PENSION FUNDS IN LABOUR SURPLUS ECONOMIES

An Analysis of the Developmental Role of Pension Plans in the Caribbean

Maurice A. Odle

INSTITUTE OF SOCIAL AND ECONOMIC RESEARCH
UNIVERSITY OF THE WEST INDIES
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CHAPTER ONE

PENSION FUNDS IN THE THEORY OF SAVING: AN OVERVIEW

Characteristics of Pension Schemes

Non-bank financial intermediation is a relatively neglected field but the degree of neglect varies from one non-bank to another. This difference in emphasis between non-banks is particularly evident in the Caribbean where frequent mention is made of insurance companies but very little specific mention is made of pension funds.[1] There are certain reasons for this neglect: one is the lack of readily available data. Hardly any mention of pension schemes appears in the bulletins of either the Statistical Department or the Central Monetary Authorities, who seem to think that only those intermediaries with clearly demarcated physical premises are important media in the flow of funds. A second reason is that pension schemes really gained wide popularity, and therefore quantitative importance, only within the last two decades. A third reason is that a part of pension funds is subsumed in life insurance statistics; however, insurance companies are agents for a minor part of the business. Also, a part of the non-insured pension funds is held in the trustee department of commercial banks but bank trust (common trust) statistics are not available.

Even with adequate statistics, analysis of pension funds is a formidable task. This is because of the complex structural characteristics of the institution. One characteristic is that there are pension schemes in both the private and the public sector (central government, local government and public corporations). In addition, for the liabilities and assets portfolios, there tends to be wide differences, not only between private and public sector, but also within each of these two sectors. A second characteristic is that some schemes are contributory (for the employees) while a few are not. Most of the non-contributory schemes are in the public sector. The non-contributory schemes in the private sector are mainly for 'top-hat' (senior) employees; for example, one of the pension schemes run by Shell in Trinidad[2] is non-contributory. A third characteristic is that most schemes are funded, although there are a few schemes that are not. Again, the non-funded schemes tend to be in the public sector. A fourth characteristic is that the rate of contribution for both employees and employers (and consequently, the size of benefits) varies widely between schemes. A fifth characteristic is that both the method of calculating benefits[3] and the method of payment of benefits vary widely.[4] A sixth characteristic is that some pension schemes are insured while others are non-insured (self-administered). The self-administered schemes are either self-trusteed or bank-trusteed. These differences have an important bearing on not only the choice of assets but also our capacity for identifying the choice, since life insurance companies do not separate their

ordinary policies from pension business. A seventh characteristic is that in recent years fairly comprehensive social security schemes have been introduced in a number of Caribbean countries and a national system of pensions for most employed and self-employed persons is an integral part of such social security schemes. This recent development emphasises the need for a holistic approach to any analysis of pension funds.

Theory of Pension Fund Saving

The motive for having pension plans is to hedge against 'excessive' longevity. Because of the significant decline of the death rate since the end of the 19th century, people in some countries have been living for a considerable number of years after retirement. Pensions are therefore a form of security and are a means of providing for those who might not have been able to provide (via other means of saving) for a reasonable standard of living during their post-retirement lives. Pension plans are therefore an attempt to even out the stream of income and consumption during the lifetime of individuals.

The underlying operational principle of pension plans is the pooling of risks. Some pensioners will live for a very long time while others will not. However, the premium required to be paid by each individual averages out these risks:

> The premiums are determined so that the expected capital sum available at the time the annuity is to begin is a particular amount; this amount must be the present value of the expected future stream of payments to the annuitants. Again, *ex post*, it will turn out that some annuitants would have been better off if they had not purchased the annuity, and some will be worse off. *Ex ante*, the expected return to each annuitant is the same. Kindahl [32].

Some questions that need to be asked in a discussion of the theory of pension fund saving are:-

(i) How liquid are pension claims, i.e., can pension liabilities be considered as money or even near-money?

(ii) To what extent can pension institutions create credit?

(iii) What determines the volume of pension saving? and

(iv) What is the economic impact of pension funds?

Pension claims are very illiquid in the sense that an employee cannot secure his share of the accumulated assets in the fund unless he changes his employment. Even with a voluntary change in employment, the average employee tends to have returned to him only his contributions plus interest since most private pension schemes do not accord fully vested rights to an employee who has given less than 20 years service. The employer's contributions are also not usually handed over in case of redundancy. The fund in a pension scheme is therefore an extreme form of contractual saving and the liabilities of such schemes cannot be considered as money (final means of payment) or even near-money in the way that the liabilities of government savings banks and building societies, for example, are.

The capacity of pension plans to create credit is also very limited; in fact, the ability to create credit is more limited than that of most of the other non-bank financial intermediaries:

> Because of their rather inflexible tie with employment, inflows to pension funds are linked to the credit-creation process in this sense *only* as output, employment, and income payments are affected. Increases in bank credit cannot wind up as the growth of household claims on pension funds in the same fashion as, say, they might end up as shares in a savings and loan association. Simple changes of household-asset structures resulting from the creation of money cannot directly affect fund inflows to pension trusts. Unless employers' wage bill is affected by bank-financed expenditures, pension trusts will receive no added inflows, whereas other intermediaries can gain from liquid-asset accumulation of the household sector. In short, pension trusts gain inflows only as value is added in production and cannot gain inflows as households trade money for other assets. Andrews [6].

Whereas the volume of total saving can be said to be mainly determined by the level (and distribution) of national income, the same cannot be said for any particular type of saving, owing to substitutability between saving media; this is particularly the case with pension fund saving:

> Although some private, self-administered pension funds existed during the interwar period, these institutions reached importance only after World War II, when the necessary socio-economic forces existed. Political economy, rather than economic theory, better explains the growth of pension funds. Ettin [22] p. 71.

Pension schemes were found to be in the interest of both employees and employers. With the advent of full employment in post-war years (in developed countries), coming after the depression during the inter-war period, security--conscious workers now logically turned their attention to providing for their post-retirement lives. This concern with their standard of living after retirement caused pensions to be introduced as a factor in collective bargaining. The employers were not entirely reluctant to enter into pension contracts partly because, with vested rights being very limited, this was a means of binding employees to them (and so reducing the costs of labour turnover) and partly because their contributions could either be shifted onto the workers (via a reduction in wages) or onto the consumers (via a rise in prices). Moreover, for both employees and employers, pension contributions were tax deductible, fund earnings were tax free and benefits were not taxed until the time of receipt by employees.

Pension fund saving[5] is therefore more directly a function of the structure of an economy than of income, although employee and employer contributions are usually not fixed but are a certain percentage of income.

Saving via pension schemes is said to be automatic and passive, rather than active, in the sense that pension plans do not compete directly with other financial intermediaries for deposits, i.e., whatever happens in the other financial intermediaries would hardly alter the rate of saving via pension funds. However, the reverse does not hold. Pension saving may conceivably alter the rate of other types of saving, so as to produce an effect on the overall rate of saving (net

saving) in the community. There are arguments both for and against an increase in net saving when pension schemes are introduced.[6]

There are at least two reasons why total saving may be augmented. The first is that it is likely that poor employees would not have saved without the compulsory scheme. It is also likely that some workers will be inspired to increase their saving efforts in other media (in order to enjoy a greater retirement income) by the introduction of the pension scheme. The second reason is that pension saving is not as liquid as other forms of saving (lower 'wealth effect') and so there is need to save in other media, irrespective of the size of pension saving.

There are at least three reasons why total saving may not be enhanced when a pension scheme is introduced. Firstly, for many poor workmen, compulsory pension saving would necessitate a fall in the consumption of essential goods unless saving via other financial media was reduced. Secondly, business saving may be reduced, unless labour productivity rose (owing to the early retirement of old workers) or prices are increased, since employer contributions could constitute an increase in labour costs. The third reason is that, *ceteris paribus*, government saving would be reduced due to the loss of income tax revenue arising out of pension deductions, unless there is a compensating increase in the general rate of taxation.

The overall effect on saving (at least with respect to households) nevertheless, seems to be favourable. With respect to the aggregate saving of households, one author found that, on the whole, pension coverage does not lead households to reduce their savings in other forms and may even stimulate the motivation to save. Only for certain groups, "especially those with high employee contribution rates and full vesting is there evidence of some substitution of pension saving for saving in other forms, but this substitution tends to be offset by those whose reaction is to increase other saving." Reviglio [51] p. 342. Another empirical study, Cagan [13] p. 82, has found that "business and government saving is probably reduced at most by 10-20 per cent of the growth in pension funds".

Although thrift saving is for purposes of security, and to that extent pension schemes are rivals to all other saving media, there are some financial instruments which are a much more direct competitor to pension saving than others. For example, life insurance[7] saving would tend to be more affected by private pension schemes than commercial bank or building society saving. Pension schemes and, to a large extent, life insurance schemes provide for a particular aspect of security, i.e., old age security. Life insurance saving would be adversely affected by the introduction of pension schemes, therefore, if workers aim for a specific level of savings (for example, that corresponding to a minimum subsistence income) for use in retirement. On the other hand, the optimum level of retirement savings may correspond to a standard of living greater than subsistence income and a pension scheme may stimulate other retirement savings if it indicates to the saver a resultant

greater possibility of being really financially independent in old age. At least one study has shown:

> ... that lower and middle income classes do substitute pension contributions for alternative forms of retirement saving, though the substitution is far from perfect. Pension saving may be complemented by other retirement saving only in the highest income classes, and these households have high propensities to save in all forms. The inherent tax advantages of the 'other retirement saving' are an added inducement for the wealthy to use this deduction. Schoeplein, [56] pp. 635-6.

Similarly, the introduction of national pension schemes can have certain substitution and complementary effects, not only with respect to life insurance schemes but also with respect to occupational pension schemes. For example, in some countries the introduction of compulsory social security schemes has resulted in the modification (scaling down in contributions) of some private sector schemes. The introduction of compulsory national schemes has also been known to cause a modification of occupational schemes in the public sector.

Pension schemes can have an important impact on social and economic development. Social justice is increased by the special tax concessions granted to pension saving for post-retirement life and social welfare is somewhat enhanced by the redistributive elements in national insurance schemes. Economic development is furthered because the very long-term nature of the liabilities of pension schemes makes possible the holding of very long-term assets. The need for liquidity is especially light in the early stages of pension schemes when benefit payments are likely to be very small relative to contributions. Pension liabilities are even more illiquid than those of life insurance companies since neither 'endowment' type contracts nor 'lapses' are possible; also, even though a 'surrender' can occur when there is a change in employment, the employee invariably has to enter into a new pension contract. Some other reasons why the individual pension saver is not as liquid as the holder of a life insurance policy are (a) he cannot use past pension contributions as security for a bank loan, (b) he is not automatically eligible for a 'policy loan', and (c) he is not in as favourable a position to secure a mortgage loan. Both cash contributions and benefit payments of pension plans are very predictable, assuming stable economic conditions. Cash contributions, being contractual, continue throughout the working lives of the members. Benefit payments, related to retirements, are actuarially determined on the basis of the age schedules and mortality of the labour force. Even the turnover of the work force is predictable within certain limits. There is, therefore, greater freedom in pension schemes to invest in long-term assets which may be more of a directly developmental nature than short-term assets.

Nevertheless, in most countries, pension schemes do not have total freedom in the assets they hold. For example, it is usual to restrict the amount of 'own-company' shares that can be held; this is justified on the grounds that if employers use contributions as a source of 'captive capital' they would not be satisfying the market test and (as in self-financing) funds may be allocated inefficiently.

Pension Saving in Underdeveloped Economies, with Special Reference to the Caribbean

Pension saving in the private and public sectors[8] is likely to be a smaller percentage of GNP[9] in underdeveloped countries, than in developed countries. There are many reasons why this might be the case.

Firstly, the agricultural sector, which is usually much larger in underdeveloped countries than in developed countries, does not easily lend itself to the introduction of occupational pension schemes. Table 1.1 shows the relative importance of agricultural employment in the Caribbean. In the peasant subsector, there are usually no pension schemes since the workers tend to be mainly self-employed or members of an extended family. Even in the plantation subsector, labour welfare schemes tend not to be fully fledged pension schemes and only the regular employees are included in the occupational pension plans; thus the casual workers have to rely on gratuity payments from the labour welfare funds.

Secondly, the very high incidence of underemployment in agriculture reduces the number of workers available for the non-agricultural sector, where the penetration of pension schemes is much greater. However, this factor has lost some of its importance in post-war years given the persistent tendency towards labour surplus in these economies.

A third reason is that the share of wages in industries in underdeveloped countries tends to be lower than that in developed countries; this is due partly to the wage rate[10] being lower (owing to weaker unions and lower productivity) and partly to the fact that many key industries in the mining sector are very capital intensive. Table 1.2 shows that the share of wages and salaries in the national income for Guyana, Trinidad, Jamaica and Barbados is considerably lower than that for the U.K. Also, Table 1.3 on subsector shares of total wages and salaries shows that structural change in the economy is very slow and the sectors in which pension contributions are likely to rise the fastest (mining and manufacture, as against certain services and agriculture) are increasing their share only slowly.

A fourth reason is that there has been in recent years a tendency to substitute capital for labour in some of the very important industries in underdeveloped countries. This has been the experience in the Caribbean, particularly in the sugar and petroleum sectors. The displacement of labour by capital in the primary sector is not compensated for by the employment of labour in a capital goods sector, since the latter does not exist in many underdeveloped countries. The leaders in this substitution between factors of production are branches of foreign firms who merely transplant in the host country the industrial processes prevalent in the metropole, where capital is plentiful and labour scarce. The local firms are likely to slavishly imitate the metropolitan firms, aided by generous capital allowances from the state. Thus we find that attempts by unions to become more militant in some industries where the technical coefficients are not fixed, and to demand higher wages, are associated with reductions in the

TABLE 1.1: NUMBERS OF PEOPLE EMPLOYED, AND EMPLOYMENT IN EACH SECTOR AS A PERCENTAGE OF TOTAL EMPLOYMENT IN THE CARIBBEAN

	GUYANA		TRINIDAD		JAMAICA		BARBADOS	
	1965	1968	1966	1968	1965	1968	1966	1968
1. Agriculture	57,975	n.a.	n.a.	n.a.	29,890	n.a.	22,440	n.a.
% of total	34.9				19.8		26.4	
2. Mining and Quarrying	5,076		14,400	11,800	4,068		500	
% of total	3.1				2.7		0.6	
3. Manufacturing	26,806		27,800	22,300	38,310		12,968	
% of total	16.2				25.4		15.2	
4. Construction	9,331		2,600	3,300	39,144		8,970	
% of total	5.6				25.9		10.5	
5. Public Utilities	2,245		13,300	13,400	4,499		786	
% of total	1.4				3.0		0.9	
6. Commerce (Distribution)	21,006		15,500	15,500	13,573		14,704	
% of total	12.7				9.0		17.3	
7. Transport, Storage and Communications	10,057		3,700	14,436			4,411	
% of total	6.1				9.6		5.2	
8. Services (and other)	33,416		55,400	54,700	7,191		20,261	
% of total	20.1				4.8		23.8	
TOTAL	165,912				151,111		85,040	

NOTES: (1) Figures for Jamaica are December figures; this may make employment figures appear deflated, e.g., in March agricultural employment was 43,080. Figures do not include cane growing on sugar estates and government workers in construction, Water Supplies and Sanitary services.

(2) For Guyana, figures refer to the year, rather than the survey week.

(3) Figures for Trinidad refer to large establishments only.

SOURCE: (1) *Manpower Survey*, Guyana; (2) *Annual Statistical Digest*, Trinidad. (3) *Annual Abstract of Statistics*, Jamaica; (4) *1965-8 Plan*, Barbados.

TABLE 1.2: SHARE OF WAGES AND SALARIES IN NATIONAL INCOME FOR GUYANA, TRINIDAD, JAMAICA, BARBADOS & U.K.

		1953	1955	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Guyana	National Income (E.C.$M)	159.0	174.4	n.a.	n.a.	227.6	248.6	250.7	230.8	255.9	282.3	293.6	323.4	
	Compensation of Employees	82.9	96.2	n.a.	n.a.	129.5	142.0	141.5	141.8	156.5	174.4	190.9	207.5	
	Compensation of Employees as a % of National Income	52.1	55.2	n.a.	n.a.	56.9	57.1	56.5	61.4	61.2	61.8	65.0	64.2	
Trinidad	National Income (E.C.$M)	314.7	397.5	566.9	609.1	683.8	742.0	779.4	855.0	895.8	922.2	1062.5	1138.4	1292.7
	Compensation of Employees	169.8	212.1	268.8	291.5	341.1	376.2	391.6						
	Compensation of Employees as a % of National Income	54.0	53.4	47.4	47.9	49.9	50.7	50.2						
Jamaica	National Income (J.£M)	99.0	125.1	177.3	177.4	191.5	204.1	213.5	226.5	244.7	265.0	282.9	300.1	
	Compensation of Employees	57.7	73.0	103.2	105.4	114.2	121.4	128.3	139.0	151.4	162.7	172.2	185.4	
	Compensation of Employees as a % of National Income	58.3	58.4	58.2	59.4	59.6	59.5	60.1	61.4	61.9	61.4	60.9	61.8	
Barbados	National Income (E.C.$M)	70.1	74.3	94.6	100.0	116.1	124.4	130.3	146.1	142.4				
	Compensation of Employees	42.9	41.0	57.4	58.8	70.7	75.3	82.3	88.3	85.5				
	Compensation of Employees as a % of National Income	61.2	55.2	60.7	58.8	60.9	60.5	63.2	60.4	60.0				
U.K.	National Income (£M)	13,757	15,506	18,667	19,591	20,905	22,382	23,416	24,913	26,863	28,663	30,009	31,264	33,450
	Compensation of Employees	9,634	11,244	13,465	14,102	15,164	16,397	17,289	18,160	19,662	21,218	22,690	23,471	25,267
	Compensation of Employees as a % of National Income	70.0	72.5	72.1	72.0	72.5	73.3	73.8	72.9	73.2	74.0	75.6	75.1	75.5*

*Compares with 71.6% in the U.S.A. in 1968.

SOURCE: *U.N. Yearbook of National Accounts Statistics, 1969.*

TABLE 1.3: CHANGING SUB-SECTOR SHARES OF TOTAL WAGES AND SALARIES IN JAMAICA, 1959-68 – £'000

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Agriculture, Forestry and Fishing	23,366	23,678	25,056	25,680	32,414	32,638	29,966	32,484	33,519	33,503
% of Total	11.3	10.6	10.6	10.3	12.0	11.1	9.5	9.7	9.2	8.3
Mining, Quarrying and Refining	6,018	7,354	8,344	9,474	9,426	10,886	12,230	13,584	15,716	16,060
% of Total	2.9	3.3	3.5	3.8	3.5	3.7	3.9	4.1	4.3	4.0
Manufacture	26,646	28,872	31,014	31,676	36,668	41,030	44,230	47,646	51,272	56,772
% of Total	12.9	13.0	13.1	12.7	13.6	14.0	14.0	14.3	14.1	14.0
Construction and Installation	33,348	35,460	35,840	36,000	36,162	40,276	44,118	47,432	49,982	65,064
% of Total	16.2	15.9	15.1	14.4	13.4	13.7	14.0	14.2	13.8	16.1
Gas, Electricity and Water	1,510	1,660	1,992	2,284	2,326	2,522	2,956	2,980	3,629	3,958
% of Total	0.7	0.7	0.8	0.9	0.9	0.9	0.9	0.9	1.0	0.9
Transportation, Storage and Communications	12,462	12,902	15,350	16,286	16,142	17,240	18,708	20,426	23,050	25,098
% of Total	6.1	5.8	6.5	6.5	6.0	5.9	5.9	6.1	6.4	6.2
Distributive Trades	31,494	34,992	33,342	33,438	35,018	34,868	37,474	38,708	39,609	43,544
% of Total	15.3	15.7	14.1	13.4	13.0	11.9	11.9	11.6	10.9	10.8
Financial Institutions	4,934	5,696	6,658	7,038	7,360	8,468	9,418	11,232	12,097	14,089
% of Total	2.4	2.6	2.8	2.8	2.7	2.9	3.0	3.4	3.3	3.5
Ownership of Dwellings	..	..	..	..	–	..	–	..	–	–
% of Total	..	..	–	–	–	..	–	–	–	–
Public Administration	21,552	23,542	26,006	30,668	32,364	36,302	39,048	44,122	53,838	61,986
% of Total	10.5	10.6	11.0	12.3	12.0	12.4	12.4	13.2	14.8	15.3
Miscellaneous Services	35,128	36,644	40,398	44,408	48,854	53,984	60,954	64,352	67,187	70,714
% of Total	17.1	16.5	17.1	17.8	18.1	18.4	19.3	19.3	18.5	17.5
Rest of the World	9,460	11,828	12,788	12,914	13,020	15,652	16,294	10,690	13,019	13,506
% of Total	4.6	5.3	5.4	5.2	4.8	5.3	5.2	3.2	3.6	3.3
TOTAL	205,918	222,628	236,788	249,866	269,754	293,866	315,396	333,656	362,918	404,295

SOURCE: Based on data in *National Income and Product, 1968*, Department of Statistics Publication, Jamaica

numbers employed; this is a further reason why the share of wages may not reach high levels.[11] It also helps to explain why in some sectors (see Table 1.4) there is a wide divergence between the share in the number of people employed and the share of earnings.

A fifth reason is that there are many small firms in underdeveloped countries which do not have pension schemes. One explanation for this comparative lack of penetration is that pension plans are a fairly recent innovation even in developed countries and there tends to be a lag before there is universal adoption in underdeveloped countries. A second, and probably more important, explanation for the lack of penetration[12] is that in a labour surplus economy the competition for labour is not very fierce, whereas in developed countries pensions are an integral part of the bargaining process.

A sixth reason is that the age structure in underdeveloped countries is such that a smaller proportion of the population is of working age. Because of the higher birth rate, nearly 40 per cent of the people in underdeveloped countries are below the critical[13] age of 15.[14] In addition, since many of the school-leavers remain unemployed (and the death rate is continually falling) the resulting unfavourable contribution/benefit payment ratio adversely affects the growth of the underdeveloped countries' total pension fund. Table 1.5 shows that in Barbados, as a result of a continually high birth rate (and a fall in the infant and adult mortality rates) the proportion of the population below 15 years of age rose from 33.3 per cent in 1946 to 38.8 per cent in 1965.

The above factors, purporting to explain differences in the share of pension saving as a percentage of GNP, between underdeveloped and developed countries, are likely to be particularly pronounced in certain types of the underdeveloped economy. However, in Caribbean territories pension funds have risen to very significant proportions, since contributions are even more related to earnings than to employment and the share of wages has risen at the same time that the rate of unemployment has increased.

The national pension schemes that have recently been introduced in some underdeveloped countries are likely to generate less savings, as a percentage of GNP, than in developed countries, for the same reasons mentioned above. Also, since a national pension scheme only covers the employed, in a labour surplus economy there are many people who would not benefit from such a scheme.[15] This has important implications for redistribution of income policy. One implication is that only the employed benefited from tax concessions made to contributors; and if the government increases the rate of indirect taxation to make up for the 'loss' of inland revenue resulting from tax deductions, the burden is partly shared by the unemployed (who presumably do make purchases despite the fact that they do not have a regular source of income).

A second implication is that, in the absence of an unemployment insurance scheme, a national pension scheme in a labour surplus economy implies that the state is more concerned with the post retirement security of a very selected

TABLE 1.4: RELATION BETWEEN NUMBERS EMPLOYED AND EARNINGS, SELECTED INDUSTRIES IN JAMAICA IN DECEMBER, 1965

	TOTAL NUMBER					CONSTRUCTION		PUBLIC UTILITIES				
	Including Government	Private Sector Alone	Agriculture	Mining	Manufacture	Private	Government	Electricity (Private)	Water Sanitation (Gov't)	Commerce (Distribution)	Transport Storage & Communication	Selected Services
Number of people employed	151,111	113,669	29,890	4,068	38,310	5,226	33,918	975	3,524	13,573	14,436	7,191
% of Total		75.2	19.8	2.7	25.4	3.5	22.4	0.6	2.3	9.0	9.6	4.8
Earnings ($J.)	1,075,957	936,931	114,125	89,284	296,905	55,625	123,954	18,300	15,072	169,291	143,745	49,656
% of Total		87.1	10.6	8.3	27.6	5.2	11.5	1.7	1.4	15.7	13.4	4.6

SOURCE: Based on data in *Annual Abstract of Statistics*, Jamaica.

TABLE 1.5: ESTIMATED DISTRIBUTION OF POPULATION BY AGE AND SEX IN BARBADOS (THOUSAND)

	TOTAL POPULATION BY AGE						MALES BY AGE						FEMALES BY AGE					
	Total	0-5	5-15	15-45	45-65	65 & over	Total	0-5	5-15	15-45	45-65	65 & over	Total	0-5	5-15	15-45	45-65	65 & over
1946	196.8	24.3	41.4	90.4	28.6	12.1	88.1	12.2	20.4	41.6	10.4	3.6	108.7	12.2	21.1	48.8	18.2	8.5
% of Total		12.3	21.0	45.9	14.5	6.1		13.8	23.2	47.2	11.8	4.1		11.2	19.4	44.9	16.7	7.8
1950	213.1	26.8	44.4	96.2	33.6	12.2	97.6	13.3	22.0	45.4	13.4	3.5	115.5	13.4	22.4	50.8	20.2	8.7
% of Total		12.6	20.8	45.1	15.8	5.7		13.6	22.5	46.5	13.7	3.6		11.6	19.4	44.0	17.5	7.5
1955	227.1	31.4	48.5	95.6	38.6	13.0	104.2	15.7	24.1	44.4	16.5	3.5	122.9	15.7	24.4	51.2	22.1	9.5
% of Total		13.8	21.4	42.1	17.0	5.7		15.1	23.1	42.6	15.8	3.4		12.8	19.9	41.7	18.0	7.7
1960	233.1	33.5	57.4	86.9	40.1	15.1	105.0	16.8	28.5	38.0	17.5	4.2	128.1	16.7	29.0	48.9	22.6	10.9
% of Total		14.4	24.6	37.3	17.2	6.5		16.0	27.1	36.2	16.7	4.0		13.0	22.6	38.2	17.6	8.5
1965	245.0	31.3	63.7	91.3	41.9	16.7	110.2	15.9	32.0	39.4	18.0	5.0	134.7	15.4	31.8	51.9	24.0	11.7
% of Total		12.8	26.0	37.3	17.1	6.8		14.4	29.0	35.8	16.3	4.5		11.4	23.6	38.5	17.8	8.7

Notes: Figures in 1960 are based on the *1960 Census* adjusted figures.

SOURCE: Based on figures in *Abstract of Statistics*, Barbados, 1965.

section of the adult population and less concerned with security during the overall community's supposed working life. Such a situation may also indicate that the government in the labour surplus economy is more interested in maximising savings than in maximising the welfare of the community as a whole, at least in the short run.

A third implication is that national insurance schemes, which include national pensions but omit unemployment insurance, reduce the potency of inter-generation (and, also, interpersonal) transfers. One example of an inter-generation transfer is where accumulated contributions are less than benefits and the state has to subsidize the national pension scheme, via increased borrowing or taxation as benefit payments fall due. If, in a labour surplus economy, unemployment insurance necessitates increased borrowing, part of the burden is shifted to the next generation. It is not necessarily a bad thing for the next generation to share the burden of present-day unemployment, since it is assumed that in the next generation there will be full employment as a result of the investment efforts of today's generation.

Finally, the rapid increase in recent years in the number of private pension schemes and, also, the introduction of national pension schemes in underdeveloped economies, may have caused certain changes in the liquidity structure of the community's saving. Since an individual probably regards saving in a private pension scheme as a long-term form of saving (which is only unlocked on a change of employment) and saving in a national pension scheme as a *very long-term* form of saving (which is only 'withdrawable' in one's old age), he is likely to use the more voluntary forms of thrift increasingly as medium-term and short-term forms of saving. This seems to be the experience in the Caribbean where, in recent years, there has been a rapid increase in the incidence of surrendering of life insurance policies.[16] This emphasises the need for an integrated approach to an analysis of pension saving, i.e., simultaneous consideration of all types of pensions (private, government, national and annuity) and a synthesis of the theory of pension saving with other types of thrift saving (which also provide a form of security).

There will be further discussion on some of the above issues in the following Chapters.

Summary and Conclusion

The structure of the pension industry is very complex with significant operational differences between private sector schemes, public sector schemes and nationally organised schemes. Even within the private and public sectors there are diverse practices. For example, private sector schemes can be either insured, self-trusteed or bank-trusteed.

Pension funds are a fairly 'compulsory' form of savings and as such can adversely affect other voluntary forms of saving. However, the introduction of pension schemes tends to increase the overall level of savings of the community.

Pension funds are a very long term type of savings and so have a very significant role in the development of a vibrant capital market. In the early life (especially) of pension schemes, liabilities are very long term and these can be matched by very long-term assets, thus aiding the development process.

In labour surplus economies (like those in the Caribbean)[17] pension saving, as a proportion of the community's total saving, is likely to be of somewhat less importance than it is in developed countries. However, the lower level of employment in labour surplus economies is partly compensated for by a fairly fast increase in wages. Rising wage rates in those industries where labour costs are a small proportion of total costs tend to spread to the rest of the economy and help to make pension funds quantitatively very important.

Generally, the compulsory element in pension schemes is particularly effective for augmenting savings in low income economies. However, in labour surplus economies, one effect of the employer's contribution may be an aggravation of the serious unemployment situation (via the further substitution of capital for labour) unless the 'burden' is fully passed on.

FOOTNOTES

[1]For example there is no explicit attempt to analyse pension funds in the definitive study by C.Y. Thomas [59]; there is also only passing reference to pension funds in M.A. Odle [43]. This study is therefore intended to partially fill the existing gap.

[2]Throughout this study, 'Trinidad' and 'Trinidad and Tobago' are used interchangeably.

[3]There are also differences between schemes with respect to vested rights and death, ill-health and widows benefits.

[4]There are two basic methods of calculating benefits – the 'pure savings' method and the 'formula' method. In the pure savings method payments are not made out of the capital that has been accumulated on behalf of the individual (i.e., payments are on the basis of what your money will purchase). In the case of the formula method, pension payment is usually based not merely on accumulated savings but also on the number of years of employment and the average or final year salary of the individual. Thus there are 'fixed-benefit' plans and 'non-fixed benefit' plans. The method of payment may be by lump-sum, or part cash (usually a quarter of the sum accumulated on behalf of the individual) plus an annual sum, or, most commonly, an annual sum alone.

[5]The volume of pension fund saving, as with life insurance saving, is measured by the size of the reserves held to defray future liabilities. For a rationale of this method of quantification, see Kindahl [32].

[6]For a useful discussion of the arguments for and against an increase in net saving, see F. Reviglio [51] (especially pp. 341-343).

[7]In some countries, there are also old age income bonds and investment certificates with equivalent restrictions on withdrawal. See Schoeplein [56].

[8]Ignoring the problem that some central government schemes are funded while in other countries they are not.

[9]One partially offsetting factor is that GNP is lower than GDP for most underdeveloped countries whereas this is not usually the case in developed countries.

[10]Of course, there can be significant differences between underdeveloped and developed countries in the rate of both employee and employer contributions.

[11]The common view is that the employer's pension contribution is a sort of payroll tax. However, if the employer considers his contribution to be really part of the wage he would have given the workers anyhow, his contribution becomes no longer a tax since, in fact, it is partly deductible. This latter view is very acceptable in a labour-surplus economy, where employment needs to be directly subsidized.

[12]Even where a large number of pension schemes does exist, the rate of employer contribution tends to be lower than in developed countries.

[13]Critical in the sense that anyone, not attending school, who is above that age and not working is defined as unemployed in many underdeveloped countries (e.g. in the Caribbean).

[14]Moreover, a minimum age for membership in some pension schemes is 21.

[15]Of course, some unemployed people are still eligible for an old age pension but the latter is very small compared to the average benefit under a national pension scheme.

[16]As a result, a withholding tax, on surrendered policies, was recently introduced in Trinidad and Guyana and this may cause not only a reduction in the rate of increase (or size) of life policies held by marginal savers but also a reallocation of thrift saving between various intermediaries and types of deposit. For example, there may be a fall in the rate of increase of life insurance saving and a corresponding increase in building society and commercial bank saving. Similarly, there may be a redistribution between deposits and shares in building societies and between demand, savings and time deposits in commercial banks.

[17]The rate of unemployment varies between 15 per cent and 25 per cent in Caribbean economies.

CHAPTER TWO

FACTORS INFLUENCING THE GROWTH OF PENSION FUNDS

Growth of Non-Bank Financial Intermediaries

The growth of pension funds ought to be viewed in the general context of the very rapid growth of non-bank financial intermediaries as a group. In the Anglo-Saxon developed countries, where banks are providers of primarily short term credit, the increase in the share of non-banks in total financial intermediation has been very rapid in recent decades.[1] Even in the underdeveloped economies of the Caribbean non-banks are beginning to supersede banks in quantitative importance. There are a number of possible reasons for the tendency for the share of non-bank financial assets to rise as a proportion of total financial assets during the course of economic development. These reasons relate to the nature of non-bank liabilities, the behavioural characteristics of households and business firms, and the discriminatory effects of government policy.[2]

Growth and Size of Pension Funds

In most countries, pension funds have been increasing very rapidly in recent years. This rapid growth has been associated with the wide penetration of pension schemes in the private sector, rather than in the public sector which has had pension schemes for many decades.[3] The main reasons for the rapid growth in the post-war period in the number of pension schemes and the size of pension reserves have already been mentioned, but, in analysing the Caribbean situation, we will inevitably have to elaborate on one or two of these reasons.

In Trinidad and Tobago, there are over 150 pension schemes (besides the local government and central government schemes).[4] About three-fifths of these schemes began in the last five years,[5] as indicated in Table 2.1. Because many of the pension schemes were recently set up it is expected that for a long time contributions plus earnings (i.e., inflows) will exceed benefit payments (i.e., outflows) and that, therefore, reserves will continue to rise at a rapid rate. The stage of maturity or levelling off in reserves growth will be particularly long in coming if we assume that the workforce is a fairly young one and that most of the recruits (who make contributions but do not draw benefits until a very long time afterwards) are young people. This is not an unwarranted assumption in view of the high percentage of very young people in the population of the Caribbean, although it should not be forgotten that a relatively high proportion of these same young people are at present unemployed, as can be seen in Table 2.2. Besides, a large number of the pension schemes which arose in recent years in Trinidad are in the manufacturing field where the work, being physically

TABLE 2.1: DATE OF COMMENCEMENT OF PENSION SCHEMES, TRINIDAD AND TOBAGO

Date of Commencement	Number of Pension Schemes
1939 or before	1
1940-50	12
1951-60	27
1961-5	25
1966-71	88
Total	153

SOURCE: Based on unpublished data in the Office of the Supervisor of Insurance.

demanding, would require relatively young people. This recent spate of new pension schemes does not detract from the fact that schemes for a couple of very large firms in the very important mining sector have been existing since the 1950s and, therefore, carry a heavy weighting in the accumulation of pension funds.

Table 2.3 shows that pension contributions ('premium income') are increasing at a very rapid rate. For example, total contributions in Trinidad increased by 19.7 per cent between 1967 and 1968 and by 12.1 per cent between 1968 and 1969; the growth of pension reserves (saving)[6] during these years must also have been very rapid, although the two growth rates need not be identical.

Table 2.4 shows the rate of growth in the number of establishments between 1965 and 1969, in Guyana. This rate of growth is not a very good indicator of the rate of growth of pension schemes because of the possibility of multi-employer schemes and because many of the new establishments are very small and are therefore unlikely to set up pension schemes. Similarly, although the rate of increase in the number of employees is generally failing to keep pace with the rate of increase in the number of establishments, this may not only indicate that the new establishments are generally becoming smaller but also that the old establishments are shedding labour. (In most of the sectors the rate of increase in the number of female employees is greater than the rate of increase in the number of male employees and assuming that females are more poorly paid and less pension-minded than males, this may also partly account for any discrepancy between the rate of increase in establishments, pensionable employees and contributions).

