system was authorized in 1954 and began operating in 1957. Social security systems can have a significant influence on economic development. These systems can influence business profits, income distribution, population growth, the capital labor ratio, the allocation of investment within and between different industries, and finally the rate of savings. To cite but one example, a recent study[2] has shown that social security gross savings, out of 23 developing countries analyzed, represent a significant addition (5% or more) in eight of these countries. In the Philippines, social security gross savings added 10% to total domestic investment. Social Security institutions do not only affect the economic variables that are of importance to economic development. They also affect the social factors that are crucial to the development process[3].

Social security systems, including that of the Philippines, have a direct impact on the economic and social nexuses in economic development in two ways: first, according to the incidence of the contributions and the taxes that are collected to finance the system; and second, according to the incidence of the benefits provided to the system members. The first step that is necessary in determining the influence of the Philippine S.S.S. on Philippine economic development therefore is to discover which groups of people are actually paying taxes and receiving benefits. This paper begins to answer this question by determining in some detail the coverage and compliance structure of the Philippine S.S.S. This information was gathered by sampling S.S.S. and Philippine Bureau of the Census and Statistics records. In conclusion this paper explores some of the implications of this compliance structure for economic development.

The Philippine Social Security System

The Philippine Social Security System is just starting its second decade of operation. It provides cash to cover expenses incurred due to sickness as well as permanent disability and death and retirement benefits. The system is financed by a payroll tax which is 6% of wage and salary income up to 500 pesos a month. Since retirement benefits are conditioned by years in covered employment and since the covered population is growing rapidly and is relatively young, reserve accumulation is great. This affords a fund for discretionary investment, a large portion of which has been allocated to service loans (i.e. loans to members at a rate below the current market rate of interest). The Social Security System total revenue in 1967 was

P159,048,506 of which P124,178,000 were from member contributions and P32,928,929 came from investment income.

Coverage in the system is compulsory upon all nongovernmental employees over sixty years of age and their employers. Employment is defined as any service performed by an employee for his employer except:

a) Agricultural labor when performed by a share or leasehold tenant or worker who is not paid any regular wage or base pay and who does not work for an uninterrupted period of at least six months in a year.

b) Domestic service – private home.

c) Employment – purely casual.

d) Employment by members of one's family.

e) Government employment (covered by G.S.I.S.)

All self-employed are also excluded. In actual fact, the system legally covers wage and salary workers excluding almost all others. Thus, in effect, a large portion of the poorest members of the labor force in the Philippines are excluded from legal coverage.

Actual Coverage, Registration, and Compliance

There are three magnitudes to the compliance problem:

1) First, what per cent of those employees and employers in the economy falling under the legal provisions concerning coverage are actually registered by the system?

2) Secondly, what percentage of those employers and employees registered are actually complying at any given time?

3) Third, for those complying, is compliance to the full extent of the law? For example, are remitted contributions at the required level or are they below required levels due to undervaluation of wages, etc.?

REGISTRATION COMPARED WITH LEGAL COVERAGE

Table 1 shows the registered number of employees and employers and the net of terminations.[4]

How do these registration figures compare to actual number of wage earners legally covered? The legal coverage of Social Security System workers consists of

Table 1
Registered Employers and Employees*

Year	Employees	Employers
1957	224,156	1,094
1958	377,050	9,743
1959	401,769	10,156
1960	484,272	28,833
1961	603,691	37,958
1962	747,988	47,426
1963	947,474	54,820
1964	1,109,313	60,373
1965	1,309,197	64,550
1966	1,519,572	67,550
1967	1,768,222	73,478
1968	2,085,458	83,001

*Net of Termination when the Social Security has registered 2,083,458 workers as of the end of 1968.

almost all nongovernmental wage earners in the Philippines. The Bureau of the Census and Statistics reports the number of wage and salary workers in the Philippines. Their latest survey in 1965 showed that there were approximately 3.6 million[5] nongovernmental wage and salary workers in the Philippines. Thus as of 1968, the Social Security System has registered less than 2/3 of all wage and salary members. This estimate is, if anything, too high since the number of nongovernmental wage and salary workers in the Philippines has certainly increased since 1965.

As of 1965, the breakdown of registration (gross of terminations) into agriculture and industry groups was as follows[6]: 67,338 employers and 1,555,704 employees in industry and 2,420 employers and 71,516 employees in agriculture. The Bureau of the Census and Statistics survey reports that at this time approximately 1,506,000 wage workers were in agriculture, while 2,100,000 were industrial workers. The Social Security System has registered only about 5% of wage and salary agriculture workers as compared to approximately 74% of the industrial workers.

