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STAFF STUDIES



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CENTRAL BANK
OF CEYLON

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STAFF STUDIES

T. Markandu



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T. M. Arkanayake



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NOTES CONTENTS

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1. The Problems of Defaults in Sri Lanka's Small Farmer Loans 1
— Nimal Sanderatne
 2. Level of Utilisation of Capacity and an Estimate of Room Requirement in the Hotel Industry in Sri Lanka 21
— G. M. P. de Silva
 3. Mobilization of Rural Savings in Sri Lanka Performance and Policies 57
— S. Kahagalle
 4. Towards a Theory of Multiple Exchange Rates 101
— Wimal Wickramasinghe
 5. Development: Definition and Measurements - A Review 135
— A. A. Justin Dias

NOTES ON CONTRIBUTORS

- Nimal Sanderatne** — Senior Economist, Economic Indicators Division, Economic Research Department.
- G. M. P. de Silva** — Project Analyst, Development Finance Department - now on release to Development Finance Corporation as Economist.
- S. Kahagalle** — Economist, Rural Economic Division, Economic Research Department.
- Wimal Wickramasinghe** — Senior Economist, Trade Division, Economic Research Department.
- A. A. Justin Dias** — Senior Economist, Rural Economic Division, Economic Research Department.

THE PROBLEM OF DEFAULTS IN SRI LANKA'S SMALL FARMER LOANS*

NIMAL SANDERATNE

Although informal or non-institutional sources of credit continue to be perhaps the more dominant source of credit to small farmers, several improvements have been made in recent years in the provision of institutional credit¹. These improvements include the expansion in institutional credit volumes; the extension of the institutional framework and institutions providing credit; the adaptability of credit limits to requirements in particular regions; and the provision of credit for a larger number of crops. Yet, despite these improvements, the inability to recover a significant proportion of loaned funds constitutes a recurrent problem.

The inability to recover loaned funds results in a declining number of credit worthy borrowers which could in turn result in lesser inputs and lower production. The magnitude of defaults in Sri Lanka is of an order which creates financial burdens to the government's budget, as well as the financial operations of the People's Bank, which is the main disbursing agency of such credit. Both these difficulties imply a restriction in the government's ability to provide credit subsequently. Therefore, the recovery of loaned funds is crucial in a programme of increasing agricultural production.

During the period 1947-1976 government sources of loans to small farmers amounted to about Rs. 925 million. These were primarily loans disbursed mainly through co-operative societies for paddy cultivation and in the last decade for selected food crops. Of the total sum lent, only about two thirds have been recovered. However, during the period 1953/54 to 1962/63 a very high level of recovery of 96 percent was achieved owing to reasons which will be discussed later. When this period is excluded, during the period before this, as well as after, the level of recovery has ranged

* A paper presented to the Agricultural Development Council Conference on Rural Finance Research at San Diego, California in July-August 1977.

1. Institutional credit sources which accounted for about 8 percent of loans to small farmers in 1957 had increased their share to 25 percent in 1969. Department of Census and Statistics, *Survey of Rural Indebtedness 1957* and Central Bank of Ceylon, *Report of the Survey of Rural Credit and Indebtedness 1969*.

between 50 to 60 percent of lent funds. During the period 1967/68 to 1975/76 the recovery rate has shown a declining trend annually and in the last few seasons, less than 50 per cent of funds lent has been recovered.

The second section of the paper suggests a conceptual framework for analysing the problem of defaults. The available data on Sri Lanka's small farmer loan schemes are analysed in the light of the suggested conceptual framework in the third section. This analysis is attempted by categorising the experience of credit schemes into several periods on the basis of the recovery principles and by examining the findings of a survey on defaults. The concluding section summarises the nature of the problem and the fundamental factors bearing on the low level of recoveries.

II A CONCEPTUAL FRAMEWORK FOR ANALYSING DEFAULTS

Numerous reasons are attributed for the non-repayment of loans by small farmers. These include the lack of a capacity to repay; the small size of holdings; high land rentals; commitment to other creditors; crop failure; unwillingness of farmers to repay; and the lack of interest and corruption of officials of the lending institutions. The large number of factors enumerated confuses the issue and provides little basis for an analytical approach to the problem. Therefore, to provide a basis for analysis, the reasons for default may be categorised into six groups. These are:

1. Defects in the agrarian structure.
2. Variability in incomes caused by fortuitous and seasonal factors.
3. Defects in the credit organizational structure.
4. Attitudinal conditions not favouring repayment.
5. Misuse of funds.
6. Other miscellaneous reasons.

These categories are in practice often inter-related and the reasons for a borrower not repaying could often be attributed to more than one of these groups. The sixth category is a residual one for including any reasons that cannot be included in the other five specified categories.

1. Defects in agrarian structure

Defects in agrarian structure relate to conditions of the farming enterprise which make it difficult for repayment. This category is sometimes referred to as that of "farmers being unable to repay, though willing to repay". In fact the willingness to repay is of no consequence owing to the inability to repay. The inability to repay arises out of the inability to generate an adequate income owing to inadequate agricultural inputs.

More precisely, a defective agrarian structure as a constraint to the repayment of a loan may be defined as a condition when the amount of the loan exceeds the farmer's cash savings, which is the excess of farm income over family subsistence expenditure. Land tenure conditions such as the size of holding and rental arrangements; the productivity potential of the land holding and irrigation facilities; the availability of inputs of good quality at reasonable prices and at the required time; satisfactory marketing channels and remunerative prices, are among the important factors bearing on the revenue productivity of the land holding and determine whether the farmer's income is adequate to meet his basic living expenses and repay the loan taken. Farm family expenditure is in turn affected by the family size and the prices of consumption goods.

Among the factors enumerated, the most significant defective factor in the agrarian structure is often the small size of farm holding. Such defects in agrarian structure could be remedied by land reform measures rather than by credit availability.

Defects in agrarian structure may also be defined as those deficiencies which cannot be overcome by short-term credit availability. Short-term credit availability in a context of a defective agrarian structure may lead to greater indebtedness to the lending agency. In other words, credit does not increase the productive capacity of the farmer appreciably and therefore his repaying capacity is limited.

2. Variability in incomes caused by fortuitous and seasonal factors

The farmer in this category unlike those with defects in agrarian structure is generally able to repay and willing to repay. The organizational structure is also capable of collecting the dues. Yet a farmer

is unable to repay his loan in a particular season owing to a short-fall in production due to total or partial crop failure, the destruction of the crop after harvesting by theft, or fire or other hazard, or a sudden fall in prices or unmarketability of the produce. In such cases, the postponement or re-scheduling of the repayment would take care of this problem. This is essentially a seasonal problem and there is a probability of such occurrences in every farm enterprise.

3. Defects in the credit organizational structure

Unlike the other two categories discussed, in this case the farmer is able to repay and has not suffered a seasonal set back, but since the organization giving credit is not supervising or following-up the farmer to recover the loan, he is not repaying the funds. In such cases, the farmer may predict that he will not suffer a loss by way of penal interest rates or even endanger the subsequent borrowing of funds. Loopholes by which a defaulter could borrow subsequently or the writing off of earlier defaults generally create this condition.

4. Attitudinal conditions not favouring repayment

Farmers who do not want to repay loans despite their ability to repay fall into this category. The consideration of government funds as grants rather than loans and therefore a lack of commitment to repay, is the general factor creating this attitudinal characteristic. This cause is generally closely linked with defects in the credit organizational structure and the reasons discussed earlier under this group often apply to attitudinal factors as well.

5. Misuse of funds

Borrowers may be unable to repay their loans owing to their use for other purposes. These purposes may be either essential consumption needs, or profitable or unprofitable investments in other enterprises. The term misuse means the use of funds for purposes other than to which the loan was intended, and does not connote economic irrationality.

This category includes an inability to repay owing to funds being used for ceremonial needs, a sudden illness or death or repayment of loans taken from other sources. Some persons may have invested the loan on other enterprises which have proved a failure, or even if

successful, there may be a lack of liquid funds to repay in time. Some borrowers of loans may have re-lent funds at higher interest rates but, have themselves been unable to recover the loans in time.

III. ANALYSIS OF SRI LANKA'S EXPERIENCE

(a) Analysis on the basis of recovery methods and principles

Short term credit given to small farmers since 1947 may be categorised into five periods on the basis of the principles of recovery. Such an analysis, though very limited, does throw some light on the third and fourth categories of the conceptual framework, namely defects in the credit organizational structure and attitudinal factors bearing on the repayment of loans.

The five periods are:

- (i) 1947/48 to 1952/53 – Individual farmer responsibility.
- (ii) 1953/54 to 1962/63 – Corporate responsibility of co-operatives.
- (iii) 1963/64 to 1966/67 – Restoration of individual farmer responsibility.
- (iv) 1967/68 to 1970 – Credit on hypothecation of rice ration books.
- (v) 1970 to 1975/76 – Credit without hypothecation of rice ration books.

The amount of funds loaned and recovered in each of these periods is summarised in Table 1². The outstanding feature that emerges from this categorisation is that the recovery rate was highest during the second period and fairly high in the fourth period. The other three periods disclose a similar recovery range of around 50 to 60 per cent.

2. Until 1967 short term credit for small farmers was restricted to paddy cultivation. The credit given for other food crops since 1967 is therefore discussed only in the fourth and fifth periods. Credit given for paddy is in terms of the cultivation year which includes two seasons, Maha or main season and a second season called Yala.

TABLE 1

Small Farmer Loans and Recoveries by Periods 1947-1976

In Rupees Million

Period	Loans Granted	Recoveries	Percent of Recovery
Paddy Loans			
(i) 1947/48 - 1952/53 ..	45.56	27.23	59.8
(ii) 1953/54 - 1962/63 ..	147.53	141.01	95.6
(iii) 1963/64 - 1966/67 ..	122.59	68.87	56.2
(iv) 1967/68 - 1970 ..	180.09	127.96	71.0
(v) 1970/71 - 1976 ..	330.55	170.63	51.6
Total Paddy ..	826.32	535.70	64.8
Other Food Crops			
(iv) 1967 - 1970 ..	19.47	15.43	79.2
(v) 1971 - 1976 ..	79.21	48.67	61.4
Total Paddy and Food Crops ..	925.00	599.70	64.83

Sources: Administration Reports
Commissioner of Agrarian Services
People's Bank.

Note: Loans given by the Bank of Ceylon have not been included in this Table as the statistics of their recovery are not available.

First Period (1947/48 to 1952/53)

During this period, when the Department of Food Production began a scheme of channelling credit through Co-operative Agricultural Production and Sales Societies (CAPS), credit worthiness was decided on the basis of the individual farmer's record of repayment. In other words, when a farmer failed to repay a loan, he forfeited his right to subsequent loans.

The amounts loaned and recovered annually during this period are given in Table 2. The rate of recovery on the basis of this principle was only about 60 per cent during this period. Only 37 per cent of funds was recovered in 1948/49, but the rate of recovery

improved in the three subsequent years and fell as low as 47 per cent in 1952/53. Consequently, the basis of credit worthiness was altered in 1953.

TABLE 2

**Loans Granted and Repaid in First Period
1947-48 to 1952-53**

Year	Loans Granted		Recoveries		Per cent of Recovery
	Rs.	Th.	Rs.	Th.	
1947/48	4,356		2,544		58.40
1948/49	5,563		2,040		36.67
1949/50	4,247		3,654		86.03
1950/51	6,695		4,147		61.94
1951/52	8,836		7,420		83.97
1952/53	15,864		7,428		46.82
Total	45,561		27,233		59.77

Sources: Administration Reports of the
Commissioner of Agrarian Services.

Second Period (1953/54 to 1962/63)

During this decade the principle of corporate responsibility was applied to co-operatives. Co-operatives which had loans in default and did not make good these defaults were not entitled to borrow on behalf of their members.

The amounts of credit given and recovered annually during this period are given in Table 3. During this period only Rs. 6.5 million of lent funds was unrecovered. The recovery rate was as high as 96 per cent of funds lent.