A large proportion of the total contributions relate to a very small number of firms. This extremely skewed pattern is in keeping with the very specialized nature of the Caribbean economy. In Guyana, in 1968, nearly one-third of the total pension contributions was accounted for by the two firms then in the

TABLE 2.2: NON-INSTITUTIONAL POPULATION AGED 15 YEARS AND OVER AND LABOUR FORCE BY EMPLOYMENT STATUS, SEX AND AGE, TRINIDAD AND GUYANA

	AGE GROUP (YEARS)	BOTH SEXES		MALE		FEMALE	
		Labour Force as % of Non-Institutional Population 15 years old and over	Unemployed as % of Labour Force	Labour Force as % of Non-Institutional Population 15 years old and over	Unemployed as % of Labour Force	Labour Force as % of Non-Institutional Population 15 years old and over	Unemployed as % of Labour Force
TRINIDAD	Total All Ages	62	14	84	13	40	16
	15-19	42	30	60	29	26	32
	20-24	72	22	95	21	48	25
	25-34	72	11	98	9	47	15
	35-44	72	8	98	6	50	11
	45-54	70	6	96	5	45	7
	55-59	68	6	92	6	39	7
	60-64	51	7	74	9	27	–
	65+	23	8	37	10	11	3
GUYANA	Total All Ages	61	n.a.	83	n.a.	39	n.a.
	14-19	44	n.a.	53	n.a.	34	n.a.
	20-24	71	n.a.	98	n.a.	48	n.a.
	25-29	54	n.a.	99	n.a.	40	n.a.
	30-44	68	n.a.	99.5	n.a.	40	n.a.
	45-59	72	n.a.	96	n.a.	47	n.a.
	60+	35	n.a.	51	n.a.	20	n.a.

SOURCE: (1) *Labour Force* (Publication No. 15), Central Statistical Office, Trinidad. (For six months ended 30.6.69).

(2) Based on data in *Manpower Requirements Survey*, Ministry of Labour and Social Security, Guyana, 1965.

TABLE 2.3: GROWTH OF PENSION FUND CONTRIBUTIONS, GUYANA AND TRINIDAD – $000 (E.C.)

	GUYANA							TRINIDAD			
	1964	1965	1966	1967	1968	1969	1970	1967	1968	1969	1970
Contribution by Employees	1,143	1,185	1,502	1,620	1,691	1,559	1,100	2,727	3,229	4,393	n.a.
Contribution by Employers	2,432	2,139	2,153	2,851	3,459	2,843	2,007	6,686	7,528	8,311	n.a.
Additional Contributions by Employers	--	--	--	--	--	--	--	1,130	1,863	1,448	n.a.
Contribution to Sugar Welfare Fund	1,422	1,280	1,340	1,431	1,440	n.a.	n.a.				
Contribution to Central Government Pension Fund	452	455	497	550	614	n.a.	n.a.				

NOTES: (1) Central Government not included in figures for contributions by employees and employers in Guyana.

(2) Contributions figure for Trinidad refers to only those schemes submitting accounts e.g. in 1969 only 56 plans submitted this statistic.

SOURCE: (1) Statistical Bureau, Guyana.

(2) *Reports of Supervisor of Insurance,* Trinidad.

TABLE 2.4: GROWTH IN THE NUMBER OF ESTABLISHMENTS COMPARED WITH GROWTH IN THE NUMBER OF EMPLOYEES, IN GUYANA

	1965 ESTABLISHMENT SURVEY				1969 ESTABLISHMENT SURVEY				RATE OF INCREASE ESTABLISHMENT SURVEY			
	No. of Establishment	NUMBER OF EMPLOYEES			No. of Establishment	NUMBER OF EMPLOYEES			No. of Establishment	NUMBER OF EMPLOYEES		
		Male	Female	Total		Male	Female	Total		Male	Female	Total
Forestry	8	1,731	8	1,739	50	2,447	9	2,456	525	41	13	41
Mining and Quarrying	11	5,206	240	5,446	13	5,775	321	6,096	18	11	34	12
Manufacturing	337	11,593	1,692	13,285	384	13,609	2,322	15,931	14	17	37	20
Construction	9	705	7	712	116	3,591	68	3,659	1,189	409	871	414
Commerce	270	5,124	1,512	6,636	425	6,702	2,425	9,127	57	31	60	38
Transport, Storage and Communication	47	2,012	77	2,089	66	2,989	135	3,124	40	49	75	50
Services	173	1,639	1,036	2,675	282	2,923	2,194	5,117	63	78	112	91
Other Industry	21	334	156	490	12	239	48	287	–429	–28	–69	–41
TOTAL (Except sugar cultivation)	876	28,344	4,728	33,072	1,348	38,275	7,522	45,797	54	35	59	38

SOURCE: *Report on Establishments Enquiry*, 1969. (Manpower Survey Office, Ministry of Labour and Social Security)

bauxite industry. Similarly, in Trinidad, two firms in petroleum mining account for a very significant percentage of total contributions.

Employers' contribution in the Caribbean, for all sectors combined, would appear to be a somewhat higher proportion of total contributions than what one would expect in a labour surplus economy, when we make a comparison with the developed economies (see Table 2.5) of the U.K. and the U.S.A. The employers' share seems to be more or less the same in all three economies, there being a common employer/employee contribution ratio of nearly[7] 3 to 1. This relatively high employer/employee ratio for Trinidad[8] is probably due to its having a smaller public sector (which tends to operate with a smaller employer/-employee ratio than the private sector).

The employer/employee ratio in Guyana is almost the same as it is in Trinidad, although there is some variation in the ratio from year to year. In Trinidad, the employee contribution increased its share to 45.0 per cent from the position of 34.9 per cent in 1967 and 34.4 per cent in 1968. In Guyana, on the other hand, there was a decided fall in 1967 and again in 1968 in the share of employees' contribution. One possible reason for the variation is tardiness or delinquency on the part of employers in making their contributions or submitting their returns. A second possibility is that Trinidad might have just ended, and Guyana was probably in the midst of, a period of 'additional' employer contributions to meet past service liabilities.[9]

Generally, pension funds in the Caribbean are likely to grow in a steady and predictable manner, assuming no depression in any major industry. However any simple projection based on past experience may not be possible in the light of the recent introduction of national insurance schemes and the relentless competition from life insurance policies.

Some aspects of life insurance business are almost similar to the services provided by pension plans. For example, the annuity policy is virtually similar and an endowment policy maturing around 60 or 65 years of age serves almost the same purpose. This makes the life insurance policy a strong competitor to the pension plan. Unfortunately, statistics are not readily available on the growth of annuities in the Caribbean. For example, although the *Annual Statistical Digest* for Trinidad indicates a growing importance of annuity expenditure in life insurance companies (since between 1960 and 1969 annuity expenditure increased over six-fold while total life expenditure increased by less than three times) no distinction is made between ordinary (individual) annuity and group annuity business; also the growth probably indicates the servicing of liabilities incurred in the past rather than the acquisition of new policies. Similar reservations have to be made, in the absence of adequately disaggregated statistics, with respect to the growth of endowment business, which is not separated from whole-of-life business in Table 2.8. Note that both ordinary annuity and endowment saving in the Caribbean have a tax advantage over pension saving since the latter is subject to taxation at the time of receipt of benefits; on the other hand, interest on annuities is taxed. [10]

TABLE 2.5 SHARE OF EMPLOYEES' AND EMPLOYERS' PENSION CONTRIBUTIONS IN THE U.K., TRINIDAD AND THE U.S.A.

	BRITAIN (£M.)					TOTAL	TRINIDAD ($E.C. '000)			U.S.A. ($US.M.)									
	1963			1967			1967	1968	1969	1951					1960				
	Private Sector	Public Sector	Total	Private Sector	Public Sector		Total	Total	Total	Total	Private	State and Local	City	Public	Total	Private	State and Local	City	Public
Employees' Contributions	120	110	230	190	155	345	2,727	3,229	4,393	571	129	311	131	442	1,437	392	801	244	1,045
Employers' Contributions	335	285	620	525	395	920	7,816	9,391	9,759	1,800	1,257	329	214	543	4,321	2,797	1,017	507	1,524
Total Contributions	455	395	850	715	550	1,265	10,543	12,620	14,152	2,371	1,886	640	345	985	5,758	3,189	1,818	751	2,569
Employees' Contributions as % of Total	26.4	27.8	27.1	26.6	28.2	27.3	25.9	25.6	31.0	24.1	9.3	48.6	38.0	44.9	25.0	14.0	44.1	32.5	40.7
Employers' Contributions as % of Total	73.6	72.2	72.9	73.4	71.8	72.7	74.1	74.4	69.0	75.9	90.7	51.4	62.0	55.1	75.0	86.0	55.9	67.5	59.3

SOURCE: Based on data in (1) Bank of England *Quarterly Bulletin*, December, 1970.

(2) *Reports of the Supervisor of Insurance*, Trinidad.

(3) V.L. Andrews, [6].

TABLE 2.6: EXPENDITURE OF LIFE INSURANCE COMPANIES, TRINIDAD, 1960-1969 – $000 (E.C.)

Year	Death or Disability Claims (including bonus)	Maturity Claims (including bonus)	Surrenders	Annuities	Expenses of Management	Taxes	Other Expenditure	Total
1960	1,374	2,616	2,177	160	4,290	282	1,109	12,008
1961	1,899	3,180	3,234	230	5,401	289	987	15,220
1962	1,972	3,155	4,099	345	5,117	330	1,320	16,337
1963	2,261	3,026	3,660	454	5,591	539	1,550	17,093
1964	2,291	2,853	4,897	500	5,808	1,028	1,596	18,973
1965	3,334	3,428	3,192	847	6,254	1,189	1,886	20,130
1966	3,031	3,244	3,275	579	6,890	1,205	1,762	19,986
1967	3,082	3,737	4,565	736	7,769	1,360	2,340	23,590
1968	3,578	4,079	5,224	795	7,886	1,575	2,199	25,336
1969	4,419	4,680	5,800	1,007	8,650	1,480	2,390	28,426

Source: *Annual Statistical Digest*, Trinidad and Tobago, 1969.

TABLE 2.7: PENSION FUND ASSETS COMPARED WITH LIFE INSURANCE ASSETS FOR BRITAIN, U.S.A. AND TRINIDAD

	BRITAIN (£M.)		U.S.A. ($M.)		TRINIDAD ($M. E.C.)	
	1963	1969	1963	1969	1963	1969
Pension Schemes	4,652	7,383	152,700	n.a.	n.a.	77
Life Insurance	7,425	12,741	141,100	197,200	n.a.	200

NOTES: (1) For Britain, pension fund assets are recorded mainly at market value and life fund assets mainly at book value.

(2) The pension fund figure of 152,700 for the U.S.A. really refers to 1956 and excludes government funds. The life insurance figure for 1963 refers to market value and the 1969 figure refers to book value.

(3) For Trinidad the figure for pension assets refers to uninsured assets only. The life insurance assets figure is an estimate.

SOURCE: (1) Bank of England *Quarterly Bulletin*, June, 1971.

(2) *Federal Reserve Bulletin*, Dec., 1971; G.E. Lent, "Taxation of Financial Intermediaries", *National Tax Journal*, March, 1969.

(3) *Annual Report of the Supervisor of Insurance*, Trinidad, 1969.

The relative sizes of pension and life insurance business are reflected in Table 2.7. It is unlikely that the ratio of pension assets to life insurance assets in the Caribbean would be as high as it is in the U.K. and the U.S.A. Firstly, in the Caribbean there is a wide discrepancy between changes in income and changes in employment. Secondly, the industrial structure in the Caribbean has a high weighting in those 'non-modern' activities which do not lend themselves easily to 'pensioning'. It is possible that such workers are compensatingly very well represented in other types of saving (see Table 2.8 for Jamaica). In 1968, in Guyana, pension contributions were $5,150,000 whereas estimated premium income for all types of life business (for both domestic and foreign companies) was $11,925,000 (in 1967); in Trinidad, in 1969, occupational pension contributions were $14,152,000 whereas life premium income was $29,925,000.[11] In both Guyana and Trinidad, therefore, pension contributions have attained a level equivalent to approximately half of total life insurance premium. Pension reserves are also likely to be increasing at a much faster rate than life insurance reserves (and this is expected to continue for some time in the future) because pension schemes have come into widespread use only very recently and the number of pensioners receiving benefits is small relative to the number of contributors, whereas life insurance business has been existing for many years and contains a long stream of maturing policies.

TABLE 2.8: SAVING HABITS OF INDIVIDUALS CLASSIFIED BY AGE AND FINANCIAL MEDIUM, JAMAICA

	Comm. Banks	Gov't Savings Bank	Bldg. Society	Credit Union	Pension Provi-dent Fund	Other[1]	Shares/ Stocks	Dev. Bonds	Unit Trust	Partner	Life Insurance Savings	Other
01	9,004	3,799	3,028	1,560	2,305	22,446	590	604	87	11,326	7,274	7,492
02	27,969	5,098	5,843	3,795	8,477	20,517	864	346	1,674	22,557	12,484	7,126
03	29,487	7,609	4,317	5,167	6,630	23,075	986	702		28,295	15,140	6,501
04	21,388	6,685	4,141	4,402	6,191	17,843	1,299	351		21,204	14,443	4,579
05	20,300	5,135	3,698	5,105	7,043	17,704	2,007	1,372		20,267	11,729	6,203
06	18,703	5,624	4,782	5,903	7,922	17,750	1,801	690		15,251	13,683	3,713
07	15,071	5,508	5,083	3,965	5,601	16,978	2,076	1,789		12,572	10,015	6,487
08	13,059	4,284	2,843	3,425	4,555	10,753	483	483		9,137	6,425	2,980
09	23,155	10,795	4,638	6,012	7,404	28,740	1,979	343		13,819	10,795	5,128
10	10,787	6,218	1,534	2,080	5,125	14,059	1,081	135		3,334	4,633	3,306
11	1,940	1,142	895	314	1,020	4,789		279		1,589	650	365
Total[2]	190,863	61,897	40,802	41,718	62,273	194,654	13,166	7,094	1,761	159,351	107,251	53,880

WHERE

01 is under 20 years
02 is 20-24
03 is 25-29
04 is 30-34
05 is 35-39
06 is 40-44
07 is 45-49
08 is 50-54
09 is 55-64
10 is 65-74
11 is 75

Notes: [1]Refers to Shares/Stocks, Development Bonds, Unit Trust, Partner, Life Insurance, etc.
[2]This blown up Table is based on the National Savings Commission household savings survey of 1972.

Source: *National Savings Commission*, Jamaica.

The growth of pension funds in the Caribbean, then, is not expected to attain the rates experienced in recent years. There are certain other specific reasons why this is so. One reason is that the stock of firms which never had a pension scheme and which chose to do so within the last two decades is fast coming to an end. A second reason is that the rate of increase in contributions in some sectors is not keeping pace with the rate of increase in income generated. For example, although many new manufacturing firms (which, unlike tourism, are very pension-minded) are likely to appear in the future, the increments of employment are likely to be even lower than the value added (which itself is not increasing rapidly as Table 2.9 seems to indicate) given the 'finishing touch' nature of activity in the manufacturing sector. A third reason is that Caribbean countries are in the process of introducing legislation to curb the capacity of unions to strike for higher wages. In the short run, the rate of increase of pension contributions would be adversely affected by an incomes policy because employees' contributions are a certain percentage of their incomes and employers' contribution are related to the size of employees' contributions.[12]

For the reasons mentioned above, therefore, increasing reliance will have to be placed on investment income for the growth of pensions. This has probably been the post-war experience of most countries. In the U.K. for example (see Table 2.10) investment income is greater than the size of employees' contributions for the private and public sector combined. (Probably due to a more conservative investment policy, investment income in the public sector is less than employees' contributions, the ratio being $\frac{85}{110}$m. in 1963 and $\frac{115}{185}$m. in 1967 but this is more than compensated for by the private sector where the ratios are $\frac{240}{120}$m. and $\frac{365}{190}$m. in 1963 and 1967, respectively). The increasing importance of investment income for the U.S.A., between 1951 and 1960, is also seen to be very pronounced. It would even appear that the same stage has been reached in Trinidad[13] since investment income is greater than employees contributions (except for 1969) although these two items, combined, are still less than the total size of employers' contributions.

Finally, although the introduction of a national pension scheme (as part of a more general national insurance scheme) is likely to lead to an increase in total pension saving in the Caribbean, it may cause a slowing down in the rate of growth of both occupational pension funds and life insurance saving. Some employers may find that their combined contributions to their own scheme and the national scheme is greater than what they conceive to be the optimum contribution per wage unit.[14] Also, certain types of life insurance policies (e.g. the annuity) and certain types of policy holders (e.g. the marginal policy holder) are likely to be particularly affected by national pensions.

Summary and Conclusion

Pension schemes, associated with growing longevity, are a fairly recent introduction and so the absolute size of pension saving has been increasing very rapidly as more and more sectors, industries and firms adopt pension plans. The

TABLE 2.9: SELECTED SUB-SECTORS AS A PER CENT OF GDP AT FACTOR COST

YEAR	GUYANA				TRINIDAD				JAMAICA				BARBADOS			
	Agriculture	Manufacturing	Mining and Quarrying	Other	Agriculture	Manufacturing	Mining and Quarrying	Other	Agriculture	Manufacturing	Mining and Quarrying	Other	Agriculture	Manufacturing	Mining and Quarrying	Other
1950	n.a.	n.a.	n.a.	n.a,	n.a.	n.a.	n.a.	n.a.	31	11	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1951	n.a.	n.a.	n.a.	n.a.	17	14	n.a.	n.a.	27	11	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1952	32	15	9	44	17	14	n.a.	n.a.	27	12	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1953	30	15	11	44	17	13	32	38	21	14	2	63	n.a.	n.a.	n.a.	n.a.
1954	28	12	13	47	18	13	n.a.	n.a.	20	14	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1955	27	13	10	50	17	12	30	41	19	13	5	63	35	17	1	47
1956	25	11	11	53	15	11	n.a.	n.a.	16	13	n.a.	n.a.	30	16	1	53
1957	25	13	9	53	14	12	n.a.	n.a.	14	13	n.a.	n.a.	35	16	1	48
1958	27	14	9	50	13	13	33	41	13	13	9	65	29	16	1	54
1959	25	13	11	51	12	13	33	42	13	14	8	65	31	16	1	52
1960	27	10	11	52	12	12	31	45	12	14	10	64	28	8		64
1961	27	11	13	49	11	13	30	46	12	14	10	64	26	9		65
1962	26	12	16	46	10	13	29	48	12	14	10	64	25	10		65
1963	28	14	13	45	11	13	27	49	13	15	9	63	30	10		60
1964	25	12	18	45	9	14	26	51	12	15	10	63	26	10		64
1965	25	13	16	46	9	15	24	52	13	15	10	63	26	10		64
1966	23	12	17	48	8	15	24	53	12	15	10	63	25	9		66
1967	22	12	17	49	8	16	25	51	11	15	10	64	26	9		65
1968	21	12	19	48	8	17			10	15	10	65	19	10		71
1969													16	10		74
1970													14	10		76

NOTES: (1) From 1960, sugar milling in Barbados is included in agriculture rather than manufacturing.
(2) Mining and quarrying figures for Guyana for the years 1958 and 1959 are estimates.
(3) After 1960 figures for Barbados are extracted from provisional estimates appearing in *Economic Survey*, 1970.

SOURCE: *National Income Accounts*, United Nations, 1969.

TABLE 2.10: SIZE OF INVESTMENT INCOME RELATIVE TO EMPLOYEES AND EMPLOYERS' CONTRIBUTIONS, TRINIDAD, U.K., AND U.S.A.

	TRINIDAD ($E.C. '000)				BRITAIN (£ M.)		U. S. A. ($US M.) (Corporate Pension and Deferred Profit-Sharing Funds)									
	1963	1967	1968	1969	1963	1967	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Contribution by Employees		2,727	3,229	4,393	230	345	129	153	176	191	222	267	316	331	354	392
% of Total Inflow	--	20.3	19.8	24.5	18.9	19.0	8.2	8.5	8.1	8.5	8.6	9.1	9.5	9.4	8.1	8.9
Contribution (Total) by Employers	--	7,816	9,391	9,759	620	920	1,257	1,392	1,681	1,648	1,803	2,053	2,303	2,275	2,629	2,797
% of Total Inflow		58.1	57.6	54.5	51.0	52.7	79.8	77.7	77.5	73.3	69.8	69.7	69.3	64.9	64.7	63.7
Interest, Dividend and Rents	--	1,708	2,247	2,662			189	247	313	409	463	558	677	800	934	1,079
% of Total Inflow		12.7	13.8	14.9			12.0	13.8	14.4	18.2	17.9	19.0	20.4	22.8	23.0	24.6
Other Income		1,199	1,449	1,102					–		96	68	26	100	149	122
% of Total Inflow		8.9	8.9	6.2							3.8	2.4	0.8	2.8	3.7	2.8
Total Investment Income		2,907	3,696	3,764	365	480	189	247	313	409	559	626	703	900	1,083	1,201
% of Total Inflow		21.6	22.7	21.0	30.0	27.5	12.0	13.8	14.4	18.2	21.7	21.4	21.2	25.6	26.7	27.4
							(State and Local Government Employee Retirement Systems)									
Contribution by Employees							311	351	399	449	493	542	608	712	752	801
% of Total Inflow							43.0	41.7	43.5	40.5	42.1	41.2	40.4	40.6	39.9	36.1
Contribution by Employers							329	386	398	518	512	582	672	784	807	1,017
% of Total Inflow							45.4	45.8	43.5	46.7	43.7	44.2	44.7	44.7	42.8	45.8
Interest, Dividend and Rents									–			–	–	–		--
% of Total Inflow																
Other Income							--			–		--	–	–	-	–
% of Total Inflow																
Total Investment Income							84	105	120	142	166	192	224	259	324	398
% of Total Inflow							11.6	12.5	13.1	12.8	14.2	14.6	14.9	14.8	17.2	18.0
							(City Government Retirement Funds)									
Contribution by Employees							131	147	153	168	180	194	210	223	236	244
% of Total Inflow							33.4	32.4	29.9	28.8	28.0	30.8	28.7	28.4	27.7	26.9
Contribution by Employers							214	251	296	345	366	344	419	445	483	507
% of Total Inflow							54.6	55.3	57.9	59.1	58.6	54.7	57.3	56.7	56.6	55.9
Interest, Dividend and Rents								–	--	-	–		–	--	–	–
% of Total Inflow																
Other Income								--			–	-	–		–	–
% of Total Inflow																
Total Investment Income							47	56	62	71	79	91	102	117	136	156
% of Total Inflow							12.0	12.3	12.1	12.1	12.6	14.4	14.0	14.9	15.9	17.2

SOURCE: Based on (1) *Annual Reports of the Supervisor of Insurance*, Trinidad. (2) Bank of England *Quarterly Bulletin*, December, 1970. (3) V.L. Andrews, [6].

relative size of pension saving has also been increasing both because of the fairly universal adoption of this form of saving (and the favourable rates of employee and employer contributions) and because in the early stages the rate of withdrawal from the fund is low relative to the rate of receipt.

The growth of pension saving is also stimulated by certain inherent advantages, such as the tax deductible nature of contributions, ease and cheapness of collection, stable contractual obligations and automatic increases with income.

In the labour surplus economies of the Caribbean pension funds have, paradoxically, grown at a very rapid rate. This has been due to a number of reasons. Firstly, the dramatic fall in the death rate and the breakup of the extended family have made the society increasingly conscious of old age security. Secondly, because of the very high rate of unemployment, the labour turnover has been very low and employers have had little need to make refund of either the workers' or their own contributions;[15] moreover, the conditions for fully vested rights were very onerous with the average employee being eligible after approximately 20 years. (This predictability of withdrawal from the fund also permitted investment in very long term assets which were relatively high earning). Thirdly, the retirement or pensionable age was set unduly high and this also minimized the rate of withdrawal from the fund. Fourthly, the system of pensions quickly penetrated to the major earning sectors. Fifthly, employers in branch firms of multinational corporations had a vested interest in making a high rate of contribution partly because of some of the reasons given above and partly because their contributions (which were tax deductible) were repatriated to foreign trustees who were in a position to invest these funds through devious means in the shares of either the parent firm or its subsidiaries and 'controlled' companies in other parts of the world.

Finally, there is still scope for both the widening and deepening of pension coverage in the Caribbean. There are a large number of establishments with more than 10 employees, (and in some cases exceeding 25 employees) which do not have pension schemes.[16] Also, in the civil service, there is need for the extension of pension coverage to women.

FOOTNOTES

[1]For example, at the beginning of World War I, the non-bank share for Britain, the U.S.A. and Canada was 37 per cent, 37 per cent and 47 per cent respectively, and, in the early 1960s, the share had risen to 62 per cent, 68 per cent and 69 per cent, respectively. See E.P. Neufeld, [41], and D.K. Sheppard, [55].

[2]For a fuller discussion, see M.A. Odle, [42].

[3]For example, in Britain, the pension scheme for the police began in 1890 and for teachers in 1898. See G. Rhodes, [50].

[4]In the U.K., by comparison, there are several thousand funds in the private sector covering about 3 or 4 million people. In the public sector there are about 60 funds for the nationalized industries, covering some 1 million people, and 500 local authorities funds covering between ½ to ¾ million people. These figures do not include the national insurance scheme nor government employees such as teachers, armed forces, civil servants, Post Office Workers or National Health Service staffs who are paid out of revenue by exchequer. See *Bank of England* [7]. In the U.S.A., before 1960, there were 24,561 pension plans registered under the Welfare and Pension Plans Disclosure Act; see V.L. Andrews, [6], p. 439. By the late 1960s, there were over 50,000 plans in the private sector alone.

[5]Although in the early 1950s there were hardly more than a dozen pension schemes in Trinidad, the 1953 industrial census showed that there were as many as 537 non-farm establishments and 216 of these each employed more than 25 persons.

[6]Because life insurance companies do not make a distinction between their group pension business and other business, pension reserves data only are available and not assets or related investment income.

[7]Surprisingly, the employer/employee ratio in the U.S.A. is higher than in the U.K., despite the tendency of the former country to operate at a higher rate of unemployment.

[8]However, in 1969 the ratio for Trinidad fell to 2.2:1. Even this ratio is unexpectedly higher than 2:1 and suggests that past service contributions are substantial.

[9]In Trinidad a maximum of 10 per cent of past service liabilities is allowed per year as an income tax deduction.

[10]Nevertheless, pension schemes have a decided cost advantage in the form of payroll deductions facilities and office space subsidy; life companies, on the other hand, make a considerable proportion of their total expenditure on commissions, salaries, rental, equipment and furniture.

[11]See *Digest* [63] p. 64. There may still be a few employers in the private sector who do not have formal schemes but who make *ex gratia* payments in recognition of outstanding service. Also, a few firms have non-contributory schemes. On the other hand, total life insurance premium contains an element of group pension premium.

[12]In the long run, the effect of the incomes policy depends on (a) the extent to which cheap labour does attract foreign investors and (b) whether unions turn their attention to improving other conditions of work and cause the introduction of pension schemes in areas where they previously did not exist.

[13]This, compared with life insurance companies in Trinidad where in 1957 they derived 90.3 per cent of their income from premiums and in 1966, 84.2 per cent. In the U.K., on the other hand, life insurance companies derived about two-thirds of their income from premiums and one-third from investments (partly as a result of higher yields and a longer number of years in existence).

[14]It is intuitively believed that the optimum amount, as a proportion of the wage, is lower in a labour surplus underdeveloped economy than in a fully employed developed economy.

[15]The employer/employee contribution ratio has also been unexpectedly high owing perhaps to the local adoption of internationally standard practices. However, soon after this was written, it was pointed out to me by Mr Joe Bailey that the experience of the more *laissez-faire* Jamaican economy was somewhat different from that of Trinidad and Guyana in that the average employer share over the 1965-72 period was a mere 42 per cent, approximately.

[16]It also needs emphasising that even some large establishments do not have schemes for the manual members of their labour force.

CHAPTER THREE

THE LIABILITIES OF OCCUPATIONAL PENSION SCHEMES

The Justification for a Fund

This section of the study on pension funds in the Caribbean will relate mainly to the Trinidad economy, as adequate data are not available at the moment for the other Caribbean territories. This does not mean that a lot of what will be said does not have relevance for the other territories in the region.

The liabilities of pension schemes are the 'reserves' (or 'fund') that are set aside to meet the expected future retirement benefits (commitments), for which contributions are made during the working life of members of the labour force. These benefits are in the form of superannuation, gratuities, and, in the event of death, death benefits and widows and orphans benefits. The adequacy of the fund is calculated from time to time by the actuary, whose aim is to match liabilities with assets, i.e., the bringing about of equality between the present value of future benefit claims and the sum of the current size of asset holdings and the present value of future contributions and earnings. The size of the scheme's liabilities is affected by (a) changes in membership in the fund during the intervaluation period as well as the membership of the fund on the valuation date and, for each pre-retirement age group, the number of new entrants and the number of cessations of membership (due either to transfers, withdrawal, death and normal or premature retirement) and (b) for each post retirement age group, changes in the number of pensioners due to death[1] or some other factor during the intervaluation period.

Private pension schemes are invariably funded but not all public sector schemes are funded (local government and public corporation schemes tend to be funded, but in some cases central government schemes are of the 'pay-as-you-go' type). There are certain benefits to be derived from building up an actual fund rather than having a notional fund.[2] The first is that assets are actually created to guarantee the pension commitment; the view is that if there is a future liability then tangible provision should be made for it. A second reason is that the psychological security for the employees is greater since funds would be available for meeting pension liabilities even if the firm or organisation suddenly goes bankrupt. This is why it is necessary for a private firm to have a fund whereas in the public sector it is not so necessary, since it is assumed that government is a permanent institution and that its capacity for acquiring revenue by taxation is infinite. A third reason is that employees have a visible entitlement to pensions and would be less prone to feel that they are dependent on the charity of employers. A fourth reason is that with the existence of a fund savings

are more explicitly seen to be channelled into investment purposes. A fifth reason is that a fund, out of which benefit payments can be made, relieves the burden on future generations. A sixth reason is that funding is a stable form of savings; employees' and employers' contributions are related to the rate of accumulation of the fund and, depending on whether the actuary's valuation indicates a surplus or deficit, it would be possible to say whether contributions need to be lowered or increased to match benefits.[3]

In Caribbean-type economies, it is even more imperative that pension schemes be funded, owing to three factors. Firstly, branch plants of multinational corporations do not have any undue moral commitment to their employees in the host country. Secondly, a fund ensures that the workers derive full benefit from their contributions and tends to prevent the exploitative nature of relationships between branch firm and host country from being carried over to the sphere of pensions. Thirdly, a fund increases the likelihood that workers' pension rights will be firmly preserved in the event of outright nationalization. Unfortunately, however, the practice is for the pension fund pertaining to host country workers to be integrated with the parent company's global fund and this creates serious problems when there is nationalization.

The Structure of the Fund

There were at least 152 pension schemes[4] existing in Trinidad during 1971; since there are many more than 152 establishments in that country it would imply that there are a number of establishments that do not have a pension scheme. Most of the establishments without pension schemes are probably small; many of these small establishments are also probably without union representation.[5] Although pension rights are an important factor in collective bargaining arrangements, there are a number of other fringe benefits (such as leave, medical and sports facilities etc.) upon which unions place stress and which might possibly be considered as an alternative to pension benefits. This helps to explain why, previously, some unionized employees in the Caribbean were not covered by pension schemes. Generally, however, unions in the Caribbean are giving increasing priority to pension schemes and the larger the union the greater probably is its ability to 'demand' an attractive scheme for the employees.[6] Employers in the Caribbean are also not averse to favouring pension plans since it not only enhances their ability to attract and retain suitably qualified employees[7] but also creates a certain benevolent image at little real cost. However, there are still a few firms which adopt an unenlightened approach.[8]

Table 3.1 on the quantitative significance of pension plans, by occupation, shows that the incidence of pension schemes reflects the openness of the Trinidad economy since there is a large number of schemes in the distributive sector. Primary activity is also well represented. Table 3.2 shows that a similar situation obtains for Barbados.[9] The distribution also indicates that there are many pension schemes, in Trinidad, in sectors which are not known to have strong union representation. This tends to confirm either that pension benefits

TABLE 3.1: QUANTITATIVE SIGNIFICANCE OF PENSION PLANS BY OCCUPATION, IN TRINIDAD, (1969)

	Number of Firms
Mining	13
Chemical and Petrochemical	5
Textiles and Leather	2
Building and Furniture	11
Distribution	24
Financial	14
Food, Drink and Tobacco	23
Electrical and Engineering	11
Paper, Printing and Publishing	2
Public Corporations	2
Other	34
TOTAL	141

NOTES: (1) Two T. & T.E.C. schemes and one Telecoms scheme are included under "Electrical and Engineering" rather than "Public Corporations".

(2) Information for eleven plans not submitted.

SOURCE: Based on unpublished information in the office of the Supervisor of Insurance.

TABLE 3.2: QUANTITATIVE SIGNIFICANCE OF PENSION PLANS BY OCCUPATION, BARBADOS (1971)

	Number of Firms
Agriculture	26
Distribution	37
Financial	19
Food, Drink and Tobacco	9
Electrical Engineering	6
Paper, Printing and Publishing	3
Public Corporations	1
Other	24
TOTAL	125

SOURCE: Special Request to the East Caribbean Currency Authority.

are considered a normal or integral part of conditions of service or that other factors are of equal or greater importance in the bargaining process. It also probably indicates that the labour surplus nature of an economy is not a decisive factor in determining the incidence of pension schemes.

The majority of the pension schemes in Trinidad are insured rather than self-administered. In 1969 there were 135 insured plans and 17 non-insured plans. This preponderance of insured plans is not surprising since in a small scheme the number of members is not enough to allow an adequate spread of risk; an insured scheme, therefore, avoids the risk of considerable fluctuation in cost to the employer.[10] In addition, if the membership is small the cost of administering the fund may be disproportionately great, due to dis-economies of scale. (Conversely, when a firm becomes fairly large it may cease to have an insured plan and opt for a self-administered plan). With an insured plan, all the risk and administrative burden is therefore transferred since

> an insurance company underwriting a pension scheme must decide, first of all, how much capital it needs to accumulate by pension age to provide the pension and, secondly, the terms upon which it will accumulate the capital. In arriving at the capital required, it must consider the expected mortality of those members of a scheme who reach retirement age, the interest which the capital will then earn or be earning and, in the case of a retirememt endowment or endowment assurance contract (though not normally in the case of a deferred annuity contract), the probability of the cash option being exercised. In deciding the terms of accumulation, it must allow for interest accretions as it invests the premiums received, the mortality likely to be experienced by the scheme members and liability that it may have on the death of a member. Throughout, it must allow for expenses, taxation, if any, and recognize that its liabilities are stated in book value (i.e., at cost) whereas its accumulated reserves have a value in real terms (i.e., at market). Finally, premiums, although received throughout the lifetime of the scheme, are fixed at particular points in time, and in respect of any one member a premium may, for example, be payable for at least as long as 40 years after it has been fixed. Furthermore, for practical reasons it cannot have a special table of premium rates for each scheme and must therefore deal with all its pension schemes on a global basis. Pilch and Wood [46] pp. 91-2.

Table 3.3 on the distribution of employees between pension schemes, by size, reinforces the view that pension schemes in large firms tend to be self-administered, whereas most small schemes are insured. About 60 per cent of the self-administered schemes have more than 200 members whereas about 85 per cent of the insured schemes have less than 200 members. It should, however, be mentioned that 'Caroni', which is the largest pension scheme in Trinidad, with 13,300 members, is an insured scheme.