COMPLIANCE OF THOSE REGISTERED

In 1967 the Social Security Administration reported, after an extensive compliance drive, that only 39% of the registered employers and 53% of the employees were actually complying.[7]

Table 2
Social Security and Philippine Wage and Salary Distribution

Yearly Wage	All wage & salary workers (1)	S.S.S. wage & salary workers (2)	Compliance Ratio (1)/(2)
0-500	1,534,260	30,000	1.95%
500-999	584,480	45,000	7.60%
1000-1499	401,830	75,000	18.20%
1500-1999	255,710	157,500	61.50%
2000-2499	401-830	157,500	39.10%
2500-2999	219,180	102,500	46.70%
3000-4999	36,530	45,000	123.10% *
5000-5999	21,190	22,500	106.10% *
6000-over	62,200	67,500	108.60% *

*These estimates exceed full compliance (100%) due to standard errors of estimation inherent in the Bureau of Census statistics and this study's samples.

By the first quarter of 1968 these figures seem to have fallen even lower. From a complete enumeration of social security employer records[8] it was found that only 16,066 employers had made their full quarterly payments out of 60,974 registered employers (net of terminations). Thus, only 26% of social security employers were not delinquent. These figures may slightly overestimate the degree of noncompliance for 1968. Delinquency is separated into two categories, partially delinquent and fully delinquent. Fully delinquent employers have not contributed for periods as long as a year or more. Partially delinquent employers have turned in part of their yearly contribution. This category includes some employers who are chronically late in making their payments. Thus by the middle of 1969 the records would probably show a greater percentage of nondelinquent employers for the first quarter of 1968. However, there would be an overwhelming majority[9] of fully delinquent employers.

(a) Social Security System and Philippine wage and salary distributions compared

From the Bureau of the Census and Statistics Survey of Households, we estimated the wage and salary distribution of all wage and salary workers[10]. We further estimated from a random sample of 2,313 social security complying employers[11] the wage and salary distribution of complying social security members. These distributions are presented in the first two columns of Table 2.

Dividing the wage distribution of complying Social Security members (column 3 of Table 1) by estimates of the wage distribution of all nongovernmental wage and

Table 3
Sectoral Breakdown of Compliance

IC	Sector	Wage Workers S.S.S. est. (1)	Wage Workers B.C.S. est. (2)	Degree of Compliance (1)/(2)
)-99	Agriculture	15,390	906,000	1.6%
199	Mining & Quarrying	270	24,000	1.1%
399	Manufacturing	203,048	593,000	34.2%
499	Construction	52,510	272,000	19.2%
599	Elec., Gas & San. service	1,013	23,000	4.6%
699	Commerce	143,910	287,000	50.1%
799	Trans. Storage & Communication	51,975	283,000	18.3%
899*	Services	122,040	479,000*	25.0%

have excluded approximately 609,000 government workers who are covered under .S. in order to make these estimates comparable with Social Security System legal age.

ary we calculate a compliance ratio for each wage bracket. This ratio increases as increase wage and salaries. That is, compliance increases as wage levels increase. ble 2 shows the number of complying wage and salary workers in the lower wage d salary brackets as far below the number of wage and salary workers in the)nomy. In the below 500-pesos-a-year wage bracket there are approximately 500,000 wage workers in the economy who are not complying with the Social curity System (1.9% compliance ratio). The number of noncomplying workers adily declines as we move up the wage and salary scale. In the 2000-2499 wage icket, for example, approximately 250,000 workers overall are not complying 9% are complying). In the wage and salary brackets above 4,000 pesos a year we that virtually all wage and salary workers are complying.

These comparisons strikingly reveal the great gap that exists in compliance tween the high-wage and the low-wage members of the labor force.