Although the principle of corporate responsibility ensured a high rate of recovery, it deprived non-defaulting members of defaulting societies the right to borrow. There was also evidence that farmers withheld the repayment of loans when they realised that they would

be denied subsequent loans as the Society of which they were members were about to default in the repayment of their loans. A survey conducted in 1962 revealed that nearly one third of all co-operatives were uncreditworthy.³

TABLE 3
Loans Granted and Repaid in Second Period
1953-54 to 1962-63

Year	Loans Granted	Recoveries*	Percent of Recovery
 Rupees	Thousand.....	
1953/54 ..	11,709	11,305	96.54
1954/55 ..	14,674	15,030	102.42
1955/56 ..	18,370	17,512	95.32
1956/57 ..	21,934	21,787	99.32
1957/58 ..	13,809	12,544	90.83
1958/59 ..	18,382	13,022	70.84
1959/60 ..	13,961	13,815	98.95
1960/61 ..	11,406	13,395	117.43
1961/62 ..	12,618	13,134	104.08
1962/63 ..	10,667	9,462	88.70
Total ..	147,530	141,006	95.57

Source: Administration Reports of the
Commissioner of Agrarian Services.

* Recoveries each year include funds lent in previous years.

The impact of these factors led to the volume of credit declining sharply after the initial years of increased participation by societies. In 1962/63, credit reached a low figure of Rs. 10.6 million compared to Rs. 21.9 million in 1956/57. This declining trend of credit as well as the low credit limits under this scheme led to its abandonment.

3. Administration Report of the Commissioner of Agrarian Services 1962/63 p.KK 55, June 1964.

Third Period (1963/64 to 1967)

The principle of corporate responsibility was given up in 1962/63. It was proposed to ensure recovery by a commitment of debtors to sell paddy under the Guaranteed Price Scheme, equivalent in value to the loan taken. Also, the non-repayment of a loan from a co-operative was to be made an offence punishable in law with a fine or imprisonment. However, both these measures were not implemented owing to a short-fall in paddy production leading to a possibility of inadequate domestic supplies for distribution to consumers under the rice ration scheme.

In effect the principle of individual responsibility was restored as during the first period. In other words, the co-operative had no specific means of ensuring recovery nor was each co-operative as a body responsible for returning funds borrowed on behalf of its members.

The proportion of recoveries during this period fell to 56 per cent. Except in 1965/66 when the recovery rate was about 76 per cent, in the other three years it was low. Table 4 gives the yearly position:

TABLE 4

Loans Granted and Repaid in Third Period 1963 - 64 to 1966 - 67

Year	Loans Granted Rs. Th.	Recoveries Rs. Th.	Per cent of Recovery
1963/64	34,588	16,200	46.83
1964/65	27,555	16,517	59.94
1965/66	28,138	21,324	75.78
1966/67	32,307	14,825	45.88
Total	122,588	68,866	56.17

Source: Administration Reports of the
Commissioner of Agrarian Services

Fourth Period (1967/68 to 1969/70)

In September 1967, a new agricultural credit scheme was introduced. The Central Bank of Ceylon provided refinance facilities and gave a guarantee to reimburse 75 per cent of defaults. Two features of this scheme are relevant for this analysis :

- (1) The government department disbursing credit was replaced by the People's Bank (in six areas by Co-operative Provincial Banks which obtained funds from the People's Bank). This disbursement of credit by a commercial bank, rather than a government department, was expected to generate a greater sense of responsibility on the part of farmers to repay loans.
- (2) The rice ration coupons of a farmer's household were pledged as security for the loan taken. When a farmer did not repay a loan the ration coupons were withheld and his account credited at the rate of one rupee per coupon. The hypothecation of the rice ration coupons was expected to act as a deterrent against default and in the event of a farmer not repaying a loan, it was ultimately recoverable through rice ration coupons.

The record of paddy loans during this period are given in Table 5. While recoveries in cash and rice coupons together amounted to 71 per cent, cash recoveries alone amounted to only 64 per cent. The highest rate of recovery under this scheme was in the first year of its implementation. The rate of recovery declined each year. During the first year's implementation, and particularly in the first season, Maha 1967/68, the recoveries from rice ration coupons were significant. The rate of recovery declined in the Maha (Main) season 1969/70 to only 52 per cent.

During this period a sum of Rs. 19.47 million was lent for other food crops and Rs. 15.43 million or 79 per cent was recovered. (See Table 1). There was a slight decline in the proportion of recoveries over the three year period when it fell from 83 per cent in the first year to 81 per cent and 75 per cent in the second and third years, respectively.

TABLE 5
Loans Granted and Repaid in Fourth Period
1967/68 to 1969/70

Year	Loans Graned Rs. Th.	Recoveries Rs. Th.	Per cent of Recovery
1967/68 ..	72,712	62,547	86.02
1968/69 ..	55,669	36,354	65.30
1969/70 ..	51,705	29,058	56.20
Total ..	180,086	127,959	71.05

Source: People's Bank.

Fifth Period (1970 to 1975)

The hypothecation of rice ration coupons was given up in the Yala season 1970. Except for this difference and the entry of the Bank of Ceylon to the scheme in 1973, it operated as before with respect to the method of disbursing credit and recovering funds. In other words, the scheme operated basically in the same way as in the first and third periods discussed earlier.

The amount of funds loaned and recovered each season during this period is given in Table 6. There was a declining trend of recoveries reaching the lowest level in Maha season 1974/75, when only 42 per cent of loaned funds was recovered. This is also one of the lowest levels of annual recovery under any credit scheme for Paddy. The average level of recovery for this period was 52 per cent.

During this period, in addition to the paddy loans, a sum of Rupees 79 million was given for subsidiary crops and about 62 per cent of this sum has been recovered. (See Table 1.) The rate of recovery of these loans has continuously declined over the years.

The foregoing analysis on the basis of recovery principles indicates certain weaknesses in the credit schemes that were implemented. Where the credit agency had neither a basis of fixing responsibility nor a method of recovering unrepaid loans, the rate of default was

high. On the other hand, when the principle of corporate responsibility was applied, or defaults recovered through rice ration coupons, the recovery rate was high. The implication of this is that the ability to fix responsibility was an important factor in the recovery of loans

TABLE 6
Loans Granted and Repaid in Fifth Period
1970/71-1975/76

Year	Loans Granted Rs. Th.	Recoveries Rs. Th.	Percent of Recovery
1970/71 ..	29,273	17,953	61.32
1971/72 ..	30,623	20,620	67.34
1972/73 ..	28,265	18,544	65.61
1973/74 ..	109,046	55,203	50.62
1974/75 ..	77,100	33,814	43.86
1975/76 ..	56,260	24,496	43.54
Total ..	330,567	170,630	51.62

Source: People's Bank.

The final years of implementation of credit schemes had particularly low levels of recovery. When a scheme is about to be given up the rate of recovery declines as there is an expectation that overdue loans may be underwritten or that fresh loans would be given. The particularly low levels of recovery in 1974/75 and 1975/76 may however be partly accounted for by the drought conditions prevailing in certain districts.

The provision of a 75 per cent guarantee on defaults in the fourth and fifth periods may have also contributed to a lack of responsibility on the part of the commercial banks and co-operatives. While the commercial banks bear only 25 per cent of the losses of unrecovered funds the co-operatives do not suffer any loss. Therefore co-operatives which are the most crucial link between the banks and the farmer, have no particular incentive to recover loans.

(b) Findings of a survey on defaults

In 1971 the Central Bank of Ceylon conducted a survey of defaults in the repayment of agricultural loans. This survey investigated loans taken under the new agricultural credit scheme between 1967 and end 1970.⁴ This period corresponds approximately to the fourth period in the earlier discussion, when about 71 per cent of loans was recovered. The survey interviewed 841 defaulting members of co-operatives and collected data on family size, cost of production living expenditure, area cultivated, yields etc.

The survey also asked the defaulter himself the reason for default. The answer to this question is no doubt biased towards giving reasons which attaches blame to others or attributes it to circumstances beyond the farmer's control. This bias must be kept in mind in the following discussion.

The survey report itself listed 17 specific causes of default and a residual unspecified category. This data is reclassified and presented in Table 7 in terms of the categories discussed in the conceptual framework.

TABLE 7
Categories of Default 1967-70

Category of Default	Percentage of	
	Defaulters	Loans
1. Defects in agrarian structure ..	19	17
2. Seasonal factors ..	26	33
3. Defects in Credit organization ..	17	12
4. Attitudinal factors ..	16	18
5. Misuse of funds ..	15	15
6. Other miscellaneous reasons ..	7	5
Total ..	100	100

Source: Central Bank of Ceylon, *Survey of Defaults in the Repayment of New Agricultural Loans* (1972) Table 18, p. 28 reclassified.

4. Central Bank of Ceylon, *Survey of Defaults in the Repayment of new Agricultural Loans*, 1972.

5. *Ibid* p. 28.

Nineteen per cent of defaulters and 17 per cent of defaults may be attributed to defects in the agrarian structure. The survey described this deficiency mainly as too low incomes to enable repayment of loans. Heavy capital expenditure and lack of irrigation facilities have also accounted for defaults in this category.

As many as 91 per cent of defaulters received incomes of less than Rs. 500 per month and 71 per cent of defaulters had incomes of less than Rs. 250 per month. Only 2 per cent of defaulters had incomes of more than Rs 1000 per month from all sources. In other words there was a high correlation between low incomes and defaults⁶. The distribution of defaulters by income groups is given in Table 8.

TABLE 8

Distribution of Defaulters by Income Groups

Income Group Rs. per month	Percent of Defaulters	Cumulative Percentage of Defaulters
Under 50	5.6	5.6
51 to 100	18.1	23.7
101 to 250	47.4	71.1
251 to 500	19.6	90.7
501 to 750	5.0	95.7
751 to 1000	2.6	98.3
Over 1000	1.7	100.0
Total	100.0	—

Source: **Survey of Defaults in the Repayment of New Agricultural Loans** Table No. 8 p. 16.

The average yield of the defaulters was 37 bushels per acre in the Maha (main) season of 1970/71 as against a national average of 52 bushels per acre.⁷ Among the reasons attributed for the low yields

6. Ibid p. 16.

7. Ibid p. 34.

were the unsuitability of the land for paddy cultivation either due to water logging or lack of irrigation facilities; inadequacy of inputs or their unavailability on time, and the lack of advisory and extension services to utilize the best available methods of cultivation⁸.

The small size of holdings of defaulters is indicated by the fact that their average size of holding was 2.41 acres. Since there was a high correlation between incomes and size of holding, it implies that the small size of holding had an important bearing on incomes. The survey did not analyse data on the basis of farm costs and expenditure as suggested in the conceptual framework to disclose more clearly the structural weaknesses bearing on defaults.

Crop Failure

As much as one - third of the loans was said to have been not repaid owing to seasonal factors, namely crop failure. The scheme of agricultural credit included a provision for the extension of loans which could not be repaid owing to crop failure. Since the amount of loans extended for crop failure during the reference period was only 10 per cent of all loans⁹, the higher figure suggests a bias among defaulters to attribute non-repayment to factors beyond their control. Apart from sampling errors which may also partly explain the difference, it is also possible that some farmers were not aware of, or officials did not grant, the permitted extensions on account of crop failure.

Credit Organization

Defects in credit organization was attributed as the reason for default by 17 per cent of borrowers and accounted for 12 per cent of defaults. Again, these causes may have been exaggerated. However, it is significant that 8.8 per cent of defaulters stated that they would have returned the loaned funds if co-operative officials were not indifferent and had taken an active interest to recover loans. A further 7.8 per cent of defaulters did not return funds as they felt that co-operative officials would not return the money to the People's Bank¹⁰. The survey report is replete with observations on the lack of interest, supervision and record keeping of co-operatives¹¹.

8. *Ibid* p. 62.

9. *Ibid* p. 62.

10. *Ibid* p. 29.

11. *Ibid* pp. 47-50.

Attitude to Repayment

In the case of attitudinal factors, a downward bias would be expected. Despite this as much as 16 per cent of defaulters admitted not returning loans due to their not feeling a responsibility to do so. These defaulters thought that the loans were outright grants, or expected the defaults to be written off or simply had no intention to repay. Past practices of writing-off loans, the lack of legal enforcement, the knowledge that even habitual defaulters had obtained subsequent loans and political interference are among the reasons for these attitudes. While the survey attributed 18 per cent of loans to be not repaid owing to attitudinal factors, in fact a higher proportion of loans may have been unrepaid owing to this reason¹².

Misuse of Funds

Unforeseen expenditure caused by illness or death, legal and ceremonial expenses, indebtedness to other sources, and use of funds for other purposes resulting in illiquidity or unprofitability, which could be included in the category misuse of funds accounted for about fifteen per cent of both defaulters and defaults. Other reasons for misuse discovered in the survey included the use of loans for re-lending at higher rates of interest¹³.