The total number of employees in the 17 self-administered schemes, as seen in Table 3.4, was 12,171 in 1969. This compares with a figure of 24,426 for the 110 insured schemes which submitted membership figures[11] i.e., membership in self-administered schemes is equivalent to 50 per cent of membership in insured schemes. If we were to deduct the figure for the largest self-administered scheme, the remaining 16 self-administered schemes would total 6,544 members and total membership in insured schemes, minus the largest scheme, would be 11,126, i.e., membership in 16 self-administered schemes would be equivalent to 50 per cent of membership in 109 insured schemes. Total membership of insured schemes is considerably greater than total membership in self-administered schemes (despite the fact that the largest schemes tend to be non-insured) and would have been even greater had more insured schemes submitted figures.

TABLE 3.3: DISTRIBUTION OF EMPLOYEES BETWEEN PENSION SCHEMES, BY SIZE, TRINIDAD (1969)

Number of Employees in Scheme	No. of Firms with Self-Administered Schemes	No. of Firms with Insured Schemes
0- 10	1	17
11- 25	3	26
26- 35	1	9
36- 50	0	11
51- 75	1	14
76- 100	0	6
101- 150	0	8
151- 200	1	3
201- 300	2	5
301- 500	3	6
501-1,000	1	3
1,001-5,000	3	1
Over 5,000	1	1
TOTAL	17	110*

*Refers only to those schemes for which data are available.

SOURCE: As in Table 3.1.

There is also indicated the size of the fund for each self-administered scheme and the number of years each scheme has been in existence. The fund for the 16 self-administered schemes for which data are available totalled $56,296,711 in 1969. (The reported fund was $40,628,674 in 1968 and $42,194,818 in 1967). Even within the group of self-administered schemes, some funds are quantitatively much more important than others; for example, seven of the funds accounted for $52,878,554 or 93.7 per cent of the total. The average number of years self-administered schemes have been in existence is eight.

The size of the total fund for insured schemes, as given in Table 3.5 was $5,708,060 in 1968 (an increase of 24 per cent over 1967's figure of $4,625,579). Even though most insured schemes are quite small, this figure for the size of the fund for insured pension schemes is much smaller than expected, given the relatively large number of such schemes and the relatively large total membership. Moreover, the average number of years insured schemes have been in existence (based on data for 121 insured schemes for which this statistic is available) is 7.2, compared with 8.0 for self-administered schemes. However, it would appear that the average wage in firms having insured schemes is relatively low. This may be the reason why the premium (which is related to benefits, and benefits, in turn, are geared to the size of wages) for all insured schemes, com-

TABLE 3.4: NUMBER OF EMPLOYEES IN SELF-ADMINISTERED PENSION SCHEMES AND SIZE OF ACCUMULATED FUNDS IN TRINIDAD IN 1969 ($E.C.)

Scheme No.	No. of Employees	Size of Fund	Size of Fund per average Employee	No. of years Scheme has been in existence
1	1,276	3,628,031	2,843	23
2	1	33,977	33,977	16
3	69	266,005	3,855	10
4	1,650	3,379,535	2,048	4
5	612	3,646,738	5,959	6
6	228	1,982,414	8,695	4
7	29	441,364	15,219	1
8	5,627	25,503,796	4,532	4
9	489	7,502,314	15,342	20
10	275	774,107	2,815	3
11	25	613,807	24,552	2
12	23	287,329	12,493	6
13	52	229,704	4,417	1
14	1,039	178,423	172	3
15	388	593,441	1,529	n.a.
16	372	7,235,726	19,451	17
	12,155	56,296,711	4,632	
17	16	–		6
	12,171	56,296,711		

NOTES: (1) One Scheme did not submit figures for the size of its accumulated fund in 1969; this scheme had a membership of 16.

(2) Amounts due but not yet paid were $26,413 for pensions and $502,137 for other benefits.

SOURCE: As in Table 3.1

bined, was only $900,605 in 1968. This figure is equivalent to only 7.1 per cent of total contributions ($12,620,000) for self-administered schemes in 1968[12] however, the size of the insured fund ($5,708,060) as a percentage of the self-administered fund is considerably higher at 14.0.

This discrepancy between the premium for insured schemes as a percentage of the contributions of self-administered schemes and the insured fund as a percentage of the self-administered fund may be partly due to the Colonial Life Insurance Company, as a very large trustee, being better able to spread risk (and so needing to charge a smaller premium) compared with a self-administered scheme of average size. The discrepancy may also be due to the self-administered schemes being under-funded. (It is hardly likely that a private sector insurance company would be over-funded).

TABLE 3.5: INCOME ACCOUNT IN RESPECT OF GROUP PENSIONS, TRINIDAD, 1967 AND 1968 – $(E.C.)

	Fund at the beginning of the year	PREMIUMS		Total premiums	Net Interest	Appreciation of Assets	Other Income	Adjustment	Total
		Single	Other						
1967									
Colonial Life Insurance Company (Trinidad) Limited	4,625,579	–	927,265	927,265	33,398*	–	–	–	5,586,242
1968									
Colonial Life Insurance Company (Trinidad) Limited	5,472,735	–	783,053	783,053	474,925	–	412	–	6,731,125
Trinidad and Tobago Insurance Limited	235,325	–	117,552	117,552	30,385	–		–	383,262
TOTAL	5,708,060	–	900,605	900,605	505,310		412		7,114,387

*Taxes have been deducted from this item.

SOURCE: *Annual Reports of the Supervisor of Insurance.*

TABLE 3.6: EXPENDITURE ACCOUNT IN RESPECT OF GROUP PENSIONS, TRINIDAD, 1967 AND 1968 – $(E.C.)

	CLAIMS			Bonuses paid in Cash	Annuities	Total Policy Payments	Commissions	Salaries	Expenses of Management	Other Expenses	Fund at end of year	Total
	Death	Matur-ities	Other									
1967												
Colonial Life Insurance Company (Trinidad) Limited	--	–	16,233	--	235,758	251,991	17,034	--	144,482*	–	5,472,735	5,886,242
1968												
Colonial Life Insurance Company (Trinidad) Limited	--	--	11,372	–	290,492	301,864	4,647	–	179,404	–	6,245,210	6,731,125
Trinidad and Tobago Insurance Limited	--	--	--		49,677	49,677	3,567	--	19,960	–	310,058	383,262
TOTAL	--	–	11,372	–	340,169	351,541	8,214	–	199,364	–	6,555,268	7,114,387

*Includes salaries and other expenses

SOURCE: Annual Reports of the Supervisor of Insurance.

Table 3.6 shows the value of benefit payments made by insured schemes in 1967 and 1968 and Table 3.7 shows the number of retired employees and the value of superannuation benefits for self-administered schemes in 1969. (Table 3.8 also shows the superannuation benefits and other expenditure for a limited number of insured and uninsured schemes submitting accounts in the years 1967 to 1969). The inadequacy of the data prevents us from making judgement about symmetry or asymmetry in the relationship between contributions and benefit payments for self-administered schemes and premium and benefit payments for insured schemes.[13]

TABLE 3.7: THE NUMBER OF RETIRED EMPLOYEES AND THE VALUE OF SUPERANNUATION BENEFITS FOR SELF-ADMINISTERED SCHEMES IN TRINIDAD 1969 $(E.C.)

Scheme No.	Retired Employees	Value of Superannuation
1	n.a.	89,251.00
2	3	12,392.88
3	0	–
4	60	49,634.15
5	21	82,602.00
6	9	36,849.16
7	630	797,165.28
8	245	336,276.00
9	6	15,564.00
10	0	–
11	8	26,383.80
12	5	10,772.22
13	312	288,381.00
14	0	–
15	n.a.	460,542.00

SOURCE: Unpublished information in the office of the Supervisor of Insurance.

Finally, we have said that the actuarial calculation of the liabilities of a pension scheme needs to be accurate in order that future benefit payments can be satisfied with a minimum of inconvenience. The benefit from avoiding the holding of too large a fund is the lowering of the employer contribution (reduced pension costs) and too small a fund means that the employer would eventually have to supplement the reserves himself. Some determinants of the optimum size fund (for meeting future benefit claims) are the age schedule of the workers, the rate of mortality, the rate of turnover and the rate of increase in wages. We employed the following cross-section test using proxy variables for which data are available for 15 of the self-administered schemes:

TABLE 3.8: PENSION FUND EXPENDITURE IN TRINIDAD, 1967, 1968 AND 1969 – $(E.C.)

		1967	1968	1969
1.	*SUPERANNUATION BENEFITS:*			
(i)	Pension to retired employees	1,033,370	1,513,818	1,897,906
(ii)	Widows' Pension	110,740	136,529	146,935
(iii)	Orphans' Pension	570	–	–
(iv)	Retirement Gratuities	175,699	374,529	1,414,176
2.	Death Grants	315,135	481,869	626,220
3.	Return of Contribution on Withdrawal	223,342	378,124	750,962
4.	Other Expenditure	1,208,820	1,364,722	2,033,719
	TOTAL	3,067,677	4,249,591	6,869,918

NOTES: Figures refer only to those schemes submitting accounts (31 in 1967; n.a. in 1968; 56 in 1969).

SOURCE: (1) *Annual Reports of the Supervisor of Insurance.*

(2) Unpublished information in the office of the Supervisor of Insurance.

$$Y = \alpha + B_1 X_1 + B_2 X_2$$

where Y is equal to the self-administered fund, X_1 is equal to the number of employees and X_2 is equal to the number of years the scheme has been in existence; we got the following results:

$$Y = 0.275 + 0.004 + 0.041 \qquad \bar{R}^2 = .84$$

$$D.W. = 1.85$$

The equation fit is a fairly strong one despite the fact that the number of employees is not a very good proxy for either earnings or contributions.

The Problem of Vested Rights

Information is not available at the moment as to exactly how many pension schemes in the Caribbean contain vested rights. It is likely that only a minority of the schemes admit vested rights and that even in those cases where vested rights are allowed, the requirements for full vesting are quite restrictive.

Employers are usually reluctant to concede vested rights for two reasons. The first is that vested rights increase the cost[14] of the scheme to the employer. The second, and related reason is that the employer hopes that by denying an employee vested rights he would be able to retain the services of the employee

and reduce the general incidence of labour turnover in his organisation.[15] This can be the only plausible explanation for the recommendation made by the representatives of the Oil Companies and the Chamber of Commerce in Trinidad (contained in Table 3.9) on the number of years of service that should be necessary before a worker is entitled to certain percentages of the employer's contribution.

TABLE 3.9: VESTED RIGHTS RECOMMENDATIONS BY THE OIL COMPANIES AND THE CHAMBER OF COMMERCE IN TRINIDAD

		Per cent
(1)	*Oil Companies*	
	5 years but less than 10 years service	25
	10 years but less than 15 years service	50
	15 years but less than 20 years service	75
	20 years and over	100
(2)	*Chamber of Commerce*	
	5 years but less than 10 years service	50
	10 years but less than 15 years service	75
	15 years and over	100

SOURCE: Report [61].

However, the majority view (with respect to the employer's contribution) in the Committee was that in the event of an employee leaving an establishment before five years service (or if he leaves the country permanently) he should be entitled to a full cash refund and in other cases he should be given a deferred annuity.[16] These recommendations of the majority of the Committee, with respect to vested rights, are much more liberal than the current practices. In most pension schemes in Trinidad an employee who leaves a firm before retirement age is not eligible for the employer's contribution whether he had left of his own free will or had been declared redundant. The employee gets returned to him only his contributions plus interest thereon; labour mobility is thereby adversely affected. However, the situation with regard to vested rights is probably becoming more liberal (or labour turnover is increasing, especially in the primary goods industries, where there is shedding of labour) since 'return of contribution on withdrawal' seems to be an increasing share of total expenditure in self-administered pension schemes (see Table 3.10).

Vested rights are also a vexed question in other parts of the Caribbean besides Trinidad. In Barbados, the results of a survey conducted by the author showed that only about half of the pension schemes contained vested rights. In no case was the employee eligible to a return of the employer's contribution before 10 years. The most common form of vested rights was for employees to be eligible to 10 per cent of the employer's contribution for each year in excess

TABLE 3.10: RETURN OF CONTRIBUTION ON WITHDRAWAL (FOR SELF-ADMINISTERED SCHEMES) AS A PER CENT OF TOTAL EXPENDITURE, TRINIDAD – ($E.C.)

Year	Expenditure	Return of Contribution on Withdrawal	(2) as a % of (1)
1967	3,067,677	223,343	7.3
1968	4,249,591	1,364,722	32.1
1969	6,869,918	2,033,719	29.6

of 10 years service if he elects a deferred paid-up annuity; only in a minority of cases was the employee fully vested with a cash refund of the employer's contribution after 15 or 20 years. Most pre-retirement withdrawals therefore represent a 'profit' to the fund, the benefits granted being less than the reserves accumulated.

In Guyana, the Retirement Income Life Assurance (RILA) scheme that existed before the nationalization of the Demarara Bauxite Comapny (an Alcan subsidiary) in 1971 stipulated very restrictive conditions. The scheme dealt with three types of workers. Re employees, if

> you have less than twelve years of service credited under the Plan at the time your service is terminated, all the contributions made by you towards retirement income will be returned to you, with interest thereon as credited under the Plan; (2) you have twelve or more years of service credited under the Plan your contributions towards retirement income will not be returned to you but beginning at your normal retirement age you will receive the retirement income to which you are entitled .... Alcan [2] p. 14.

Similarly 'locked-in' as these with over 12 years service were certain other workers, " .....provided the number of your years of attained age and your years of service credited under the Plan then total, including fractions of years of age and service, 84 full years or more". Alcan [2] p. 6. These vesting conditions of Alcan, a multinational corporation, related to all its employees around the world.[17]

Generally, such stringent regulations, similar to the ones advocated by the Oil Companies in Trinidad (and which were previously referred to) were designed to cheapen the cost of the firm's pension schemes and to retain (tie) the services of its highly trained labour force. But these types of regulation may have been financially and operationally unnecessary for a firm operating in the Caribbean, for three reasons. Firstly, the employee turnover in the Caribbean is very low, owing to the labour surplus nature of the economy. But the RILA plan is unable to take this into account because of the global nature of the pension scheme and its failure to distinguish between workers of the parent firm and

workers of a subsidiary. Secondly, only those employees with very specialized skills can be said to be difficult to replace and these tend to be expatriate personnel. The system therefore unduly penalises those local workers who have a genuine need to change jobs. Thirdly, the labour force in the Caribbean is a young one and the real burden to the employer of giving vesting rights to employees with only few years service is probably on average less than his contribution. One researcher has found that

> ... very often, where a scheme is contributory, virtually the whole of the cost of the pension benefit for a young employee will be paid for out of his own fixed contribution and it is only in the later years of his membership that the employer will begin to shoulder the major part of the cost. Since most normal labour turnover is concentrated in the younger age groups, the cost of giving vested rights to such employees may be very low.[18]

Furthermore, the retention of an employee's service

> ... should always be achieved by the promise of benefits to come rather than the threat of withholding benefits already earned. The carrot is more effective than the stick. A pension scheme which binds a disgruntled employee to a company is, in any case, worse than useless. What employer, if he thinks about it, really wants to keep an employee who only goes on working for him grudgingly because he will lose the pension rights already earned by years of previous service if he leaves. Pilch and Wood [46] p. 159.

In fact it is likely that in a labour surplus[19] economy few workers will leave an employment of their own free will; most of the labour turnover would be therefore due to redundancy (the 'fault' of the employer) and the employee should be automatically entitled to the employer's contribution.

There are other reasons why fully vested rights may be socially desirable. One reason is that even in a labour surplus economy mobility is important given the shortage of certain types of skills; external diseconomies therefore result from the lack of vested rights. A second reason is that when there is redundancy, the refund of the employer's contribution (along with the refund of the employee's contribution) acts as an important buffer if a long time elapses before another job can be found.[20] This is particularly important in a labour surplus economy, where substantial severance pay is not required by law; the immediate hardship of unemployment is more important than any post-retirement hardship (which the pension is supposed to provide against). A third reason is that labour surplus economies tend not to have national unemployment benefit schemes. A fourth reason is that, with the introduction of a National Insurance Scheme, an employee who does not receive a substantial occupational pension at the time of retirement does not necessarily become a 'burden' on the state.

Two other issues relating to vested rights remain to be discussed. The first concerns whether the conditions for vested rights in a 'wasting asset' industry should be the same as that in other industries. Since bauxite and petroleum, for example, are exhaustible resources[21] it can be argued that (a) employees should not have to wait the same number of years (or longer) as in other non-mineral

industries before being eligible for the employer's contribution; (b) any redundancy should make the employee automatically eligible for the employer's contribution, besides any other compensation, and (c) any complete termination[22] of production activities by the employer should also automatically qualify the worker for the employer's contribution.

A second and related issue concerns whether foreign firms should not be 'forced' to include in any pension contract they conclude with their employees a condition of automatic refund of the employer's contribution for any loss of employment.[23] There are at least two grounds on which such a clause can be defended. The first is that foreign firms tend to be more 'exploitative' than local firms (for example, the proposals of the Oil Companies in the Trinidad report on superannuation schemes were more stringent than the proposals of the representatives of the Chamber of Commerce); moreover, foreign firms already enjoy a number of special tax inducements for the employment of capital. The second reason is that foreign firms in the Caribbean have been displacing a great deal of labour with machines similar to those used by their parent firms in the labour scarce metropole. This policy of deliberately creating redundancy in a labour surplus economy creates much hardship for those unable to find new employment and the employer's contribution is a relatively small compensation. It is unlikely that such vested rights would intensify the displacement of labour; if anything, it may help to slow down the rate of displacement.

The Optimal Retirement Age

An important issue is what should be the retirement age in a labour surplus economy. Many foreign firms in the Caribbean use 65[24] as their male retirement age (and 60 years for females). For example, Alcan stipulated the same retirement age (65 years) for its employees in Guyana as for those in other parts of the world. However, this age for males is inadequate (too high) for four reasons: In the first place it is a mere transplantation of a cut-off point that is used in labour scarce metropolitan economies and is not related to the concrete conditions in underdeveloped countries. Unfortunately, a number of local firms probably slavishly copy the practice of the large and leading (foreign) firms.

A second and related reason is that, in underdeveloped countries, people do not live to as ripe an old age as in developed countries. In 1961, for example, the average life span for the Guyana male and female was 59.0 and 63.0, respectively, Census [35]. For 1970, these figures are estimated to have increased to 64.0 and 68.0, respectively, compared with 68.2 for the white U.S.A. male and 75.4 for the white U.S.A. female. Thus, the period between retirement and death may be so short that the fund may be bigger than it ought to be unless the actuary actually uses a non-metropolitan death rate in his calculations. Table 3.11 shows that death grants and widows and orphans pensions are not an insignificant proportion of total pension expenditure despite the fact that in some cases, survivors' benefits are considerably less than the original pension.

TABLE 3.11: DEATH GRANTS AND WIDOWS' AND ORPHANS' PENSIONS AS PER CENT OF TOTAL EXPENDITURE, TRINIDAD – $(E.C.)

Year	Total Expenditure (1)	Death Grants (2)	(2) as a % of (1) (3)	Widows' Pension (4)	(4) as a % of (1) (5)	Orphans' Pension (6)	(6) as a % of (1) (7)	(3)+(5)+(7) (3)+(5)+(7)
1967	3,067,677	315,135	10.3	110,740	3.6	570	0.02	13.9
1968	4,249,591	481,869	11.3	136,529	3.2	–	–	14.5
1969	6,869,918	626,220	9.1	146,935	2.1	–	–	11.2

SOURCE: Based on data in Table 3.8.

A third reason is that in a labour surplus economy available work should be shared among as many people as possible. Thus the age of retirement should probably be generally reduced to 60[25] (except for skills in very scarce supply) so as to allow as many young people as possible at the other end of the age scale (where the rate of unemployment is highest) to enter the labour force.[26] The 55 years retirement limit in the public service should be more rigidly enforced; formerly a loophole existed in the 'no suitable replacement' clause.

A fourth reason is that in labour surplus economies jobs like mining, cane-cutting and construction are particularly arduous (owing to inadequate supporting capital and equipment) and the life span in these occupations is probably well below 65.

The national (public) pension schemes in the English-speaking independent Caribbean countries have slavishly followed the pattern set in the private sector. Table 3.12 shows their retirement ages to be higher than in many other labour surplus economies in Latin America.

A Rational Method of Calculating Benefits

The method of calculating benefits varies widely between pension schemes in the Caribbean. The results of the survey in Barbados reveal at least four different bases: (1) career average salary (2) average salary of last three/five years (3) $\frac{\text{months employed}}{600}$ x final salary and (4) final salary. Although there is wide divergence between firms in the salary level chosen for calculating pension benefits, there could be some convergence in actual pension benefits, depending on the rate or proportion of salary chosen, which in turn, would depend on the size of contributions. (The legal maximum pension is commonly 2/3 of final salary). Generally, final year salary is said to be most likely to enhance the welfare of the worker since this eases the transition from working to post-retirement life.[27] However, final year salary can create computational problems, if unions manage to extract unexpectedly high wage increases.[28]

There are three aspects of the computation of benefits which are particularly desirable in labour surplus economies. The first is that there should be an 'early' retirement option. Not all the firms which stipulate 65 as the retirement age offer an option at 60 with lower pension.[29] Only a minority of firms offer an option at 55 if the age plus years of service total 80 (i.e., after at least 25 years service). A second aspect is the need, given the relatively short life span, for choice with respect to the relation between the size of the pension while alive and the size of the pension accruing to one's survivors. A person with no dependents should be able to opt for a large pension while alive, with no payments after death. A person with dependents (and who may not have adequate life insurance coverage) should be able to opt for a small pension while alive and continued payment for the life of someone of his choice. Alternatively, a person should be able to opt for a medium sized pension for at least 60/120 monthly instalments and for as long as he lives after that.

TABLE 3.12: THE RETIREMENT AGE IN PUBLIC PENSION SCHEMES IN THE CARIBBEAN AND OTHER LATIN AMERICAN COUNTRIES

Country	Normal Retirement Age for Men	Normal Retirement Age for Women	Required Period of Employment and Contribution
Barbados	65	65	750 weeks contribution
Guyana	65	65	750 weeks contribution
Jamaica	65	60	15 years employment
Trinidad	65	65	750 weeks contribution
Argentina	60[1]	55[2]	30 years employment; 13 years contribution
Bolivia	55	50	15 years employment
Brazil	65	60	5 years employment
Chile	65	55	10 years contribution approx.
Colombia	60	55	500 weeks contribution in last 20 years
Costa Rica	65	65	10 years contribution
Cuba	60	55	25 years[3] employment
Dominican Republic	60	60	800 weeks contribution
Ecuador	60	60	15 years employment
Guatemala	65	65	15 years contribution
Haiti	55	55	20 years contribution
Honduras	65	60	15 years employment
Mexico	65	65	500 weeks contribution
Nicaragua	60	60	750 weeks contribution
Panama	60	55	15 years employment
Paraguay	60	60	15 years employment
Peru	60	60	20 years employment (15 years salaried workers)
El Salvador	65	60	750 weeks contribution
Uruguay	50	50	30 years (men); 25 years (women)
Venezuela	60	55	750 weeks contribution
Canada	65	65	None
U.S.A.	65	65	10 years employment[4]

[1]65 years for self employed persons; [2]62 years for self employed persons; [3]If less than 25 years employment, the retirement age is 65 for men and 60 for women; [4]For those born in 1926 or after.

Source: R.W. Weisse, "Early Retirement under Public Pension Systems in Latin America", *International Social Security Review*, No. 3, 1972.

A third aspect is whether pension benefits should not be related to changes in the cost-of-living.[30] This issue has special relevance for the open economies of the Caribbean where cost-of-living increases are primarily related to changes in the prices of imports. Whereas developed countries have a certain amount of control over the level of prices (via fiscal, monetary and income policies) small open economies are at the mercy of external forces. Since most of the main firms in the Caribbean export their products and thereby benefit directly or indirectly from any inflation in the metropole, they should not be averse to agreeing to pension benefits tied to the cost-of-living.

Summary and Conclusion

The liabilities structure of occupational pension schemes should be geared towards satisfying the retirement needs of the workers in the particular society and should complement other private and national social security measures. However, in the labour surplus economies of the Caribbean, the workers are nowhere near having fully vested rights,[31] (even in cases of 'redundancy') despite the precarious nature of the major industries' dependence on foreign markets, the tendency to substitute capital for labour and the lack of a national system of unemployment benefits. The government needs to ensure that the system of pensions is not being operated solely in the interest of the employer, rather than of the society as a whole. In addition, there is such variety in employers' attitudes to vested rights that there is need for legislation to standarize practices, especially since the government gives a tax allowance on employers' contributions. The retirement age and the method of calculating benefits in most pension schemes in the Caribbean are also not in the workers' interest, given the average life expectancy.

FOOTNOTES

[1]In Caribbean-type economies, the death rate is likely to be somewhat higher than that in developed countries; the period between retirement and death, when the bulk of pension benefits are paid, is therefore shorter, and, *ceteris paribus*, the liabilities would be less.

[2]In the private sector, funding is the rule rather than the exception. However, in at least two countries, Germany and Austria, mere book reserves are allowed to cover the future payment of retirement benefits. In the early stages of a company's life this can have a very favourable effect on the cash flow situation. For a discussion, see A.S. Nathan, [38].

[3]Even with the existence of a fund in an uninsured scheme, there are certain problems in guaranteeing workers' future benefits owing to (a) unexpectedly low earnings ('investment risk'), (b) unexpectedly high final year wages ('inflation risk'), (c) changes in the rates of death in service and death in retirement ('mortality risk'), and (d) changes in the age and sex distribution and the rate of turnover ('experience risk'). For an analysis, see A.S. Nathan [39].

International Social Security Review, No. 3, 1972.

[4]This figure does not include a number of pension schemes in the public sector. From discussions with the Supervisor of Insurance in Trinidad it would appear that the law is not clear as to whether 'provident funds' are pension schemes and therefore some provident funds may not have sought registration.

[5]Also, a substantial proportion of the large establishments in the Caribbean have pension schemes only for their regular monthly staff, many of whom are without union representation.

[6]In the U.S.A., however, it would appear that there is no close correlation between the size of the firm and the attractiveness of the pension scheme. See P.P. Harbricht [30]. (To hazard an explanation, we would think that this somewhat perverse situation is due to the countervailing monopsony power of employers in large firms to acquire labour without offering exceptional fringe benefits).

[7]One author also thinks that a pension scheme serves the additional function of keeping open channels of promotion since old employees can be prematurely retired. See Pilch and Wood, [46] pp. 168-9.

[8]For example, in an enquiry conducted by the author on Barbados in 1972, one employer gave the following reasons for not being able to 'afford' a pension scheme: "(1) Relatively high rate of turnover of staff, (2) Expectations of ever increasing benefits and therefore contributions to national insurance schemes, (3) Ever increasing scope and content of social legislation e.g. increasing holidays, redundancy pay, maternity leave and benefits etc., (4) Extreme increase in wages and salary with no increased productivity, (5) Government policy of trying to reduce inflation by curbing reward of capital e.g. price control, import licences, increased taxation."

[9]According to Inland Revenue records, there are approximately 400 active pension schemes in Jamaica.

[10]Correspondingly, the employees in a small firm would feel more secure if the scheme is insured than if it were not insured.

[11]Combined membership in self-administered and insured schemes (for which data are readily available) is thus 36,597 but the Supervisor of Insurance in Trinidad estimates membership of all registered schemes to have been 50,096 in 1969 (probably with 12,171 members in self-administered schemes and 37,925 in insured schemes). This figure of 50,096 represents a pension penetration of .16 (given that the labour force at 30.6.69 was 318,300) which, although not unexpected given the labour surplus nature of the economy, is quite low. However, the earnings of the workers covered by pension schemes is more than commensurate with their numbers as a proportion of the national labour force.

[12]In most cases, employees contribute 5 per cent of basic salary and the employers contribute 10 per cent and any additional amounts required to provide the stipulated pension. (In a few cases the employer either made no payments or contributed an amount less or equal to that of the employees). Data in this section are subject to correction.

[13]Based on the records of the Supervisor of Insurance, it is estimated that, in 1969, 2,569 retired employees received $4,369,475 in superannuation benefits, with insured schemes (a majority of whom paid no superannuation benefits in this year) accounting for only 20.8 per cent of the benefit payments.

[14]That the scheme would be more 'expensive' was the view put forward by the representatives of the Chamber of Commerce and the Oil Companies in the Report [61].

[15]Even though this does not help to attract new employees, it may be fairly effective in 'locking-in' the existing employees.

[16]The Committee also recommended that " . . . where the employee takes up employment in which an approved scheme is operated the benefits may be transfered to the new scheme" (p.8)

[17]The RILA Plan is ".... offered to the eligible employees of the following companies, Alcan Africa, Alcan Asia, Alcan Australia, Alcan Design Homes, Alcan International, Alcan Products of Jamaica, Almetco Manufacturing, Aluminium Fiduciaries, Aluminium Laboratories, Alcan Jamaica, Aluminium, Aluminium Secretariat, Aluminium Securities, Aluminium Works, Aluminium Company of Canada, Aluminium Goods, Chaguaramus Terminals, Demerara Bauxite, Magnesium Company of Canada, Newfoundland Fluorspar, Oregon Bauxite, Saguenay Power, Saguenay Shipping, Saguenay Terminals, Saguenay Transmission, South East Asia Bauxites, Sprostons (Jamaica), Sprostons (Trinidad), Sprostons, The Alma and Jonquieres Railway, The Roberval and Saguenay Railway".

[18]M. Pilch and V. Wood, [46], p. 158. The choice of the number of years after which an employee is eligible for the employer's contribution is, therefore, more arbitrary than rational.

[19]In the heyday of colonialism, when labour was scarce, the sugar companies also used fiscal and other devices (e.g. raising the import duty on essential goods in order to force workers to offer more hours of their labour for a monetary wage as against working on their subsistence farms) to attract and retain the services of labour. Stringent vested rights conditions had their origin in such conditions of labour scarcity. The continued reluctance to grant full vested rights in the Caribbean today is therefore probably related more to the urge to reduce pension costs than to retain the services of labour; this does not detract from the fact that even in a labour surplus economy some types of skilled labour are very scarce.

[20]Perhaps when an employee becomes redundant, the employer's contribution should be paid to the National Insurance Scheme who should pay benefits out of it until the person finds a job, the remainder being held in reserve until retirement or another period of redundancy.

[21]In 1969, a foreign manganese company ceased production in Guyana after operating there for only about 10 years.

[22]Termination should include the nationalization of the concern by the government. This would avoid the sort of situation that arose in 1971 when the Government of Guyana nationalized a subsidiary of Alcan which made the refund of its contribution a bargaining weapon during compensation discussions. Termination should also refer to the closing down of one or more departments within a firm even though other departments continue operating; such a vesting clause would also avoid the unpleasant events that resulted when Sandbach Parker, a Guyana subsidiary of Jessels of England, closed some of its departments and informed the workers that they were not eligible for a pension refund as the firm and its pension plan were still substantially in operation.

[23]Even in the case where an employee leaves of 'his own free will' he should be entitled to the employer's contribution since the employer might have needled him into leaving; or the employer could conceivably be blamed for making the job insufficiently attractive. Similarly, if we assume that the employer's contribution is really a deferred part of the worker's wage, the employee should be eligible for the employer's contribution even in the extreme cases of dismissal for 'gross negligence', 'misconduct', 'fraud', 'dishonesty', etc.

[24]See, for example, a survey (mimeo) of 39 pension schemes carried out by the National Savings Commission in Jamaica in 1972. Interestingly enough, the Trinidad laws relating to Income Tax and Finance (1967) do not approve pension schemes which "provide for retirement for maturity before such time as the employee or annuitant attains fifty years of age."

[25]Suitable adjustments may be necessary in either the rate of contribution or the size of the pension, or both. Also, male paternalism should not, as in Jamaica, lead to a lower retirement age for women in the national pension scheme, since their contribution rates are not higher and, moreover, their life span is greater.

[26]Even in fairly labour scarce economies (e.g. Britain) there are disincentives to working for a wage after retirement in the form of almost equivalent reductions in the national pension benefit.

[27]If the final year basis of computation of pension benefits requires a larger contribution by the worker throughout his working life, the extent to which his welfare will be enhanced depends essentially on his time preference. As such, there should be no legal restriction on the size of the pension, especially since it is taxable.

[28]As a result, actuaries tend to use a conservative estimate of the size of the fund.

[29]A lowering of the pension results from the smaller amount of contributions and the reduced amount of interest earned.

[30]Pension benefits based on final year salary suffer less from inflation than pension benefits based on average year salary. But pensions based on final year salary also become eroded with each passing year of post-retirement life, although the period between retirement and death in the typical underdeveloped economy is not likely to be as long as in a developed economy.

[31]In the Caribbean-type economy, the case for fully vested rights should be considered analogous to the practice of paying gratuity to employees, on short contracts, from the time that they assume duty.

CHAPTER FOUR

THE ASSET STRUCTURE OF OCCUPATIONAL PENSION SCHEMES

Degrees of Operational Freedom

The operational characteristics of pension plans (with regard to outflows and inflows) confer a considerable degree of latitude in the choice of assets. Some of these characteristics have been referred to in previous sections of this study.[1]

With respect to inflows, a first characteristic is that for the average individual there is a very long time lag between the year that he begins to make contributions and the year that he starts to receive benefits. (This lag or intervening period may sometimes amount to decades). The tendency for there to be a long time lag is reinforced in full employment conditions, where any new workers are expected to be young. In the labour surplus economies of the Caribbean, new entrants to the labour force may not always be young, but this is partly offset[2] by the fact that, (a) a relatively high percentage of the population is in the young age group, and (b) the incidence of unemployment is highest in this age group. A second characteristic is that inflows are stable and predictable because contributions are semi-contractual. A third characteristic, also associated with the semi-contractual nature of pension plans, is that contributions are less subject to competition from other savings institutions than the latter thrift institutions are to competition from each other.

Concerning outflows, the basic feature is that there is almost complete exemption from unforeseen demands for cash, i.e. benefit payments are actuarially predictable. One reason for this predictability is that retirements are known in advance from simple age schedules. A second reason is that mortality after retirement can be actuarially forecast within reasonable limits. A third reason is that the degree of turnover of the workforce can be foreseen with a fair degree of accuracy.[3]

There are a number of factors affecting the asset portfolio of pension schemes as a result of the nature of inflows and outflows of funds, described above. One is that the asset portfolio of pension plans can have a very long maturity structure, since the liabilities are very long-term and very predictable. In fact, the asset structure of pension schemes can be even more long-term than the asset structure of insurance companies since the latter (although not having a serious liquidity problem) have to bother with relatively short endowment policies, surrenders, lapses, etc. A second result of the predictability of inflows and outflows is that portfolio changes can be carefully planned and are usually

achieved with the increments of cash inflow. For example, pension schemes avoid the sudden switching that can occur in life insurance companies out of securities and other assets, to satisfy an increase in demand for policy loans. A third result is that since pension schemes do not, like life insurance companies, have to satisfy a demand for policy loans and mortgage loans (which are mainly fixed interest assets) they may be able to hold a higher proportion of variable interest securities, like equity and real estate.[4] On the other hand, many life insurance companies, through pressure of competition from other thrift institutions, are being forced to invest more in common stock to maintain the attractiveness of 'with profit' policies in the same way as many pension schemes which have gone over to the 'final salary' basis of benefit payments need open-ended assets to match their open-ended liabilities. (Generally, however, a great deal of the liabilities of pension schemes and insurance companies are somewhat fixed in money terms and, for purposes of 'matching' these institutions tend to hold a fairly large proportion of fixed interest securities).