Compliance in the major sectors

From a sample[12] of Social Security firms we were able to derive the number of mplying social security workers in each of the major industrial sectors (I.S.I.C. ternational Standard Industrial Classification) of the economy. This figure is

Table 4
Percentage of Complying Firms in Manufacturing

I.S.I.C.	% of S.S.S. firms complying to total number of firms in manufacturing as enumerated by the survey of the B.C.S.		
	Establishments with:		
	5-19 employees	20 or more	50 or more
20	30%	5%	33%
21	41	107*	81
22	55	54	54
23	224*	71	97
24	24	71	30
25	25	58	41
26	38	51	40
27	107*	8	55
28	54	123*	75
29	50	50	50
30	119*	23	55
31	47	99	68
32	500*	285*	312*
33	28	75	43
34	131*	81	95
35	67	44	59
36	16	21	17
37	36	61	48
38	75	65	70
39	65	80	69
Total	36.7%	66.9%	44.0%

*These estimates exceed full compliance (100%) due to errors in estimation. These classifications have very few firms, therefore their standard errors are very large, despite the large sample size.

compared with the Bureau of the Census and Statistics estimates of the distribution of wage and salary workers by industrial sector[13] in the Philippines. The degree of compliance is again defined here as the ratio of those actually covered (those workers who are remitting their contributions regularly and earning benefit rights) to the actual number of workers legally covered in the whole economy. This measure takes into account both magnitudes of noncompliance discussed at the beginning of this section; that is, it accounts for both those who are registered and those who are registered but not complying.

The distributions appear in Table 3 which shows two important facts: that there is a wide variation in overall compliance among the different sectors; and secondly, that the sectors with the lowest levels of compliance are those that are traditionally low wage sector. For example, agriculture, mining and quarrying, and construction have low levels of compliance while manufacturing and commerce, traditionally high wage sectors in developing economies, have much higher rates of compliance. In fact, the degree of overall compliance for agricultural wage workers is almost nonexistent. Thus these comparisons reveal that in its ability to redistribute income to agricultural wage workers who make up the bulk of the really poor in the Philippines, the Social Security System is even more limited than the previous registration and compliance figures indicated.

(c) Compliance within manufacturing

Table 4 shows the further disaggregation of the manufacturing sector into the I.S.I.C. classification both for sampled Social Security System data on manufacturing[14] and for the Bureau of the Census and Statistics survey of manufacturing of 1966[15]. The comparisons in this table were made for firms with five or more employees only since the Bureau of the Census and Statistics survey of manufacturing does not include firms with less than five employees.

The table reveals that there is considerable variation in compliance even within a given industrial sector. Furthermore in firms with 5 or more employees we see that the average degree of compliance is only 44%. When we further disaggregate these statistics into those firms with between 5-19 employees and those with 20 or more employees, we find that the larger firms (20 or more employees) have an average compliance rate of 66%, while the small scale firms have a compliance rate of only 36%. Average annual wages for large scale firms (20 or more employees) are twice those of the small scale firms (5-19 employees)[16]. Thus, compliance even in the manufacturing which is considered as an industrial sector with a relatively high degree of overall compliance, is biased in favor of the high-wage and away from the low-wage worker.

UNDERVALUATION OF CONTRIBUTIONS

Determining the degree of undervaluation of employee wages involves comparisons between wage levels as reported to the Social Security System and other

independent estimates of wage levels. By estimating the contributions as a proportion of wages one can measure this source of noncompliance. Contributions should be equal to approximately 6% of money wages. It is difficult to make such comparisons due to the lack of exactly comparable data. The S.S.S. data on wages (and/or contributions) are biased by the compliance structure. For example, the average wage for the Philippines as a whole includes large numbers of low-wage agricultural workers while the Social Security System has been shown to largely exclude these wage workers. Therefore, a comparison at this level of aggregation would make it seem as though social security wages were relatively higher than they are, and thus underestimate the degree of underreporting.