Miscellaneous Reasons

Other reasons which cannot be easily categorised into the five groups discussed above accounted for 7 per cent of defaulters and 5 per cent of defaults. These reasons included malpractices of government officials, political interference, heavy capital expenditure and unemployment.

In summary, we may conclude that though the quantified distribution of the six categories of causes for default may have biases there is little doubt that the five specified categories were significant factors bearing on defaults. The implication of this is that a credit programme for small farmers could recover a substantial proportion of funds lent only if it addresses itself to meeting the several fundamental reasons bearing on defaults.

12. *Ibid* pp. 38—40.

13. *Ibid* pp. 53—56.

IV SUMMARY AND CONCLUSIONS

In a context of small sized holdings and low productivity, the income derived from a significant proportion of farm holdings is inadequate to meet the basic subsistence needs of the farm household. This is no doubt one of the basic reasons why many farmers do not have a repaying capacity. In turn, these conditions lead to the use of institutional credit to repay debts to other sources or for subsistence. Even where the credit has been used for cultivation purposes, the increase in income may be inadequate to meet the subsistence expenditure of the household. Such basic defects in agrarian structure cannot be remedied by agricultural credit policies but agricultural credit policies are adversely affected by them.

Although we have viewed the agrarian structure to be closely related to the repaying capacity of a farmer, deficiencies in the agrarian structure also influence the attitude to repayment and the misuse of funds. Owing to these structural problems any credit scheme for small farmers are likely to run into these problems unless there is a reform of the agrarian structure or farmers with such problems are excluded from a credit scheme. The latter solution is impractical in a context of programmes specially designed to help small farmers.

The non-repayment of loans on account of seasonal factors has been a significant reason for defaults over the years. Although this factor may be exaggerated by defaulters themselves, the fact that recovery rates are lower during times of greater crop failure, is indicative of the impact of this factor. Although the scheme of agricultural credit introduced in 1967 allows for extension of loans on account of crop failure, records do not indicate that farmers have made adequate use of this provision. Although there is a compulsory agricultural insurance scheme its coverage has been limited and it has been unable to cope with this problem. Again given deficiencies in the agrarian structure, seasonal failures tend to accentuate indebtedness and thereby repaying capacity in future as well.

Organizational deficiencies have been an important factor bearing on the inability to recover institutional credit. Co-operatives, which have been the agencies disbursing funds throughout the entire period, have acted as mere offices for issuing funds. They have not been

directly involved with the agricultural enterprise and the proper use of funds and their recovery. During the period when the principle of corporate responsibility was applied, co-operatives acted more responsibly and recovered a high proportion of funds. On the other hand, the guarantee of 75 per cent given by the Central Bank appears to have had an effect of reducing their sense of responsibility. The co-operatives do not keep adequate records, make decisions about the credit worthiness of borrowers, supervise lent funds or even follow-up defaulters.

Within the existing organisational framework four methods of ensuring recovery have been considered and two of them implemented for certain periods. The two methods which were implemented were the application of the principle of corporate responsibility and the hypothecation of rice ration books.

The higher rate of recovery during the period of corporate responsibility implies a greater vigilance over loaned funds when a co-operative's financial position and ability to obtain funds subsequently were affected. A lax attitude appears to prevail when funds are given irrespective of the record of recoveries. Since 1967 when credit was channelled to co-operatives through commercial banks and the Central Bank gave a guarantee of 75 per cent of defaults, the co-operatives have merely reported defaults to the bank. Although one of the reasons for commercial bank involvement was to instill a greater business-like perspective to agricultural lending, this has not been realised. This is due to the banks not being given the discretion to decide on its lenders the agricultural credit scheme and the realisation that this scheme too is a government loan scheme. Perhaps due to the continuation of the guarantee the banks have not developed an adequate supervisory role over the co-operatives.

The system of hypothecating rice ration books was expected to be a deterrent against default as well as built-in device to ensure complete recovery of lent funds over time. It failed to act as a deterrent against default as some farmers preferred to repay with rice ration coupons as this method of repayment did not require an immediate lump sum repayment. This method of recovery also had the defect of decreasing the number of eligible borrowers. In any case, this method had to be given up owing to political pressures against it and a change of government.

Two methods for the recovery of loans which were advocated but not implemented were the commitment to sell paddy under the Guaranteed Price Scheme (GPS) and the rendering of non-repayment of loans taken from a co-operative a punishable offence.

The compulsory sale of produce under the GPS was made impractical by the much higher open market prices and the need to obtain adequate domestic supplies for the rice ration scheme. Penal provisions to implement agricultural policies have been mere suggestions in Sri Lanka and never implemented.

The attitude that agricultural credit for small farmers is a form of loan, grant or subsidy has been prevalent for a long time. The writing-off of loans, the practice of sometimes giving defaulters fresh loans, lack of supervision, follow-up of loans or legal enforcement of liabilities, and political and influential opinion in the village that loans need not be repaid, are among the major factors which have created this attitude. Although there was a realisation in 1967 that this attitude must be changed, the new agricultural credit scheme implemented by the banks has fallen into the same predicament. These factors must be changed to create a new attitude. The organisation disbursing credit should maintain records and effectively supervise credit, defaulters should not be given fresh loans nor defaults written-off and a method of legal enforcement or penalty should be attached to defaults. Even if the legal enforcement is not altogether effective, the knowledge that such action is taken would have a salutary effect on not treating these loans as grants.

While the defects in agrarian structure and credit availability for other uses have a fundamental bearing on the misuse of funds, the lack of supervision by the credit disbursing organisation is a direct cause for it. The high proportion of funds used for other purposes could be avoided if the organisation granting credit perform an effective role. Similarly the creation of attitudes favouring a climate of treating loans as not requiring to be repaid also leads to the misuse of funds.

In summary, changes in the agrarian structure which ensure adequate sized holdings and need inputs and the creation of a village level institution capable of determining the credit-worthiness of borrowers and the effective supervision of lent funds are the basic requirements to ensure a high level of recovery of lent funds.

- ① Rural farmers' non. Agri. credit must be taken & consider. to total. DB such credit, big amount to be paid.
- ② They must be made to have other sources of income.
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LEVEL OF UTILISATION OF CAPACITY AND AN ESTIMATE OF ROOM REQUIRE- MENTS IN THE HOTEL INDUSTRY IN SRI LANKA - 1977 - 82

G. M. P. de SILVA

Between 1967-75 the hotel industry in Sri Lanka has shown a remarkable rate of growth. The tourist industry commenced on organised lines in 1967 and the growth of the industry in terms of the level of investment and new capacity created is perhaps one of the fastest rates of growth achieved in any sector of the economy in Sri Lanka. For example, in 1967 accommodation capacity in hotels approved by the Tourist Board was 770 rooms. Bulk of this capacity was in old established hotel concerns which had been in operation over a long period. By the end of 1975, there were 76 hotels in Sri Lanka suitable for international tourist trade, with 3673 rooms. Of these rooms 1100 were in Colombo city, 1689 on the beaches and 826 on the interior circuit of the ancient cities, Kandy and hill country and 58 in the Northern Region. The annual average rate of growth of rooms in the industry worked out to a very impressive 25.0 per cent over the period. The record of the industry in terms of the volume of capital invested appears even more impressive. Table I summarises the available data on investment in the industry during the period 1968-75. Total investment in the industry excluding expenditure by government on infra-structural development amounted to Rs. 320.5 million, an annual investment of around Rs. 40 million. The foreign component amounted to about Rs. 85.0 million.

The bulk of the investment in the hotel industry came from indigenous sources; the proportion of foreign capital in the industry is very small. There are signs that the level of investment activity in the industry will continue unabated for several years to come. As at March 31, 1976 there were 33 new hotels under construction, with 1535 rooms. This programme of construction is likely to attract an

This study has benefitted from valuable comments made on an earlier draft of this paper by Mr. V. K. Wickramasinghe, Director, Development Finance Department, Central Bank.

even larger volume of capital into the industry. Thus the total volume of investment in the physical assets of the industry should now be close upon Rs. 450 million.

No firm estimates are available on the volume of capital expenditure by government on infra-structural developments for the tourist industry. The available data are summarised in Table I. These consist of the development of international airport at Katunayaka, improvements to road and rail network and the creation of several institutions to provide trained personnel to the industry and also to act as regulating body. Indeed, it is true that not all these infra-structural developments were undertaken to meet specific requirements of the tourist industry. Nevertheless it is true that a large part of the cost of providing them should be attributed to the tourist industry. Therefore, the total investment in the industry in current terms, once an addition is made on very rough assumptions for the portion of government investment on infra-structural development attributable to the tourist industry, should be in the region of Rs. 600 million.

TABLE I
Investment In the Hotel Sector

Rs millions.

Year	No. of Rooms Completed	Capital Expenditure on hotels		Total	Ceylon Tourist Board Expenditure on infra-structural development - Resort Areas
		Rupee	Foreign (Net of FEECs)		
1968	145	4.6	0.4	5.0	—
1969	120	2.1	1.2	3.3	1.8
1970	498	22.2	13.8	36.0	2.4
1971	137	6.1	0.3	6.4	1.3
1972	75	4.0	0.5	4.5	2.9
1973	591	34.8	26.1	60.9	1.9
1974	471	40.3	3.3	43.6	3.7
1975	811	122.1*	38.7*	160.8*	n.a.
	2,848	236.2	84.3	320.5	14.0

* Provisional

Source: Ceylon Tourist Board

N. B. - Expenditure on other infra structural development such as development of airport, other transport facilities, vehicles, hotel school etc. are not reflected here.

The excellent growth performance of the industry is unique in the sense that no other sector of the economy has shown this level of growth in recent years. In the sixties the industrial sector grew rapidly in current terms but the period also witnessed rapid increases in prices of industrial products which reduce substantially the growth of industrial output in real terms. The growth in manufacturing sector at constant (1959) factor cost prices averaged around 5.7 per cent per annum during the period 1959-72. Table II shows that in the case of the tourist industry the direct contribution of tourism to Gross National Product at constant prices rose from Rs. 6.3 million in 1970 to Rs. 26.3 million in 1975, representing an annual average rate of growth of 32.9 per cent. Tourist earnings expressed as a percentage of the Gross National Product and total value of exports give some measure of the importance of the industry to the economy or, to put it in another way, the degree of dependence of the economy on the tourist industry. Table II summarises this data for the period 1967-75.

It is unlikely that the hotel industry will be able to sustain rapid growth rates beyond 1977 as it is evident that the original expectations with regard to the volume of tourist traffic in the island have not been fulfilled.¹ Planning for investment in physical capital in the industry appears to have proceeded on the basis of the original expectations with regard to the number of tourist arrivals. As a result, there appears to be emerging in the industry a problem of over capacity. The rate of growth of investment in the industry, therefore, will have to be curtailed until there are indications that the volume of traffic will increase sufficiently fast to warrant further investment. The purpose of this article is to examine the level of utilisation of capacity in the industry in the period 1968-76 and to estimate the total room requirements in the period 1977-82 on the basis of likely growth in traffic that Sri Lanka may achieve.

1. The volume and pattern of tourist traffic that have emerged in Sri Lanka during the last seven years are very different from what was envisaged in 1967. See First Tourism Development Plan prepared by Harris Kerr and Forster. According to this plan the total number of visitors in 1976 was expected to be around 307,000 visitors. Number of visitors anticipated from U. S. A. was 104,000. (See Table III).

TABLE II

Year	Contribution to GNP (at constant prices Rs. Million)	Tourist Earnings as a percentage of GNP & Total Exports	
		% of Total Exports	% of GNP
1967	—	0.34	0.07
1968	—	0.51	0.10
1969	—	0.88	0.15
1970	6.3	1.05	0.18
1971	6.6	1.04	0.17
1972	7.5	2.18	0.34
1973	9.1	3.03	0.52
1974	12.8	3.08	0.54
1975	26.2	3.99	0.72

Source: GNP & Export data from Central Bank of Ceylon
Tourist Earnings from Ceylon Tourist Board.