Some Legal Constraints

It has been mentioned above that the liabilities structure of pension schemes does not restrict the choice of assets in the way that life insurance companies are usually bound to satisfy any level of demand for policy loans and morally bound to give mortgage loans to policy holders. It will now be shown that the legal constraints surrounding the asset portfolio distribution of pension schemes are not as comprehensive as those circumscribing the operations of life insurance companies. For example, although the independent English-speaking Caribbean territories have introduced regulations concerning the asset structure of life insurance companies, and which would affect insured pension schemes, no country has seriously tried to control non-insured schemes, despite the greater quantitative (by assets, rather than numbers) importance of the latter type of scheme. There is also wide variation between the Caribbean territories in the degree of control of the insured schemes. For example, there is much closer control over the asset structure of life insurance companies in Trinidad, than in the other Caribbean territories. Because of the greater availability of data, the analysis, below, of the asset structure of occupational pension schemes will primarily concern the Trinidad experience.

One major legal constraint in Trinidad concerns trusteeship requirements. For example, the following is stipulated:

> (1) Every approved pension fund plan . . . . shall be constituted by trust irrevocably vested –
>
> (a) in not less than three trustees where the trustees are individuals, or
>
> (b) in a trust corporation.
>
> (2) . . . . where the trustees are individuals at least one trustee shall be a representative of the employees selected by the employees and where the trustee is a trust corporation there shall be established a Management Committee of not less than

three members at least one of whom is a representative of the employees selected by the employees.

(3) No employer shall be capable of being a trustee in respect of any plan. Law [66] p. 35.

The first effect of the above law is that, given the trust character of the arrangement, investments naturally tend to be conservative; this does not detract from the historical trend (in most capitalist countries) of pension schemes holding an increasing proportion of variable interest rather than fixed interest securities, associated with a sustained high level of economic activity.

The second effect is that, in those schemes which are bank-trusteed, investments also tend to be on the cautious side, given the traditional nature of bank officials. This situation can be further aggravated if there is little competition between banks for the trusteeship of pension schemes; in the Caribbean, for instance, it would appear that trusteeship is monopolized by two banks, the Royal Bank of Canada and the Bank of Nova Scotia.[5] (The relative investment service fees are unknown but these banks have a high managerial reputation in this field). However, these conservative effects are partly offset by at least two factors. The first is that banks are in competition with life insurance companies for the business of small pension schemes (those small funds which are not insured tend to be bank-trusteed, rather than self-trusteed). The second factor is that where a bank is trustee for a number of small pension schemes, such schemes are able to benefit from the investment economies of scale that result from aggregation; a large asset portfolio tends to be a more aggressive and high yielding portfolio than a small portfolio. The third factor is that where, as in Trinidad, there is employee representation on the Management Committee, there may tend to be a less narrow approach in investment policy, e.g. more residential mortgages (primarily for staff members) and less foreign securities; however, the employee representative may lack sufficient information on the market situation and expertise in general financial matters, and may not be able to sway the other members in the Management Committee.[6]

The third effect is that where pension schemes are self-trusteed, the investment views of the employer (even though, as in Trinidad, he is not allowed to be the sole trustee) tend to carry a great deal of weight,[7] directly or indirectly, since he appoints the majority of the trustees.[8] Also, in Trinidad, the law only requires that there is at least one employee representative on the board of trustees, whose members may amount to any number greater than three.[9] (This weak employee representation fails to reflect the modern view that the employer's contribution can be considered to be a deferred part of the workers' wage). As a result, the choice of assets may still reflect the social and industrial biases of the employer.

The second major legal constraint concerns regulations stipulating assets in which life insurance companies (a few of whom manage pension plans) may invest.[10] The Trinidad law is restrictive with respect to place of investment, the

profitability of corporations whose assets can be held, portfolio concentration, and the loan to value mortgage ratio.

Paragraph 1(a) of section 37 of the 1966 Act[11] states that –

A Company may invest its statutory funds in assets of the following classes:-

(i) any Commonwealth country or dependency or the Republic of Ireland, or

(ii) the United States of America or a state thereof, or

(iii) any country approved by the Minister in which the state carries on business, and

(iv) *the country in which the head office of the company is situated or a province or* state thereof.

There are no real balance of payments, safety, or other reasons why, if insurance companies are allowed to invest part of their funds abroad, there should be a barrier against investment in the assets of non-Commonwealth third world countries or even European countries, as implied by the legal clause above. In fact, if economic (including financial) integration is to take place between the Commonwealth and non-Commonwealth countries of the Caribbean, this regulation would have to be amended.

With reference to investing only in those corporations which are deemed to be of a certain profitability and viability, paragraph 11(g) states that assets may be held

(i) *of a corporation incorporated in any country listed in (a) above that has paid*

(A) a dividend in each of the five years immediately preceding the vesting thereof in trust at least equal to the specified annual rate upon all its preferred shares; or

(B) a dividend in each year of a period of five years ended less than one year before the date of vesting thereof in trust upon its common shares of at least four per cent of the average value at which the shares were carried in the capital stock account of the corporation during the year in which the dividend was paid; or

(ii) of or guaranteed by a corporation incorporated in any country listed in (a) above where the earnings of the corporation in a period of five years ended less than one year before the date of the vesting thereof in trust have been equal in sum total to at least ten times, and in each of any four of the five years have been equal to at least one and one-half times the annual interest requirements at the date of vesting in trust on all indebtedness of or guaranteed by it other than indebtedness classified as a current liability in the balance sheet of the corporation. . . .

At least two criticisms can be made of this regulation. The first is that its terms are such as to make verification difficult; a regulation is of little use if supervision or implementation presents a great deal of problems. The second criticism is that it does not facilitate investment in any new (but potentially very socially and economically desirable) industries that might arise in other Caribbean territories and so is harmful to Caribbean financial integration. Moreover, the pre

five-year period is the one in which a new and unestablished firm is most in need of risk finance since self-financing possibilities would be limited and bank loans, if available at all, would be for short periods.

In paragraph 1(j), section (c)[12] it is stipulated that "a company shall not purchase more than thirty per cent of the common shares of any corporation"; while this regulation has good intentions in that (a) it seeks to prevent any fund having a controlling interest (and therefore being able to affect policy) in any one corporation and, more important, (b) it avoids the risk of undue asset concentration, it may turn out to be unnecessarily restrictive (even though it aids diversification) in Caribbean economies which are dominated by only a few firms, especially if these firms eventually become government owned.

The proportions mentioned in paragraph (a) which required that a mortgage ". . . . does not exceed three-quarters of the value of the real estate or interest therein . . . . " and in paragraph (6) which stipulated that "the total accepted value of the real estate or leaseholds for the production of income . . . . shall not at any time exceed ten per cent of the accepted value of the total assets in Trinidad and Tobago of the company" have very recently been amended to 90 per cent [13] and 20 per cent, respectively. This move towards liberalization is a change in the correct direction. A higher loan to value ratio allows more poor people to acquire their own homes; and an increase in real estate encourages the holding of more risky domestic and industrial mortgages.

Finally, paragraph (6) requires that "the total accepted value of the assets of any company invested in common shares shall not at any time exceed twenty-five per cent of the accepted value of the total assets in Trinidad and Tobago of the company." This regulation is also unnecessarily restrictive. Firstly, its conservative nature does not allow a fund to use its initiative and judgement for maximising investment income. There is no intrinsic reason for believing that those in charge of investment policy in statutory funds are more irresponsible, inexperienced or inexpert than investment officers in other financial institutions. Secondly, any restriction on the holding of common shares could conceivably have an adverse effect on the development of a vibrant local and regional equity market; at this stage of import substitution in the region, the holding of Caribbean shares should be exempted from any restriction. Generally, asset portfolio restrictions should be meaningfully geared towards promoting development and be less concerned with problems of safety.

The third major legal constraint concerns the minimum percentage of a life insurance company's assets that should be held locally. This is an attempt to ensure that local assets match local liabilities. However, this legislation has had only a limited developmental impact, for two reasons. Firstly, the local assets ratio is too low in Trinidad and Jamaica. For example, the 1966 Insurance Act stated that "every company shall have invested in assets in Trinidad and Tobago an amount equal to at least sixty per cent of the Trinidad and Tobago liability in each Statutory Fund".[14] Secondly, the Insurance Acts do not apply to non-insured pension schemes. It is as a result of this legislative loophole that the

major portion of non-insured pension funds in Guyana, Jamaica and Barbados is still held abroad.[15] The firms concerned should be made to return their pension funds to the Caribbean within a minimum period of three years.[16] In the past, because of the global nature of the operations of multinational corporations, the pension funds of subsidiaries[17] have been automatically sent to the metropolitan head office.[18] For example, one questionnaire respondent stated (in a letter dated 31 August 1972) that its pension plan covered

> employees of the bank throughout its world-wide operations involving in excess of 14,000 members, and of this number only 67 are employed in Barbados and it is not the practice to segregate assets or compute the actuarial position of individual groups. To furnish the information requested regarding our total plan would be a mammoth undertaking and would not appear to be of any benefit under terms of study.

It is ironical that it is a Guyana subsidiary of this very multinational corporation which has been made the trustee of half of the pension funds returned to Guyana following the nationalisation of the Alcan bauxite undertaking in mid-1971.

The Distribution of Assets

Because the assets of insured pension schemes are not segregated from the other assets of life insurance companies, the analysis in this section will be mainly related to the non-insured (self-administered) schemes in Trinidad.[19]

Although the legal maximum holdings of equity and real estate by insured schemes are very low, even these levels have not been attained by the non-insured pension schemes.

Table 4.1 shows the absolute and percentage distribution of assets for the combined self-administered schemes in Trinidad. Although equity holdings have risen from 0.8 per cent in 1967 to 3.2 per cent in 1969, they are still an exceedingly small proportion of total assets and well below the legal maximum of 25 per cent for insured schemes. This paucity of equity holdings (which may be partly a supply problem) conflicts with the supposed intention of many schemes to reduce pension costs (i.e. reduce the rate of contribution) by rapidly increasing the level of investment income.[20] An alternative to a reduction in pension costs is to increase benefits; this is even more desirable in order to safeguard the real income of retired workers against the inroads of inflation.

Real estate assets by non-insured pension schemes, although not shown separately, are even smaller in quantity[21] than equity holdings. This compares with the legal maximum allowed to insured schemes of 10 per cent of their asset portfolio (now increased to 20 per cent). When combined with the fact that mortgage holdings are also a very small proportion of total assets, the situation becomes even more surprising, in view of the fact that the employee representative on the various trust boards would have been expected to favour this socially desirable type of investment. But although this might be another example of the

TABLE 4.1: ABSOLUTE AND PERCENTAGE DISTRIBUTION OF ASSETS FOR TOTAL SELF-ADMINISTERED SCHEMES, TRINIDAD, 1967-69 $M(E.C.)

	Mortgages	Equities	Trinidad Government Securities	Other Trinidad Assets	Foreign Government Securities	Other Foreign Assets	Total
1967							
Absolute Value	1.6	0.4	18.2	9.6	15.3	0.5	45.6
% of Total	3.5	0.8	39.9	21.1	33.6	1.1	
1968							
Absolute Value	1.5	0.7	20.4	7.7	14.1	0.7	45.1
% of Total	3.3	1.6	45.2	17.1	31.3	1.6	
1969							
Absolute Value	1.9	1.5	19.0	12.2	11.0	1.6	47.2
% of Total	4.0	3.2	40.3	25.8	23.3	3.4	

SOURCE: Computations based on unpublished information in the office of the Supervisor of Insurance.

power of 'co-optation', there are certain operational reasons, (pertaining to the very high overhead costs in managing mortgages, and resultingly small differential between mortgage yield and bond yield) why pension schemes, small funds in particular, hold a very low proportion of mortgage assets. Firstly, the investor must be highly trained and experienced. Secondly, there are special problems of discovering, processing and supervising mortgage loans. Thirdly, there is the technical problem of appraising and inspecting mortgage security.[22] Fourthly, insurance costs are sometimes prohibitive. Fifthly, the book-keeping required for the recording of amortization payments is voluminous. Sixthly, it may be necessary to employ legal staff or a consultant.[23]

With reference to the local assets ratio, Table 4.2 shows that the holdings in 1970 of non-insured schemes were well above the legal requirements for insured schemes. After the introduction of the Act in 1966 requiring life insurance companies to hold at least 60 per cent of their portfolio in local assets, non-insured pension schemes seemed to have quickly acted to forestall similar legislation. As a result, local assets as a percentage of total assets for all self-administered schemes increased to 65.2 per cent in 1967 and again to 85.1 per cent in 1970. The average local assets holdings in 1970 for self-administered schemes were so high that they tend to undermine any belief that statutory funds needed to hold a high proportion of foreign assets because (a) there was not a regular flow of attractive local securities (b) the rate of interest on local securities is so much lower than the rate of interest on foreign securities that it would not be possible to honour previously made fixed commitments (since contributions are based on a certain level of expected income) and (c) the local capital market is at such a rudimentary stage of development that local securities are not easily liquidated in times of need and have to be held until maturity.[24]

There seems to be a wide discrepancy also, between the market value of total self-administered assets and the aggregate fund requirements or total liabilities – see Table 4.3 (The size of the discrepancy, for 1969, varies considerably between schemes; for some schemes the extent to which assets fall short of liabilities is dangerously large. Only in four of the 16 schemes did assets exceed liabilities). Although the market value of assets is expected to fluctuate from year to year, the very large size of the discrepancy suggests that it is due to a genuine shortfall in the holding of assets rather than normal market fluctuation. In the same way that pension funds do not maintain a surplus,[25] they also should not maintain a deficit and so there appears to be need for a general supplementing of assets.[26] Since it is unlikely that rates of contribution were set too low relative to future benefit payments, the shortfall requires an increase in the rate of growth of investment income and reinforces the comment made earlier about the need for large amounts of higher earning assets, e.g., shares[27] (unless some employers are willing to supplement pensions out of their 'own pockets').

TABLE 4.2: GROWTH OF TOTAL, LOCAL AND FOREIGN ASSETS FOR SELF-ADMINISTERED PENSION SCHEMES, TRINIDAD

	1967			1968			1969			1970		
	Total Assets	Local Assets	Foreign Assets	Total Assets	Local Assets	Foreign Assets	Total Assets	Local Assets	Foreign Assets	Total Assets	Local Assets	Foreign Assets
Absolute Value[1]	45,653,492	29,776,894	15,876,598	45,110,935	30,346,440	14,764,495	47,150,203	34,542,153	12,232,216	69,604,079	59,210,700	10,393,379
% of Total	–	65.2	34.8	–	67.3	32.7	–	73.3	26.7	–	85.1	14.9
Size of Change		–	–	-542,557	569,546	-1,112,103	2,039,268	4,195,713	-2,532,279	22,453,876	24,668,547	-1,838,837
% Rate of Change	–	–		-1.2	1.9	-7.0	4.5	12.1	-17.2	47.6	71.4	-15.0

[1] Refers to 15 pension plans in 1967, 16 in 1968 and 1969, and 19 in 1970.

Source: As in previous Tables.

TABLE 4.3: DISCREPANCIES BETWEEN NOMINALLY ACCUMULATED FUNDS AND VALUE OF ASSETS OF SELF-ADMINISTERED SCHEMES IN 1969, TRINIDAD – $(E.C.)

No.	Amount of Fund at end of year	Value of Assets Held	Absolute Discrepancy	% Discrepancy
1	3,628,031	3,521,600	– 106,431	–2.9
2	33,977	41,177	+ 7,200	+21.2
3	266,005	271,991	+ 5,986	+ 2.3
4	3,379,535	3,270,650	– 108,885	– 3.2
5	3,646,738	3,604,842	– 41,896	– 1.1
6	1,982,414	2,069,040	+ 86,626	+ 4.4
7	441,364	378,095	– 63,269	–14.3
8	25,503,796	19,736,511	–5,767,285	–22.6
9	7,502,314	5,835,926	–1,666,388	–22.2
10	774,107	774,107	0	0
11	613,807	600,078	– 13,729	– 2.2
12	287,329	285,413	– 1,916	– 0.7
13	229,704	113,093	– 116,611	–50.8
14	178,423	178,423	0	0
15	593,441	590,780	– 2,661	– 0.4
16	7,235,726	5,878,477	–1,357,249	–18.8
Total	56,296,711	47,150,203	–9,146,508	–16.2

NOTES: Figures relate to market value for most of the self-administered schemes.

SOURCE: As in previous tables.

So far we have been analysing the portfolio of the combined self-administered schemes; when we now examine the differences between the asset portfolios of the individual self-administered schemes we find certain defined and some not so well defined features.

One broad feature is that there is wide variation between the self-administered schemes in the holding of each asset as a proportion of each scheme's total assets. As a proportion of total assets, mortgage holdings vary from nil to 20.0 per cent, equities from nil to 38.1 per cent (in sharp contrast to the size of holdings in developed countries – see Table 4.4); Trinidad government securities from nil to 84.1 per cent; 'other' Trinidad securities from nil to 57.6 per cent; foreign government securities from nil to 71.4 per cent and 'other' foreign assets from nil to 71.6 per cent (see Table 4.5).

A second feature is that by 1970 there were still four non-insured schemes which had not yet attained a local assets ratio greater than the 60 per cent legal minimum proportion (see Table 4.6) prescribed for insured schemes.

TABLE 4.4: PREDOMINANCE OF ORDINARY SHARES IN HOLDINGS OF ASSETS BY PENSION SCHEMES OF THE U.K. – £M

	1963		1969	
	Absolute Value	% of Total	Absolute Value	% of Total
Cash and short-term assets	70	2	142	2
British Government stocks	1,050	23	905	12
U.K. Local Authority Securities[1]	545	12	494	7
Overseas government etc. securities	83	2	48	1
Company Securities:				
Fixed interest	636	14	983	13
Ordinary	1,759	38	3,734	51
Loans and Mortgages	275	6	297	4
Property	121	3	603	8
Other[2]	108	2	177	2
TOTAL[3]	4,652	100	7,383	100

NOTES:

[1]Includes loans by local authority pension funds to parent authorities.

[2]Includes assets of the pension funds of co-operative societies.

[3]Pension fund holdings in 1970 were £3,524 or 9% of total market holdings and these were second in institutional importance to the holdings of insurance companies at £4,600 m. or 12% of total market holdings.

SOURCE: (1) Bank of England *Quarterly Bulletin*, December, 1970.

(2) Bank of England *Quarterly Bulletin*, June, 1971.

A third feature is that the size of the pension scheme seems to have some influence on the choice of assets. The effect of size is not very clear cut for the years 1967 to 1969 (see Table 4.7) but by 1970 there seemed to be a tendency for small schemes to hold a lower proportion of local assets,[28] irrespective of whether we measure size by number of members in the scheme or (which is even more relevant) the amount of money in the fund. One possible explanation is that small funds follow the lead of the large funds, but with a time lag, in the event of a change in investment policy (in this case a switch from foreign to local assets). Table 4.8, on the holdings of all types of assets by size of pension scheme, shows a slight tendency for small schemes to retain a lower proportion

TABLE 4.5: VARIATION IN DISTRIBUTION OF ASSETS IN PORTFOLIOS OF SELF-ADMINISTERED SCHEMES, TRINIDAD, 1969

Scheme No.	ABSOLUTE VALUES						TOTAL	PERCENTAGES					
	Mortgages (1)	Equities (2)	Trinidad Government Securities (3)	Other Trinidad Assets (4)	Foreign Government Securities (5)	Other Foreign Assets (6)		(1)	(2)	(3)	(4)	(5)	(6)
1	142,000	155,536	984,464	2,027,777	78,263	133,650	3,521,600	4.0	4.4	28.0	57.6	2.2	3.8
2	–	–	* 7,200	4,502	–	29,475	41,177	–	–	17.5	10.9	–	71.6
3	–	103,569	–	60,627	75,214	32,581	271,991	–	38.1	–	22.3	27.7	12.0
4	508,500	289,421	881,380	755,998	252,376	582,975	3,270,650	15.5	8.8	26.9	23.1	7.7	17.8
5	647,750	200,806	1,134,882	1,539,467	81,937	–	3,604,842	18.0	5.6	31.5	42.7	22.7	–
6	214,000	417,522	753,240	615,254	69,024	–	2,069,040	10.3	20.2	36.4	29.7	33.4	–
7	10,000	934	179,384	22,492	165,285	–	378,095	2.6	0.2	47.4	5.9	43.7	–
8	178,883	–	10,331,689	5,438,104	3,008,946	778,889	19,736,511	0.9	–	52.3	27.6	15.2	3.9
9	–	–	2,709,536	338,081	2,788,309	–	5,835,926	–	–	46.4	5.8	47.8	–
10	155,000	...	233,477	385,630	–	–	774,107	20.0	–	30.2	49.8	–	–
11	–	33,400	350,131	76,941	139,606	–	600,078	–	5.6	58.3	12.8	23.3	–
12	–	13,127	232,684	15,477	24,125	–	285,413	–	4.6	8.2	5.4	8.5	–
13	13,000	–	82,698	–	17,395	–	113,093	11.5	–	73.1	–	15.4	–
14	–	–	*150,000	28,423	–	–	178,423	–	–	84.1	15.9	–	–
15	–	131,000	270,947	36,601	152,232	–	590,780	–	22.2	45.9	6.2	25.8	–
16	–	116,213	677,564	886,842	4,197,858	–	5,878,477	–	0.2	11.5	15.1	71.4	–
Total	1,869,133	1,461,528	18,979,276	12,232,216	11,050,570	1,557,480	47,150,203	4.0	3.1	40.2	25.9	23.4	3.3

*Book value.

SOURCE: As in previous Tables.

... WITHIN THE GROUP OF

TABLE 4.6: VARIATION IN FOREIGN/LOCAL ASSETS DISTRIBUTION WITHIN THE GROUP OF SELF-ADMINISTERED SCHEMES, TRINIDAD

No.	1967			1968			1969			1970		
	Total Assets	Local Assets as % of Total Assets	Foreign Assets as % of Total Assets	Total Assets	Local Assets as % of Total Assets	Foreign Assets as % of Total Assets	Total Assets	Local Assets as % of Total Assets	Foreign Assets as % of Total Assets	Total Assets	Local Assets as % of Total Assets	Foreign Assets as % of Total Assets
1	2,469,759	96.3	3.7	2,979,276	92.6	7.4	3,521,600	94.0	6.0	4,029,488	98.0	2.0
2	37,098	24.3	75.7	*38,004	29.3	70.7	41,177	28.4	71.6	*60,205	0.6	99.4
3	272,627	46.5	53.5	347,769	37.4	62.6	271,991	60.4	39.6	524,529	46.2	53.8
4	1,920,440	86.7	13.3	1,398,660	71.5	28.5	3,270,650	74.5	25.5	3,059,881	71.8	28.2
5	2,577,051	95.8	4.2	2,995,899	97.4	2.6	3,604,842	97.7	2.3	4,320,158	100.00	0.0
6	1,715,974	89.0	11.0	1,789,412	89.9	10.1	2,069,040	96.7	3.3	2,445,375	97.0	3.0
7	341,309	41.7	58.3	360,427	44.1	55.9	378,095	43.7	43.7	426,257	51.4	48.6
8	18,560,712	79.0	21.0	*21,578,946	74.8	25.2	19,736,511	80.8	19.2	29,260,986	93.8	6.2
9	7,868,409	29.8	70.2	5,985,995	48.1	51.9	5,835,926	52.2	47.8	6,603,036	65.5	34.5
10	334,517	100.0	0.0	528,315	100.0	0.0	774,107	100.0	0.0	1,049,008	98.1	1.9
11				518,875	71.8	28.2	600,078	76.7	23.3	7,724,770	100.0	0.0
12	261,954	90.7	9.3	268,245	91.1	8.9	285,413	91.5	8.5	282,310	91.9	8.1
13	177,293	87.5	12.5	184,725	89.3	10.7	113,093	84.6	15.4		–	–
14	–	–	–	–	–	–	178,423	100.0	0.0	473,130	84.0	16.0
15	222,449	56.8	43.2	387,315	70.0	30.0	590,780	74.2	25.8	875,697	70.0	30.0
16	8,893,900	40.5	59.5	5,749,072	20.1	79.9	5,878,477	28.6	71.4	6,305,485	39.0	61.0
17	–	–	–	–	–		–			6,094,901	96.9	3.1
18	–	–	–	–		–	–			92,633	60.4	39.6
19	–			–		–	–	–	–	2,976,230	90.1	9.9
Total	45,653,492	65.2	34.8	45,110,935	67.3	32.7	47,150,203	73.3	26.7	69,604,079	85.1	14.9

*Foreign assets at book value

SOURCE: As in previous Tables.

TABLE 4.7: DISTRIBUTION OF LOCAL AND FOREIGN ASSETS OF SELF-ADMINISTERED SCHEMES BY SIZE OF ESTABLISHMENT, TRINIDAD

	1967				1968				1969				1970			
	Local Assets as a % of their Total Assets	Foreign Assets as a % of their Total Assets	Local Assets as a % of total Self Administered Assets	Foreign Assets as a % of total Self Administered Assets	Local Assets as a % of their Total Assets	Foreign Assets as a % of their Total Assets	Local Assets as a % of total Self Administered Assets	Foreign Assets as a % of total Self Administered Assets	Local Assets as a % of their Total Assets	Foreign Assets as a % of their Total Assets	Local Assets as a % of total Self Administered Assets	Foreign Assets as a % of total Self Administered Assets	Local Assets as a % of their Total Assets	Foreign Assets as a % of their Total Assets	Local Assets as a % of total Self Administered Assets	Foreign Assets as a % of total Self Administered Assets
Small Establishments (100 members)	61.5	38.5	1.5	0.9	63.0	37.0	2.4	1.4	71.4	28.6	2.6	1.0	71.2	28.8	2.2	0.9
Medium-Sized Establishments (101-500 members)	41.7	58.3	17.4	24.3	44.6	55.4	14.3	17.7	52.4	47.6	16.8	15.3	66.5	33.5	19.4	9.7
Large Establishments (500 members)	71.9	28.1	46.4	9.5	78.8	21.2	50.6	13.6	83.8	16.2	53.9	10.4	93.6	6.4	63.5	4.3
Small Fund ($1m. E.C.)	68.7	31.3	2.5	1.1	71.4	28.6	4.2	1.7	80.3	19.7	5.5	1.4	78.6	21.4	5.1	1.4
Medium-Sized Fund ($1m.-$5m. E.C.)	92.6	7.4	17.6	1.4	90.4	9.6	18.4	2.0	90.4	9.6	23.9	2.5	92.2	7.8	22.3	1.9
Large Fund ($5m E.C.)	41.9	58.1	45.1	32.2	60.6	39.4	44.7	29.1	65.7	34.3	43.9	22.8	83.2	16.8	57.7	11.7

SOURCE: As in previous Tables

TABLE 4.8: DETAILED DISTRIBUTION OF ASSETS OF SELF-ADMINISTERED SCHEMES, BY SIZE OF ESTABLISHMENT, TRINIDAD, 1969

	Mortgages	Equities	Trinidad Government Securities	Other Trinidad Assets	Foreign Government Securities	Other Foreign Assets	Total Local Assets	Total Foreign Assets	Total Assets
Small Establishments (100 members)									
Absolute value	23,000	151,030	852,097	180,039	421,625	62,056	1,206,166	483,681	1,689,847
As % of small establishments total assets	1.4	8.9	50.4	10.7	25.0	3.7	71.4	28.6	–
As % of item for all establishments	1.2	10.3	4.5	1.5	3.8	4.0	2.6		
Medium-Sized Establishments (100-500 members)									
Absolute value	369,000	664,735	4,644,764	2,262,408	7,207,423	–	7,940,907	7,207,423	15,148,330
As % of medium establishments total assets	2.4	4.4	30.7	14.9	47.6	–	52.4	47.6	–
As % of item for all establishments	19.7	45.5	24.5	18.5	65.2		16.8	15.3	32.1
Large Establishments (500 members)									
Absolute value	1,477,133	645,763	13,482,415	9,789,769	3,421,522	1,495,424	25,395,080	4,916,946	30,312,026
As % of large establishments total assets	4.9	2.1	44.5	32.3	11.3	4.9	83.8	16.2	–
As % of item for all establishments	79.0	44.2	71.0	80.0	31.0	96.0	53.9	10.4	64.3
Small Fund ($1m. E.C.)									
Absolute value	178,000	282,030	1,506,521	630,693	573,857	62,056	2,597,244	635,913	3,233,157
As % of small establishments total assets	5.5	8.7	46.6	19.5	17.7	1.9	80.3	19.7	–
As % of item for all establishments	9.5	19.3	7.9	5.2	5.2	4.0	5.5	1.4	6.9
Medium-Sized Fund ($1m.-$5m. E.C.)									
Absolute value	1,512,250	1,063,285	3,753,966	4,938,496	481,600	716,535	11,267,997	1,198,135	12,466,132
As % of medium establishments total assets	12.1	8.5	30.1	39.6	3.9	5.7	90.4	9.6	–
As % of item for all establishments	80.9	72.8	19.8	40.4	4.4	46.0	23.9	2.5	26.4
Large Fund ($5m. E.C.)									
Absolute value	178,883	116,213	13,718,789	6,663,027	9,995,113	778,889	20,676,912	10,774,002	31,450,914
As % of large establishments total assets	0.6	0.4	43.6	21.2	31.8	2.5	65.7	34.3	–
As % of item for all establishments	9.6	8.0	72.3	54.5	90.4	50.0	43.9	22.8	66.7

SOURCE: As in previous Tables.

of mortgages than other schemes; this is not surprising in view of the fact that there are economies of scale with respect to the servicing of mortgages. On the other hand, small schemes appear to hold a greater proportion of equities;[29] this is perhaps due to the limited availability of local equity and large schemes not being able to get hold of as many shares as they would wish to buy (i.e., their actual holdings of shares fell short of their optimum or desired holdings of shares).

A fourth feature is that the type of occupation seems to have some bearing on the distribution of assets in pension schemes' portfolios. Table 4.9 shows that public utilities hold a higher proportion of local assets and Table 4.10 shows that they also hold a higher proportion of mortgages (and equities); this is as expected given the supposed greater social consciousness of those who manage public utilities.

A fifth feature is that the asset structure of the various self-administered schemes is considerably different from the asset structure of the various insurance companies carrying on long-term business in Trinidad; Table 4.11 shows that the insurance companies, particularly the foreign ones, give much greater weight to the holding of mortgages and real estate,[30] than do self-administered pension schemes. (However, we would expect the assets of the self-administered schemes to be more long-term than the assets of the insurance companies, since the latter's liabilities are less long, but data are not available on the maturity structure of the assets held). It is also indicated that the average proportion of local assets held by insurance companies in 1968 was 55.7 per cent; this compares unfavourably with the figure of 67.3 per cent for self-administered pension schemes in the same year. Assuming that when the 1966 Act was introduced the proportion of local assets held by self-administered pension schemes and long-term insurance businesses was roughly the same, the greater ability of the pension schemes to quickly liquidate their foreign securities is perhaps partly due to their having fewer securities to unload on the foreign markets[31] and partly because the long-term nature of the operations of pension schemes allows for the future making up of any deficits via increased employers' contributions, which are tax deductible.

The assets representing the liabilities of insured pension schemes are subsumed in the total assets of long-term insurance businesses. To remove this identification problem (in order for us to make a more accurate assessment of the quantitative significance of the total pension industry) it may be necessary to enact legislation requiring life insurance companies to separate their pension assets from other assets. Life insurance companies would also benefit from such a measure, since income from their pension assets would become non-taxable whereas other investment income is taxable; the fact that income from insured assets are at present taxed reduces whatever advantage a small pension fund might have derived in becoming insured rather than remaining self-administered.

TABLE 4.9: LOCAL ASSETS/FOREIGN ASSETS RATIO FOR MINING COMPARED WITH PUBLIC UTILITIES AND OTHER SELF-ADMINISTERED SCHEMES, TRINIDAD

	1967		1968		1969		1970	
	Local Assets	Foreign Assets	Local Assets	Foreign Assets	Local Assets	Foreign Assets	Local Assets	Foreign Assets
Mining								
As % of mining establishments total assets	58.3	41.7	53.5	46.5	65.9	34.1	83.6	16.4
As % of item for all establishments	69.2	92.7	66.5	88.9	60.4	39.6	73.0	81.6
Public Utilities								
As % of Public Utilities total assets	93.4	6.6	89.3	10.7	88.5	11.5	92.2	7.8
As % of item for all establishments	21.9	2.9	23.2	5.7	28.2	10.1	18.9	9.1
Other Self-Administered Schemes								
As % of Self-administered establishments total assets	79.0	21.0	79.8	20.2	87.5	12.5	83.2	16.8
As % of item for all establishments	8.9	4.4	10.3	5.3	11.5	4.5	8.1	9.3

SOURCE: As in previous Tables.

TABLE 4.10: PERCENTAGE DISTRIBUTION OF ASSETS FOR MINING, PUBLIC UTILITIES AND OTHER SELF-ADMINISTERED SCHEMES, TRINIDAD, 1969

	Mortgages	Equities	Trinidad Government Securities	Other Trinidad Assets	Foreign Government Securities	Other Foreign Assets	Total Local and Foreign Assets	Total Local Assets	Total Foreign Assets
Mining									
As % of Mining establishments total assets	0.6	0.4	43.8	21.2	31.6	2.5	–	65.9	34.1
As % of item for all establishments	9.6	8.0	73.1	5.5	90.4	50.0	67.1	60.4	39.6
Public Utilities									
As % of Public Utilities total assets	11.8	6.2	30.5	40.0	5.0	6.5	–	88.5	11.5
As % of item for all establishments	69.5	46.5	17.7	65.8	5.0	46.0	23.3	28.2	10.1
Other Self-Administered Schemes									
As % of Self-administered schemes total assets	0.9	1.5	3.9	25.2	11.1	1.4	–	87.5	12.5
As % of item for all establishments	21.0	45.6	9.3	9.3	4.6	4.0	9.6	11.5	4.5

SOURCE: As in previous Tables.

TABLE 4.11: ASSET STRUCTURE OF LONG TERM INSURANCE BUSINESS, TRINIDAD, 1968 $(E.C.)