In order to minimize this source of bias, I will compare wages and contributions from the manufacturing sector only. These data are more accurate than my estimates for social security system as a whole, and it can be compared to the Bureau of the Census and Statistics data for manufacturing which is more accurate and reliable than any overall estimates of wages in the Philippine economy.[17] Contributions are 4.94% of payrolls in manufacturing for large-scale firms and 4.88% of payrolls in medium-scale firms (5-19 employees). Underreporting would then appear to be approximately 20% according to these estimates. However, these estimates overvalue underreporting for two reasons: (1) Payroll taxes are not 6% of total payrolls, in the Philippines, but only 6% of total payrolls up to 500 pesos a month for each individual; (2) This measure estimates contributions for complying firms only, therefore, using the total manufacturing payrolls as estimated by the Bureau of the Census and Statistics, overestimates underreporting. Thus we must adjust (reduce) the total payrolls in manufacturing to make them comparable to total contributions. From a comparison of the number of covered employers in manufacturing with the number actually existing (according to Bureau of the Census and Statistics estimates) it was found that 66% of the large-scale employers (20 or more employees) and only 36.79% of the medium-scale employers (5-19 employees) were complying. Thus total payrolls must be reduced in order to get an estimate of the payrolls of complying firms. However, within these groupings of firms (i.e., large, medium) it is more likely that those not covered are lower wage workers than those covered and complying; therefore, total payrolls should be reduced by a smaller proportion than the degree of noncompliance warrants. That is, for example, payrolls of medium sized firms would not be made comparable to social security coverage by reducing the payroll by 63.3%, the degree of noncompliance. Due to this consideration I have decided to reduce payrolls by 1/2 the degree of noncompliance. Now we can compare the contributions of those complying with this estimate of the total payrolls of those complying. For large scale firms it turns out that contributions were 5.4% of this total and for small scale 6.5% of payrolls.[18] These figures reveal that, for manufacturing at least, underreporting does not appear to be significant.[19]

Underreporting of wages for those firms that are complying does not appear to exist to any significant degree as a serious source of noncompliance. This fact is not

surprising considering the large degree of noncompliance. Firms do not have to resort to undervaluation if they do not want to comply since it is so easy to avoid the social security payments altogether. Those firms that are registered and complying are the "honest" firms to begin with so the degree of false reporting is not extreme. This fact is important since it increases the probability that the data on contributions derived from the records of complying firms are an accurate representation of actual values.

Summary and Implications Of Coverage and Compliance for Development Policy

Summarizing the above analysis we find the compliance is almost exclusively amongst the nonagricultural "highly" modernized large scale firms in the industrial and commercial sector. Thus, not surprisingly, the compliance structure (as opposed to the legal structure of coverage) reflects the basic "dualism" that characterizes developing economies today. That is the basic dualism between the "subsistence" agricultural and "capitalist" nonagricultural sectors, and within the industrial sector, between the large scale firms with advanced technology and the small scale firms backward in technology and modern business procedures. This compliance structure is biased in favor of the higher wage, wealthier members and against the lower wage, poorer members of the Philippine wage force.

What implications does this compliance structure have for economic and social development policy? First it is clear that this compliance structure significantly constrains the system's ability to provide social justice and equity through income redistribution. It may redistribute income[20] and provide effective protection against some of the insecurities present in the contemporary Philippine economic environment, but if it does do this it does so only amongst a limited group of people who are relatively well off by Philippine standards. Secondly the data suggests that the payroll tax which is used to finance the Social Security System is likely to have a differential effect on the different sectors of the economy and even within sectors. The actual strengths of these differential effects cannot be known without a full study of the incidence of the payroll tax[21]; however these data suggest that to the extent that employers bear part of this tax, the tax will distort the relative profitability of investments within and between sectors (i.e., manufacturing less profitable, agriculture more profitable). If part of the payroll tax is shifted forward in the form of higher prices, not only will the relative profitability of investments be distorted, but the relative price structure will as well. Thus payroll taxation in the Philippines is likely to be far less neutral in its effects on the allocation of resources than it would be in developed countries where coverage and compliance is close to being universal. This is an important fact for development planners to be aware of since payroll taxation may provide incentives that run counter to development strategies and policies. Finally this compliance structure must be taken into account when social planners consider extending or increasing the present social security benefits. For example the compliance structure of the

Philippine S.S.S. suggests that the most imminent need is not for new programs or increases in the present benefit structure, since these revisions would increase the benefits going to a relatively small group of Filipinos, but instead for increased efforts in order to extend compliance of already existing programs.

While this study has only examined the coverage and compliance of the Philippine S.S.S. the fact that many, if not most, other developing countries have "dualistic" structures implies that the Philippine compliance structure is not unique. Thus this study also suggests that other developing countries need to take into account in the design of economic and social development policy the likelihood that their systems compliance structures are biased in favor of the large scale firms in manufacturing and commerce and towards the higher wage workers in the labor force.

FOOTNOTES

The issues considered in this article grew out of a general study of the "Effect of the Philippine Social Security System on Income Redistribution" and was undertaken as a doctoral dissertation at the University of Wisconsin. Research for the dissertation in the Philippines was financed by a grant from the Midwest Universities Consortium for International Activities, Inc. (M.U.C.I.A.).