GROWTH OF THE INDUSTRY - REASONS

It is instructive to examine the reasons for the rapid growth of the tourist industry. One of the factors that often inhibits growth of industry or new forms of economic activity in the modern sector of an economy is the shortage of industrial entrepreneurship. This is an important ingredient in the economic process, for it is frequently argued that, at least at the beginning, it is not so much a shortage of savings that prevent the growth of modern forms of investment as the shortage of entrepreneurial talent. There is, therefore, a volume of frustrated savings. There is readiness to save and willingness to invest which is frustrated by the lack of ability to invest. Frustrated savings may show up in a variety of forms such as hoarded gold or foreign exchange, luxury consumption, and occasional large scale spending and gifts.¹ A good indication of the existence of frustrated savings occurs whenever the total supply of savings is highly responsive to the appearance of new opportunities.

1. See Albert O Hirschman, *The Strategy of Economic Development*, New Haven: Yale University Press 1959 p. 35 - 37.

The appearance of the tourist industry in Sri Lanka's economy as a major outlet for investment has attracted a large volume of savings which tended to remain sterile in the hands of a small but growing class of people. Most of these people made their money in gemming and business. Had it not been for the appearance of the tourist industry, most of the resources generated by the gemming industry may have found its way into the traditional forms of investment such as gold, real estate development and trading and business or may have been held in the form of idle cash reserves. It is unlikely that the new capital made available through the gemming industry would have flowed into industry in the same way as it did into the tourist industry. If the emergence of the tourist industry did not coincide with the growth of gemming industry on sound organised lines, a large proportion of this new capital may have remained sterile for want of investment outlets.¹

This could have happened for one important reason. Basically industry requires entrepreneurial talent of a kind that is in short supply in Sri Lanka. The sixties saw the emergence of a class of industrial entrepreneurs. But their experience is still limited, their activities are financed largely through self-financing and no effort whatsoever has so far been made to mobilise external sources of funds for their activities through the stock market. In these circumstances, those who amassed wealth through gemming would have had to move into industry on their own. This, however, is not easy for most of them as they lack the basic skills necessary to give them the required confidence to handle complex problems in industry. On the other hand, hotel industry's demands on entrepreneurial talents are not so heavy. Investment in hotel sector does not involve complex decision making, or difficult technological problems. For most investors, investment in the hotel industry would appear as a simple extension of real estate development in which most of them have acquired an experience. The aspects of construction or management in the hotel industry do not pose any problems for the entrepreneur because there

1. The gemming industry also provided an ideal method to bring into the open hoarded wealth quite legitimately, without attracting the attention of the Inland Revenue Department. One had only to enter the industry and claim a fictitious 'find' (the stone is really purchased from another) and then sell it to the Gem Corporation or export it himself - a very convenient way to turn 'black' money into 'white'.

is a wealth of experience behind them in these areas. Management of a hotel requires expertise of the kind that is normally acquired in managing a trading establishment. The only difficulty that might arise is with regard to 'selling' the hotel. But once the right contracts have been signed with tour operators, the entrepreneur has very little to worry about the success of the project. In short, entrepreneurial talents required in the hotel industry are simple. What is more, past experience acquired in trading and business provides a suitable basis for decision making in the hotel industry. The knowledge that this experience is relevant, although it has not been gained in precisely the same field of endeavour, provides the confidence required for decision making. In other words, the move from traditional forms of investment into tourist industry is fraught with less problems to the local entrepreneur because of the simplicity of technological and decision making requirements in this industry and also because of "the degree of confidence provided by the subjective feeling of doing something that is new but not entirely so".¹ In short for an entrepreneur in search of an investment outlet, hotel industry provides a relatively safe and easy avenue, free from complex technological and managerial problems generally associated with investment in industry.

ROLE OF FISCAL INCENTIVES

The remarkable growth of investment in hotels is the result of their relative lack of complexity in the decision making process. In this context, the fiscal incentives granted by the Government helped to strengthen the attractiveness of the industry. Virtually the same fiscal incentives were available for nearly a decade to promote industry in the island but the response of the investors in these fields has not been as remarkable.

The fiscal incentives consist of a corporation tax holiday (five year full tax holiday and fifteen year half tax holiday), capital allowances such as lump sum depreciation and development rebate,

1. Henry G Aubrey "Investment Decisions in Underdeveloped Countries" in *Capital Formation & Economic Growth*, NBER Princeton University Press, 1955. pp. 397 - 440.

carry forward of losses, exemption of dividends declared by approved companies from income tax and investment relief under Section 16cc to investors in hotel companies¹.

The fiscal incentives granted by the Government have made a positive contribution to the industry by making investment in the industry highly attractive to investors. The tax holiday virtually ensures for any investor a reasonable return on the investment. At the beginning of the project the operating profits tend to be low until the hotel establishes itself, builds up a reputation in the market and achieves higher occupancy rates. The capital allowances granted extend a cash advantage to a concern undertaking capital expenditure by reducing the tax burden in the early stages of the project. The lump sum depreciation allowance and the development rebate taken together on most items of plant machinery and buildings amount to more than 100 percent of the initial sum invested so that practically the entire investment can be recouped out of profits in the first few years of investment. But this benefits only a concern which pays tax and not one which is exempt from tax. Since these deductions are allowed in the first year of operations of the project when profits are exempt, these concessions do not mean anything to a project except in the following situation:—

- (1) These deductions would benefit the company if it incurs losses throughout the tax holiday period in which case these could be carried forward and set off against the profits of the company in later years which are liable to tax.
- (2) Owners of the hotel projects also own other businesses. In this case, if the hotel project is owned by an individual or partnership the accounting losses of this project can be set off against the profits from other ventures. In this way there is great scope for manipulating the tax advantages of the hotel industry to achieve higher overall return on

1. Certain adjustments have been effected recently to the above incentives granted for promotion of industry and tourism. Tax holidays to companies and capital allowances remain as they were but exemption of dividend out of tax exempt profits has been altered. The dividend exemption does not apply to undertakings approved after November 6, 1974. The exemption is now restricted to dividends on ordinary shares of companies approved earlier and that too up to a maximum of 10 percent.

the capital invested in all the businesses. It may also be possible for a concern with several lines of business to move part of the taxable profits into the hotel business under various ruses and thereby avoid tax.

- (3) The construction of the hotel is undertaken by one company while the operation of the hotel is undertaken by a subsidiary or associate company. In this instance the owning company will enjoy the benefits of capital allowances while the operating company will get the benefits of the tax holiday. Strangely enough this technique appears to have been used only in a few instances by hotel undertakings to reap the full benefits of tax incentives.

The dividend exemption and the investment relief granted to investors were designed to promote the mobilisation of equity funds for hotel investment. These concessions were granted to both public and private companies. However, the other fiscal incentives have encouraged reliance on self-financing. Whenever recourse was made to external sources of funds, it was to banks and long term lending institutions such as the Development Finance Corporation of Ceylon to which they turned and not to the stock market. The growth of the industry has contributed very little to the development of the stock market as only few depended on the stock market for funds.

GROWTH OF TOURIST TRAFFIC

Figures relating to tourist arrivals in Sri Lanka are summarised in Table III. In dealing with tourist arrival statistics an important distinction must be made between the visitors from India and other tourists. Because of the strong cultural and ethnic ties Sri Lanka has with India, visitors from India must be kept apart from the total arrivals in Sri Lanka in order to get a clear picture of the growth of tourist traffic in the island.

Indian visitors to Sri Lanka come here mostly to see their friends and relatives with whom they stay and who look after and entertain them during their stay in Sri Lanka. Most of them are the dependents of the Indian business community in Colombo. Therefore, the net gain to Sri Lanka's economy from Indian visitor traffic may be minimal or may even be negative.

TABLE III
Tourist Arrivals

Year (1)	Total Arrivals (2)	Indian Arrivals (3)	Total Excluding Indians (4)	Index of Excluding Arrivals		The Ceylon Tourist Plan 1967 Forecast Arrivals (7)
				1961=100 (5)	1967=100 (6)	
1961	27,777	10,053	17,724	100.0	—	—
1962	26,397	10,291	16,106	90.9	—	—
1963	18,440	3,337	15,103	85.2	—	—
1964	18,872	2,870	16,002	90.3	—	—
1965	19,781	4,663	15,118	85.3	—	—
1966	18,969	3,644	15,325	86.5	—	—
1967	23,666	4,623	19,043	107.4	100.0	24,000
1968	28,272	6,803	21,469	121.1	112.7	32,800
1969	40,204	8,841	31,363	176.9	164.7	44,300
1970	46,247	10,686	35,561	200.6	186.7	56,000
1971	39,654	6,097	33,557	189.3	176.2	73,600
1972	56,047	7,843	48,204	271.9	253.1	97,000
1973	77,888	7,754	70,134	395.7	368.2	129,000
1974	85,011	6,773	78,238	441.4	410.9	171,500
1975	103,204	7,808	95,396	538.2	500.9	229,000
1976	117,000*	—	—	—	—	307,000

* Provisional

Source: Ceylon Tourist Board Statistical Reports
The Ceylon Tourist Plan 1967.

The total arrivals excluding Indians show a marked improvement in the latter half of the last decade. This is an indication that the tourist promotion effort that was begun after 1965 has paid rich dividends in the form of a growth in the volume of tourist traffic to the island. Column (5) of the table gives an index of the arrivals excluding Indians with 1961 as the base. It shows that the tourist arrivals actually declined in the first half of last decade. From 1967 onwards, however, the tourist arrivals have recorded an increase every year except in 1971. This reduction in tourist traffic in 1971 was due to the internal disturbances experienced in Sri Lanka in April/June of that year. The industry, however, recovered completely from this temporary set back in 1971.

The index of arrivals shows that by 1970 the industry had succeeded in doubling the total number of arrivals over 1961 figure. Although it took ten years to achieve this, in the short space of

three years from 1971—1973 the industry has once again very nearly doubled the tourist arrivals over 1970 figure which means that the total arrivals by 1973 was nearly four times that of 1961 figure.

Column (6) of the table shows index of arrivals with 1967 as the base. Tourist promotion work was begun in this year. Hence it is more meaningful to study the growth in tourist traffic with 1967 as the base. Even with 1967 as the base the growth in tourist traffic excluding Indians is very impressive. By 1975, in the space of eight years the industry has shown a fivefold increase in the total tourist arrivals excluding Indians over the base year.

Likely Growth of Tourist Traffic 1976—80

It is clear that between 1967—75 the industry has made remarkable progress in terms of the number of arrivals. The total volume of tourist arrivals in the island exceeded 100,000 for the first time in 1975. The annual average rate of growth between 1967—75 was 20.2 per cent. However, the performance of the industry during this period is nowhere near what was anticipated originally when the Ceylon Tourist Plan was drawn up in 1967. According to the Plan tourist traffic to Sri Lanka was expected to increase from 24,000 in 1967 to 307,000 by 1976, representing an annual average rate of increase of 32.7 per cent (see Table III Column (7)). It was on the basis of these expectations that most of the planning in the early 70's for the creation of hotel capacity in the industry has taken place.

The rate of growth between 1967—75 appears to be satisfactory, but this overall growth rate hides fluctuations experienced by the industry within sub-periods. Between 1967—70 the industry recorded an annual average rate of growth of 25.0 percent. There has, however, been a slowing down in the pace of growth of the industry in the two sub-periods 1970—73 and 1973—75. Between 1970—73 the annual average rate of growth declined to 19 percent while in the period 1973—75 the rate of growth was still less, being around 15.1 percent. The very high rate of growth is a characteristic of any new industry. Since the industry starts off from a low base in the initial years, the increases that are recorded in the first few years are extremely large and impressive but when the industry has reached maturity, in the sense it has grown to respectable proportions, the rate of growth tends to slow down. We may, therefore, see a slowing

down of the rate of growth of tourist traffic in the next few years but it must not in anyway be understood to mean that the industry has exhausted its potential for growth.

Factors Determining Growth

There are several socio-economic factors that determine the growth of international travel. Some of these factors are generally beyond the control of the receiving country. They are largely a function of the economic conditions prevailing in the countries of origin of visitors. Among these factors contributing to the growth of world travel, the growth in the real income of individuals in Western Europe and North America and rest of the developed world is the most important. Rapid increases in the growth of real incomes in these countries have brought foreign travel within the reach of a growing class of people. The spread of education which stimulates greater interest in foreign places and cultures, frequent paid holidays, lower air fares and faster means of travel over long distances have all contributed to the growth of world travel. All these factors have brought on an age of mass travel. The tourist industry all over the world no longer caters exclusively to the wealthy class.¹ Since this is an age of 'mass travel' the growth of the industry is extremely sensitive to the growth of incomes in Western Europe and North America. There is evidence to show that in developed countries expenditure on foreign travel increases more than proportionately with a rise in income. In other words, the income elasticity of expenditure on foreign travel is greater than unity².