COMPANIES	SECURITIES HELD IN TRUST (Statutory Funds)					
	Fund Requirement	T. & T. Government Securities	Mortgages	Real Estate	Cash and Deposits in Bank	Other T.& T. Securities
1. American Life Insurance	3,529,493	1,161,110	865,113	504,668	299,954	41,795
2. Barbados Mutual Life Assurance	4,458,908	368,121	914,935	445,891	–	102,098
3. British American Life Insurance	2,770,730	319,650	1,107,890	–	–	23,000
4. Caribbean Atlantic Life Insurance	550,270	302,030	61,483	–	–	–
5. Confederation Life Association	12,006,543	4,749,352	4,107,346	213,765	364,293	–
6. Crown Life Insurance	12,295,354	3,672,665	2,343,868	–	33,486	–
7. CUNA Mutual Insurance	65,721	355,724	–	–	75,000	–
8. Demerara Mutual Life Assurance	3,141,905	341,500	781,023	387,533	–	–
9. First Federation Life Insurance	506,480	–		NOT STATED		
10. Guyana and Trinidad Mutual Life Insurance	(1)	–	–	–	–	–
11. Imperial Life Assurance	2,799,967	1,124,006	19,723	–	48,151	–
12. International Life Insurance (U.K.)	5,199,091	132,501	–	–	280,008	–
13. Jamaica Mutual Life Assurance	609,582 (est)	132,724	–	–	–	–
14. Maritime Life Assurance	1,371,988	1,115,981	451,228	–	–	–
15. National Life Assurance	4,219,662	1,709,784	522,385	–	–	–
16. North American Life Assurance	11,018,997	2,989,194	3,624,644	–	312,308	100,000
17. Standard Life Assurance	42,527,174	4,850,176	13,156,280	719,700	–	723,232
18. Sun Life Assurance	7,650,562	1,570,000	–	–	–	–
TOTAL – FOREIGN COMPANIES	114,672,427	24,894,518	27,955,918	2,271,557	1,412,300	990,125
%		22.4	25.2	2.0	1.3	0.9
19. Colonial Life Insurance (Trinidad)	20,737,768	3,463,481	8,292,980	643,066	1,093,609	2,085,200
20. Trinidad and Tobago Insurance	2,568,147	309,093	1,763,304	15,227	318,816	143,364
21. United Security Life Insurance	237,760	45,150	161,300	79,581	–	–
22. Western General Insurance	232,327	200,000	14,937	–	66,280	–
23. West Indian National Insurance	157,719	35,953	39,000	87,397	–	9,900
24. First National Insurance	98,800	–	–	–	97,000	31,586
TOTAL – LOCAL COMPANIES	24,032,521	4,053,677	10,271,521	825,271	1,575,705	2,270,050
%		15.2	38.6	3.1	5.9	8.5
GRAND TOTAL	138,704,948	28,948,195	38,227,439	3,096,828	2,988,005	3,260,175
%		21.1	27.8	2.3	2.2	2.4
(1) Total Business (Including T&T business)	12,539,044	507,515	894,956	--	–	–

(Continued)

TABLE 4.11: (Continued)

	SECURITIES HELD IN TRUST (Statutory Funds)						
	Total Local Assets	Local Assets Ratio	Foreign Government Securities	Other Foreign Securities	Total Foreign Securities	Total Securities in Fund	More than or less than Fund Requirements
1. American Life Insurance	2,871,740	81.4	NOT STATED		–	2,871,740	−3,529,493
2. Barbados Mutual Life Assurance	1,831,045	41.1	NOT STATED		–	1,831,045	−4,458,908
3. British American Life Insurance	1,450,540	52.4	561,744	–	561,744	2,012,284	− 758,446
4. Caribbean Atlantic Life Insurance	363,513	72.7	344,783	–	344,783	708,296	+ 208,026
5. Confederation Life Association	9,434,756	78.6	2,954,546	–	2,954,546	12.389.302	+ 382,759
6. Crown Life Insurance	6,050,019	49.2	7,282,848	–	7,282,848	13,332,867	+1,037,513
7. CUNA Mutual Insurance	430,724	665.0	–	–	–	430,724	+ 366,003
8. Demerara Mutual Life Assurance	1,510,056	48.1	2,172,921	–	2,172,921	3,682,977	+ 541,072
9. First Federation Life Insurance			NOT STATED				
10. Guyana and Trinidad Mutual Life Insurance	–	–	–	–	–	–	–
11. Imperial Life Assurance	1,191,880	42.6	1,760,338	–	1,760,338	2,952,218	+ 152,251
12. International Life Insurance (U.K.)	412,509	7.9	NOT PLACED IN TRUST			412,509	–
13. Jamaica Mutual Life Assurance	132,724	21.8	287,825	–	287,825	420,549	− 189,033
14. Maritime Life Assurance	1,567,209	114.0	153,537	–	153,537	1,720,746	+ 348,758
15. National Life Assurance	2,232,169	52.9	1,834,433	–	1,834,433	4,066,602	+ 99,717
16. North American Life Assurance	7,026,146	68.8	4,531,774	–	4,531,774	11,557,920	+ 828,503
17. Standard Life Assurance	19,449,388	45.7	24,718,080	985,436	25,703,516	45,152,904	+2,625,730
18. Sun Life Assurance	1,570,000	20.5	5,790,312	–	5,790,312	7,360,312	− 290,254
TOTAL – FOREIGN COMPANIES	57,524,418	50.2	52,393,141	985,436	53,378,577	110,902,995	−3,769,432
%	51.9	–	47.2	0.9	48.1	–	–
19. Colonial Life Insurance (Trinidad)	15,578,336	75.1	7,597,096	–	–	23,175,432	+2,437,664
20. Trinidad and Tobago Insurance	2,549,804	99.1	–	–	–	2,549,804	+ 47,800
21. United Security Life Insurance	286,031	120.0	–	–	–	286,031	+ 48,271
22. Western General Insurance	281,217	121.0	–	–	–	281,217	+ 48,890
23. West Indian National Insurance	172,250	109.2	–	–	–	172,250	+ 14,531
24. First National Insurance	128,586	130.1	–	–	–	128,586	+ 29,786
TOTAL – LOCAL COMPANIES	18,996,224	79.0	7,597,096	–	–	26,593,320	−2,560,799
%	71.4	–	28.6	–	–	–	–
GRAND TOTAL	76,520,642	55.2	59,990,237	985,436	60,975,673	137,496,315	−1,208,633
%	55.7	–	43.6	0.7	44.3	–	–
(1) Total Business (Including T&T business)	1,402,471	–	4,106,551	6,806,286	–	12,315,308	–

NOTES: 21 of the 47 registered companies reported. *SOURCE:* Based on *Annual Report of the Supervisor of Insurance*, Trinidad, 1969.

Summary and Conclusion

In the Caribbean, the asset structure of only part (non-insured) of the occupational pension business is readily identifiable since the insured schemes are an integral part of the portfolio of the life insurance companies. The laws relating to the asset holdings of insured pension schemes (in Trinidad, specifically) are inadequate in a number of respects. Even more unsatisfactory is the fact that there is no legal control of the location or pattern of asset holding of non-insured pension schemes. This reflects a piecemeal and unintegrated approach to financial legislation. At the same time that the laws were introduced for life insurance companies, they should have been made applicable to non-insured pension schemes since the two types of long-term business are fairly similar in structure.

Generally, the local asset ratio for pension schemes in the Caribbean is still too low. In addition, the distribution between local assets is not optimal from a development point of view, with too much funds (equity and debentures) going to the traditional local subsidiaries (who already have access to many sources of capital) of foreign companies and too little to those which are required for a diversified economic structure.

FOOTNOTES

[1]See, also, V.L. Andrews [6].

[2]A low turnover in the labour force in the Caribbean also favours this tendency, since it avoids the payment of 'withdrawal benefits'.

[3]In many pension schemes in the Caribbean membership of new employees is compulsory after a year. In only a few establishments is membership in a newly introduced scheme optional for the existing employees. On becoming a member the employee is 'locked-in'.

[4]Some of these points have relevance only for non-insured schemes since life insurance companies in the Caribbean do not usually operationally segregate assets representing pension business from assets representing other business.

[5]In Trinidad, Colonial Life, and in Guyana and Barbados, American Life, appear to have a monopoly of the insured pension business and so insurers and bank trustees in the region may have a fairly standardized approach with respect to liabilities and assets. (In Guyana, however, Colonial Life has made a vigorous entry into the pension market and by 1972 had accounted for 25 schemes).

[6]The employer may still have ultimate control over investment policy, since, if he alone appoints the bank trustees he has the ability to terminate the bank's service. For a more general discussion, see V.L. Andrews, [6] pp. 437-44. Where a company appoints its regular bank as trustee or its regular insurance company as pension insurer, it may demand 'financial reciprocation' i.e. loans at favourable terms, etc; for the effect of the concentration of pension assets in a few funds and control of these funds by a few trustees and insurers, see D. Wrightsman [76].

[7]For example, the RILA plan had stated that "the company shall at all times determine and have the sole right to decide through which underwriting medium, members' retirement income benefits are to be provided". See Alcan, [2] p. 15. Unfortunately, we have so far been unable to find out which of the self-administered schemes in Trinidad are bank-trusteed and which are self-trusteed. We therefore are not in a position to say whether there are any significant investment differences in Trinidad between bank-trusteed schemes and self-trusteed schemes.

[8]In most countries large funds are self-trusteed, partly because the firms have the required managerial resources and partly because they like to keep control of such large funds.

[9]It would appear that the pension trust law in Barbados does not require even a single employee representative since only one of the 35 firms which returned questionnaires said it had an elected member ("subject to company management approval") among its trustees. In addition, no firm said it had consulted the workers concerning the provisions of its pension plan.

[10]See The Second Schedule, Section 37, of the Insurance Act (Act No. 24 of 1966), Trinidad [62].

[11][62]. See pp. 82-6.

[12]Also, section (d) stated that "a company shall not purchase its own shares". This piece of legislation is designed to prevent circular control by management in the situation in which the pension fund ends up owning the company through use of its contributions as a source of captive finance (since non-objective investment considerations may consciously or unconsciously have been involved). There is also need for legislation on 'party in interest' holdings, i.e. where a firm acquires stocks of a supplier or customer for purposes of control.

[13]A mortgage loan up to 90 per cent of the value of the real estate may be given provided that ". . . . that portion of the indebtedness in excess of seventy-five per cent of the value of the real estate is guaranteed by the National Housing Authority . . . ." See Insurance (Second Schedule Amendment) Order, 1972.

[14]In Guyana, on the other hand, the 1970 Insurance Act stipulated a minimum of 95 per cent local assets.

[15]For example, at the beginning of 1973, the pension funds of the sugar companies in Guyana were still held entirely in foreign assets (with all the trustees living abroad).

[16]It is sometimes said that there are not enough high earning equities in the Caribbean which can be held as an alternative to foreign assets and, as a result, the pension schemes will not be able to pay 'supplementary' benefits to offset increases in the cost-of-living. (Note that this view is inconsistent with the limitation placed on life insurance companies', equity holdings by, for example, Trinidad). However, the increased social benefits of the locally invested funds would far outweigh any fall in private benefits.

[17]For a discussion of the danger of inequity in multinational pension schemes attempting to cater, in a uniform manner, for the particular needs of employees in disparate territories, see Pilch and Wood, [46] pp. 186-7 and M.J. Crossley, [16].

[18]It is also believed that certain subsidiaries of multinational firms exaggerated or inflated the employers' contributions and used this as a disguised source of repatriation of profits, on which they did not pay tax (and, instead, even received a tax allowance).

[19]Data are not available on either the volume or the structure of assets in pension schemes in the other Caribbean territories. In Guyana, for example, although the Statistical Bureau collects data on pension contributions, it does not solicit information on asset holdings, indicating insufficient concern with 'use of funds'.

[20]Moreover, the long-term stability of fund inflow easily allows the investor to hold assets whose capital value may fluctuate from time to time (e.g. ordinary shares) since there is no anticipated pressure for the realising of such assets at inconvenient market times, with resultant capital losses.

[21]For most schemes real estate assets do not exist at all.

[22]The fact that foreclosure is anathema is partly reflected in the virtual non-holding of real estate assets.

[23]For a more expansive discussion of these reasons, see V.L. Andrews, [6], pp. 426-7 and pp. 514-19.

[24]It has already been shown that inflows and outflows of funds in pension schemes are so predictable that liquidity is not a problem.

[25]In the case of a surplus, benefits are increased or costs (contributions) reduced.

[26]The recent examples of sudden termination of pension plans in the Caribbean bring into sharp focus the need for greater actuarial vigilance. It is possible that some firms become technically underfunded because they anticipate and deliberately take into account the 'gift' associated with employees leaving without vested rights, i.e. the employer's contribution. More generally, total assets tend not to cover the discounted values of the accrued benefits (liabilities) in the early stages because plans start off with past service benefits which are not immediately covered by initial contributions and it is only after a number of years that the more rapidly accumulating funds catch up with the accrued benefits; for a useful disccusion, see J.A. Attwood, [3], and D.F. Gilley, [25].

[27]The nature of the liabilities of pension schemes is such that they are capable of holding a relatively high proportion of ordinary shares in their portfolios; however, investment officers in the Caribbean frequently complain about the non-availability of shares. It is interesting to note that in the U.K., in 1969, ordinary shares were 51 per cent (plus fixed interest company securities of 13 per cent – see Table 4.4 of the asset portfolio of U.K. pension schemes). In the U.S.A., "in 1960, at book value, slightly over 30 per cent of fund assets were in common stocks (44 per cent of assets at market value) and 50 per cent of fund inflows were used to acquire common stocks. Indeed, pension funds are now the largest single institutional investor in common stocks, and since 1950 have bought more stock than any other investor group", see E.C. Ettin [22], p. 72.

[28]The 1971 Insurance Amendment Act, which amended Section 38 of the 1966 Insurance Act, ruled that Trinidad government securities bought by insurance companies on the metropolitan stock exchanges should be considered as foreign assets since such a transaction involved a foreign exchange liability; however, the Act was silent with respect to non-insured pension schemes.

[29]However, it is also shown in the table that the share of small schemes in equity assets, for all schemes combined, is lower than that for either medium or large sized schemes.

[30]This is not entirely unexpected since insurance companies accept more risk and therefore need to hold a more varied and diversified portfolio.

[31]But Caribbean countries are so small as to be generally price takers in metropolitan markets; they can hardly induce a capital loss by their own action.

CHAPTER FIVE

PUBLIC SECTOR PENSION PLANS

Funding vs Pay-as-you-go

The fundamental difference between public sector and private sector pension schemes is that whereas the latter are invariably funded, some public sector schemes are not funded, i.e. a pay-as-you-go system obtains. In many countries pension schemes of public corporations[1] are funded, while in a few they are not. Similarly, there is some amount of variation between countries in the funding of central government and local government schemes; for example, the central government's Widows and Orphans Scheme in Trinidad is unfunded[2] whereas in Guyana it is funded. Also, the local government schemes in Trinidad are non-contributory and unfunded, whereas the local government schemes in Guyana are contributory and funded (insured).

It is said that since the public sector is 'permanent' it does not need to fund its pension schemes, because there is no real risk attached to the honouring of its commitment to make payments to its employees after the latter have retired. For example, with reference to central and local government schemes, a number of specific reasons for risklessness can be given.[3] One is that the functions performed in the central and local government sectors are so basic that there is likely to be continuing need. Another is that the public authorities usually have a monopoly of the particular functions. A third reason is that even when there are changes in organisation (e.g. the method of financing roads) the function continues to be performed by the government. A fourth reason is that government has almost unlimited powers of taxation and so the capacity to finance itself.[4] Pay-as-you-go, therefore, simply involves the paying of one's bills as they become due.

In the case of the public corporations, reasons have also been advanced in favour of a pay-as-you-go or unfunded system of pension organisation. One reason is that the public corporations are, in most cases, basic industries with revenue earning capacity. Secondly, the public corporations are certain to go on expanding and therefore the probability of a liability on the taxpayer is small.[5] Thirdly, in the event of a sale or transfer of assets to the private sector, pensions would normally be included in the deal. Fourthly, the probability of a contraction of a public corporation to a point where pension expenditure is a large part of its total expenditure is likely to be small. A fifth reason is that contraction on any large scale would scarcely happen to more than one industry at any point in time.[6]

On the other hand, in a labour surplus economy, there is the problem that the rate of increase in the number of pensioners and, consequently, the rate of outgo (benefit payments) could outstrip the rate of increase of new members and related inflows (contributions and interest receipts) owing to the sluggish nature of employment creation in such an economy. As a result, if the government were operating a pay-as-you-go system it would be forced to subsidize public sector pensions out of general revenues and this could conceivably occur at an embarrassing financial time. The avoidance of this embarrassment can be the justification for a fund in a labour surplus economy. In the long run, however, the solution is for public sector revenues and funds to finance a pattern of activities, which, when complemented by the private sector maximizes national employment.

Unfunding can also be used in a positive manner to bring about inter-generation transfers, so as to maximize social welfare.[7] Similarly, partial funding can cause many elements of transfer to the general public. One type of transfer occurs when a public corporation charges higher prices partly in order to defray pension costs. A second type of transfer occurs when the central government uses part of its tax revenue to make pension payments owing to, say, the 'formula' method underestimating the true pension liability; this may occur, especially, in a situation of unexpectedly rapid rises in wages. A third type of transfer occurs when the public sector scheme, by stipulating too low a contribution (or by investing only in low-yield government bonds), fails to protect the real value of pensions against inflation; this can cause a transfer which favours younger generations.[8]

As an example of a funded Widows and Orphans Pension Scheme, Table 5.1 on the Guyana scheme (set up in 1923) shows that the number of contributors is usually a small proportion of the total number of central government employees.[9] This is because the scheme normally applies only to male officers earning above a certain minimum wage and who are holding permanent appointments.[10] Between 1959 and 1966, the increase in the number of contributors was 27 per cent whereas the increase in the number of pensioners was 77 per cent. This illustrates the point that, with the increasing maturity of a scheme, compounded by slow employment creation in a labour surplus economy, the 'burden' of pension payments becomes greater. When we compare values of pension contributions and pension benefits, the discrepancy is even greater. Table 5.2 shows that between 1959 and 1966 the increase in the value of contributions was 38 per cent whereas the increase in the value of benefit payments was 183 per cent; this difference in the ratio of contributors to value of contributions and the ratio of pensioners to value of pension benefits is likely to increase if more high wage earners opt for an early retirement. (But for the entire 1954-66 period, the difference between the rates of increase of the value of contributions and benefits was not as great, being 169 per cent and 438 per cent, respectively; both contributions and benefits increased rapidly between 1954 and 1959, and at about the same rate, being 95 per cent and 90 per cent, respectively).

TABLE 5.1: NUMBERS CONTRIBUTING AND IN RECEIPT OF PENSIONS, WIDOWS AND ORPHANS SCHEME, GUYANA, 1959-1966

	1959	1960	1961	1962	1963	1964	1965	1966
Contributors	2,428	2,439	2,453	2,584	2,658	2,675	2,885	3,086
Former Contributors with interest	438	496	579	642	715	736	803	853
Contributors who ceased and retained no interest	47	65	81	89	74	82	47	69
Rejected Officers contributing	24	20	20	19	19	17	11	16
Rejected Officers who formerly contributed and retained an interest	20	20	18	17	17	–	23	21
Pensioners	158	165	179	197	214	244	262	279
Officers awaiting Medical Examination	–	125	283	185	178	137	268	178

SOURCE: *Annual Reports* of the Directors of the W. & O. Fund.

TABLE 5.2: RECEIPTS AND EXPENDITURE, WIDOWS AND ORPHANS SCHEME, GUYANA, 1954-66 $(E.C.)

	1954	1955	1956	1957	1958	1959	1960
Receipts							
1. Contributions	195,144.93	217,348.59	241,270.09	332,629.39	354,062.14	380,853.46	385,526.75
2. Interest on Investments	70,619.75	88,541.99	94,518.57	112,983.91	128,120.19	158,247.69	163,297.28
3. Interest Rejected Officers Deposit Account	664.21	546.83	835.53	778.87	1,014.90	1,047.97	1,050.69
4. Government Interest	48,586.00	48,684.63	54,982.33	57,808.68	59,647.51	58,557.33	100,917.52
5. Rejected officers	–	–	–	–	–	–	–
6. Profit on sale of securities	–	–	–	–	–	–	–
TOTAL	315,014.89	355,122.04	391,606.52	504,200.85	542,844.74	598,706.45	650,792.24
Expenditure							
1. Refund of Contributions	11,861.42	10,045.73	15,455.27	14,757.50	16,243.68	21,501.81	24,601.66
2. Pensions	37,987.32	41,302.35	45,183.64	58,266.80	62,333.90	72,025.98	79,154.33
3. Clerical Assistance	1,841.56	5,462.93	5,167.21	4,881.22	2,763.16	5,820.04	6,401.14
4. Miscellaneous	731.65	1,509.55	5,279.73	633.86	869.87	496.35	651.61
5. Loss on sale of securities	1,896.35	29,340.81	2,751.32	31,983.44	–	3,132.41	130.91
6. Insurance Premium	2,248.50	2,144.94	2,275.84	2,149.22	2,110.88	2,325.91	2,205.91
7. Depreciation of office Equipment and Furniture	–	–	–	–	–	–	–
8. Rejected officers	–	–	–	–	–	–	–
9. Pension contribution of Secretary	536.22	695.18	650.69	574.19	–	–	–
10. Actuarial Valuation	–	–	4,022.40	–	100.80	–	–
TOTAL	57,103.02	90,501.49	80,786.10	113,246.23	85,422.29	105,302.50	113,145.56

(Continued)

TABLE 5.2: (Continued)

	1961	1962	1963	1964*	1965	1966
Receipts						
1. Contributions	399,379.30	411,545.53	457,567.64	447,839.00	463,347.94	524,671.04
2. Interest on Investments	203,515.11	241,177.16	254,301.52	337,729.00	548,998.12	684,262.59
3. Interest Rejected Officers Deposit Account	1,084.69	1,142.10	39,076.37	–	–	–
4. Government's Interest	91,959.20	99,863.84	184,039.61	147,648.00	133,953.19	130,052.62
5. Rejected Officers	–	–	–	–	–	365.90
TOTAL	700,226.78	753,728.63	897,026.16	933,216.00	1,146,299.25	1,339,352.15
Expenditure						
1. Refund of Contributions	36,325.31	37,218.52	52,715.27	36,446.00	31,424.34	30,911.48
2. Pensions	87,174.15	97,402.95	124,973.24	159,202.00	169,020.31	204,192.22
3. Clerical Assistance	6,749.10	9,139.25	8,990.57	12,938.00	15,189.18	16,458.58
4. Miscellaneous	740.67	1,325.37	2,564.02	2,883.00	4,078.52	2,289.01
5. Loss on sale of securities	–	5,503.33	3,082.70	66,983.00	84.95	87,936.84
6. Insurance Premium	1,965.93	1,916.30	2,140.61	–	43.67	–
7. Depreciation of Office Equipment and Furniture	–	–	150.00	346.00	975.77	1,066.38
8. Rejected Officers	–	–	–	–	341.52	–
9. Pension contribution of Secretary	–	–	–	–	–	–
10. Actuarial Valuation	3,163.20	–	–	–	–	–
TOTAL	136,118.36	152,505.72	194,616.41	278,798.00	221,158.26	342,854.51

*Figures for 1964 are rounded.

SOURCE: *Annual Reports* of the Directors of the W. & O. Fund.

The difference between the rate of increase (between 1954 and 1966) of total receipts and total payments (325 per cent and 500 per cent, respectively) is considerably less than the difference between the rate of increase of contributions and benefits (169 per cent and 438 per cent, respectively); this is due to the very rapid increase in the value of interest receipts. Whereas the value of total interest on investments was equivalent to 61.4 per cent of the value of contributions in 1954, by 1966 the figure had risen to 155 per cent.[11] In fact, in 1966, investment income had far exceeded the value of contributions (investment income began to exceed contributions in 1964); thus, increasingly great reliance is being placed on investment income for the paying of pension benefits.[12]

The Asset Structure

The asset structure of government pension schemes tends to be not as diversified as the asset structure of pension plans in the private sector. For example, in the Widows and Orphans Scheme mortgage loans and 'other' (personal) loans to contributors are very negligible. Between 1954 and 1966, there were mortgage assets holdings in only two years, 1963 and 1964, for amounts of $28,000 and $21,000, respectively. (It would appear as though the mortgage loans were very temporary and short-term). The amount of personal loans varies between $80 in 1958 and $4,987 in 1965. Another small, but rapidly rising item (varying between 4.3 per cent in 1953 and 20.1 per cent in 1966) in the asset portfolio, is the net balance held on deposit by the Accountant General and 'utilised for the purpose of the government'; interest thereon was the rate paid by Government to the local commercial banks on overdrafts and after 1967 the interest rate used was the discount rate of the Central Bank.

The bulk of the assets, therefore, was in the form of government securities (local and foreign). Even when we exclude deposits held with the Accountant General, securities in some years amounted to over 90 per cent of the total asset portfolio. This sort of asset concentration reflects a very conservative approach on the part of investment officers (whose cautiousness might be due to the constraint of public accountability.)[13] The conservatism is particularly reflected in the fact that virtually all the foreign securities held are government securities since there are many fairly safe but high yielding types of ordinary shares[14] in the metropole. If funds are going to be held abroad, they might as well earn as high a rate of interest as possible.

Before 1969, the Widows and Orphans Scheme was legally bound not to hold in securities of the Government of Guyana an amount exceeding 66 2/3 per cent of its asset portfolio. In 1969, as a result of pressure on the foreign exchange reserves, the statutory limit was increased to 75 per cent. The actual holdings of Guyana Government securities plus deposits with the Accountant General fell far short of the statutory limit; the highest holding, as seen in Table 5.3, was 43.3 per cent in 1966. (In fact, in none of the years total local assets

were more than half of the total assets of the scheme). There can be little justification for either the statutory limitation or the failure of the Widows and Orphans Scheme to attain this limit of holdings of 'own company'[15] assets (i.e. Guyana Government securities). Such laws, when reinforced by institutional behaviour, must have had a very serious adverse effect on the development of a vibrant local capital market.

Another example of a funded government pension scheme is the Provident Fund,[16] in Trinidad. The members of this fund are those government employees who are not eligible for non-contributory pensions; these are usually paid monthly employees. The fund is being gradually run down, by the non-admission of new members, with responsibility being transferred to the central government budget; this is evidenced (see Table 5.4) from the fact that in 1962 there were 4,338 depositors, whereas in 1970 there were only 3,109 depositors. (In 1963, there were 74 persons receiving a pension totalling $41,884 and in 1970 there were 77 persons receiving a sum of $83,309). However, the value of contributions in 1970 was the same as that in 1962 owing perhaps to a rapid rise in wages. Contributions are at the rate of four per cent of wages with a government 'subsidy' of the same amount, plus interest. A contributor may have a portion of his contribution and bonus applied towards life insurance (see Table 5.5). The life policies,[17] and nominal value thereof, are equally divided between 'compulsory' (contributory) policies, and 'bonus' policies; for example, of the 34 policies in 1970, 18 were compulsory and 16 were bonus policies and of the $14,221.68 nominal value of the policies, $7,530.72 pertained to compulsory policies and $6,690.96 was the value of bonus policies. Generally, relatively few people have taken the opportunity of having a portion of their contributions and bonus applied towards life insurance, and with the run-down of the provident scheme the numbers are falling rapidly.

The asset portfolio of the Government Employees Provident Fund is very much dominated by local and foreign government securities (see Table 5.6); approximately three-quarters of the total assets held are government securities.[18] (Local assets were not an insignificant part of total assets, being, for example, 56.2 per cent in 1970; a substantial proportion was probably government securities). A concentration of government securities among local assets can only partly be explained by the unavailability of more attractive assets (because interest from investment in government securities only appeared to average around six per cent between 1963 and 1970). A better explanation, as in the case of Guyana, is probably the use by government of the Provident Fund as a captive source of finance.

As previously stated, the Government of Trinidad is running down[19] the Provident Fund and assuming increasing responsibility for pension benefits, as they accrue, out of government budgetary revenue. As a result, there are now four types of government schemes in Trinidad comprising one funded and three pay-as-you-go plans: (1) A Contributory Provident Fund for non-pensionable officers, (2) Pensions for Widows and Orphans of deceased contributors, (3)

TABLE 5.3: LOCAL AND FOREIGN ASSETS HOLDINGS OF THE WIDOWS AND ORPHANS SCHEME, GUYANA 1954-66

	1954	1955	1956	1957	1958	1959	1960
1. Local Securities (Cost Price)	482,356.25	657,544.59	817,300.00	816,800.00	1,116,376.25	1,258,276.25	1,258,276.25
2. Local Securities (Market Value)	n.a.	n.a.	n.a.	n.a.	1,116,800.00	1,261,800.00	1,261,800.00
3. Local Securities (cost) plus Deposits with Accountant General	482,356.25	657,554.59	944,387.24	1,124,468.88	1,311,564.36	1,811,960.85	1,681,874.52
4. Foreign Securities (Cost Price)	1,806,264.73	1,669,698.44	1,602,526.08	1,746,674.85	2,458,177.02	2,455,092.01	3,122,057.83
5. Foreign Securities (Market Value)	n.a.	n.a	n.a.	n.a.	2,086,915.53	2,109,948.45	2,597,566.09
6. Total Securities (Cost Price)	2,288,620.98	2,327,253.03	2,419,826.08	2,563,474,85	3,574,553.27	3,713,368.26	4,380,334.08
7. Total Securities (Market Value)	n.a.	n.a.	n.a.	n.a.	3,203,715.53	3,371,748.45	3,859,366.09
8. Total Assets	2,393,751.80	2,658,372.35	2,969,192.77	3,360,147.39	3,810,610.40	4,267,567.86	4,805,019.05
9. Total Local Assets (Cost Price)	587,487.07	988,673,91	1,366,666.69	1,613,472.54	1,352,433.38	1,812,475.85	1,682,961.22
(9) as a % of (8)	24.5	37.2	46.0	48.0	35.5	42.5	35.0
(1) as a % of (8)	20.2	24.7	27.5	24.3	29.3	29.5	26.2
(3) as a % of (8)	20.2	24.7	31.8	33.5	34.4	42.5	35.0

(Continued)

TABLE 5.3: (Continued)

	1961	1962	1963	1964	1965	1966
1. Local Securities (Cost Price)	1,658,276.25	1,658,276.25	1,658,276.25	n.a.	n.a.	2,158,276.25
2. Local Securities (Market Value)	1,661,800.00	1,658,700.00	1,661,800.00	n.a.	n.a.	2,161,800.00
3. Local Securities (cost) plus Deposits with Accountant General	2,051,107.75	2,464,112,44	2,807,016.48	n.a.	n.a.	4,024,192.95
4. Foreign Securities (Cost Price)	3,316,439.08	3,501,972.15	3,688,441.87	n.a.	n.a.	4,574,640.02
5. Foreign Securities (Market Value)	2,699,387.02	3,179,479.70	3,372,215.00	n.a.	n.a.	4,108,039.76
6. Total Securities (Cost Price)	4,974,715.33	5,160,248.40	5,346,718.12	n.a.	n.a.	6,732,916.25
7. Total Securities (Market Value)	4,361,187.02	4,838,179.70	5,034,015.00	n.a.	n.a.	6,269,839.76
8. Total Assets	5,368,030.65	5,966,355.15	6,680,575.88	7,361,497.00	8,317,705.09	9,289,580.48
9. Total Local Assets (Cost Price)	2,051,591.57	2,464,383.00	2,992,134.01	n.a.	n.a.	4,714,940.46
(9) as a % of (8)	38.2	41.3	44.8	n.a.	n.a.	50.8
(1) as a % of (8)	30.9	27.8	24.8	n.a.	n.a.	23.2
(3) as a % of (8)	38.2	41.3	42.0	n.a.	n.a.	43.3

SOURCE: Computations based on Data in the *Annual Reports* of the Directors of the W. & O. Fund.

TABLE 5.4: NUMBER OF CONTRIBUTORS AND VALUE OF CONTRIBUTIONS, GOVERNMENT EMPLOYEES PROVIDENT FUND, TRINIDAD, 1962-70 – $(E.C.)

	1962	1963	1964	1965	1966	1967	1968	1969	1970
Number of Contributors									
Total number of Depositors	4,338	4,153	4,082	3,942	3,546	3,477	3,393	3,289	3,109
Number of depositors who joined during the year	n.a.	37	77	13	92	47	56	115	43
Number of depositors who withdrew during the year	n.a.	222	148	153	486	116	140	220	222
Value of Contributions									
Compulsory Deposits	222,217	212,742	258,133	283,509	275,079	240,713	243,062	232,860	220,103
Government Bonus	217,895	212,551	258,008	283,499	275,040	240,763	243,294	232,861	220,732
Total	440,112	425,293	516,140	567,008	550,118	481,476	486,356	465,721	440,836

SOURCE: *Annual Reports* of the Government Employees Provident Fund.

TABLE 5.5: THE LIFE INSURANCE POLICIES OF THE GOVERNMENT EMPLOYEES PROVIDENT FUND, TRINIDAD – $(E.C.)

Year	No. of Depositors	No. of Policies	Nominal Value	Premiums Paid	Commission Received
1962	45	111	39,847.68	5,584.70	32.96
1963	37	95	30,855,36	2,149,44	37.60
1964	33	85	27,584.16	1,891.12	46.00
1965	29	73	22,894.56	1,808.52	50.04
1966	24	59	10,096.80	1,541.64	56.76
1967	29	62	22,736.40	1,398.60	50.04
1968	27	56	21,459.92	1,287.52	46.00
1969	21	40	16,459.92	1,057.28	37.60
1970	18	34	14,221.68	933.76	32.96

SOURCE: *Annual Reports* of the Government Employees Provident Fund.

TABLE 5.6 DISTRIBUTION OF ASSETS OF THE GOVERNMENT EMPLOYEES PROVIDENT FUND, TRINIDAD, 1963-70 – $(E.C.)

	1963	1964	1965	1966	1967	1968	1969	1970
Securities	3,113,207.86	3,045,441.02	3,052,433.04	2,188,401.56	2,419,457.16	2,350,190.27	3,315,395.30	3,588,253.99
Joint Consolidated Fund	87,963.78	233,022.42	16,526.56	140,536.96	217,979.18	305,486.74	398,034.70	322,563.52
Treasury Bills	–	–	272,864.00	1,185,720.00	692,230.00	–	–	–
SUB-TOTAL	3,201,171.64	3,278,463.44	3,341,823.60	3,514,658.52	3,329,666.34	2,655,677.01	3,713,430.00	3,910,817.51
Interest	206,320.33	171,297.94	183,978.88	164,732.94	167,262.99	251,478,40	188,686.74	241,370.33
Cash	–	–	723,693.79	–	–	–	1,487,304.89	1,511,979.05
TOTAL	3,407,491.97	3,449,761.38	4,065,517.39	4,076,171.31	4,546,957.94	4,971,830.73	5,200,734.89	5,422,796.56

SOURCE: Annual Reports of the Government Employees Provident Fund.

Non-contributory pensions for pensionable-establishment officers and (4) Non-contributory gratuities, mainly for daily rated workers. Tables 5.7 and 5.8 show that total contributions fall very far short (and increasingly so as the schemes mature) of total pension payments. As a result, the 'burden' of total pension and gratuity payments in 1969 was as much as 4.8 per cent of the central government's recurrent budget.[20]

Finally, it would appear that the economic and redistributional effects in the Caribbean are the same whether the public sector schemes are funded or not. When the schemes are funded, an extremely high proportion of total assets is held in government securities, and when the schemes are not funded, government makes total use of the funds itself. There is however one difference. Funded schemes tend to hold a significant amount of foreign government securities. Besides the immediate foreign exchange or balance of payments effects, this holding of foreign securities is equivalent to a transfer of financial resources abroad and eventually causes the government external debt to be larger than it needs to be.

Summary and Conclusion

In the Caribbean, there is fairly comprehensive pension coverage of monthly paid employees (or, alternatively, their widows and orphans) in the public sector and a not insignificant proportion of the more casual (weekly and daily paid) workers are provided with a gratuity. However, there is wide variation in the method of mobilization; some schemes are contributory while others are not and some pension plans are funded while others adopt a pay-as-you-go approach.

Government securities are the major item in the asset portfolio of public sector pension schemes. Surprisingly, a significant proportion of these government securities is still foreign, despite the growing public external debt and the legal and moral pressures and exhortations for private financial intermediaries to hold a greater proportion of local assets. There is no reason why, at this stage of development in the Caribbean, public sector pension schemes should hold any foreign assets at all. Finally, a 100 per cent local assets ratio is only the first step towards optimizing the use of pension funds; there is further need to ensure that investment takes place in those sectors which maximise the social return.

TABLE 5.7 GOVERNMENT PENSION SCHEMES' ACTUAL CONTRIBUTIONS TO BUDGETARY REVENUE, TRINIDAD, 1962-70

Pension Contributions	1962	1963	1964	1965	1966	1967	1968	1969	1970
1. Widows and Orphans Scheme	1,782,451	1,285,352	1,321,125	1,422,500	1,741,693	1,862,557	1,970,711	2,021,271	2,190,813
2. Police Superannuation Fund	53,700	60,844	62,542	64,925	83,148	86,062	88,288	92,963	98,658
3. Fire Service Superannuation Fund	11,458	10,939	12,096	12,435	15,368	13,339	19,264	17,735	22,626
4. Provident Fund Bonus, Surrendered and Forfeited	931,740	42,295	28,763	27,331	21,183	23,496	43,745	34,932	106,616
5. Trinidad and Tobago Defence Force	–	–	–	–	–	–	63,397	116,147	163,209
6. Members of Parliament	–	–	..	–	–	–	–	13,260	28,273
7. Other Government Agencies etc.	12,358	64,566	200,625	155,566	68,292	258,978	171,273	143,558	224,592
TOTAL	2,791,707	1,463,996	1,625,151	1,682,757	1,929,684	2,244,432	2,358,678	2,439,866	2,834,787

SOURCE: Government Estimates.