1) See page XV in *Social Security Programs Throughout the World 1967*. Social Security Administration, Office of Research and Statistics, Washington, 1967.

2) Franco Reviglio, "Social Security: A Means of Savings Mobilization for Economic Development", *International Monetary Fund, Staff Paper*, July 1967. pp. 324-368.

3) Hans Singer summarized the four aspects of development that focus our attention on its social nature:
"(1) The nature of development as a built-in ongoing indigenous process which must be embodied in people and their relations with each other.
(2) The fact that development is not only growth but also change, both interrelated.
(3) The fact that the human factor, or human "investment" is the essential basis of higher productivity.
(4) The fact that the ultimate objective of development must be a better life for the people, with the increase in production merely a means toward this end".
"Social Factors in Development: An Overview with Special Emphasis on Social Security" in Everett M. Kassalow ed. *The Role of Social Security in Economic Development*. U.S. Department of Health, Education and Welfare, Social Security Administration, Office of Research and Statistics, Research Report No. 27, pp. 24.

4) See Annual Report of the Social Security System 1968, (Manila Social Security Administration).

5) Labor Force, including educational attainment data, October 1963, Series 19, the *Bureau of the Census and Statistics Survey of Households Bulletin.*

6) See Annual Report of the Social Security System 1967, (Manila Social Security Administration).

7) *IBID.* section on coverage.

8) This information was taken by the author from the summary sheets of the monthly computer printout of contribution records compiled by the Social Security System.

9) Fifty-three per cent of registered employers are *fully* delinquent. From 1,000 random samples of all social security employees. Taken in 1969 at the Social Security Administration. For further details on the sample reliability see R. E. Rosenberg unpublished Doctoral Dissertation, University of Wisconsin, Madison, August 1970. Appendix V.

10) The wage and salary distribution for the Philippines was derived by going through the over 6000 sampled households contained in the 1965 Philippine Bureau of the Census and Statistics (BCS) survey, and placing each wage and salary worker into his appropriate wage and salary bracket.

11) The wage and salary distribution of complying Social Security employees was derived from a random sample of 2318 S.S.S. wage and salary workers in February and November of 1966. For further details on sampling procedure and reliability see R. E. Rosenberg. *IBID.* Appendix I and V.

12) These data were estimated from a systematic sample of one-fifth of all covered Social Security System firms in manufacturing. For a description of the procedure and reliability of the data, see R. E. Rosenberg, *IBID.* Appendix V.

13) These estimates are taken from the Bureau of the Census and Statistics Survey of Households Bulletin, "Labor Force" (October, 1965), Series No. 19, p. 3, Table 2.

14) Data was derived from Social Security records by sampling 1/3 of all registered firms in manufacturing. See R. E. Rosenberg, op. cit., Appendix V.

15) Data were taken from Bureau of Census and Statistics, *Survey of Manufacturing, 1966, Preliminary Report*, Table 2, pp. 8-9.

16) See Bureau of the Census and Statistics, *Survey of Manufacturing, 1966* pp. 6-9. The average wage of large scale firms is 2,832 pesos a year while for small scale firms it is 1,412 pesos.

17) Estimates of contributions were taken from my sample of 1/3 of all complying firms in manufacturing, 1966. Payrolls in manufacturing were taken from the Bureau of the Census and Statistics Survey of Manufacturing, 1966. This survey completely enumerates all firms above 20 or more employees. See R. E. Rosenberg op. cit. Appendix V for more details as to method of sampling and precision of my sample of manufacturing firms.

18) It appears there is less undervaluation for the medium size firms than from the large scale firms. This may not be the case since the inaccuracy (variance) of the medium scale estimates are far greater than the large scale, since the Bureau of the Census and Statistics only samples the small scale firms while it takes a census (a complete enumeration of) the large scale. See the discussion of the precision of these estimates in Appendix V of R.E. Rosenberg, op. cit.

19) These results may not be typical of all firms covered in the Philippines since manufacturing is a higher compliance sector than some others.

20) It has been shown that despite the limited and biased coverage and compliance the Philippine Social Security System increases the equality of the Philippine income distribution. See R. E. Rosenberg "The Effects Of Social Security Income Redistribution in the Philippines" unpublished doctoral dissertation, Chapter II, part V.

21) For a full discussion of the question of payroll tax incidence in the Philippines and the most likely payroll tax incidence, see R. E. Rosenberg, op. cit., Chapter II, part I.