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1. The tourist industry is especially vulnerable to changes in 'fashion' when the industry is designed to cater exclusively to the wealthy class. There are instances when entire tourist resorts have declined and fallen into disuse as a result of changes in 'fashion'. Fortunately the growth of "mass tourism" has helped the industry to eliminate to a large extent the possibility of tourist complexes and regions falling into disuse through changes in tastes and fashions. The industry is more likely to suffer from fluctuations in national income in developed countries because of the high income elasticity of demand for foreign travel. See John M. Bryden, *Tourism & Development, a case study of the Commonwealth Caribbean*. Cambridge University Press 1973 pp. 90.
 2. The data for 12 countries which provide the bulk of world tourist traffic show that an increase in national income generally brings about a rise in the level of expenditure on foreign travel. The income elasticity was estimated to be about 1.5 for many countries while for a few it was estimated to be greater than 2.0 IUOTO, *Economic Review of World Tourism, 1968* (Geneva 1968) quoted in U.N. *Elements of Tourism Policy in Developing Countries* (TD/E/C. 3/89/Rev. 1) pp. 8.

The outlook for the tourist industry in Sri Lanka in the next few years therefore depends greatly on the economic well being of the developed world. More specifically the economic well being of countries of Western Europe such as West Germany, France, U. K. and Scandinavian countries would be relevant to the growth of the industry in Sri Lanka. The experience of 1975 shows that three other areas namely Japan, Australia and Eastern Europe may turn out to be important markets for Sri Lanka's tourism in the future.

The economic health of these countries would exert a decisive influence over the future growth of tourist industry in Sri Lanka. The onset of the world wide energy crisis has been a major factor influencing the level of growth of incomes in the developed world. Before the rapid increase in petroleum product prices, there was every reason to expect a rapid increase in group tourism to South East Asia, from which Sri Lanka could have expected to gain because of its attractions, the facilities offered, and comparatively low destination costs. But the energy crisis has pushed most developed economies into difficulties over balance of payments and accentuated the problems of inflation. The slower growth in real incomes of the large majority of the population in the developed world can be expected to slow down the rate of expansion of the world tourist industry. In addition the balance of payments difficulties of some important tourist generating countries may lead to the imposition of restrictions on the availability of foreign exchange for travel abroad. There have already been several increases in air fares, on both scheduled and charter aircrafts, on account of higher fuel costs. All these factors point towards a much slower growth rate in the volume of tourist traffic to Sri Lanka in the coming years. The possibility of achieving higher rates of growth of traffic to Sri Lanka would depend on the speed at which the main markets of Western Europe can be expected to emerge from the economic recession that these countries are currently experiencing. It would also depend on the degree of success achieved by the sales promotion in enlarging Sri Lanka's share of static or slowly expanding world market for tourism.

FUTURE GROWTH - SOME PROJECTIONS

It is evident from the above discussion that a host of factors, mainly economic, influence the level of visitor traffic to any country. The decision to travel is taken in the country of residence of the traveller, and the economic prospects facing his country and the impact these developments would have on his own income and standard of living would have an overwhelming bearing on his decision whether to undertake foreign travel or not. And these factors are beyond the control of the receiving country which makes the task of predicting the level of visitor traffic to any country a really difficult one. All that one could do in these circumstances is to extrapolate the past trends of tourist arrivals into the future. A limitation of this approach to the problem of estimating demand arises from the assumption on which such an exercise rests. It assumes that the pattern of tourist arrivals will remain static. Therefore, one must be careful to evaluate major changes in the international scene that may well make the past trends an inappropriate guide to the future. Major factors in the international scene such as the increase in prices in petroleum products which has brought about a slowing down in the growth of real income in developed countries, balance of payment difficulties to many of them and increased air fares must therefore be borne in mind.

The two estimates of tourist arrivals made for the period 1975-80 by the Ceylon Tourist Board are summarised below -

TABLE IV

	CEYLON TOURIST BOARD		(3)
	Original Estimate (1)	Revised Estimate (2)	
1975	89,896	103,204 actual	—
1976	100,683	113,600	117,000 actual
1977	112,765	136,000	133,400
1978	126,297	168,000	153,410
1979	141,453	210,000	176,422
1980	158,427	230,000	202,885
1981			233,317
1982			268,315
Rate of Growth	12%	17.4%	15%

Original estimate which was based on a growth rate of 12 per cent was revised upwards when the target for 1975 was exceeded and the industry recorded an increase of 21 per cent over the 1974 figure. The revised estimate assumed a growth rate of 17.4 per cent. The industry appears to have lost its momentum once again in 1976, with the growth rate down to 12.5 per cent over 1975. It is clear from the past experience in the industry that though there might be an upsurge in visitor arrivals in one year the industry might find it difficult to sustain such rapid rates of growth over a period of five to ten years. If the past trends within the sub-periods analysed is a pointer to anything, they show that the rate of growth of visitor arrivals is slowing down. The overall average rate of growth in the next few years is likely to be between the two extremes adopted by the Tourist Board. For the purpose of this article the rate of growth of visitor arrivals is assumed to be 15 per cent over the period 1976-1982. Column (3) summarises the visitor arrivals figures on the basis of this assumed growth rate.

Seasonality in Sri Lanka's Tourism-Its Relevance to Investment in Hotel Capacity

Tourist arrivals in Sri Lanka show quite marked seasonality, with peak arrivals occurring in November/December and January/March. The tourist season generally starts around October, with peak visitor arrivals occurring in the period December/February. Visitor arrivals starts declining in March and by the end of April, season appears to be over.

Table V shows the seasonal distribution of tourist arrivals in Sri Lanka in the period 1968-75. The period October/March generally accounts for more than 60 per cent of visitor arrivals in Sri Lanka. In 1974 and 1975, the proportion of visitor arrivals in the peak months has tended to increase from around 60 per cent during the period 1968-73 to 65 per cent. The seasonality ratio which is the ratio of the peak month to the average monthly arrival figure for the year varied between 1.3 for 1967 and 1.7 for 1975, with the important exception of 1971 when it was 2.0. The latter result was not brought about by an unprecedented concentration of visitor arrivals during the peak months of 1971 but was due to a drastic reduction of tourist flow during the 'off season' of this year which coincided with the period of civil disturbances during that year.

TABLE V

Seasonal Distribution of Tourist Arrivals 1968-75

Proportion of tourist arrivals in	1968	1969	1970	1971	1972	1973	1974	1975
January ..	9.5	11.0	11.1	14.9	10.2	12.0	12.8	11.4
February ..	9.7	10.3	11.7	16.5	10.4	10.7	11.3	10.1
March ..	9.4	9.3	10.4	13.0	9.9	10.1	11.6	10.8
April ..	7.3	6.7	7.0	3.8	5.5	7.0	7.5	5.7
May ..	6.9	6.5	8.1	2.4	5.8	5.3	3.8	5.4
June ..	4.9	4.8	4.5	2.5	4.2	4.1	3.9	4.7
July ..	6.9	6.0	5.6	4.8	6.6	7.6	6.4	5.7
August ..	7.3	7.0	7.2	6.2	8.2	8.5	7.2	8.3
September ..	7.2	6.4	6.6	4.7	6.0	5.3	5.9	5.1
October ..	9.0	9.0	7.3	6.5	7.9	7.6	7.3	7.4
November ..	8.3	10.0	8.0	10.0	11.0	9.2	9.8	10.9
December ..	13.2	12.7	12.2	14.5	14.0	12.2	12.5	14.5
Seasonality ratio ..	1.6	1.5	1.4	2.0	1.7	1.5	1.5	1.7

Source: Ceylon Tourist Board

It was hoped that with the inauguration of the Japanese Air Line charters operated during the two lean months of May and June 1975 the proportion of visitor arrivals in the 'off peak' period would increase, thus bringing about a decline in the seasonality ratio. But the final results for 1975 show that the extremely high concentration of traffic in the peak period has more than offset the effects on the overall position of Japanese charters during the lean season. The problem of seasonality may be alleviated to some extent with more intensive development of the new markets namely Japan and Australia from where a sizable flow of traffic could be attracted during April-September period. But it is very unlikely that, even with these efforts at developing new markets, the problem of seasonality of traffic could be completely overcome.

There are significant differences in the seasonal patterns for different countries but it is unnecessary for us to analyse them here. What is important for us here is to understand the importance of the seasonality factor in planning investment in accommodation in the hotel industry. If the tourist traffic is well spread over the year the hotel industry would benefit greatly because it would register higher occupancy rates throughout the year, which means that the industry as a whole could manage with a smaller number of beds (or rooms) for

a given number of visitor nights. When the industry shows a highly seasonal character, hotel industry is compelled to carry a higher volume of beds (or rooms) in order to be in a position to cater effectively to the demand in peak months.

Seasonality of traffic makes planning for peak demand in many countries uneconomic. In the past few years level of occupancy achieved by the hotel industry in Sri Lanka has been around 40 per cent. The data for 1974 and 1975 show that the overall occupancy level for the entire industry was only 39.7% and 36.8% respectively. This means that during good part of the year existing accommodation remained unutilised. Planning for peak demand is justifiable only when the industry as a whole registers a high level of occupancy, say in the region of 70-80 per cent. When the overall occupancy level is in the region of 70-80 per cent peak demand is bound to emerge as a problem for the industry. This would mean that in the peak period supply of rooms may be insufficient to meet the demand and some tourists may have to be turned away. It would also mean that potential tourist earnings may be either completely or partially lost, depending on whether the tourist is willing to make do with alternative accommodation or not. Even at this stage, it is necessary to remember that though there is this loss in earnings, there are significant economies in terms of investment. The industry could save on the cost of investment required for providing additional rooms to satisfy peak demand which will remain unutilised during good part of the year. From the point of view of both the individual hotel owner and the industry, there is therefore a trade off between the need to satisfy peak demand with the attendant problem of having to carry a large volume of vacant rooms with heavy overheads throughout good part of the year and the need to achieve a sufficiently high level of room occupancy to ensure an acceptable level of profitability. In the present stage of development of the hotel industry in Sri Lanka, there is no economic justification for attempting to cater to peak demand.

Proportion of Tourists Staying in Accommodation

Approved by Tourist Board

This is one aspect that appears to have escaped the attention of those concerned with the industry. It is instructive to find out what proportion of the tourists entering Sri Lanka actually spend their time and money in hotels approved by the Tourist Board as suitable

for foreign visitors. The available statistics show that there is a marked divergence between the total number of foreign visitor nights recorded at various hotels recognised by the Tourist Board and included in its statistical reports, and the actual number of visitor nights spent by foreigners in Sri Lanka on the basis of information given in embarkation and disembarkation cards. This is a significant factor in analysing the total number of rooms required in the industry. Therefore the more relevant variable for planning capacity in the industry is the visitor nights spent in approved accommodation rather than visitor arrivals figure. Table VI shows the extent to which visitors to Sri Lanka used accommodation other than those approved by the Tourist Board.