TABLE 5.8: ACTUAL PENSION AND GRATUITY PAYMENTS OUT OF GOVERNMENT REVENUE, TRINIDAD, 1962-70

	1962	1963	1964	1965	1966	1967	1968	1969
Accounted for by Ministry of Finance								
1. Public Officer's Pension	2,204,571	2,311,771	2,746,657	2,931,721	3,135,297	3,371,192	4,002,192	4,181,603
2. Public Officer's Gratuities	1,240,579	1,513,530	1,306,663	1,346,438	1,864,814	1,131,085	2,277,041	2,806,248
3. Widows' and Orphans' pensions	511,085	538,381	564,401	605,439	790,113	688,649	741,507	772,500
4. Assisted Secondary Schools Teachers Pensions and Gratuities	–	–	58,740	150,758	71,917	91,322	69,495	122,469
5. Contribution to Daily-paid Workers Pension Scheme	–	–	–	–	–	6,564	–	–
6. Trinidad Contingent Pensions	8,878	9,397	9,977	10,185	9,657	8,601	8,593	9,228
7. Provident Fund	217,108	227,775	263,493	269,647	267,647	248,374	303,091	311,391
8. Naval and Military Pensions	26,597	27,495	30,914	32,065	31,365	29,944	30,212	30,681
9. Gratuities to technical and Professional contract officers	37,308	13,920	19,500	13,800	24,990	24,100	34,367	44,590
10. Ex Gratia Allowances	978	790	872	873	872	872	872	872
11. Ex Gratia Awards	72,115	11,562	91,326	54,323	50,498	41,158	119,189	113,926
12. Special Gratuities for Entitled Officers	55,323	46,501	117,888	78,861	96,585	84,383	43,928	48,377
13. Pensions and Gratuities to Specified Ex-Legislators	–	–	–	41,628	3,468	3,468	3,468	3,468
14. Judges' Pensions	–	–	–	–	–	2,228	3,819	14,300
15. Judges' Gratuities	–	–	–	–	14,952	15,913	19,500	47,408
SUB-TOTAL	4,374,642	4,801,122	5,210,431	5,535,738	6,362,175	6,747,853	7,657,474	8,507,061

(Continued)

TABLE 5.8: (Continued)

	1962	1963	1964	1965	1966	1967	1968	1969
Accounted for by Ministry of National Security								
16. Fire Service Pensions	16,065	16,172	24,470	30,294	31,013	35,137	48,539	60,021
17. Fire Service Gratuities	20,644	2,813	42,809	9,975	8,140	38,504	62,926	74,224
18. Police Pensions	672,555	698,955	833,166	850,364	883,883	942,605	1,110,406	1,172,067
19. Police Gratuities	171,029	188,267	240,222	194,885	210,742	529,286	609,811	587,300
20. Trinidad & Tobago Defence Force – Pensions and Gratuities	–	–	–	–	–	–	435	71,679
SUB-TOTAL	880,293	906,207	1,140,667	1,085,518	1,133,778	1,545,532	1,832,117	1,965,291
Accounted for by Ministry of External Affairs								
21. Gratuities to former Heads of Missions	–	–	13,883	5,719	–	1,998	–	–
Accounted for by Ministry of Public Utilities								
22. Railway Pensions	–	–	–	–	–	545,606	670,000	695,924
23. Railway Gratuities	–	–	–	–	–	246,344	200,000	520,475
24. Port Services Pensions	–	–	–	–	–	88,580	125,000	165,838
25. Port Services Gratuities	–	–	–	–	–	104,777	150,000	184,102
SUB-TOTAL						985,307	1,145,000*	1,566,339
GRAND TOTAL	5,254,935	5,707,329	6,351,098	6,626,975	7,495,953	9,280,690	10,634,591	12,038,691

*Figures for 1968 are revised estimates. *SOURCE:* Government Estimates, Trinidad.

FOOTNOTES

[1]Some of the public corporation schemes in the Caribbean are self-administered while others are insured. The self-administered ones tend to operate their asset portfolio partly like the typical private sector scheme (see Chapter 4) and partly like the average public sector plan.

[2]The Widows and Orphans Scheme in Trinidad was begun in 1890 and funding was introduced in 1896; however, funding was terminated in 1910, partly because it was said that there was no local money and capital market in which the funds of the pension scheme could be invested. It is interesting, though, that the White Paper on *Social Security in Trinidad and Tobago* [65] in considering the integration of national insurance with public sector pension schemes recommended a new Widows and Orphans scheme which " . . . . should be funded to allow for administration by an independent body with executive powers to invest collections" (p. 8).

[3]See G. Rhodes, [50].

[4]For 1971, pension benefits as a per cent of central government current expenditure were 4.6 in Guyana and 2.3 in Jamaica.

[5]This reason may not be applicable to some parts of the Caribbean. For example, in Guyana, many of the public corporations have a chronic current deficit, which has to be financed by central government subsidy. On the other hand, it is possible for a public utility with monopoly powers, to pass on, through higher prices, part of unfunded pension costs to the public.

[6]Of course the probability of a general contraction is greater in structurally dependent underdeveloped economies, like those in the Caribbean.

[7]It is assumed in the social welfare function that inter-generational comparisons are possible; for a discussion, see Asimakopulos and Weldon, [5].

[8]Similar transfer effects from partial funding can occur with a private sector scheme; for a discussion, see Asimakopulos and Weldon [4].

[9]Besides its restricted membership, it cannot be said to be a fully fledged pension scheme since only wives and children benefit and not (directly) the contributors; moreover, if the wife of the contributor dies before him, and his children are over 18 years of age, his money is forfeited. Thus a motion at the 1972 annual meeting of the Public Service Association in Guyana was that the Widows and Orphans' scheme should be restructured "with a view to providing such benefits to all contributors as will be no less than the contributor would have obtained had this contribution been used to purchase annuity insurance policies".

[10]At the beginning of 1973, the government of Guyana announced that women in the civil service will in future be eligible for appointment to the permanent pensionable establishment.

[11]This rapid rise in the rate of interest has been reflected in a fall in the securities' market value below cost price, as shown in the high figure for loss of sale of securities in Table 5.2 (but the increase in income probably more than compensates for the capital loss) and again in Table 5.3.

[12]Fortunately, there was little change in the share of pension benefits in total expenditure, between 1954 and 1966; in fact, the share fell from 66.5 per cent in 1954 to 59.6 per cent in 1966.

[13]The conservatism might be also due to a lack of expertise or ability in appraising the worth of various types of assets.

[14]Though market information is often lacking.

[15]The major reason for the statutory limitation was to give colonial investors the assurance of convertibility at all times.

[16]For a general description (though somewhat dated) on the various types of schemes for government employees in Trinidad, see I.L.O. [67] esp. pp. 25-27.

[17]The Government Employees Provident Fund in Trinidad is therefore unique in being partly insured and partly uninsured.

[18]Loans to contributors are very negligible. In 1963, there were 178 such loans for a total value of only $8,259 and these loans fell gradually to 65, for a value of $2,980, by 1970.

[19]Of course the market rate of interest on government securities may not always reflect the community's time preference. Also, social benefits (primary plus secondary) may be underestimated since secondary benefits are difficult to quantify. Conversely, the yield on private sector assets may not reflect certain diseconomies to the rest of the public and may be therefore socially inflated.

[20]Pension coverage in the government sector appears to be high compared with coverage in the private sector. Whereas in 1968 total pension payments out of government revenue were $10,634,591, pension benefits for those self-administered and insured occupational schemes, submitting accounts, were $4,249,591. The figures for these funded occupational plans include a few public corporation schemes; however, the figures do not include the majority of the insured schemes and exclude those lump-sum payments that are probably made to long-service retiring employees by those firms without formal pension schemes.

CHAPTER SIX

NATIONAL PENSION SCHEMES

National Pensions and Social Security

A National Pension Scheme is usually a part, albeit a very important part, of a comprehensive social security programme, in most of the countries which have introduced such schemes. For example, in the social security programme introduced in Caribbean territories, there are six other kinds of benefits besides retirement benefits – Employment Injury Benefits, Maternity Benefits, Sickness Benefit, Invalidity Benefits, Survivors' Benefits and Funeral Grants. In some countries, the scope of social security is even greater and includes, in addition, a health programme, family allowances,[1] and unemployment benefits. In the United Kingdom, for example, national insurance benefits in 1966 were £1,426 m. (see Table 6.1) which were equivalent to 19.4 per cent of central government current expenditure (total contributions to social security were £1,806 m.) or as much as 5.9 per cent of GNP; retirement pensions in the same year accounted for over 75 per cent[2] of national insurance benefits.

Social security in underdeveloped countries is limited not only with respect to scope of benefits but also with respect to its coverage of the population. Whereas about 23 per cent[3] of the population in developed countries contribute to social security, the percentage is much less in most underdeveloped countries. In the Caribbean, the limited coverage is mainly due not only to the lack of financial resources in labour surplus countries but also the high rate of open unemployment, the significant amount of underemployed workers in the agricultural labour force and the large number of self-employed (such as petty traders) who pose a serious problem of incorporation into social security schemes.

There are at least three underlying principles in social security programmes (of which pensions are an integral part). The first is to reduce the 'income loss' and general hardship of any one individual by the technique of pooling, and the spreading of the losses among all contributors. Thus, whereas a private insurance company would require high risk individuals to pay a higher premium, a national insurance scheme does not. The second underlying principle is to redistribute income from (a) those in the higher income bracket and (b) those with a low incidence of risk, to those in the low income range and to those with a high incidence of risk (and who could not be allowed to bear their losses alone). The third underlying principle is to use social security as a means of savings mobilisation for economic development. This third principle is not an unimportant motivation for the setting up of social security schemes in many underdeveloped countries.[4]

TABLE 6.1: NATIONAL INSURANCE BENEFITS IN THE UNITED KINGDOM, 1938, 1950-66 (£m.)

	1938	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Retirement Pensions, Widows Benefits and Guardians Allowances	47	276	294	340	374	383	453	491	513	664	726	750	848	903	1028	1130	1337	1426
%	38.0	71.0	72.2	71.7	70.8	72.0	73.7	73.1	72.9	72.6	73.3	75.2	75.2	75.4	72.8	75.5	75.4	75.3
Sickness and Maternity Benefit	22	77	79	83	99	100	111	120	125	151	160	156	178	189	226	230	283	301
%	17.7	19.8	19.4	17.5	18.8	18.8	18.0	17.9	17.8	16.5	16.2	15.6	15.8	15.6	16.0	15.4	15.9	15.9
Unemployment Benefit	55	20	15	28	27	20	18	22	27	49	51	35	36	55	82	53	55	65
%	44.3	5.1	3.7	6.0	5.1	3.8	3.0	3.3	3.8	5.4	5.2	3.5	3.2	4.5	5.8	3.5	3.1	3.4
Injury and Disablement Benefit	-	14	16	19	24	25	29	33	33	42	45	47	53	56	65	71	85	87
%	–	3.6	3.9	4.0	4.5	4.7	4.7	4.9	4.7	4.6	4.5	4.7	4.7	4.6	4.6	4.7	4.8	4.6
Others (Death Grant, Industrial Death Benefit)	–	2	3	4	4	4	4	6	6	–	8	9	10	10	12	13	15	15

SOURCE: Hauser and Burrows, [29].

There are three possible approaches to financing social insurance. The first approach ('social method') is not to have a system of contributions and to pay the pension and other types of benefit out of general government revenue. The second or 'provident fund' approach is a payroll tax on employers and employees and the paying of the various types of benefit out of an accumulated fund. The third approach is to receive payroll contributions from employers and employees but to make benefit payments in a pay-as-you-go manner, i.e., the unfunded approach.

In discussing the financing of social security in developing countries, Reviglio [52] esp. pp. 511-515 deals with some of the advantages and disadvantages of the first two approaches. Concerning the first approach, one advantage is that it eliminates the cost of collection of social security taxes. A second advantage is that it is not only employers and workers who pay for the social security benefits but all those who own wealth or are in receipt of some sort of income (e.g. dividends and rent). A third advantage is that it avoids any disincentives to the employment of labour that may result from payroll taxes. A fourth advantage is that, whereas the general tax system is fairly progressive, payroll taxes, by themselves, are probably regressive since (a) although they are tax deductible, very low wage earners do not derive full benefits, (b) they are not imposed on those portions of wages and salaries above a certain level and (c) they exclude income from rent, interest and dividends.

One disadvantage of the social method approach is that industries with a high-risk coefficient would be favoured against other industries and this may cause some amount of inefficiency in the economic system. Similarly, where only a part of the work force (and their dependants) is covered by the social security programme, its financing out of general government revenue tends to benefit those who are relatively better off (and to neglect the poorer section of the population who also pay direct and indirect taxation). A second disadvantage is that some people are more willing to pay taxes when such payment can be seen to be directly related to specific benefits.[5] The taxable capacity of the population may therefore be greater when the provident fund method, rather than the social method, is employed. The third disadvantage is that because tax payments are not directly related to social security benefits, there may be a tendency to raise benefits arbitrarily and in those years when there is an increase there may be a disconcerting effect on the general budget.

The above advantages and disadvantages of the social method are reversed when considering the pros and cons of the provident fund approach. The third or unfunded approach has generated some amount of controversy ever since Samuelson demonstrated that, if we assume that the sum of the growth rates of population and the real wage exceeds the rate of interest, a pay-as-you-go social security scheme (where each person supports a portion of the cost of maintaining the retired population in return for which future generations would support him during his retirement) will raise everyone's lifetime consumption (hence welfare) as compared with a funded pension scheme.[6] It would appear

that less funding of social security schemes would imply a lower savings ratio and hence a long-run growth path with higher *per capita* consumption;[7] this path can hardly be recommended for underdeveloped countries, especially with a secular tendency for a rise in the capital-output ratio.

At the present stage of development of Caribbean-type economies the provident fund is probably the most effective method of providing for old age security, for three reasons: Firstly, those workers whose incomes are near to subsistence level are more willing to accede to forced saving at the margin when there is visible evidence of their saving efforts. Secondly, the existence and popular mention of a fund is likely to make the workers more savings conscious and cause a redoubling of savings efforts. The knowledge of the fund is unlikely to have an adverse effect on work effort, partly because jobs are scarce in the labour surplus economies of the Caribbean and partly because unemployment insurance does not exist. Thirdly, the management of a fund is likely to impose a certain degree of financial discipline and encourage investment in those developmental sectors where the social rate of return is high.

Size and Structure of National Pension Funds

Social security schemes were introduced in Jamaica, Barbados and Guyana between 1965 and 1969 and in Trinidad April 10 1972. Despite the fact that the self-employed (mainly peasant farmers and petty traders) are a significant per cent of the labour force, the numerical coverage of these schemes is not unimpressive. For example, in Guyana in May 1971, 146,711 persons were registered out of a possible 150,000 (see Table 6.2); given a population of 730,000, this represents a coverage of 20.1 per cent. Table 6.3 shows the number of contributors, by industry, to the National Insurance Scheme in Jamaica; with a total population of 1,972,000, the number of contributors in 1968 of 362,000[8] represents a coverage of 18.4 per cent, and 438,600 contributors in 1969 represent a coverage of 22.2 per cent. In the fairly urbanized society of Trinidad, the National Insurance Scheme is optimistically expected to involve a quarter million workers which (with a population of 1,021,000) would be equivalent to the relatively high maximum coverage of 24.5 per cent.

Table 6.4 shows the rates of social security contribution in Guyana and Trinidad. In Trinidad, the wage floor and wage ceiling, as bases for contributions, are understandably higher than in Guyana, since income per head is considerably lower in the latter country. The ratio of employer to employee contribution is also higher in Trinidad. (Thus, any adverse effect on employment as a result of this payroll tax is likely to be greater in Trinidad than in Guyana). The higher employer/employee contribution ratio in Trinidad is likely to cause the value of contributions/GNP ratio to be higher than in Guyana, *ceteris paribus*. (In Trinidad, the general contribution rate represents about 8 per cent of

TABLE 6.2: RATE OF PROGRESS OF REGISTRATION OF EMPLOYEES, NATIONAL INSURANCE, GUYANA

	Total	Monthly Increase*
To the end of October, 1969	53,559	53,559*
To the end of November, 1969	68,849	15,290
To the end of December, 1969	84,789	15,940
To the end of January, 1970	93,834	9,045
To the end of February, 1970	98,770	4,936
To the end of March, 1970	104,899	6,129
To the end of April, 1970	110,987	6,088
To the end of May, 1970	115,832	4,845
To the end of June, 1970	119,530	3,698
To the end of July, 1970	122,213	2,683
To the end of August, 1970	125,404	3,191
To the end of September, 1970	129,107	3,703
To the end of October, 1970	132,475	3,368
To the end of November, 1970	135,033	2,558
To the end of December, 1970	136,976	1,943
To the end of January, 1971	139,155	2,179
To the end of February, 1971	140,532	1,377
To the end of March, 1971	143,406	2,874
To the end of April, 1971	144,945	1,539
To the end of May, 1971	146,711	1,766

*Includes August and September of 1969.

SOURCE: National Insurance Scheme, Guyana.

assumed average earnings; the rate for the lowest class is set at 7½ per cent and there are marginal increases above 8 per cent for the higher classes).

Besides the rate of contributions, the level of employment and the distribution of income have an important influence on the size of total contributions. For example, the rate of unemployment is slightly lower in Trinidad[9] than it is in, say, Jamaica and this should enhance the relative size of its social security contributions. Also, the distribution of income in Jamaica (where there is a large peasant sector and the rate of flat rate to wage related contributions is fairly high – see Table 6.3), is probably more skewed than it is in Trinidad and this would adversely affect the relative size of contributions in Jamaica. Table 6.5 shows the level of contributions, investment and other income for the national insurance schemes in the Caribbean. The growth of total contributions is expected to slow down appreciably as maximum coverage of employees and employers[10] is approached.

TABLE 6.3: NUMBER OF CONTRIBUTORS TO NATIONAL INSURANCE SCHEME, BY INDUSTRY, JAMAICA

	1967	1968			1969		
	Total	Deduction * Card (Wage related Contributions)	Stamp** Card (Flat rate Contributions only)	Total	Deduction* Card (Wage related Contributions)	Stamp** Card (Flat rate Contributions only)	Total
Agriculture	66,581	12,100	24,800	36,900	16,000	27,800	43,800
Cane Farming and Sugar Manufacturing	–	34,100	4,800	38,900	36,900	4,500	1,400
Mining and Quarrying	6,729	6,100	–	6,100	7,100	400	7,500
Manufacture (excluding sugar)	51,352	33,800	16,300	50,100	43,400	18,200	61,600
Construction	14,520	17,200	1,200	18,400	28,400	1,900	30,300
Commerce	31,519	20,800	8,100	28,900	29,300	9,000	38,300
Transport, etc.	15,582	14,500	1,500	16,000	17,200	1,800	19,000
Services and Electricity	51,352	28,100	11,100	39,200	41,800	13,200	55,000
Domestic Work	–	–	8,300	8,300	–	8,000	8,000
Government (Central, Local, Statutory Authorities)	96,682	69,600	50,500	120,100	100,500	29,300	129,800
Other (Self-employed in various industries)	19,834	–	–	–	–	3,900	3,900
TOTAL	354,152	236,300	126,600	362,900	320,600	118,000	438,600

* Year beginning 1st January. ** Year beginning 1st April (Relates to Earners of less than $E.C. 28.8 per week).

NOTES: (1) Cane farming and Sugar Manufacturing are included under Agriculture and Domestic Work under Services, for the year, 1967.

(2) 1968 figures are an underestimate as they were based on a 10 per cent sample drawn when a considerable number of employers' returns were still outstanding.

SOURCE: *Economic Survey*, Central Planning Unit, Jamaica, 1971.

TABLE 6.4: RATES OF CONTRIBUTION AND RELATED WAGES, NATIONAL INSURANCE SCHEME. GUYANA AND TRINIDAD – $(E.C.)

Group	Actual Weekly Earning	Corresponding Rounded Monthly Earnings	Employed Persons Weekly Contribution	Employer's Weekly Contributions[1]	Total Weekly Contributions	Relevant Wage for the Purpose of Contributions and Benefits
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I	Under 10.00	Under 43.00	.25	.90	1.15	15.00
II	10.00 – 19.99	43.00 – 86.99	.45	.70	1.15	15.00
III	20.00 – 29.99	87.00 – 129.99	.75	1.15	1.90	25.00
IV	30.00 – 39.99	130.00 – 172.99	1.05	1.55	2.60	35.00
V	40.00 – 49.99	173.00 – 216.99	1.40	2.00	3.40	45.00
VI	50.00 and upwards	217.00 and upwards				
I	Under 16.00	Under 69.00	–	.90	.90	–
II	16.00 – 20.99	69.00 – 90.99	.50	1.00	1.50	–
III	21.00 – 27.99	91.00 – 120.99	.65	1.30	1.95	–
IV	28.00 – 36.99	121.00 – 159.99	.85	1.70	2.55	–
V	37.00 – 47.99	161.00 – 207.99	1.15	2.30	3.45	–
VI	48.00 – 61.99	208.00 – 268.99	1.45	2.90	4.35	–
VII	62.00 – 79.99	269.00 – 346.99	1.85	3.70	5.55	–
VIII	80.00 and over	347.00 and over	2.45	4.90	7.35	–

[1]Contributions payable by an employer in respect of employment injury coverage for an employed person, who has not yet attained the age of sixty-five years, or for an unpaid apprentice shall be fifty cents per week.

SOURCE: (1) *Report of the National Insurance Board*, Guyana.

(2) Act No. 35 of 1971, National Insurance, Trinidad and Tobago.

TABLE 6.5: PERCENTAGE WAGE RELATED AND FLAT RATE CONTRIBUTORS, BY INDUSTRY, JAMAICA

	1968			1969		
	Deduction Card (Wage Related Contributors)	Stamp Card (Flat Rate Contributors)	Total	Deduction Card (Wage Related Contributors)	Stamp Card (Flat Rate Contributors)	Total
	%	%	%	%	%	%
Agriculture	32.8	67.2	100.0	36.5	63.5	100.0
Cane Farming and Sugar Manufacturing	87.7	12.3	100.0	89.1	10.9	100.0
Mining and Quarrying	100.0	–	100.0	94.7	5.3	100.0
Manufacture (excld. sugar)	67.5	32.5	100.0	70.5	29.5	100.0
Construction	93.5	6.5	100.0	93.7	6.3	100.0
Commerce	72.0	28.0	100.0	76.5	23.5	100.0
Transport, etc.	90.6	9.4	100.0	90.5	9.5	100.0
Services and Electricity	71.7	28.3	100.0	76.0	24.0	100.0
Domestic work	–	100.0	100.0	–	100.0	100.0
Government (Central, Local, Statutory Authorities)	58.0	42.0	100.0	77.4	22.6	100.0

NOTES: (1) Self-employed excluded.

(2) The marked decrease in number of Stamp Card users in the Government sector between 1968 and 1969 is not an indication of a rise in wages. The explanation is that Parish Councils and the Public Works Department are changing to the use of Deduction Cards for all workers, regardless of wages earned.

SOURCE: As in Table 6.3

TABLE 6.6: NATIONAL INSURANCE INCOME FROM CONTRIBUTIONS, INVESTMENTS AND OTHER SOURCES, JAMAICA, BARBADOS, GUYANA AND TRINIDAD 1967-72 – $'000(E.C.)

		1967	1968	1969	1970	1971	1972
Jamaica	Contributions	17,300	20,900	22,300	23,800	n.a.	n.a.
	Investment Income	700	1,700	2,700	4,500	n.a.	n.a.
	Other Income	–	–	–	–	–	n.a.
	TOTAL	18,000	22,600	25,000	28,300	n.a.	n.a.
Barbados	Contributions	2,704	5,355	5,803	6,500	n.a.	n.a.
	Investment Income	25	253	503	866	n.a.	n.a.
	Other Income	–	–	150	264	n.a.	n.a.
	TOTAL	2,729	2,608	6,456	7,630	n.a.	n.a.
Guyana	Contributions	–	–	1,981	12,943	13,261	n.a.
	Investment Income	–	–	4	461	834	n.a.
	Other Income	–	–	1	3	5	n.a.
	TOTAL	–	–	1,986	13,407	14,100	n.a.
Trinidad	Contributions	–	–	–	–	–	42,118
	Investment Income	–	–	–	–	–	1,080
	Other Income	–	–	–	–	–	–
	TOTAL	–	–	–	–	–	43,198

SOURCE: (1) *Annual Reports of the National Insurance Fund*, Jamaica.
(2) *Financial Statistics, 1960-70*, Barbados Statistical Service.
(3) *Annual Reports of the National Insurance Board*, Guyana.
(4) Files of the Central Bank of Trinidad.

Table 6.7 shows the rate of pension and other types of national insurance benefits in Trinidad. The benefits are graduated according to earnings class, although there is probably a certain amount of redistribution of income when benefits are compared with contributions. (This aspect of redistribution will be discussed later). The range of pension rates, like the other benefit rates, is quite wide. The weekly retirement or invalidity pension varies from $6.00 in class I to $31.00 in class VIII.

In the early stages of a national insurance scheme pension payments are likely to be a very small proportion of total benefits and of total expenditure. This is because each member of the scheme usually has to make a certain minimum number of contributions before he can qualify for benefits. For example, although the national insurance scheme in Guyana was introduced in 1969, employees began to be eligible for retirement pensions only in 1972. In the early years of such a scheme, therefore, pension benefits are negligible. Tables 6.8 and 6.9 for Barbados and Guyana, respectively, therefore show that sickness (employment injury and other types), rather than pensions, is the major

TABLE 6.7: WEEKLY RATE OF PENSION AND OTHER TYPES OF NATIONAL INSURANCE BENEFITS, TRINIDAD – $(E.C.)

Earnings Class	Retirement or Invalidity Pension	Sickness or Maternity Benefits	RATES OF EMPLOYMENT INJURY BENEFITS					RATES OF SURVIVOR BENEFITS*			
			Injury Pension to Insured Person	DEATH BENEFITS							
				Widow/ Widower 50% of (3)	Dependent Child 20% of (3)	Dependent Orphan 40% of (3)	Dependent Parent 15% of (3)	Widow 50% of (1)	Dependent Child 20% of (1)	Dependent Orphan 40% of (1)	Dependent Parent 15% of (1)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
I	6.00	7.20	8.00	4.00	1.60	3.20	1.20	3.00	1.20	2.40	0.90
II	8.00	11.10	12.50	6.25	2.50	5.00	1.87	4.00	1.60	3.20	1.20
III	10.00	14.70	16.50	8.25	3.30	6.60	2.47	5.00	2.00	4.00	1.50
IV	13.00	19.50	22.00	11.00	4.40	8.80	3.30	6.50	2.60	5.20	1.95
V	16.00	25.50	28.50	14.25	5.70	11.40	4.27	8.00	3.20	6.40	2.40
VI	20.00	33.00	37.00	18.50	7.40	14.80	5.55	10.00	4.00	8.00	3.00
VII	25.00	42.60	47.50	23.75	9.50	19.00	7.12	12.50	5.00	10.00	3.75
VIII	31.00	54.00	60.00	30.00	12.00	24.00	9.00	15.00	6.20	12.40	4.65

*In addition there is a funeral grant of $100.

SOURCE: Act No. 35 of 1971, National Insurance, Trinidad

TABLE 6.8: BENEFIT PAYMENTS, AND OTHER EXPENDITURE, NATIONAL INSURANCE FUND, BARBADOS – $'000 (E.C.)

	BENEFITS				Administrative Expenses	Grand Total	(4) as a % of (6)
	Sickness	Maternity	Other	Total			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1967							
Absolute Value of Benefit	49	–	1	50	11	61	–
% of total benefits	98.0	–	2.0	100	–	–	82.0
1968							
Absolute Value of Benefit	315	110	35	460	54	514	–
% of total benefits	68.5	23.9	7.6	100	–	–	89.5
1969							
Absolute Value of Benefit	415	152	144	711	74	785	–
% of total benefits	58.4	21.4	20.3	100	–	–	90.6
1970							
Absolute Value of Benefit	440	169	177	786	99	885	–
% of total benefits	56.0	21.5	22.5	100	–	–	88.8

SOURCE: Financial Statistics, 1960-70, Barbados Statistical Service

TABLE 6.9: BENEFIT PAYMENTS AND OTHER EXPENDITURE, NATIONAL INSURANCE SCHEME, GUYANA $(E.C.)

	INDUSTRIAL			OTHER BENEFITS										
	Injury	Disable-ment	Death	Sick-ness	Mater-nity	Funeral	Sur-vivors	Inva-lidity	Old Age Grant	Total	Medical Care	Adminis-trative Expenses	Grand Total	(10) as % of (13)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
1970														
Absolute Value of Benefit	334,133	18,271	15,294	19,294	16,711	800		–	45	404,548	61,764	1,091,060	1,557,380	–
% of total benefits	82.5	4.5	3.8	4.9	4.1	0.2		–	0.01	100.0	–	–	–	25.9
1971														
Absolute Value of Benefit	813,785	146,207	35,250	429,453	140,528	35,756	858	195	13,614	1,615,646	256,230	1,479,149	3,351,025	–
% of total benefits	50.4	9.0	2.2	26.6	8.7	2.2	0.05	0.01	0.8	100.0	–	–	–	48.2

SOURCE: Based on data in *Annual Reports of the National Insurance Scheme*, Guyana

TABLE 6.10: FINANCIAL OPERATIONS OF THE NATIONAL INSURANCE SCHEME, GUYANA, 1969-1971 $(E.C.)'000

	1969	1970	1971
1. Current Receipts	2,404.4	13,406.7	15,322.2
2. Current Expenditure	190.5	1,655.0	3,664.1
3. Current Surplus or Deficit (1)–(2)	2,213.9	11,751.7	11,658.1
4. Capital Expenditure	20.8	190.0	499.9
5. Capital Revenues	–	–	–
6. Overall Surplus or Deficit (5+3–4)	2,193.1	11,561.7	11,158.2
Financing			
7. Bank Borrowing	–	–	–
8. Other Financing	–2,193.1	–11,561.7	–11,158.2

item of benefit payments in the immature years of the national insurance scheme.[11]

In the early years, also, administrative expenses are expected to be a not insignificant proportion of total expenditure. However, the share of administrative expenditure, in Guyana (wages and salaries were 67.1 per cent and 68.0 per cent of total administrative expenditure in 1970 and 1971, respectively) was 70.0 per cent and 44.1 per cent in 1970 and 1971, respectively, and largely accounts for the considerable size of current expenditure (see Table 6.10); such a large share should cause some amount of bureaucratic concern, especially when we note that the share of administrative expenditure in Barbados in 1967 was 18.0 per cent and in the following years never exceeded 11.2 per cent. It may be that social security savings are not being mobilized in Guyana at minimum cost.[12]

Because pension benefits are relatively low in early years of a national scheme, the fund is likely to accumulate at a very rapid rate during this period. Table 6.11 shows the size of the national insurance fund in the Caribbean at the end of the years 1967 to 1971. As the coverage of the national insurance schemes increases, the balance of the fund at the end of the year as a percentage of GDP at factor cost, is increasing appreciably; this rate of increase is, however, expected to slow down in the near future. It would appear that the mobilization capacity of the fund is greatest in Barbados. (By July 1972, the reserves of this country's national insurance scheme were $32.5m. for 116,570 registered persons, with $3.9m. paid out in benefits to claimants). In the absence of data we cannot say to what extent this is due to differences between the Caribbean territories in (a) the share of wages (b) rates of employment (c) employment structure (e.g. wage earning/self employed labour in agriculture and the relative size of this sector) and personal income distribution or (d) rates of contribution.

TABLE 6.11: SIZE OF NATIONAL INSURANCE FUND AT END OF YEARS 1967-71, BARBADOS, JAMAICA AND GUYANA – $'000 (E.C.)

		BARBADOS		JAMAICA		GUYANA	
		Annual Balance	Balance in Fund at end of year	Annual Balance	Balance in Fund at end of year	Annual Balance	Balance in Fund at end of year
Absolute Value							
	1967	2,668	2,668	15,600	15,600	–	–
	1968	5,094	7,762	19,900	35,500	–	–
	1969	5,671	13,433	22,300	57,800	2,218	2,218
	1970	6,745	20,178	25,400	83,200	11,849	14,067
	1971	n.a.	n.a.	n.a.	n.a.	10,749	24,816
Fund as % of GDP at Factor Cost							
	1967	–	1.4	–	0.9	–	–
	1968	–	3.6	–	1.9	–	–
	1969	–	5.7	–	2.8	–	0.5
	1970	–	7.2	–	3.6	–	3.0
	1971	–	n.a.	–	n.a.	–	5.0

NOTES: (1) Figures for Jamaica are rounded. (2) GDP figures are provisional

SOURCE: As in previous Tables

Impact of the National Fund

A national pension scheme can have a number of important effects on the economy. National pensions may have a stimulating or de-stimulating effect on private pension schemes and other types of savings, depending on circumstances. A national pension plan, in conjunction with other elements of a national insurance scheme, may also have an effect on the employment of labour, the distribution of income and the growth of the economy.

We have previously mentioned that the introduction of a national pension scheme may stimulate people to save more in other media if they now think that they can really be independent in their post-retirment lives. On the other hand, the introduction of a national insurance scheme may cause people to want to reduce their other savings, especially if they had already arrived at an optimum level for use in their old age. Thus, the introduction of a national pension scheme may have an adverse effect (sometimes temporary) on the growth of private sector pension schemes. For example, the 10,000 oil workers in Trinidad once gave the Oilfield Workers Trade Union (O.W.T.U.) a mandate to approach government for exemption from the proposed National Insurance Scheme: "O.W.T.U.'s argument for exemption is that benefits offered by the oil companies are so high that contribution to both private and national pension schemes would mean paying more for less benefits".[13] The suggestion, therefore, is that a single contribution from the employee (say 8-10 per cent) should cover both his national insurance and occupational pension scheme commitments and that, if necessary, either the contribution to the occupational pension scheme should be scaled down or the contribution to the national insurance scheme should be graduated in the required manner. It is said that this automatic system of adjustment is advantageous from both the employee's and the employer's point of view.[14] From the employee's point of view, his rate of contribution and pension would remain the same no matter what changes are made in the national insurance scheme. This may be especially appealing to very low income earners whose present consumption needs are hardly being satisfied and who, therefore, tend to place less emphasis on saving for old age *vis-à-vis* consumption in the present. From the employer's point of view he would no longer have to change the contract terms of the occupational scheme every time there is a change in the national insurance scheme;[15] only administrative alterations would be necessary for changes in the shares of contributions and benefits between the two schemes.[16]

It would appear as though the maximization of savings was not a very important factor (at least in Guyana) in the introduction of a national insurance scheme covering pensions and other social security benefits.[17] For example, it would appear that there is no explicit mention anywhere of the national insurance scheme being used as a means of mobilizing savings in Guyana for development. The emphasis seems always to be on benefits rather than on finance. "The basic and underlying philosophy of the scheme was to extend comprehensive social security coverage to as many workers as the limited

resources of the country could possibly cater, and in keeping with the egalitarian socialist concept to secure, the greatest good for the greatest number".[18] In the section of the report headed 'objects', the National Insurance Board[19] then went on to vaguely say that:

> In Guyana the basic objectives of National Insurance are that:-
>
> (a) Rights to benefits must be earned by the payment of contributions.
>
> (b) The rates of contributions payable and the level of benefits receivable are related to the income earned.
>
> (c) Private pension schemes are encouraged especially for workers earning high incomes as National Insurance coverage is at present limited to the first $217 of the monthly salary or the weekly equivalent of $50.
>
> (d) Medical treatment and treatment required for functional rehabilitation are provided for insured victims of industrial accidents and those suffering from occupational diseases.
>
> (e) Registration of all employers and workers.