This information shows that a substantial part of the visitors to Sri Lanka find accommodation outside the hotels approved and graded by the Tourist Board. In the initial years of tourist growth, those seeking accommodation outside the chain of recognised establishments was very high, over 40 percent (row 10). The higher proportion in the early years may be due to the shortage of accommodation in the graded establishments, particularly in the outstations. This proportion is likely to fall gradually as more and more rooms are put on the market with the completion of the hotel construction programme that is now underway. But there is likely to be a irreducible minimum number of tourist who may still prefer to patronise the cheaper hotels that are not recognised by the Tourist Board. This may be happening in the case of Indians and Pakistani visitors to Sri Lanka who contribute about 10 - 12 percent of the travel market. It is also possible that some of them may be living off the hospitality of friends and relatives or individuals in Sri Lanka who may look after them in the hope of obtaining similar treatment when they are abroad. The interesting point that emerges from this discussion is that even after allowing for Indians and Pakistanis who are generally believed to patronise the cheaper establishments or stay with relatives and friends, there is still a balance of about 15 percent of visitor nights not spent inside approved accommodation (row 11). Part of this may be accounted by cheaper hotels. Sri Lanka has no camping or caravan sites and there is no evidence that this is happening on any significant scale anywhere in the island. It is very likely that a large part of the visitor nights spent outside approved accommodation may be spent with friends and relatives, in which case

TABLE VI
Proportion of visitors staying in accommodation not approved for international tourists

	1968	1969	1970	1971	1972	1973	1974	1975
1. Total no. of visitor arrivals	28,272	40,204	46,247	39,654	56,047	77,888	85,011	103,204
2. Average duration of stay (in nights)	10.3	10.0	10.5	10.5	10.9	10.3	10.2	9.8
3. Total no. of visitor nights x 2	291,201	402,040	483,593	416,367	610,912	802,246	867,112	1,011,399
4. Foreign visitor nights spent in graded establishments	—	—	—	—	369,492	528,820	588,084	655,991
5. Foreign visitor nights spent in supplementary accommodation	—	—	—	—	40,912	61,057	60,838	75,461
6. Total foreign visitor nights in classified accommodation	171,210	226,311	249,782	279,577	410,404	589,877	648,922	731,452
7. (4) as a percent of (3)	—	—	—	—	60.5	65.9	67.8	64.9
8. (5) as a percent of (3)	—	—	—	—	6.7	7.6	7.0	7.5
9. (6) as a percent of (3)	58.8	56.3	51.7	67.1	67.2	73.5	74.8	72.3
10. Proportion of visitor nights not accounted by approved hotels	41.2	43.7	48.3	32.9	32.8	26.5	25.2	27.7
11. Proportion of visitor nights (excluding Indians)* not accounted by approved hotels	6.2	20.4	26.0	16.0	18.1	13.1	13.6	15.5

*Includes Indians, Pakistanis and Maldivians. This calculation is based on the extreme assumption that all visitors whose country of residence was any one of those singled out above stayed in either cheaper accommodation or with friends and relatives

gain to the country may be either negative or negligible. This is an aspect that needs careful investigation for the proportion of visitor nights spent outside approved accommodation is far too high to adopt a complacent attitude.

For the purpose of projecting the requirement of rooms in the industry it is reasonable to assume that the irreducible minimum would be in the region of 25 percent of the total visitor nights.

Growth and structure of hotel capacity in Sri Lanka

Table VII summarises the growth and regional distribution of accommodation capacity (rooms and beds) 1967-75 in Sri Lanka. Accommodation capacity included in this table are only those which come up to required international standards of operation. In addition there are a large number of other establishments, which are approved by the Tourist Board but are not taken into reckoning when planning for the development of accommodation facilities for foreign visitors. The latter group, though approved, are not considered as measuring up to international standards of operation. The statistical reports of the Tourist Board provide data only for the first group of establishment namely those that are accepted as suitable for foreign visitors.

This information shows that the accommodation capacity maintained an impressive rate of growth of around 25 percent over the period. The expansion in accommodation capacity has taken place more or less at the same rate as the expansion of traffic to the island. With regard to regional distribution 47.5 percent of rooms are concentrated in the Colombo region, extending from Mount Lavinia to Negombo. The next highest concentration occurs in South Coast resort region which accounts for 21.8 percent. Historic cities account for 16.9 percent, High country region accounts for 5.8 percent and the East coast region for 6.3 percent. The balance 1.7 percent of rooms are in the Northern region. It is clear from this table that most amount of development in the industry in the early years has taken place in Colombo city, greater Colombo region and the South Coast resort region.

TABLE VII

**Accommodation Capacity (Rooms & Beds)
Growth & Regional Distribution 1967-75**

Resort Region		1967	1968	1969	1970	1971	1972	1973	1974	1975
Colombo Resort Region - City	Rooms	227	261	309	338	364	410	705	341	1059
	Beds	n.a	n.a	502	766	845	793	1382	n.a	n.a
Colombo Resort Region Greater Colombo	Rooms	110	110	144	260	443	454	518	629	669
	Beds	n.a	n.a	376	580	973	853	971	n.a	n.a
South Coast Resort Region	Rooms	89	101	118	301	351	384	519	594	790
	Beds	n.a	n.a	239	441	715	776	1040	n.a	n.a
East Coast Resort Region	Rooms	23	35	35	35	45	55	75	105	230
	Beds	n.a	n.a	n.a	n.a	n.a	114	154	n.a	n.a
High Country Resort Region	Rooms	151	152	154	178	210	212	189	215	212
	Beds	n.a	n.a	n.a	n.a	n.a	358	341	n.a	n.a
Historic Cities Resort Region	Rooms	139	216	201	248	306	328	414	456	514
	Beds	n.a	n.a	n.a	n.a	421	672	833	n.a	n.a
Northern Region	Rooms	31	28	28	48	48	48	48	65	58
	Beds	n.a	n.a	n.a	n.a	n.a	80	80	n.a	n.a
All Regions	Rooms	770	903	989	1408	1767	1891	2468	2905	3632
	Beds	n.a	n.a	n.a	n.a	n.a	3646	4801	5699	7220

Source: Ceylon Tourist Board
Statistical Reports,

Table VIII summarises the occupancy trends for the period 1968-75. Satisfactory level of room occupancy has been achieved in the past only in Colombo city, greater Colombo region, Historic cities and the South coast region. The availability of new capacity in the Colombo city has tended to bring down the occupancy level achieved from 71.2 percent in 1969 to 43.3 percent. It has shown a slight improvement in 1974 and 1975.

TABLE VIII
Occupancy Trends - Percentages 1968—75

Resort Region	1968	1969	1970	1971	1972	1973	1974	1975
Colombo Resort Region - City	59.2	71.2	62.6	43.4	46.4	43.3	48.4	48.4
Colombo Resort Region Greater Colombo		48.1	53.4	35.7	49.9	52.1	43.2	38.8
South Coast Resort Region	34.8	44.1	40.6	28.9	38.1	46.2	39.1	33.4
East Coast Resort Region	38.0	24.1	25.7	16.3	23.4	34.1	26.6	24.0
High Country Resort Region	22.1	21.7	23.1	16.0	13.3	17.5	16.5	16.2
Historic Cities Resort Region	45.7	37.8	37.9	27.8	36.7	41.8	37.2	32.7
Northern Region	22.6	23.8	22.5	19.8	23.1	20.4	13.2	17.5
All Regions	40.7	44.3	42.8	31.1	38.8	42.4	39.7	37.0

Source: Ceylon Tourist Board Statistical Reports.

Up to about 1973 expansion in capacity did not appear to affect adversely the level of occupancy in the regions. Increase in capacity in greater Colombo area between 1967—73 was very nearly five times that of 1967, but a declining trend in occupancy levels has not been experienced. Capacity in the South Coast resort region increased six times over 1967 figure but has been able to maintain its occupancy levels throughout the period except in 1971. The decline in 1971 is visible in all regions and was due to the insurrection of that year. Historic cities resort region has also shown its ability to maintain occupancy levels in the face of a threefold increase in capacity between 1967—73. The experience of 1974—75, however, seems to indicate that the expansion in capacity that has taken place in these two years appears to have had an adverse effect on the level of occupancy in all regions except Colombo city itself. Colombo city managed to increase its occupancy levels despite an increase in capacity from 705 in 1973 to 1100 in 1975. Greater Colombo region which saw an increase in capacity of around 28 percent over this

period registered a decline in occupancy levels from 52.1 percent in 1973 to 38.8 percent in 1975. South Coast region has also witnessed a decline of 13 percent in occupancy in the face of a capacity increase from 519 rooms in 1973 to 790 rooms in 1975, an increase of about 50 percent. East Coast has registered a 10 percent decline in occupancy while capacity in the region increased by 200 percent. The decline in occupancy levels in the case of Historic cities was about 10 percent and the increase in capacity for this region was about 50 percent. In the case of High Country and the Northern region there was no substantial increases in capacity. The performance of the High country resort region was most disappointing; this area recorded the lowest occupancy levels for any region in Sri Lanka. Despite the many natural assets, consisting of scenic beauty, pleasant climate, greenery etc. this region appears to have failed to capitalise on them.

It is usual to measure capacity utilisation on the basis of room occupancy rates. But a better measure of capacity utilisation can be constructed by relating the total number of guest nights in a hotel or region to the number of bed nights available¹. The required data is available for 1972 and 1973 and the resulting capacity utilisation figures on the basis of this measure are presented in Table IX below:

TABLE IX

Ratio of total guest nights to total bed nights available

Region	1972	1973
Colombo Resort Region - City ..	31.0	26.2
Colombo Resort Region - Greater Colombo	42.5	46.8
South Coast Resort Region	30.3	24.2
East Coast Resort Region	18.0	25.1
High Country Resort Region	13.3	18.6
Historic Cities Resort Region	29.7	31.9
Northern Region	23.6	20.5
All Regions	31.0	32.4

Source: Basic data from Ceylon Tourist Board Statistical Reports

1. See Guide lines for Tourism Statistics. U. N. New York 1971. TD/B/C. 3/86 "While data concerning the number of rooms may also be gathered, regularly or occasionally, it is recommended that the basic unit for regular statistic of capacity (and occupancy) should be the bed". pp. 20

Capacity utilisation on the basis of this measure appears to be rather low. Room occupancy rates generally tend to be above the rates yielded by this measure. Room occupancy rates therefore tend to present a more satisfactory picture of capacity utilisation than warranted and therefore may hide the existence of excessive under-utilisation of capacity in the industry.

One cannot be happy with the overall level of capacity utilisation achieved in the industry in the past few years. It is clear that most of the hotels may be running at very low levels of capacity utilisation while only a few may have achieved levels of utilisation over 40 percent. The analyses of a sample of hotel projects show that most of them, if they are properly managed and capital costs per room kept low, can break even around 40 percent level of occupancy. In the case of projects where the overheads are very much less, the break even point may be less, about 30—35 percent. Hotel properties that achieve rates of occupancy above the break even points will earn profits while those that fall below this minimum level will incur losses. It would appear therefore that most of the hotel properties barely manage to reach the break even level of occupancy.

It is clear that tax concessions have enabled the industry to survive low levels of occupancy in the initial years. The industry is still in its early stages and most of the establishments are still enjoying the extensive tax concessions granted. The low levels of occupancy have not started to bother the individuals or the companies in the industry yet. Most of the hotels in the industry are new which means that they will not require a high level of expenditure on maintenance, renovation and replacements of short lived assets, such as carpets and fixtures, for sometime. Therefore, a high rate of occupancy is not required to survive in the industry in the early stages. But as the hotel properties grow old, maintenance expenditure is likely to grow, replacement of fixtures and fittings will become a regular occurrence and expenditure on renovations will become necessary in order to maintain the high standards of comfort and elegance demanded by foreign tourists. On top of all these, hotel concerns would also become liable to tax¹. As this stage is approached

1. There is a five year tax holiday on corporate income followed by a fifteen year half-holiday. Present company tax rates are 60 percent on those companies in which the shareholding is held by few shareholders and 40 percent on broad based companies. Most hotel companies fall into the first category and will be subject to a 30 percent rate of company tax.

it would become impossible to survive in the industry with low rates of occupancy. The hotel sector as a whole may have to achieve a rate of occupancy of around 60 percent to ensure an adequate return on the capital invested¹.

An Estimate of Room Requirements for Sri Lanka

This study presents estimates of room requirements in Sri Lanka's hotel industry on two different bases:

- (1) Though planning for peak demand does not appear justified an estimate has been prepared on this basis, in order to examine the level of rooms required and to compare this result with the existing and planned level of rooms in the next few years. Method of analysis is the same as the one used in the Second Economic and Social Development Plan of Spain (1968-71)². The workings are laid out in Table X.

1. Assume a 100 room hotel built at a cost of 12,000,000 (Rs. 120,000 per room) financed as follows:-

Equity	Rs. 6,000,000
Loan Capital	..	Rs. 6,000,000
		Rs. 12,000,000

Total number of room nights available for selling is $365 \times 100 = 36,500$. Since the hotel is likely to break even around 40 percent capacity 14,600 room nights have to be sold before the hotel could start earning profits. A reasonable return on equity today would be around 20 percent (before tax) which means that the hotel should earn Rs. 1.2 million. Assume that the hotel sells a room for US \$ 20 (average price for the whole year) or Rs. 240. The net sale price after deduction of 10 percent tour operators commission and 10 percent Business Turnover Tax would be Rs. 192. Variable expenses per room night (servicing cost of room and cost of meals) is assumed to be Rs. 42 which may be an under-estimate. This leaves us a contribution of Rs. 150 per room night. To make a profit of Rs. 1.2 million this hotel must sell a further

$\frac{1,200,000}{150}$

= 8000 room nights. Thus a total of 22,600 nights have to be sold to ensure a reasonable rate of return which means the hotel must achieve a capacity utilisation of 62 percent. The overheads bill for this hotel will be Rs. $14,600 \times 150 =$ Rs. 2.2 million (approx.). This will consist of Rs. 1.0 million depreciation and maintenance on fixed assets, Rs. 0.7 million interest on loan capital and the balance Rs. 0.5 million will cover such fixed expenses as fuel and electricity, administration costs, directors fees etc.

2. Presidencia del Gobierno, Comision de turismo, 11 plan de desarrollo economico y social: Turismo (Madrid, Imprenta Nacional, 1967) table 3.1 page 40 Reproduced in U.N. Elements of Tourism policy in Developing Countries, 1973 (TD/B/C. 3/89/Rev. 1.)

- (2) In the second estimate no attempt is made to plan for peak demand. The objective of the second exercise is to estimate that level of rooms (or beds) which will ensure an average annual occupancy high enough to yield an acceptable level of profits. The formula for the second method is as follows:-

$$B = \frac{TL}{365 R}$$

where

B = The number of beds required

T = The expected number of tourists

L = The expected average length of stay (days), and

R = The accepted annual occupancy rate

An important variable in this formula is R, the annual occupancy level which would ensure a reasonable return on the capital invested. As the industry matures, maintenance, replacement and other overheads start climbing up and companies become liable to tax, the present levels of occupancy will be insufficient to sustain the industry. The industry must aim at achieving higher occupancy levels. In this analysis it is assumed to increase gradually from 50 per cent in 1976 to 60 per cent in 1981-1982.

The above analysis shows that the bed nights required on peak day increases from 5,000 in 1976 to 11,500 in 1982. The regional distribution of peak night demand for beds has been determined on the basis of the pattern of distribution of visitor nights in the peak month. The assumed occupancy rates for each region were applied to the number of beds necessary to satisfy fully projected peak demand. Table XI shows the method of estimation and the underlying assumptions. Table XII and XIII summarise the projections on the basis of this method. Table XIV summarises the projections on the basis of the second method.

TABLE X
Projection (1) Room Requirements 1976-1982
Assuming Industry Plans to Cater to Peak Demand

(In '000)

	1976	1977	1978	1979	1980	1981	1982
1. Projected no. of visitors ..	116*	133	153	176	203	233	268
2. Proportion of visitors staying in approved accommodation ..	.75	.75	.75	.75	.75	.75	.75
3. No. staying in approved accommodation (1) x (2) ..	87	100	115	132	152	175	201
4. Average duration of stay (in nights) ..	10	10	10	10	10	10	10
5. No. of foreign visitor nights (3) x (4) (a) ..	870	1000	1150	1320	1520	1750	2010
6. Local visitor night (% of total) (b) ..	6	6	6	6	6	6	6
7. No. of local visitor nights ..	55	63	72	83	96	110	127
8. Total no. of visitor nights (5) + (7) ..	925	1063	1222	1403	1616	1860	2137
9. Peak month ((8) x 14%) (c) ..	130	149	171	196	226	260	299
10. Peak day of peak month 1.2 ^(d) x Peak month visitor nights	5.0	5.8	6.6	7.6	8.8	10.1	11.5
No. of days in month (31 days)							

* Provisional visitor arrival figure for 1976.

(a) Over the period 1968-75 total foreign visitor nights increased at the rate of 23 per cent per annum. However there are indications that the rate of increase is slowing down. In the period 1973-75 and 1975-76 the rates of increase were 11.4 per cent and 12.7 per cent respectively. The assumed rate of increase is 15 per cent per annum.

(b) Local visitor nights have drastically declined as a proportion of total during the period 1968-75. In 1973 it was about 6 per cent of the total while in 1975 it was 6.2 per cent. Six per cent of the total roughly equals 6.3 per cent of foreign tourist nights.

(c) Peak month visitor nights were roughly about 14 per cent of the total for the year in 1975.

(d) The assumption is that visitor nights on the peak day are 1.2 times the daily average for the month.

TABLE XI

**Peak bed nights and occupancy in hotels and corresponding
bed requirements in Sri Lanka**

Regions	Assumed Occupancy rate on peak day (a) (%)	Total bed nights in peak day	Total No. of beds required (3) = (2)/ (1) x 100 (3)	Proportion of visitor nights on peak day (4)	Distribu- tion of beds required among regions (5)
	(1)	(2)	(3)	(4)	(5)
1. Colombo Resort Region - City ..				28.0	1641
2. Colombo Resort Region - Greater Colombo ..				23.5	1382
i. North of City ..				20.7	1218
ii. South of City ..				2.8	164
3. South West Resort Region ..				25.2	1482
i. Up to Galle ..				21.9	1288
ii. Beyond Galle ..				3.3	194
4. East Coast Resort Region ..				6.0	353
5. High country Resort Region ..				2.7	159
6. Ancient Cities Resort Region ..				14.0	824
i. Kandy Area ..				6.3	371
ii. Anuradhapura area ..				3.6	212
iii. Polonnaruwa/ Sigiriya area ..				4.1	241
7. Northern Region ..				0.6	35
8. All Regions ..	85	5000	5882	100.0	5882

Notes:

- (a) There is no data on the level of occupancy achieved on the peak day for hotels in various resort regions in Sri Lanka. Since actuals are not available level of occupancy on peak day was assumed on the basis of the experience for the peak month. Taking all localities and regions of the country together, it was assumed, that the maximum peak day occupancy which could be achieved in practice ranged from 97 per cent in the Colombo region to 60 per cent in the high country region, averaging about 85.3 per cent for all hotel accommodation. In two areas, high country and northern region peak month occupancy was well below those recorded in other areas. Assumed peak day occupancy levels may be fairly close to the actuals but may not be so for the two areas mentioned. It is possible that the individual hotels may reach 100 per cent occupancy on the peak day but there are various reasons why, in normal circumstances, this rate is not reached nationally, or even within a region. Last minute cancellations, organizational problems in rotating groups, temporary closures for maintenance and repair, and other unforeseeable lapses in optimum efficiency are among the major factors.
- (b) Projected visitor nights on peak day were distributed among the various regions on the basis of the pattern of distribution in the peak months in 1975. For all areas except East Coast and Northern Region peak month occurs in December. The peak month for East Coast occurs in August while for the Northern Region peak month is April. For determining the pattern of distribution August figure for East Coast was included with December figures for rest of the country. Similar adjustment was made for the Northern Region.

TABLE XII

Projection I

**Total Requirements of beds in the Hotel Industry
in Sri Lanka on Peak Day of Peak Month**

Region	1976	1977	1978	1979	1980	1981	1982
1. Colombo Resort Region - City ..	1647	1911	2174	2503	2899	3327	3788
2. Colombo Resort Region Greater Colombo ..	1382	1604	1825	2101	2433	2792	3179
i. North of City ..	1218	1412	1607	1851	2143	2460	2800
ii. South of City ..	164	192	218	250	290	332	379
3. South Coast Resort Region ..	1482	1720	1957	2253	2609	2994	3409
i. Up to Galle ..	1288	1 94	1700	1958	2267	2602	2963
ii. Beyond Galle ..	194	226	256	295	342	392	446
4. East Cost Resort Region ..	353	409	466	536	621	713	812
5. High Country Resort Region ..	159	184	210	241	279	321	365
6. Ancient Cities Resort Region ..	824	955	1087	1252	1449	1663	1894
i. Kandy Area ..	371	430	489	563	652	749	852
ii. Anuradhapura area ..	212	246	280	322	373	427	487
iii. Polonnaruwa/Sigiriya Area ..	241	279	318	367	424	487	555
7. Northern Region ..	35	41	46	55	63	72	82
8. All Regions ..	5882	6824	7765	8941	10353	11882	13529

TABLE XIII
Projection I
Total Requirements of Rooms in the Hotel Industry in
Sri Lanka on Peak Day of Peak Month

Region	Bed/ Room Occupancy Ratio	1976	1977	1978	1979	1980	1981	1982
1. Colombo Resort Region - City ..	1.4	1176	1365	1553	1788	2070	2376	2706
2. Colombo Res. Region								
Greater Colombo ..	1.7	813	944	1073	1236	1431	1642	1870
i. North of City ..	1.7	716	830	945	1088	1260	1447	1647
ii. South of City ..	1.8	91	107	121	139	161	184	210
3. South Coast Resort Region ..	1.8	823	955	1087	1251	1449	1663	1894
i. Up to Galle ..	1.8	715	830	944	1087	1259	1445	1646
ii. Beyond Galle ..	1.8	108	125	143	164	190	218	248
4. East Coast Resort Region ..	1.8	196	227	258	297	345	396	451
5. High Country Resort Region ..	1.8	88	102	116	133	155	178	202
6. Ancient Cities Resort Region ..	1.8	457	530	603	695	805	924	1052
i. Kandy Area ..	1.7	218	252	287	331	383	440	501
ii. Anuradhapura Area ..	1.8	117	136	155	178	207	237	270
iii. Polonnuruwa/Sigiriya Area ..	1.8	133	155	176	203	235	270	308
7. Northern Region ..	1.6	22	26	29	34	39	45	51
8. All Regions ..	1.64	3575	4149	4719	5434	6294	7224	8226

NOTES: (1) Total number of bed rooms required have been calculated on the basis of 1975 bed/room occupancy ratio.

(2) For Ancient Cities Resort Region bed/room occupancy ratio vary between the major areas within the region. Therefore, the individual totals for each group do not add up to total given in row (6).

TABLE XIV

Projection II

Distribution of Rooms required by Regions

Region	1976	1977	1978	1979	1980	1981	1982
1. Colombo Resort Region - City ..	1135	1254	1389	1537	1710	1902	2185
2. Colombo Resort Region							
Greater Colombo ..	635	702	776	860	956	1064	1222
i. North of City ..	551	610	674	747	831	924	1061
ii. South of City ..	84	92	102	113	125	140	161
3. South Coast Resort Region ..	617	681	754	835	929	1033	1187
i. Up to Galle ..	513	566	627	694	772	859	986
ii. Beyond Galle ..	104	115	127	141	157	174	201
4. East Coast Resort Region ..	104	115	127	141	157	174	201
5. High Country Resort Region ..	90	100	110	122	136	151	174
6. Ancient Cities Resort Region ..	439	485	537	594	662	736	845
i. Kandy Area ..	211	233	258	286	318	354	407
ii. Anuradhapura area ..	115	128	141	156	174	194	222
iii. Polonnaruwa/Sigiriya Area ..	113	124	138	152	170	188	216
7. Northern Region ..	20	24	27	30	33	37	43
8. All Regions ..	3040	3361	3720	4119	4583	5097	5857

NOTES: (1) Total number of bed rooms required have been calculated on the basis of 1975 bedroom occupancy ratio.
 (2) For Ancient Cities Resort Region bed/room occupancy ratio vary between the major areas within the region. Therefore, the individual totals for each group do not add up to total given in row (6).

Prospective Hotel Capacity in 1977

By the end of 1977 it is expected that there will be 4980 rooms of international standards available in the industry. The figure is made up as follows:-

Rooms of International Standard

	<u>No.</u>
Existing (December 31, 1976) ..	4314
Under construction (expected to be operational in 1977) ..	666
Approved* (work not started yet) ..	n.a.
	<u>4980</u>

* Over 100 rooms may become operational in 1978.

The distribution of rooms by tourist region and the number of rooms required in 1977 and 1982 on the basis of the two projections are presented in Table XV.

TABLE XV
Comparison of Room Availability
in 1977 and Room Requirements in 1977 & 1982

REGION	Available Rooms				Required Rooms (1977)		Required Rooms (1982)	
	December 1976	Under Construction December 1976	Approved but not under construction December 1976	Total 1977	Projection I	Projection II	Projection I	Projection II
Colombo Resort Region ..	2243	100	—	2343	2309	1956	4576	3407
South Coast ..	862	335	—	1197	955	681	1894	1187
East Coast ..	225	71	—	296	227	115	451	201
Historic Cities ..	724	130	—	854	530	485	1052	845
Hill Country ..	212	—	—	212	102	100	202	174
Northern Region ..	48	30	—	78	26	24	51	43
TOTAL ..	4314	666	100*	4980	4149	3361	8226	5857

* Expected to be operational in 1978.