This lack of emphasis on the savings[20] aspect of the national insurance scheme in Guyana is also probably reflected in the fact that when the scheme was set up none of the 13 man Board appeared to come from either the Central Bank or the Ministry of Economic Development.[21] The officials seemed to be mainly trade unionists (which is not necessarily a bad thing) or officials of the Ministry of Labour and Social Security. It is not surprising, therefore, that one estimate (see Tables 6.12 and 6.13) based on the current rates of contribution, benefit, administrative expenditure and investment income (slightly deflated) showed that:-

> (a) contributions alone will be insufficient to cover expenditure from about 1980 onwards;
>
> (b) contributions plus interest on investments will be insufficient to cover expenditure from about 1985 onwards and reserves will begin to be used; and
>
> (c) unless contributions are increased in the meantime, reserves will be exhausted about year 2003. Matthews [37].

It cannot be said that the national insurance authorities in Guyana are very liberal (or expeditious) in dispensing benefits since complaints have frequently been made by the public. Table 6.14 shows the amount of claims allowed relative to the amount of claims received in 1970.[22]

If social security benefits were the overriding aim of national insurance schemes in the Caribbean, rather than the mobilization of savings, then, logically, some attempt should also have been made to provide unemployment benefits. There is great concern to prevent income loss and ". . . to provide for the coverage of the major hazards to which the population might be exposed *during* working life . . . ", White Paper [64] p. 3 (my emphasis), but a very significant proportion of the people of working age in a labour surplus economy has no work or income whatsoever, to protect. Quite apart from the fact that unemployment insurance can be very costly in a labour surplus economy, there

TABLE 6.12: ESTIMATED INCOME FROM CONTRIBUTIONS AND ESTIMATED EXPENDITURE ON BENEFITS, NIS, GUYANA, 1972-2003 – $m. (E.C.)

YEAR	ESTIMATED INSURABLE		ESTIMATED CONTRIBUTIONS		ESTIMATED COST OF PRESENT BENEFITS							
	Wages of employed persons	Income of self-employed persons	Employed persons 7.5% of wages	Self-employed persons 5% of income	Total (3)+(4)	% of wages for employed persons	Value of employees benefits	% of income of self-employed persons	Value of self-employed benefits	Total costs of benefits (7)+(9)	Estimated cost of survivors' pensions	Grand total (10)+(11)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1972	162	53	12.2	2.2	14.4	2.89	4.7	1.60	0.5	5.2	n.a.	5.2
1973	162	53	12.2	2.6	14.8	3.92	6.4	1.60	0.6	7.0	n.a.	7.0
1974	162	53	12.2	2.9	15.1	3.96	6.4	2.60	1.1	7.5	n.a.	7.5
1975	178	53	13.4	3.2	16.6	5.18	9.2	2.92	1.4	10.6	n.a.	10.6
1976	178	58	13.4	3.5	16.9	5.22	9.3	4.10	2.4	11.7	0.8	12.5
1977	178	58	13.4	3.5	16.9	5.26	9.4	4.10	2.4	11.8	0.8	12.6
1978	178	58	13.4	3.5	16.9	5.30	9.4	4.10	2.4	11.8	0.8	12.6
1979	178	58	13.4	3.5	16.9	5.34	9.5	4.10	2.4	11.9	0.8	12.7
1980	190	58	14.3	3.5	17.8	6.42	12.2	4.10	2.4	14.6	1.0	15.6
1981	190	62	14.3	3.7	18.0	6.46	12.3	5.14	3.2	15.5	1.1	16.6
1982	190	62	14.3	3.7	18.0	6.50	12.4	5.14	3.2	15.6	1.1	16.7
1983	190	62	14.3	3.7	18.0	6.54	12.4	5.14	3.2	15.6	1.1	16.7
1984	190	62	14.3	3.7	18.0	6.58	12.5	5.14	3.2	15.7	1.1	16.8
1985	201	62	15.1	3.7	18.8	7.23	14.5	5.15	3.2	17.7	1.2	18.9
1986	201	66	15.1	4.0	19.1	7.27	14.6	5.75	3.8	18.4	1.3	19.7

(Continued)

TABLE 6.12: (Continued)

YEAR	ESTIMATED INSURABLE		ESTIMATED CONTRIBUTIONS		ESTIMATED COST OF PRESENT BENEFITS							
	Wages of employed persons	Income of self-employed persons	Employed persons 7.5% of wages	Self-employed persons 5% of income	Total (3)+(4)	% of wages for employed persons	Value of employees benefits	% of income of self-employed persons	Value of self-employed benefits	Total costs of benefits (7)+(9)	Estimated cost of survivors' pensions	Grand total (10)+(11)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1987	201	66	15.1	4.0	19.1	7.31	14.7	5.75	3.8	18.5	1.3	19.8
1988	201	66	15.1	4.0	19.1	7.37	14.8	5.75	3.8	18.6	1.3	19.9
1989	201	66	15.1	4.0	19.1	7.39	14.8	5.75	3.8	18.6	1.3	19.9
1990	212	66	15.9	4.0	19.9	7.97	16.8	5.75	3.8	20.6	1.4	22.0
1991	212	70	15.9	4.2	20.1	7.97	16.8	6.31	4.4	21.2	1.5	22.7
1992	212	70	15.9	4.2	20.1	7.97	16.8	6.31	4.4	21.2	1.5	22.7
1993	212	70	15.9	4.2	20.1	7.97	16.8	6.31	4.4	21.2	1.5	22.7
1994	212	70	15.9	4.2	20.1	7.97	16.8	6.31	4.4	21.2	1.5	22.7
1995	222	70	16.7	4.2	20.9	8.47	18.8	6.31	4.4	23.2	1.6	24.8
1996	222	73	16.7	4.4	21.1	8.47	18.8	6.81	5.0	23.8	1.7	25.5
1997	222	73	16.7	4.4	21.1	8.47	18.8	6.81	5.0	23.8	1.7	25.5
1998	222	73	16.7	4.4	21.1	8.47	18.8	6.81	5.0	23.8	1.7	25.5
1999	222	73	16.7	4.4	21.1	8.47	18.8	6.81	5.0	23.8	1.7	25.5
2000	231	73	17.3	4.4	21.7	8.88	20.5	6.81	5.0	25.5	1.8	27.3
2001	231	76	17.3	4.5	21.8	8.88	20.5	7.22	5.5	26.0	1.8	27.8
2002	231	76	17.3	4.5	21.8	8.88	20.5	7.22	5.5	26.0	1.8	27.8
2003	231	76	17.3	4.5	21.8	8.88	20.5	7.22	5.5	26.0	1.8	27.8

NOTES: (1) The figures for self employed persons' contributions and benefits for 1972, 1973, 1974 and 1975 are based on 60 per cent, 70 per cent, 80 per cent and 90 per cent compliance, respectively.
(2) The figures for 1987 onwards are very tentative.

SOURCE: I.L.O. Adviser's Long Term Estimates, N.I.S., Guyana, June, 1971.

TABLE 6.13: ESTIMATE OF THE SURPLUS OF THE NATIONAL INSURANCE SCHEME, GUYANA, 1971-2003 – $m. (E.C.)

YEAR	Estimated Total Contributions	Estimated Cost of Total benefits	Estimated Cost of Administration	Estimated Capital Costs	Estimated Total Costs (2)+(3)+(4)	Surplus Income or Deficiency (1)–(5)	Estimated Income from Temporary Investment of Surplus	Estimated Income from Permanent Investment	Accumulated Surplus
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1971	–	–	–	–	–	–	–	–	22.3
1972	14.4	5.2	2.2	1.2	8.6	5.8	0.1	0.9	29.1
1973	14.8	7.8	2.2	1.2	10.4	4.4	0.1	1.6	35.2
1974	15.1	7.5	2.2	–	9.7	5.4	0.1	1.4	42.1
1975	16.6	10.6	2.3	–	12.9	3.7	0.1	1.7	47.6
1976	16.9	12.5	2.4	–	14.9	2.0	0.1	1.9	51.6
1977	16.9	12.6	2.4	–	15.0	1.9	Negligible	2.1	55.6
1978	16.9	12.6	2.4	–	15.0	1.9	do	2.2	59.7
1979	16.9	12.7	2.4	–	15.1	1.8	do	2.4	63.9
1980	17.8	15.6	2.5	–	18.1	–0.3	none	2.6	66.2
1981	18.0	16.6	2.5	–	19.1	–1.1	do	2.6	67.7
1982	18.0	16.7	2.5	–	19.2	–1.2	do	2.7	69.2
1983	18.0	16.7	2.5	–	19.2	–1.2	do	2.8	70.8
1984	18.0	16.8	2.5	–	19.3	–1.3	do	2.8	72.3
1985	18.8	18.9	2.6	–	21.5	–2.7	do	2.9	72.5
1986	19.1	19.7	2.7	–	22.4	–3.3	do	2.9	72.1

(Continued)

TABLE 6.13: (Continued)

YEAR	Estimated Total Contributions	Estimated Cost of Total benefits	Estimated Cost of Administration	Estimated Capital Costs	Estimated Total Costs (2)+(3)+(4)	Surplus Income or Deficiency (1) (5)	Estimated Income from Temporary Investment of Surplus	Estimated Income from Permanent Investment	Accumulated Surplus
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1987	19.1	19.8	2.7	–	22.5	–3.4	none	2.9	71.6
1988	19.1	19.9	2.7	–	22.6	–3.5	do	2.9	71.0
1989	19.1	19.9	2.7	–	22.6	–3.5	do	2.8	70.3
1990	19.9	22.0	2.8	–	24.8	–4.9	do	2.8	68.2
1991	20.1	22.7	2.8	–	25.5	–5.4	do	2.7	65.5
1992	20.1	22.7	2.8	–	25.5	–5.4	do	2.6	62.7
1993	20.1	22.7	2.8	–	25.5	–5.4	do	2.5	59.8
1994	20.1	22.7	2.8	–	25.5	–5.4	do	2.4	56.8
1995	20.9	24.8	2.9	–	27.7	–6.8	do	2.3	52.3
1996	21.1	25.5	3.0	–	28.5	–7.4	do	2.1	47.0
1997	21.1	25.5	3.0	–	28.5	–7.4	do	1.9	41.5
1998	21.1	25.5	3.0	–	28.5	–7.4	do	1.7	35.8
1999	21.1	25.5	3.0	–	28.5	–7.4	do	1.4	29.8
2000	21.7	27.3	3.1	–	30.4	–8.7	do	1.2	22.3
2001	21.8	27.8	3.1	–	30.9	–9.1	do	0.9	14.1
2002	21.8	27.8	3.1	–	30.9	–9.1	do	0.6	5.6
2003	21.8	27.8	3.1	–	30.9	–9.1	do	0.2	–3.3

NOTES: (1) Estimated costs of administration are equivalent to 1% of insurable wages and income.

(2) The rate of interest used by the actuary for both temporary (average of 6 months) and permanent investment was 4% whereas the current rates were 6% and 7%, respectively.

SOURCE: I.L.O. Adviser's Long Term Estimates, N.I.S. Guyana, June, 1971.

TABLE 6.14: CLAIMS RECEIVED RELATIVE TO CLAIMS ALLOWED, NATIONAL INSURANCE SCHEME, GUYANA, 1970

Type of Benefit	Claims Received	Claims Allowed	Claims Disallowed	Claims Outstanding
Sickness	1,465	1,066	178	221
Maternity	329	280	14	35
Funeral	43	14	–	29
Survivors	1	–	–	1
Old Age	5	1	4	–
TOTAL	1,843	1,361	196	286

SOURCE: Annual Report of the National Insurance Board, 1970.

seems to be a mental and moral barrier against 'subsidizing' idleness in the Caribbean.[23] Descended from a slave society in which there was automatic full employment, the typical middle-class individual finds it difficult to understand how it is that an able-bodied person who really wants work can be unemployed. This sort of hostility (in which the unemployed rather than unemployment was seen as the curse) also existed in developed economies.[24] However, unemployment benefits were introduced in many developed economies because a high level of unemployment was considered a temporary phenomenon,[25] rather than the chronic phenomenon it is in the Caribbean (and in many other underdeveloped countries).

The need for some sort of unemployment insurance becomes even greater if we assume that a national payroll tax may have an adverse effect on employment. A payroll tax affects employees on the supply side and employers on the demand side. In a low income labour surplus economy, the supply of labour would hardly be affected because employees place much greater importance on income (work) than on leisure. On the demand side, a rise in the cost of labour would cause employers to want to pass the increase backwards onto labour (by curtailing future wage increase)[26] or forward onto consumers, by increasing prices. In a small open economy, whose export industries are price-takers in the outside world, the effect is likely to be backward, rather than forward. Thus the national payroll tax may be a factor contributing (or capable of contributing in the future) to the displacement of labour by capital[27] in the main export industries in the Caribbean.[28] And, unless the payroll funds are spent on developmental projects, their disbursement would not eventually cause a sufficiently offsetting employment effect because of the extreme openness of the Caribbean economies. However, there are two factors which may tend to reduce the adverse effect on the employment of labour. Firstly, some of the funds may return to the employer via either industrial mortgages, equity or loans from

TABLE 6.15: NUMBER OF INDUSTRIAL BENEFITS PAID IN THE WAGE GROUPS AND THE TOTAL NUMBER OF DISALLOWANCES, NIS, GUYANA 1970

Wage Group(s)		Numbers Paid
Group I		781 + 14(3)
Group II		2373 + 27(8)
Group III		2199 + 36(9)
Group IV		1218 + 13(4)
Group V		880 + 19(8)
Total I – V		7451 + 109(32)
	=	7,592
Number of Disallowances		1,314
GRAND TOTAL		8,906*

+Denotes 'Disablement Benefits'.

( )Denotes 'Death Benefits'.

*There were two (2) wage groups which were not stated in two (2) 'death cases'. These two (2) plus the 8906 cases give the total number of accidents i.e. (2 + 8,906 = 8,908).

SOURCE: *Annual Report of the National Insurance Board,* 1970.

banks in which the insurance funds have been deposited; external financing, therefore, partly acts as a substitute for internal financing. Secondly, the acquisition of huge social security funds by the government may reduce the frequency of increase in the rate of company taxation. (A reduction in the rate of increase of indirect taxation would also dampen wage demands and make labour relatively cheaper).

There are three other features of payroll taxes which distort the labour mix. One is the wage ceiling, i.e. the wage above which no additional payroll tax is paid. Given the universal tendency for rising wages, this ceiling is likely to become increasingly distorting over time with the employment of high wage labour becoming less and less affected by the existence of the payroll tax. Thus the skilled/unskilled ratio may tend to increase; there may also be a tendency to increase overtime payments rather than to employ more hands. A second distorting feature is the differential tax applied to various classes or categories of labour.[29] In Guyana and Trinidad national insurance schemes, there are five and eight distinct earnings classes, respectively. A third distorting effect is that the tax is paid for each person employed, i.e. the tax is a marginal rather than a lump-sum tax and would adversely affect growing labour intensive industries.[30]

The system of national pensions and general social security benefits has a number of redistributive effects. Elements of redistribution are contained in both the pension and non-pension aspects of the national insurance scheme and are mainly caused by the differentiated rates of both benefits and contributions. With respect to benefits under the national pension scheme, in Guyana, for example, there is, firstly, inter-generational redistribution from young contributors to old contributors in order to allow the latter to secure the required 750 contributions for a 60 per cent old-age pension;[31] a similar redistribution occurs with respect to invalidity pensions. Secondly, there are inter-occupational redistributive effects. Because some industries and occupations are less risky than others the Industrial Injury Benefits scheme redistributes income from white collar to blue collar employees. In earnings groups I to III, the insured person receives a weekly benefit of between 100 per cent and 60 per cent of his actual wages, whereas in earnings group IV and V the weekly rate of Injury Benefit is 60 per cent of the relevant wage; Table 6.15 shows the number of Industrial Benefits paid in the various groups and the total number of disallowances.[32] Thirdly, there exists intra-group and intra-personal redistribution. Maternity benefits involve redistribution from males to females and sickness benefits involve redistribution from the strong to the weak.

On the contributions side, a major aspect of redistribution concerns the fact that there is both a wage floor and a wage ceiling. In Guyana, the amount of contribution that employees in earnings class I are required to make is very negligible (in Trinidad, it is zero); the rate of contribution thereafter is 7½ per cent, rising to slightly over 8 per cent for the highest earnings class. However, this effect of favouring low wage earnings is counteracted somewhat by a number of other factors. Firstly, there is a relatively low wage ceiling. Secondly, after spells of temporary casual employment some poor people may not, at the end of their lives, have made enough contributions to be eligible for benefits and this would be equivalent to a transfer from temporary to permanent workers. Thirdly, the granting of tax deductions on contributions would tend to have the perverse effect of favouring those in the higher earnings classes since the poor are often non-taxable anyway (because of the large number of children that they have) and therefore unable to benefit fully from the tax deduction.[33] In the long run, however, the availability of a pension in one's post-retirement life may remove an important social security motive for desiring many children.[34] (Perhaps the lack of adequate social security is one of the reasons why, in some countries, modern birth control methods do not have the dramatic effects that are expected and serve only to restrict the actual size of the family to the desired or optimum size, given the social conditions). Lastly, if contributions are inadequate and government has to subsidize the system of benefits, this would be tantamount to a redistribution from non-wage earning taxpayers to wage earners.[35]

A national insurance scheme can have a not insignificant effect on the rate of economic growth in a country, assuming that the large volume of forced savings is used for investment, rather than for consumption purposes. The composition of investment is almost as important as the volume of investment. Table 6.16, on the asset structure of the National Insurance Scheme in Barbados, shows that less than a quarter of the total assets are Barbados government securities and that the bulk of the assets is held in the form of fixed deposits. This is unfortunate for at least three reasons: Firstly, it implies that the government has relinquished control over the disposition of the funds to the banking system and so has lost the opportunity, at least temporarily, of influencing the direction of investment, despite frequent public pronouncements about the need for a change in the composition of output and more rapid structural transformation.[36] Secondly, there is no guarantee that the commercial banks, with the national insurance funds now at their disposal, will favour customers seeking loans for investment purposes over consumer borrowers. Thirdly, the commercial banking system is still entirely in the hands of multinational financial corporations and this, in itself, causes a great deal of credit distortion; the putting of these large national insurance funds at the disposal of these foreign banks not only aggravates the misallocation of credit but also strengthens their position. It is essential that a large national insurance fund does not frustrate, and is fully integrated with other government policies for promoting faster economic development.

It appears that the national insurance scheme in Barbados justifies its asset portfolio structure on the grounds that in exchange for fixed deposits the commercial banks had agreed to substantially increase their mortgage loans. Table 6.17 shows that loans for building, construction, land development and real estate have indeed risen appreciably (although it is possible that only members of the middle class are directly benefiting). However, personal loans have also increased their share and loans to such important sectors as agriculture, manufacturing and public utilities have tended to fall as percentages of total assets. The overall credit distortion, therefore, remains and may even have been worsened.

Tables 6.18, 6.19 and 6.20 on the Jamaica, Guyana, and Trinidad economies, respectively, show a certain preference for the holding of government securities. Only a very small proportion of the government securities are believed to be foreign government securities.[37] (The Trinidad scheme also holds a large proportion of fixed deposits and so many of the above criticisms of the Barbados national insurance scheme are applicable here). We do not have enough data to say whether the Caribbean governments are pursuing an optimal investment policy, in the various developmental programmes. However, the huge national insurance funds at their disposal certainly make it possible for them to be less dependent on external debt and less subject to the distortions and fragmentation in development planning that such dependence creates. Tables 6.21

TABLE 6.16: ASSET STRUCTURE OF THE NATIONAL INSURANCE SCHEME, BARBADOS, 1967-70 – $'000 (E.C.)

YEAR	CASH		INVESTMENTS*								
	In Hand	At Bank	Fixed Deposit	(3) as a % of (11)	Barbados Government Treasury Bills	Barbados Government Debentures	(5)+(6) as % of (11)	Foreign Government Securities	(8) as a % of (11)	Other Assets	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1967	1	162	2,150	80.6	345	–	12.9	–	0	9	2,668
1968	6	19	5,400	69.6	826	1,000	23.5	484	6.2	27	7,762
1969	57	40	10,625	79.1	–	1,985	14.8	726	5.4	–	13,433
1970	74	13	12,175	60.3	–	4,905	24.3	1,211	6.0	–	20,178

*Does not include $1.8m. invested in Barbados Development Bank during 1970.

SOURCE: Based on data in *Financial Statistics, 1960-70*, Barbados Statistical Service.

TABLE 6.17: SECTORAL DISTRIBUTION OF BANKS' LOANS AND ADVANCES, BARBADOS, 1968-72 – $ (E.C.)'000

	Dec. 1968	%	Dec. 1969	%	Dec. 1970	%	Dec. 1971	%	March 1972	%	June 1972	%	Sept. 1972	%	Dec. 1972	%
Agriculture	13,523	15.9	11,489	8.6	11,588	6.8	13,225	6.7	15,291	7.5	15,654	7.6	13,392	6.2	15,686	6.9
Manufacturing	9,743	11.4	11,698	8.7	12,673	7.5	15,901	8.6	16,840	8.3	16,098	7.7	11,682	5.4	18,102	8.0
(1) Food and Non-Alcoholic Beverages	883	1.0	2,150	1.6	3,329	2.0	3,466	1.7	2,863	1.1	3,174	1.5	2,448	1.1	2,865	1.3
(2) Alcoholic Beverages and Tobacco	587	.7	732	.5	538	.3	1,333	.8	685	.6	1,040	.5	695	.3	1,166	.5
(3) Clothing and Accessories	1,119	1.3	1,070	.8	1,899	1.1	3,183	1.6	3,313	1.6	3,106	1.5	2,782	1.3	2,870	1.3
(4) Other Industries	7,154	8.4	7,746	5.8	6,907	4.1	8,919	4.5	9,979	5.0	8,778	4.2	5,757	2.7	11,201	4.9
Distributive Trades	20,330	23.8	24,819	18.5	29,010	17.1	37,853	19.2	44,415	21.8	46,901	22.6	47,834	22.3	49,250	21.8
Tourism	6,447	7.5	24,171	18.0	22,335	13.1	24,675	12.5	28,198	13.8	32,341	15.6	30,786	14.3	24,424	10.8
Transport	987	1.1	1,340	1.0	3,820	2.2	4,648	2.3	3,937	1.9	2,282	1.1	2,558	1.2	7,502	3.3
Public Utilities (gas, electricity, telephone)	7,020	8.2	14,905	11.1	16,001	9.4	12,504	6.3	11,504	5.6	12,417	6.0	11,527	5.4	7,081	3.1
Building and Construction	2,708	3.2	(--	–	–	–	–	–	–		–	–	–	–	–	–
Land Development and Real Estate	2,247	2.6	(7,985	5.9	15,747	9.3	19,723	10.0	16,745	8.2	17,161	8.3	16,883	7.9	25,552	11.3
Personal	11,777	13.8	22,157	16.5	31,494	18.5	26,161	18.3	40,392	19.8	42,244	20.4	46,284	21.5	51,868	22.9
Other Advances	10,664	12.5	15,819	11.7	27,325	16.1	31,800	16.1	26,631	13.1	22,123	10.7	33,821	15.8	26,896	11.9
Total Loans and Advances	85,446	100	134,383	100	169,993	100	197,490	100	203,953	100	207,221	100	214,767	100	226,341	100
Per cent of Long Term Loans to Total Loans	30.1		23.9		30.1		31.9		28.1		29.0		26.6		28.0	

SOURCE: Economic and Financial Review, East Caribbean Currency Authority, December, 1972.

TABLE 6.18: ASSET CHANGES OF THE NATIONAL INSURANCE SCHEME, JAMAICA, 1967-1970 – $m(E.C.)

	1967	1968	1969	1970
Cash and Bank Balances	–	0.5	3.6	0.5
Domestic Treasury Bills	5.5	−3.6	−1.9	−2.2
Other Government Securities	7.4	21.6	24.5	27.1
Foreign Assets	2.4	0.2	−2.4	–
Other Assets	0.2	1.2	−1.4	–

SOURCE: *Annual Reports of the National Insurance Fund,* Jamaica.

and 6.22 show the great reliance on the National Insurance Fund in the domestic borrowing of the central government of Jamaica and Guyana, respectively.

Generally, in the national insurance schemes of the Caribbean territories, there is so far a distinct absence of holdings of equity, business securities, mortgages and real estate. This is somewhat unfortunate for the development of the private capital market since these types of assets are long term (as the majority of their holdings of government securities also are) and would have tended to match the liabilities of the national insurance scheme, which are also mainly long term (the non-pension liabilities are not as long term as the pension liabilities). The national insurance scheme should be particularly interested in financing residential housing (a good which serves a fundamental social need) since this would cause a logical integration with the general social security system;[38] if the problem of servicing mortgages is beyond the administrative capacity of the national insurance schemes, alternative investment should be made in real estate and mortgage finance companies. (Besides being labour intensive, house building can have an important developmental effect if most of the building materials and furniture are locally produced). Of course, this claim for investment by the national insurance schemes (acting as development bankers) in assets other than government securities pre-supposes a significant role for the private sector in the economic transformation of the Caribbean; it is, however, possible that future Caribbean governments may be brave enough to choose the socialist path.

In Trinidad, it would appear that a specific (though only permissive) role is envisaged for its National Insurance Scheme in the development of the private capital market. Securities in which the funds of the scheme may be invested include bonds, debentures and other evidences of indebtedness of a corporation or guarantees by a corporation carrying on business in Trinidad and Tobago, preferred shares of such a corporation, fully paid ordinary shares of such a

TABLE 6.19: DISTRIBUTION OF ASSETS IN THE NATIONAL INSURANCE SCHEME, GUYANA 1969-71 -- $ (E.C.)

Year	Cash in Hand	(1) as a % of (2)	Cash in Bank	(3) as a % of (4)	Government Securities	(5) as a % of (6)	Other Assets	(7) as a % of (8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1969	n.a.	–	n.a.	–	1,396,318	76.5	428,574	23.5
1970	2,555	0.02	56,242	0.4	13,051,586	92.8	956,407	6.8
1971	9,264	0.04	49,639	0.2	23,776,607	95.8	979,655	3.9

SOURCE: Based on data in the *Annual Reports of the National Insurance Scheme*, Guyana.

TABLE 6.20: ASSET STRUCTURE OF THE NATIONAL INSURANCE SCHEME, TRINIDAD, 1972 $(E.C.)(m)

Type of Asset	Value	% of Total
Government Securities	25.2	63.8
Fixed Deposits	11.4	28.9
Mortgages	1.2	3.0
Other (shares, etc.)	1.7	4.3
TOTAL	39.5	100.0

NOTES: Investment income yielded $1.1m. only

SOURCE: Files of the Central Bank of Trinidad

TABLE 6.21: IMPORTANCE OF NATIONAL INSURANCE FUND IN THE DOMESTIC BORROWING OF THE CENTRAL GOVERNMENT,* JAMAICA – $m(E.C.)

	1966/67	1967/68	1968/69
Bank of Jamaica	−9.1	−9.1	2.4
Treasury Bills	(−8.6)	(−3.4)	(0.5)
Other	(−0.5)	(−6.2)	(1.9)
Commercial Banks	13.0	16.3	24.0
Treasury Bills	(14.4)	(3.2)	(10.1)
Other	(−1.4)	(8.2)	(13.9)
Government Savings Bank	4.3	2.9	4.3
Treasury Bills	(−0.5)	(1.0)	(−2 4)
Other	(4.8)	(1.9)	(6.7)
NATIONAL INSURANCE FUND	19.7	19.7	22.6
Treasury Bills	(5.8)	(−3.8)	(−1.9)
Other	(13.9)	(23.5)	(24.5)
Other	2.4	7.2	2.4
Treasury Bills	(−3.8)	(0.5)	(−5.5)
Other	(6.2)	(6.7)	(7.7)
TOTAL	30.2	36.5	55.7
Gross Borrowing	36.5	41.3	66.2
Amortization	−6.2	−4.8	−10.8

*Loan receipts net of repayment instalments, contributions to sinking funds and supplementary sinking funds, and redemption of debt.

SOURCE: Ministry of Finance.

TABLE 6.22: IMPORTANCE OF NATIONAL INSURANCE FUND IN THE HOLDINGS OF GOVERNMENT DEBENTURES, GUYANA. $(E.C.) '000

Year	Total	Bank of Guyana	Commercial Bank	Insurance Companies	Other Financial Institutions	Industrial Commercial Undertakings	Post Office etc. and National Insurance Fund*	Sinking Funds	Other Holders	Bearer Bonds
1965	32,628	3,128	350	804	327	4,745	10,290	–	1,027	11,948
1966	40,031	3,178	2,350	1,473	525	9,231	10,306	–	1,020	11,948
1967	48,300	3,136	8,572	1,982	763	9,231	10,306	–	1,988	11,948
1968	51,533	3,136	7,860	2,092	886	10,859	11,857	807	2,087	11,948
1969	55,563	3,136	7,209	2,326	1,152	11,774	2,433	2,433	1,978	11,948
1970	67,891	3,136	6,436	4,906	1,232	10,950	23,930	3,239	2,113	11,948
1971	80,419	3,588	6,302	6,400	1,593	8,924	36,573	3,239	2,352	11,948

*The increase after 1968 is almost entirely due to the introduction of the National Insurance Scheme. In 1968 government securities totalled $21.8m.

SOURCE: Unpublished Data in the Bank of Guyana

corporation provided that it does 'not without the approval of the Minister of Finance, exceed 25 per cent of the total funds of the Board', and mortgages and real estate or households in Trinidad and Tobago.[39] Compared with its legislation on insured funds, previously referred to, the National Insurance Act of Trinidad is more restrictive with respect to the holding of foreign securities and more liberal with respect to the quantities[40] that might be held of various types of local assets.

National Pensions, Social Security and Caribbean Economic Integration

The setting up of national insurance schemes in the Caribbean should be harmonized with current moves towards economic integration. This harmonization has at least three aspects. Firstly, the integration of the countries' private, public and national pension schemes. Secondly, the integration of the general social security[41] systems. Thirdly, the integration of the national insurance funds with a regional capital market.

It is said that integration of pension and other social security schemes by member countries of an integrated area is necessary to (a) remove any restrictions on the mobility of labour within the area and (b) to enhance competition between similar industries in the area.[42] Given the externally dependent nature of the Caribbean economies, there is little trade within the region; consequently, the integration strategy that is being advocated for the region is based not on the marginal increases in efficiency associated with the classical competitive approach but on the dynamic complementing and integrating of the member territories' production structures.[43] We are therefore concerned with increasing the mobility of labour as a factor contributing to the pushing outwards of the production frontier. In the early stage of integration, there is expected to be mainly movement of skilled labour, given the labour surplus nature of the economies, but in the later stages there should be movement of both skilled and unskilled labour to areas where there are manpower bottlenecks.

National pensions can affect the mobility of labour between Caribbean territories if there are wide variations in the levels of benefit; at the moment, however, there does not seem to be a wide disparity between the rates of pension benefits in the various Caribbean economies.[44] There may also be need to harmonize the occupational pension schemes in the various territories, although we assume that these schemes themselves were adjusted to suit the respective national insurance schemes. Uniformity in the treatment of preservations is in this context particularly important in order to avoid, as Titmus puts it, " . . . a variety of bits and pieces of non-preserved, partially preserved or frozen pension rights." Titmus [60] p. 924. There is also need for a synchronized approach to prevent suffering among those whose working lives are so divided up among member countries of the integrated

area as to prevent them from fulfilling the conditions of any of the national schemes.[45]

There may also be need to standardize other (non-pension) social security aspects in the Caribbean with respect to conditions, rights, contributions and benefits. There should be horizontal uniformity, where the categories of risk covered in the territories are the same, and vertical uniformity, where the extent of coverage of the population is more or less the same. The degree to which social security expenditure is financed out of the budget or out of contributions should be similar and all the territories should employ either a flat rate or wage-related contributions; the level of the flat rate and the rate of the wage related contribution in the various territories should also be coordinated. Uniformity with respect to rates of benefit is also required. In reality, national pensions and other social security benefits may have far less importance on the mobility of labour than other factors, such as the real wage rate and the overall tax rate. General tax harmonization (not piecemeal) is needed.[46]

The surplus of the national insurance schemes in the Caribbean is a source of huge long-term funds and can be used to assist in the development of a regional capital market. This synchronization[47] of the quantity demanded and supplied of long-term loans (and the harmonization of the interest rate or price of borrowing) in the various territories and the working out of the path to financial integration should be the task of the Regional Development Bank, the Capital Issues Committees, and the planning and foreign exchange authorities in the various constituent territories, bearing in mind the need for a special investment policy with respect to the poorer territories of the region.

Pensions and the Reform of Social Security

In a socialist economy, universal and adequate pensions are an integral part of the socio-economic system. However, given the nature of the workings of the externally dependent[48] capitalist economies of the Caribbean, the state ensures neither work, pensions nor other social security benefits for everyone. But while we continue to operate a non-socialist economy, there is at least room for the improvement of social security in such a system in a number of areas:

(1) Each firm, no matter how casual the nature of the work, should be compelled to have a pension scheme (the terms of which should be arrived at in negotiations with workers' representatives) in order to complement the pension benefits under the national insurance scheme. Every redundant worker who has not worked for a long enough period to be entitled to the employer's contribution should be made to benefit from this contribution being deferred or deposited at the national insurance scheme on his behalf until he reaches retirement age.[49] Alternatively, there should be no limitation whatsoever to vested rights. If the state cannot ensure that occupational schemes are run in the workers' benefit, it should incorporate these private schemes into the national

scheme so as to (a) spare the workers the whims, fancies and paternalism of the foreign and local employers and (b) bring about uniformity in pension practices and benefits.[50] To accommodate those workers moving from one employment to another, the state should also encourage the transferability of pension rights between occupations.[51]

(2) Those workers who are still too old to qualify for a pension under the existing national insurance systems (despite the accelerated contribution measures) and those excluded self-employed workers should be given a special tax deduction for their retirement savings.[52] Unqualified workers should also have their contributions returned to them when they reach retirement age; very poor workers should not be made to subsidize the more fortunate members of the proletariat.

(3) The national minimum pension should be one that the worker can live on without too much discomfort in his old age, i.e. the sharp wage differentials that existed during the employees' working lives should not persist during their post-working lives. The current vertical redistribution between low income and high income workers therefore needs to be greater, especially since the latter tend to be adequately covered by occupational schemes; a higher minimum pension may also require an increase in the rather low wage ceiling, with respect to contributions. In short, the system of contributions should be more graduated (progressive) and benefits ought to be more flat rate.

(4) The national pensions need to increase not only with changes in the cost-of-living but also with changes in the average national standard of living, even if this requires a subsidy out of the national budget[53] (which is likely given the very high proportion of fixed interest securities that the national insurance schemes tend to hold).

(5) Part of the pension contributions of those in regular employment should be used to increase the old age pension of those people who will be unemployed for a large part of their lives and therefore will not make enough contributions to be eligible for pensions under the national insurance schemes. In labour surplus economies, those in regular employment are a relatively privileged group and should help to relieve the discomfort of the life long sufferers in the latter's dying years.[54]

(6) Given the labour surplus nature of the Caribbean economies, for those pensioners who want to work there should be an especially high tax rate (as an alternative to an earnings ceiling) with the resulting revenue helping to relieve the suffering of those without jobs.

(7) The current system of national pensions and social security should be extended to incorporate other important forms of social security such as public health insurance, free education, housing[55] for every family, a job for everyone and unemployment (frictional) benefits.[56]

(8) Persons should become eligible for national superannuation at an earlier period in life, i.e., given the current death rates, the retirement age should be brought forward and later put back as the rate improves.

(9) Certain benefits within the social security system need to be increased. For example, the national insurance scheme in Trinidad pays a death benefit of $100, irrespective of whether the employee paid the 50 cents minimum or the $2.45 maximum contribution, whereas many friendly societies pay $250 on as little as 10 and 15 cents per week.

(10) There is need for simplification in the procedure for making a claim for benefits and (in answer to popular complaints) there should be a reduction in the time lag between making a claim and receiving benefits.

Summary and Conclusion

A national insurance scheme has been introduced in the Caribbean in recent years. Although the social security system includes pensions, it is not fully comprehensive because of the lack of some essential needs of the community, such as health and unemployment insurance.

The national insurance system mobilizes very large quantities of funds which could be used for developmental purposes[57] because of the long term nature of the liabilities of the scheme. However, the funds are not being effectively utilized in the Caribbean.

Even within the limited scope of the existing system, there is need for considerable reform. A person should be eligible for national superannuation before the statutory age of 65;[58] people should die in relaxed contemplation (of the life hereafter) rather than on the job.[59] Those casual workers who do not make enough contributions to earn a pension should be granted special tax concessions. Also, the degree to which national pension benefits for the higher paid workers are wage related should be reduced (and redistribution thereby increased) so as to raise the level of the minimum pension.

FOOTNOTES

[1]A system of adequate income tax allowances may have the same effect as cash payments, except for those whose incomes are too low to take advantage of deductions.

[2]The percentage today is probably even higher since in the 1972 budget Britain raised the base of retirement pensions from £6 a week for a married man to £6.75 a week and for married couples, from £9.70 to £10.90 a week.

[3]See Reviglio, [52].

[4]See Reviglio [51].

[5]This is one reason why, when a compulsory lending scheme was introduced in Guyana in 1962, it was violently rejected by the population. For a general discussion of the advantages and disadvantages, see Prest [48].

[6]See Samuelson [53].

[7]For a resolution of the issues, see Aaron, [1], and Blackburn [8].

[8]In the Caribbean, yearly employment figures for all establishments are not available and so the National Insurance Schemes can be a useful source for employment data.

[9]The rate of unemployment in Trinidad is also somewhat lower than it is in Guyana and this may help to explain the higher employer to employee ratio in Trinidad.

[10]In both Guyana and Trinidad, maximum coverage at the moment is estimated at 1,000 establishments.

[11]If unemployment benefits had been included in the scheme, then we would have expected this item to be also a high proportion of payments in the labour surplus economies.

[12]The Guyana National Insurance Scheme began on September 29, 1969 and by the end of 1970 the staff had totalled 371 persons. The administering of the non-pension element in the scheme probably accounts for the bulk of the people employed since, for example, Sweden's pension fund was before 1966 " . . . administered by a staff of only about a dozen people". See, Special Correspondent, [54] p. 99.

[13]*Daily Express* (Trinidad), October 29, 1969.

[14]For a more recent theoretical discussion on whether there should be national pensions or only occupational pensions, see Pole, [47]. The final decision in the U.K. has been to have a system of both national pensions and universal occupational pensions; see [68].

[15]Any need for the integration of national and private pensions has actually been denied by one member of the government of Guyana. At the time of the nationalization of the Demerara Bauxite Company, the Minister of Mines and Forests is reported (*Guyana Graphic*, April 18, 1971) to have said "Government neither had or has any intention of merging the pension and life assurance plan for the workers at Linden with the National Insurance Scheme"; the N.I.S. ". . .was established to serve the nation as a whole and bears no relation to a scheme specifically intended to serve the interests of the bauxite workers".

[16]The National Insurance Board of Guyana in its first (1969) annual report [27] (p. 5) mentions that because coverage is limited to a certain maximum wage " . . . private *pension schemes are encouraged especially for workers earning high incomes . . .* " and the second White Paper on Social Security in Trinidad mentions explicity the possible need for " . . . adjusting (harmonising or marrying) the private scheme. . ." [26] p. 8.

[17]There are also a number of non-pension forms of saving that might be adversely affected by the introduction of national insurance schemes. Some of these are Industrial Life Insurance, Workmen's Compensation Insurance, Non-cancellable Sickness and Accident Insurance and Group Health Insurance. For example, appendix tables A6.1 to A6.4 show the various income items relating to these schemes and the size of the related funds in Trinidad, before the introduction of that country's National Insurance Scheme.

[18]Foreword by Minister of Labour and Social Security – 1st Annual Report of the National Insurance Board, Guyana, 1969.

[19]*Ibid.* p. 5.

[20]In a fully employed economy, the yield from payroll taxes can be enormous. In the U.S.A., the yield from the social security taxes rose from $5.7 billion in 1949 to about $54 billion in 1969. "The yield from this taxation of labour income substantially exceeded corporate income taxes, in 1969, and the yield was about one-half that of all individual income taxes". Brittain, [11] p. 111.

[21]In Trinidad, however, it is stated that the national insurance scheme

> . . .has as its objective the mass mobilization of the domestic financial resources of the country to provide an umbrella of protection against hazards which are an integral part of everyday human existence. The judicious utilisation of part of the resources so mobilized for development programmes which will contribute to further improvement of the country's living standards open a whole range of possibilities which can give Trinidad and Tobago the appropriate degree of stimulation to urge it forward into an era of increasing prosperity. White Paper [64] p. 8.

[22]Officials of the National Insurance Scheme, in Guyana, have frequently complained of employers not being as vigilant in the prevention of industrial accidents since the scheme's introduction. And, in a recent case, a young cane farmer was fined $500 for chopping off his right thumb in order to falsely collect national insurance benefits during the 'dead' season when work is not available; this trade off between limb and income is an indication of the desperate nature of the situation in a labour surplus economy without unemployment benefits.

[23]Government 'public assistance' expenditure is an exceedingly poor substitute for unemployment benefits. In Trinidad, for example, ". . .benefits paid under this scheme are meagre. Indeed, they are below subsistence levels and are administered grudgingly and punitively." Lloyd and Robertson, [36] p. 16.

[24]See Gilbert, [28], p. 160:

> Pensions were the one social reform of the pre-war period that was at once universally popular with the working class and also approved by respectable social thinkers. Other reforms, for instance unemployment insurance, more salutary in the long run, were less popular. Still others, like labour's annual right to work Bill – which would have required local authorities to provide work for any unemployed person asking for it – were regarded by middle class philanthropists as socialist dogmatics.

[25]For example, in the U.K., unemployment benefits, which had been 44. 3 per cent of total national insurance benefits in 1938, did not exceed 6.0 per cent in subsequent years (3.4 per cent in 1966). See Hauser and Burrows, [29].

[26]It is also likely that the marginal worker would no longer be hired.

[27]Some other factors would be the industry structure and rigidity in factor proportion, expectations about future tax treatment of capital goods, and anticipated increases in the wage rate. See E. Deran, [19]. See also De Castro, [18] and Odle, [42].

[28]Moreover, in a small, open and underdeveloped economy, the payroll tax does not affect the price of capital because the latter is imported, rather than produced in domestic capital goods industries. For an elaboration, see Shoup, [58] pp. 412-13.

[29]See Cassidy, [14].

[30]Partly to prevent the distorting employment effects of the payroll method of financing pensions for the retired in the U.K., one author suggested its substitution by compulsory regular subscriptions to special non-transferable bonds. See Buchanan, [12]. One major objection to this plan and which has relevance for underdeveloped countries, is that a compulsory loan would reduce net worth less than the payroll tax and so the reduction in consumption would be less and that in saving greater. See Prest, [49].

[31]See, Report [26]. "Persons over 35 years of age when the Scheme started on September 29, 1969, will receive special credited contributions of twenty-five for each year of age over 35 up to a maximum of six hundred credits". (p. 16).

[32]In 1970, the total number of accidents was 8,908; 109 of these cases involved disablement (including 40 amputations) and 34 resulted in death.

[33]Those people in receipt of retirement income (which is substantially less than the wage during the last years of their working life) are in a lower tax bracket than they would have been had the earnings being taxed during their working life; this represents an inter-temporal redistribution. See, also, Schoeplein, [56].

[34]For a fuller discussion, see Neher, [40].

[35]For a more general discussion of redistribution as a social security policy, see Lampman, [33]. See also, Paukert, [44] and Deran, [20].

[36]It is also hardly likely that the public sector in Barbados is lacking in absorptive capacity, otherwise the public debt should be falling. Yet, in 1970, the national insurance scheme's holdings of foreign assets were equivalent to no less than 5.9 per cent of total assets.

[37]In Guyana, the foreign government securities held were generally intra Caribbean (St. Vincent and St. Kitts/Nevis/Anguilla debentures in the main) rather than extra regional.

[38]To this we might add that, wherever possible, labour intensive activity should be favoured over capital intensive activity in order to promote employment.

[39]See Section 23(1) of Act No. 35 of 1971, National Insurance, Trinidad and Tobago.

[40]The Fund is also not subject to the 1966 legislation pertaining to insurance companies that at least 20 per cent of their portfolio should be invested in government securities of Trinidad and Tobago.

[41]Before the introduction of national insurance schemes in the Caribbean, old age pensions, buttressed by public assistance, were the only forms of national social security (see appendix tables A6.5 to A6.7); the bulk of the community relied on life insurance and occupational pensions. Existing previous to all this was the Friendly Society; for a history of the Friendly Society movement in the Caribbean, see Wells, [74].

[42]For a discussion of the Western European approach, see Wedel, [73]. See, also, Titmus, [60].

[43]See Brewster and Thomas, [10].

[44]The experience of other economic unions seems to point to at least two dangers in the free movement of unskilled labour. Firstly, immigrants help to dampen the wage rate and keep the surplus of the multinational corporations high. Employers also exploit the differences between local and immigrant workers by paying lower wages and using the immigrants to break strikes. Secondly, the immigrant workers become a sub-class (and this weakens class consciousness) because of their concentration in certain arduous and unwanted 'categories' of work. The division between local and immigrant workers extends to relations outside of work because immigrants get the worst housing and their children attend the worst schools. See Castle and Kosack, [17].

[45]For an argument in favour of the adding together of the various periods of territorial service, see Bosscher, [9].

[46]Government social expenditure outside of those benefits contained in our national insurance schemes (e.g. the amount of free education and free medical services as a percentage of GNP) may also be important; this is particularly so (along with family allowances) for a worker who migrates with his family.

[47]For a start, the holding of any debentures or equity outside of the region should be proscribed. At the moment, in the Caribbean, there is no uniformity in local assets ratios. For example, with respect to insurance companies, Guyana stipulates 90 per cent, Trinidad, 60 per cent, Barbados 50 per cent and Jamaica, 75 per cent.

[48]And, by definition, incapable of generating full employment.

[49]For a general discussion of the 'casual labour' problem involved in catering for

certain types of manual, female (young and old, married and unmarried) and part-time employees, see Pilch, [45].

[50] All this emphasises the need for a sub-department to ensure that occupational pension schemes incorporate certain minimum benefits and other conditions. In the past, legislation has concentrated on merely limiting the size of benefits.

[51] Pension legislation should therefore reflect a rational and integrated system of 'deferment', 'vesting' and 'transference'. Generally, if the government prefers a system of deferment and transference to vesting, this will have to be more positively pursued, even though it would be difficult to promote deferment, in particular, in foreign-owned firms in the Caribbean, given the uncertainty associated with the feeling of loss of physical contact and the history of alienation. The U.K. experience, also, has shown that, whenever a choice exists, workers invariably opt for a refund; see [69] p. 47.

[52] Such a scheme has actually been proposed in the U.S.A., see Gold, [24].

[53] For a discussion of some of the methodological issues, see Watson, [70] esp. p. 82, *et seq.* See also Wilson, [71] and Castellino, [15].

[54] In its preamble (*Op. Cit.*) the national insurance scheme of Guyana espouses the "egalitarian socialist concept of the greatest good for the greatest number" but this is vitiated by its very first 'objective' that rights to benefits must be earned by the payment of contributions.

[55] A person who has to pay a high rent (or has an expensive diet), for example, can hardly exist on current pensions.

[56] There can hardly be said to be a meaningful system of social security when over one-fifth of the labour force is out of a job. It is very significant that in those economies which have turned socialist the very first economic problem faced was a shortage of labour.

[57] And which, by creating more employment, can help to remove the contradiction inherent in a system of social security in which a significant portion of the labour force has nothing to secure.

[58] Although the labour force in the Caribbean is still comparatively young, it must be admitted that this proposal would significantly increase the burden of solvency of the fund, particularly with the recently legislated later entry into the labour force of school-leavers (which was partly designed to ease the labour surplus problem) and the migration of rural non-covered workers to pension-covered urban occupations.

[59] In a multinational pension scheme, the early death of underdeveloped countries' members constitutes a 'gift' to the members from the developed countries, unless survivors' benefits are compensatingly higher.

TABLE A6.1: LIFE ASSURANCE FUND AND INCOME ITEMS IN RESPECT OF INDUSTRIAL LIFE INSURANCE, TRINIDAD 1968 – $(E.C.)

COMPANIES	Fund at Beginning of the Year	PREMIUMS		Total Premiums	Net Interest	Transfers from Reserves	Other Income	TOTAL
		Single	Other					
Local Companies								
1. Colonial Life Insurance (Trinidad)	10,217	–	1,075	1,075	504	–	–	11,796
2. First National Insurance	80,000	199,165	–	199,165	–	–	3,087	282,252
3. United Security Life Insurance	64,172	–	147,820	147,820	2,644	–	–	214,636
4. Western General Insurance	20,127	245,295	–	245,295	12,210	100,000	1,130	378,762
TOTAL	174,516	444,460	148,895	593,355	15,358	100,000	4,217	887,446
Foreign Companies								
1. British American Life Insurance	13,422,188	8,815,383	–	8,815,383	660,728	–	39,347	22,937,646
GRAND TOTAL	13,596,704	9,259,843	148,895	9,408,738	676,086	100,000	43,564	23,825,092

SOURCE: *Annual Report* of the Supervisor of Insurance for 1969.

TABLE A6.2: FUND AND INCOME ITEMS IN RESPECT OF WORKMEN'S COMPENSATION, TRINIDAD, 1968 ($E.C.)

COMPANIES	Amount of Fund at the Beginning of the year		Premiums	Net Interest	Other Receipts	Total	Claims Under Policies paid and Outstanding	Commissions	Expenses of Management	Other Payments	Fund at the End of the Year		Total
	Reserved for unexpired risk	Additional Reserve									Reserved for unexpired risks	Additional Reserve	
Local Companies													
1. N.E.M. (West Indies) Insurance	133,038	–	228,363	8,749	–	370,150	175,943	36,586	68,223	23,129	185,699	–	370,150
2. Trinidad & Tobago Insurance	146,341	–	225.169	19,698	–	391,208	123,117	37,763	30,412	83,248	116,668	–	391,208
3. West Indian National Insurance	16,207	–	50,310	–	–	66,517	24,963	4,352	13,601	8,301	15,300	–	66,517
A. Total	295,586	–	503,842	28,447	–	827,875	324,023	78,701	112,236	114,678	317,667	–	827,875
Foreign Companies													
1. British American Insurance	273,520	–	4,649,819	12,934	–	4,936,273	1,370,938	1,114,571	1,933,826	234,567	282,371	–	4,936,273
2. Commercial Union Assurance	86,554	–	145,643	–	–	232,197	90,927	32,046	15,129	35,838	58,257	–	232,197
3. Gresham Fire and Accident Insurance	5,500	–	16,720	–	3,917	26,137	12,311	5,016	2,122	–	6,688	–	26,137
4. Guardian Assurance	16,924	–	39,116	–	–	56,040	12,153	10,166	605	15,514	17,602	–	56,040
5. Guyana & Trinidad Mutual Fire Insurance	1,687	81,003	5,528	4,860	–	93,078	717	–	3,803	–	2,411	86,147	93,078
6. Norwich Union Fire Insurance	4,964	–	35,581	–	–	40,545	8,713	5,909	308	20,692	4,923	–	40,545
7. New India Insurance	11,650	–	21,492	1,867	–	35,009	13,676	343	3,646	8,747	8,597	–	35,009
8. Phoenix Assurance	10,221	–	13,733	–	–	23,954	33,838	3,403	307	48,589	5,492	–	23,954
9. Royal Exchange Assurance	8,626	–	31,076	–	14,039	53,741	33,305	7,386	589	–	12,461	–	53,741
10. Royal Insurance	86,870	–	155,730	–	–	242,600	64,331	47,356	16,027	31,634	83,252	–	242,600
11. Western Assurance	830	–	7,340	–	–	8,170	1,757	1,350	1,407	771	2,885	–	8,170
B. Total	507,346	81,003	5,131,778	19,661	17,956	5,747,744	1,642,666	1,227,546	1,977,769	396,352	484,940	86,147	5,747,744
A. & B. Grand Total	802,932	81,003	6,625,620	48,108	17,956	6,575,619	1,966,689	1,306,247	2,090,005	511,030	802,607	86,147	6,575,619

SOURCE: *Annual Report* of the Supervisor of Insurance for 1969.

TABLE A6.3: ASSURANCE FUND AND INCOME ITEMS FOR NON-CANCELLABLE SICKNESS AND ACCIDENT INSURANCE, TRINIDAD, 1968 – $(E.C.)

COMPANIES	Fund at Beginning of the year	Premiums		Total Premiums	Net Interest	Appreciation of Assets	Other Income	Adjustment	Total
		Single	Other						
Local Companies									
1. Colonial Life Insurance (Trinidad)	763	–	308,919	308,919	1,209	–	34	–	310,925
2. United Security Life Insurance	–	63,195	–	63,195	1,136	–	–	–	64,331
A. Sub-Total	763	63,195	308,919	372,114	2,345	–	34	–	375,256
Foreign Companies									
1. Confederation Life Association	74,820	–	72,454	72,454	–	–	8,659	–	155,933
2. National Life Insurance	6,390	–	21,034	21,034	460	8	–	7,295	191,120
B. Sub-Total	81,210	–	93,488	93,488	460	8	8,659	7,295	191,120
A. & B. Grand Total	81,973	63,195	402,407	402,407	2,805	8	8,693	7,295	566,376

SOURCE: *Annual Report* of the Supervisor of Insurance for 1969.

TABLE A6.4: FUND AND INCOME ITEMS IN RESPECT OF GROUP HEALTH INSURANCE, TRINIDAD, 1967 AND 1968 – $(E.C.)

COMPANIES	Fund at Beginning of the year	Premiums		Total Premiums	Net Interest	Appreciation of Assets	Other Income	Adjustment	Total
		Single	Other						
1967									
Local Companies									
1. Colonial Life (Trinidad)	16,519	–	421,080	421,080	13,583	–	–	–	451,182
Foreign Companies									
1. Confederation Life Association	6,337	–	257,625	257,625	–	–	–	–	263,962
Total	22,856	–	678,705	678,705	13,583	–	–	–	715,144
1968									
Local Companies									
1. Colonial Life (Trinidad)	403,371	–	170,352	170,352	32,477	–	32	–	606,232
2. Trinidad and Tobago Insurance	1,287	–	12,122	12,122	717	–	–	–	14,126
Total	404,658	–	182,474	182,474	–	–	32	–	620,358

TABLE A6.5: NUMBER OF OLD AGE PENSIONERS AND TOTAL PENSION EXPENDITURE, TRINIDAD, 1942-68 (SELECTED YEARS)

	No. of Pensioners at end of year			No. of pensioners granted for first time during year	NO. DISCONTINUED DURING YEAR					Total Expenditure on pension during year**
	Male	Female	Total		On Account of death	On Account of admission to institution	On Account of improved circumstances	On Account of other causes*	Total	
	Nos.	Nos.	Nos.	Nos.	Nos.	Nos.	Nos.	Nos.	Nos.	Nos.
1942	—	—	16,756	1,179	1,216	—	—	—	1,713	774,689
1945	—	—	16,621	1,357	1,116	111	24	294	1,545	928,633
1950	—	—	17,109	1,897	1,296	117	63	77	1,533	995,744
1955	7,603	13,130	20,733	2,221	1,315	126	87	5	1,533	2,100,645
1960	9,693	15,613	25,306	2,453	1,174	23	25	11	1,233	2,610,004
1961	10,228	16,276	26,504	2,443	1,169	48	18	10	1,245	2,676,064
1962	10,750	16,915	27,665	2,221	876	116	31	37	1,060	2,723,832
1963	11,259	17,613	28,872	2,838	836	75	18	36	965	2,762,524
1964	12,362	18,709	31,071	3,249	967	39	16	28	1,050	3,693,741
1965	13,113	19,693	32,806	2,939	1,122	48	13	21	1,204	2,315,079
1966	14,179	21,044	35,223	2,417	534	27	22	8	591	3,989,502
1967	15,248	22,389	37,637	2,414	922	50	25	43	1,040	4,051,130
1968	16,268	23,709	39,970	2,333	482	39	33	25	579	4,196,797

*Other causes include: Failure to draw pension for three or more months; failure to prove residential qualifications or failure to prove age of at least 65 years (40 years if blind).

**With effect from 1st January 1971, the maximum monthly pension rate was increased to $18, with the minimum at $5.

SOURCE: Annual Statistical Digests, Central Statistical Office, Trinidad.

TABLE A6.6: PUBLIC ASSISTANCE EXPENDITURE AND NUMBER OF PERSONS RECEIVING RELIEF, TRINIDAD, 1936-68 (SELECTED YEARS)

YEAR	NUMBER OF PERSONS ASSISTED						No. of guardians drawing relief for children	No. of assisted burials during year	Burials	Home Assistance	Other	Total
	ADULT		CHILDREN		TOTAL							
	Male	Female	Male	Female	Male	Female						
	Nos.	Nos.	Nos.	Nos.	Nos.	Nos.	Nos.	Nos.	Nos.	Nos.	Nos.	Nos.
1936	1,959	3,154	938	*	6,051	*	–	–	2,020	82,083	3,316	87,419
1945	2,997	*	2,919	*	5,916	*	880	–	15,892	154,443	6,559	176,894
1951	1,245	1,861	3,561	3,513	4,806	5,374	2,400	1,549	15,751	345,533	1,940	363,224
1955	1,457	2,004	4,218	3,658	5,675	5,662	2,931	1,290	17,610	468,843	6,618	493,071
1960	1,726	2,501	6,212	6,360	7,938	8,861	4,237	216	5,306	857,130	25,142	887,578
1961	1,801	2,757	6,430	5,878	8,231	8,635	4,099	245	6,826	1,178,967	33,473	1,219,216
1962	1,940	3,086	7,024	6,537	8,964	9,623	4,365	199	4,071	1,339,936	7,450	1,351,457
1963	2,173	3,385	6,183	6,620	8,356	10,005	4,451	330	6,372	1,456,821	10,247	1,473,440
1964	2,292	3,242	7,653	7,489	9,945	10,731	4,610	88	6,159	1,464,299	16,997	1,487,454
1965	2,786	3,808	7,922	7,646	10,708	10,454	5,579	182	5,933	1,763,284	18,523	1,787,840
1966	1,998	3,291	7,493	6,742	9,491	10,033	2,375	195	7,187	1,754,656	14,496	1,776,340
1967	2,037	3,093	6,883	6,964	8,920	10,057	5,207	175	4,383	1,722,222	13,003	1,739,608
1968	2,165	3,537	7,549	7,319	7,319	10,856	5,417	194	5,927	1,764,466	12,373	1,782,766

*Included under figures for males.

SOURCE: *Annual Statistical Digests*, Central Statistical Office, Trinidad.

TABLE A6.7: NUMBER OF FRIENDLY SOCIETIES, SIZE OF MEMBERSHIP AND NET ASSETS, TRINIDAD, 1890 - 1968 (SELECTED YEARS) – $ (E.C.)

YEAR	No. of Societies	No. of Members	Net Assets
1890	23	4,624	6,602
1915	212	23,945	134,654
1937	242	42,287	337,410
1945	286	129,730	816,136
1950	364	135,173	1,310,722
1955	371	145,970	1,826,388
1956	371	159,436	1,835,208
1957	334	141,662	1,835,208
1958	329	126,000	2,400,000
1959	324	126,699	2,133,998
1960	313	116,423	2,427,370
1961	270	96,589	2,243,543
1962	334	93,991	2,201,310
1963	328	79,040	2,503,733
1964	323	75,590	1,560,068
1965	320	76,852	2,058,701
1966	322	69,938,	2,156,666
1967	312	69,511	2,139,326
1968	309*	71,094	1,967,638

*80 societies failed to submit the returns for the year 1968.

SOURCE: Annual Statistical Digests.

CHAPTER SEVEN

PENSIONS, POLICIES AND PROSPECTS

Saving via pension plans, as measured by the reserves or accumulated fund, is quantitatively much more important in the Caribbean, or, for that matter, in other developed and underdeveloped countries, than most people realize.[1] In the Caribbean, the volume of reserves held by the non-insured occupational schemes (including funded public sector schemes) alone, is probably now exceeded only by the volume of saving in commercial banks and insurance companies. When we add (a) the insured fund for occupational schemes, (b) an imputed figure for unfunded government schemes, and (c) an imputed figure for that portion of national insurance funds[2] representing retirement pensions, pension business assumes even much greater dimensions. Rapid growth is expected to continue for the next few years, as coverage is extended to the whole working population. However, the true potential of this form of savings can hardly be reached in economies with surplus labour.

As an important financial institution, it is necessary for there to be clear and unambiguous monetary and fiscal regulations governing the operations of pension business. At the same time, it is necessary for these regulations to be consistent with those pertaining to competing financial institutions and organisations; otherwise, while some institutions will, by their policies, be contributing to the achievement of certain developmental goals, the remaining institutions may be diverging from the required financial path and offsetting the efforts of the others.

The Caribbean territories, with the exception of Trinidad, have no comprehensive policy for the control of the operations of the pension industry. Since an income tax deduction is granted, the law is far too lax concerning conditions of approval of pension schemes and, with respect to the liabilities of pension schemes, allows too great a variation in benefits, in general, and vested rights, in particular.[3] There is also need for control over the asset structure of the non-insured schemes. In Guyana, for example, legislation is only now being contemplated for a 100 per cent repatriation of pension assets invested abroad; the fact that legislation was introduced at the beginning of 1970, controlling life insurance companies (who operate a part of the pension business) and that 2½ years have elapsed before an attempt is being made to legally control non-insured schemes, are typical examples of the *ad hoc* and piecemeal approach to financial policy and regulation[4] in the Caribbean.

The Central Bank of Guyana cannot be without blame for the position in which the government found itself over the RILA scheme at the time of nationalization of the bauxite company. It is surprising that officials of this

Central Bank, which has been existing since 1965, had, at the time of nationalization, no knowledge of the country in which the pension funds (of the most important sector) were invested or any idea of the size of assets involved; it is even more surprising that the Central Bank had no general plans for extending specific financial control to such non-banking intermediaries. This raises the question of whether the central banks in the Caribbean are at all relevant and what should really be the role of a Central Bank in an economy requiring structural change.[5] A primary function of the Central Bank should be to ensure that saving is being maximized and that the distribution of assets held in financial intermediaries is optimum from a social and developmental point of view. Pension schemes in the Caribbean are not taking advantage of the long-term nature of their liabilities to act as quasi-development bankers; a similar comment can be made about life insurance companies, some of which carry on pension business in addition to their more traditional activities.

One canon of taxation is that those in the same economic position should be treated similarly. The tax treatment in the Caribbean of (a) insured as against non-insured pension schemes and (b) pension schemes as a whole, compared with life insurance companies, does not adhere to this particular canon of taxation. Because insurance companies do not distinguish between assets held for pension business from assets representing other business, all investment income is subject to taxation (for non-mutual companies) whereas investment income of non-insured schemes is not, except indirectly at the time of receipt of the pension. There is a similar tax bias against the non-pension business of life insurance companies. Although annuity, and to a lesser extent endowment, policies serve basically the same social security function as non-insured pension schemes, the incidence of taxation on these policies have become greater in recent years, given the tendency of Caribbean governments to increase the rate of taxation on insurance companies.[6] Similarly, the burden of the withholding tax on a person surrendering a policy is in effect different from that of someone withdrawing from a non-insured scheme and who has been granted vested rights.

There is also a lack of consistency between the actual direct effects of pension schemes on the employment of labour and the effects desired by the government. Occupational and national pension schemes may in the short run aggravate the unemployment situation in a labour surplus economy, owing to the supposed 'burden' of the employer contribution. (But, in the long-run, if wisely invested, the pension funds can create enough employment to more than offset such adverse short-run effects). Thus, governments should be more careful about ensuring consistency in the various strands of its economic policy. For example, at about the same time that the Trinidad government introduced a direct subsidy for the employment of labour,[7] it introduced (April 10 1972) a payroll tax to finance the new national insurance scheme;[8] at that time, also, the government of Trinidad maintained its system of generous capital subsidy via depreciation allowances, investment allowances, cheap rental on industrial buildings, low import duty on capital equipment, etc. There is need, it would appear,

for a rationalization[9] of the system of taxation of financial intermediaries as part of a general reform of the whole taxation system to bring it more in line with what is needed in a labour surplus economy.

Finally, a related issue is whether there should be special fiscal and monetary treatment for those foreign firms which have pension schemes and for those foreign insurance companies which administer occupational pension plans. A 100 per cent local assets ratio should apply particularly to foreign firms in order to avoid a repetition of the Guyana Government experience when localization was attempted in the bauxite industry. Foreign firms should be also forced to have as workers' representatives at least 50 per cent of the total number of trustees, in order to mitigate the normal tendency towards alienation in foreign enterprises and to emphasize the legal rights of workers in pension schemes. Recent experience in Guyana has also shown that there is need for specific legal guidelines with respect to vested rights and termination[10] of pension plans.

Local branches of multinational insurance companies should not only be made to isolate assets representing local business as a condition of operating but should also be made to identify those assets which represent local pension business. It is even debatable whether foreign life insurance companies should be allowed to operate in the Caribbean at all since they merely detract from the business of the local companies, reduce the extent of economies of scale in the industry, accentuate the credit distortion and multiply the problems of supervision by the monetary authorities.

It is hoped that this study (which has suffered from a lack of data of sufficient breadth and depth) will stimulate further investigation into the pension business and that the government research departments in the Caribbean territories will be moved to collect adequate statistics on occupational pension schemes.

FOOTNOTES

[1]In low income economies, where the discretionary savings for a large part of the labour force tend to be low, the contractual nature of pension savings is particularly important for the mobilization of financial resources; so also is the automatic link with income increases. For a general analysis, see M.S. Joshi, [31].

[2]In the Caribbean social security systems are funded as in the U.K.; in most E.E.C. countries, however, the social security systems are unfunded or pay-as-you-go.

[3]Most workers and unions seem to have a very limited knowledge of their pension plans and there is need for much greater vigilance in this aspect of workers' conditions of service.

[4]Even though the return of funds invested abroad is very important, this is not the be-all and end-all of regulation. When invested locally, the pension funds should be made to maximize economic development. Until very recently, there seemed to be a lot of policy confusion in government circles. When the major bauxite firm in Guyana was nationalized and efforts were being made to secure the return of the pension funds invested abroad, the Minister of Mines is reported to have said (*Guyana Graphic*, April 18 1971) that the new Trust "... . will be a completely independent body charged with the responsibility of operating the new pension and assurance scheme, and will not be, under any circumstances, subject to Government control or influence".

[5]One explanation for the general failure of the Central Banks in the Caribbean to come to grips with the financial structure is that at the time of their setting up most of the top officials came, quite expectedly, from the Treasury Department. These officials had a natural research bias in favour of things they were acquainted with, such as government budgeting, foreign exchange operations and the performance of industries in the real sector (a situation encouraged by omnipresent and omniscient I.M.F. officials). Thus the financial sector, especially the non-banking sub-sector, has been neglected and restructure postponed. This is reflected in the sort of annual reports and bulletins put out by the central banks of the region and which seem almost to be a duplication of the statistical and analytical role of the other government agencies. The Research Departments of the Central Banks need to be much more concerned with the changing nature and impact of the whole financial system. In this regard, the Bank of Guyana, for example, still publishes insurance statistics pertaining only to the locally owned companies. Similar defects in the functioning of the Bank of Jamaica have been partly responsible for the setting up in that country of the National Savings Committee, which is in the process of collecting occupational pension fund statistics in Jamaica for the first time.

[6]Up to very recently, it was pointed out that " . . . there has yet been no equivalent of the 1956 Finance Act provisions in the United Kingdom exempting the capital element in purchased annuity payments from tax. In all the principal territories the taxation of annuity funds is more onerous than in the United Kingdom before 1956 . . . " M. DeSouza, [21], p. 270. It would appear that the 1956 tax exemption in the U.K. on policyholders' funds applied to both capital gains and interest income and the new legislation removed the competitive advantage of self-administered funds which had already been entitled to a fully gross build-up; for a discussion, see Fellows, [23], p. 21.

[7]See Budget Speech, January, 1972.

[8]This does not mean that a national insurance scheme should not have been introduced as all that is implied here is that one policy of the government may be offsetting another; in fact, the introduction of the employment subsidy might have been in anticipation of the payroll tax.

[9]Another example of the need for rationalization is that although the introduction, in recent years, of national pensions and family planning services may help to reduce the birth rate, increases in the child allowance do just the opposite.

[10]Even the terminology used in trust deeds in the Caribbean needs to be brought in line with what is expected in an independent country. For example, the University of Guyana's trust deed, drawn up three years after independence, allows for the termination of the pension plan "at the expiration of twenty-one-years from the death of the survivor of all the lineal descendants of His Majesty King George V now living or any earlier date on which the University is wound up otherwise than for the purpose of reconstruction and amalgamation . . . . " (page 4, paragraph 16).

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MAURICE A. ODLE

Dr. Odle is a graduate of the London School of Economics. He is a Senior Lecturer at the University of Guyana and Director-designate of that institution's Centre for Development Studies. He is a former Dean of Social Sciences at the University of Guyana and other appointments have included a Lectureship at Enfield College of Technology and a Senior Research Fellowship at the University of the West Indies. He is the author of *The Significance of Non-Bank Financial Intermediaries in the Caribbean*, also published by I.S.E.R.

PENSION FUNDS IN LABOUR SURPLUS ECONOMIES

In the past decade, pension plans have gained near universality in the Caribbean because of the spread of this type of saving throughout the private sector (to an extent comparable to the previous penetration in the public sector) and the introduction of national pension schemes within the framework of a general social security system. This spread, when combined with the contractual and long-term nature of pension saving, has caused pension funds to acquire tremendous economic and social significance.

Surprisingly, despite the labour surplus nature of the Caribbean economies, the employer/employee contribution ratio in the private sector (except, perhaps for Jamaica) is nearly as high as that in developed countries, because the branch firms of the multinational corporations, which operate globally integrated schemes, have generally adopted the standards of the parent firms in the metropole. This practice, which affects the costs of labour, is unlikely to aggravate the unemployment situation if the funds accumulated are compensatingly invested in employment creating and structurally transforming activities. However, a great deal of the economic benefits is lost by the widespread export of these private sector funds to the headquarters of the multinational pension schemes and the inefficient investment practices of both the public sector funds and the huge national insurance fund.

On the social side, the 'liabilities' conditions in many private sector schemes, pertaining to preserved rights, vested rights, the pensionable age and termination are not in the workers' interests, given the peculiar circumstances of labour surplus economies. As with the operation of their schemes' asset portfolios, the local firms tend to follow the lead of the dominant foreign firms. A considerable amount of reform is needed, with the government setting the example not only with respect to the pensionable age, but also with respect to the degree of vertical and horizontal redistribution in its national insurance scheme.

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