Problem of Excess Capacity

It is quite apparent that a situation of excess capacity is emerging in the industry in the next few years. This problem is bound to be felt acutely unless there is a rapid growth in traffic over the anticipated level. According to the projections the available rooms in 1977 far exceed the number of rooms required to cater even to peak demand. Because of the extremely seasonal nature of tourist traffic it is not desirable for Sri Lanka to attempt to cater to peak demand. The more practical approach for the industry would be to carry a certain number of rooms which would ensure for the industry an acceptable rate of return on the investment. As the industry matures, the proportion of older hotels in the industry will gradually increase, the repair and maintenance and replacement costs are likely to increase; and the incidence of tax on the industry too would show an upward movement. In the context of these developments it would not be possible for any hotelier to survive in the industry at occupancy level as low as 40 percent. A reasonable average for the industry as a whole by 1980 would be about 60 percent.

It is possible to estimate the total number of visitors required to come into Sri Lanka to help the industry to achieve differing levels of capacity utilisation. This can be done with the help of the following formula:

$$\text{No. of tourist} = \frac{\text{No. of rooms} \times 365 \times \text{Room Occupancy rate (\%)} \times \text{Bed/Room Occupancy Ratio}}{\text{Average length of stay}}$$

Since not all tourists who come into the country stay in rooms of international standard, the level of inflow must be greater than that yielded by this formula. In the period 1973-75 roughly about one visitor out of four stayed in accommodation not considered suitable for international tourist traffic. So the estimate yielded by the above formula must be adjusted by multiplying it by the reciprocal of the proportion of visitors staying in rooms accepted as suitable for tourist traffic. The assumptions (same as for Projection II) and the results are summarised below:

Assumptions

No. of rooms available = 4980

	1977	1978	1979	1980	1981	1982
Room Occupancy Rates (%)	52	54	56	58	60	60
Bed/Room Occupancy Ratio	1.7	1.7	1.7	1.7	1.7	1.7
Average length of stay ¹	10	10	10	10	10	10
Proportion staying in approved accomodation	0.75	0.75	0.75	0.75	0.75	0.75

1. Average length of stay of a tourist has actually shown a declining trend in the recent past. From 11.0 (nights) in 1967 it dropped to 10.3 in 1973. It has futher declined to 10.2 in 1974 and 9.8 in 1975.

RESULTS

Year	Level of Room Occupancy %	No. of tourist required to come into the country	Ceylon Tourist Board Revised Estimate	(4) ÷ (3) x 100
(1)	(2)	(3)	(4)	(5)
1977	52	214,246	136,000	63.5%
1978	54	222,486	168,000	75.5%
1979	56	230,727	210,000	91.0%
1980	58	238,967	230,000	96.2%
1981	60	247,207		
1982	60	247,207		

The results show that by 1977 Sri Lanka must achieve a level of tourist inflow which is more than double the level achieved in 1975. It is impossible for the industry to achieve this feat for international tourist traffic is not likely to respond so quickly to the gradual economic recovery of the developed world. Therefore, a serious problem of over capacity is bound to trouble the industry in the next few years, with grave repercussions on the overall rate of return on the capital invested in the industry. If the expansion of capacity is held in check the problem is likely to ease somewhat in early 1980s, provided, however that the assumptions on which this exercise is based are realised. Given a gradual increase in the average duration of stay

and the proportion of visitors staying in approved accommodation, the industry can achieve a higher level of capacity even in the face of static level of inflow of tourists.

Before completing this analysis, there is one limitation in the exercise which must be highlighted. The distribution of rooms under Projection I and II has been attempted on the basis of 1975 experience. By 1975, some regions were well developed to receive tourist traffic. An important exception, however, was the East Coast which is coming into the scene only now. Though the projections put room requirements at a relatively low level, the pattern of tourist traffic within the country may shift in favour of East Coast region, enabling this region to carry a higher volume of rooms. The same consideration may apply to the Northern region.

Conclusion

This study raises several important implications for policy in the field of tourism. Rapid growth of the industry has no doubt been facilitated by the over generous tax incentives granted and the ease with which investment in hotels could be undertaken relative to investment in industry which are characterised by complex technology. Moreover, in the initial stages, planning in the industry was based on more optimistic expectations with regard to the number of tourist arrivals in the country. All this has resulted in the emergence of a problem of over capacity in the industry. Therefore, there is a clear need both in terms of the national interest and in terms of the interest of the individual investor to slow down investment in the industry until the capacity already created could be utilised more intensively. There is evidence that excess capacity in the industry has already begun to put pressure on the hotel rates charged from clients. There is considerable amount of competition among hotel owners to attract customers, with the result most hotels have been forced to cut their rates well below those advertised in their brochures. This is an unhealthy development from the point of view of the national economy. Table XVI shows the earnings of the industry per visitor arrival and per visitor night.

TABLE XVI

Earnings Per Visitor Arrival and Per Visitor Night

Year	US\$ Per Arrival	US\$ Per Visitor Night
1963	63.02	
1964	60.78	
1965	64.25	
1966	67.74	
1967	51.17	4.65
1968	62.61	6.08
1969	71.19	7.12
1970	78.14	7.44
1971	85.94	8.18
1972	130.06	11.93
1973	164.57	15.98
1974		18.71
1975		22.02

Source: Basic data from Ceylon Tourist Board Statistical Reports.

The continued improvement of Sri Lanka's earnings per visitor and per visitor night are very important from the point of view of national interest. Growth of total earnings could occur even in the face of a decline per visitor or per visitor night. Problem of excess capacity in the industry could certainly slow down the rate of growth of earnings per visitor and per visitor night or in extreme circumstances bring about an actual decline. Since the industry is still in its infancy, it has not exhausted the potential for improving on the levels already achieved. Any development that arrests the continued growth of these two variables is bound to conflict with the national interest.

Another aspect that should engage the attention of policy makers is the high proportion of visitors who either patronise the cheaper hotels in the country or live off the hospitality of friends and relations. Tourist industry as an important source of foreign exchange, is already suspect on account of the very high import content of expenditure in the industry and on account of leakage of a high

proportion of its earnings into the unofficial market¹. If those who stay with friends and relatives form a significant proportion of the total of those who do not patronise tourist hotels, the net foreign exchange earnings from the industry as a whole could turn out to be inadequate in relation to the investment that has taken place. To the extent visitors to Sri Lanka live off our hospitality, it constitutes a drain on our resources. The net benefit from the category of visitors who choose to patronise the cheaper hotels is also likely to be very small. It is reasonable to assume that this class of tourist saves mostly on the cost of accommodation while the expenditure on food and drinks would tend to be more like that of a visitor in a tourist hotel. This means that the visitors in cheaper accommodation are really economising on expenditure such as accommodation and personal services which have a very low import content. Therefore, the import content of the expenditure of visitors in cheaper accommodation is likely to be very high as a proportion of the total expenditure for this category. In view of these considerations, an attempt should be made to reduce the proportion of visitors staying outside recognised accommodation.

1. According to Ceylon Tourist Board estimates published in 1973 Statistical Report 68.4 percent of tourist earnings leaked into the unofficial market in 1967. The proportion has come down drastically since then with the introduction of FEECs Scheme in 1968. In 1973 the Tourist Board estimate of leakage was 7.5 percent of the total. These findings are based on sample surveys of departing tourists. However, there is considerable doubt with regard to the accuracy of these estimates. It is possible that with the growth of charter groups as a significant proportion of the total traffic to Sri Lanka, leakage may have taken other forms which cannot be found out by questioning departing passengers-

MOBILIZATION OF RURAL SAVINGS IN SRI LANKA-PERFORMANCE AND POLICIES*

SUMANARATNE KAHAGALLE

Introduction

The capacity for rural savings mobilization has been doubted till very recently. Data on household consumption, income and savings behaviour, from surveys and other fragmentary information available, give the impression that rural residents in the low income countries are poor and operate very close to minimum subsistence levels. Consequently, it is implied that even if the rural poor acquire additional income it is likely that most, if not all, the additional income will be expended on consumption. In other words marginal and average propensities to save would continue to be low. Some recent studies on savings, however, indicate that voluntary rural savings capacities in less developed countries are much larger than previously thought, and that rural savings behaviour is sensitive to various forms of economic incentives¹.

This paper attempts to estimate the rural savings capacity in Sri Lanka and to examine the institutional structure and strategies used to mobilize rural savings. An estimate is made of the potential savings capacity in the rural sector² through an analysis of data on household income and expenditure in the rural sector. Once a savings income ratio is determined for the rural sector, an attempt is made to estimate the aggregate rural savings for the period 1960-1972. The paper also analyses the trend of savings in the rural sector to determine the factors affecting the volume of savings.

* I am greatly indebted to Dr. Nimal Sanderatne for his encouragement and valuable comments on an earlier draft of this paper. The willing cooperation extended by Mr. Yasapale Perera towards collection and processing of data facilitated in the preparation of the present paper. However, I am solely responsible for the views expressed and any errors or omissions.

1. See Dale W Adams, "Mobilizing Financial Savings Among Rural Poor," Studies in Agricultural Capital and technology. Economics and Sociology Occasional Paper No. 256. Department of Agricultural Economics and Rural Sociology the Ohio State University, Columbus, Ohio.
2. For the purpose of this study the term "rural sector" has been considered as the sector which includes all the housing units not included in the urban and estate sectors. The urban sector consists of all housing units in the municipal, urban and town council areas. The estate sector consists of all housing units in the tea and rubber estates of over 20 acres and with more than 10 resident workers. The housing units in the coconut estates were included in the rural sector.

In the rural sector savings may be effected both in the organized or institutional sector, as well as in the non-institutional or informal sector. In fact savings in the latter sector may constitute a substantial proportion of total savings and may even exceed those which find their way into the institutional sector. Since the writer contends that much of the savings of the non-institutional sector are utilized without consideration of the priorities of economic growth, changing the composition of savings is an important objective of financial policies. Therefore, the means by which savings can be channelled into the institutional sector are discussed. A discussion of the extension of the institutional sector and its strategies to enhance savings in Sri Lanka is an important part of the paper. The paper concludes with a discussion on the role of rural financial institutions, the rate of interest, inflation and contractual savings on the mobilization of savings and some of the socio-cultural factors bearing on rural savings.

Rural Background

The rural sector is still by far the largest sector in Sri Lanka containing as it does approximately 68.5 per cent of the population.³ The rest of the country is classified as the urban and estate sectors.

In the rural sector the main source of income is the cultivation of paddy and subsidiary food crops. Land holdings are small; averaging less than one acre per family with paddy land holdings averaging 1.2 acres.⁴ Fragmentation accentuates the problem further and with the population increasing at approximately 2.3 per cent (from 1959-1975) per annum, the pressure on land is considerable. Landlessness itself is a common feature and it has been estimated that only 55 per cent of paddy lands are owner cultivated.

The average size of a rural household in 1973 was 5.63 persons. This consisted of 1.31 income receivers and 4.32 dependents.⁵ It has been observed for some time that Sri Lanka's rural population is

3. **Census 1971**, Classification of population: 22.4 per cent urban, 68.5 per cent rural and 9.1 per cent estate population.

4. **Census of Agriculture 1971**. Department of Census and Statistics.

5. **Survey of Sri Lanka's Consumer Finances 1973** - Central Bank of Ceylon. Department of Economic Research, Colombo 1974, Page 29 Table 5.

relatively skewed in favour of the young. Approximately 50 per cent of the rural population is below 19 years of age.⁶ The high dependency ratio is another unfavourable factor affecting the capacity to save.

It was found that 31.0 per cent of the rural population had no schooling.⁷ This has two important considerations. On the one hand, the type of employment and income of this section is limited, while on the other hand, savings institutions must be geared to meet their less sophisticated needs and structured so as not to alienate them.

Though several of the structural conditions in the rural sector discussed above give little encouragement for the mobilization of savings, recent developments in this sector offer possibilities for enhancing savings. These factors include the adoption of high yielding varieties and the "green revolution" technology which increases income several fold even on small holdings; land reforms which increase the land holdings of small farmers and give landless persons land; and the development of agro-based industries. These changes are likely to increase rural income which need to be mobilized into savings for further investments in this sector. The development of suitable institutions and strategies for rural savings mobilization is therefore a much needed requirement.

The institutional savings facilities to the rural sector are provided primarily by the Cooperative Rural Banks, Commercial Banks, and the National Savings Bank. Institutional credit to the rural sector is provided mainly by the government sponsored Comprehensive Rural Credit Scheme which was introduced in 1973. This scheme is operated mainly through Cooperative Rural Banks and Bank of Ceylon Sub-offices at Agricultural Service Centres. In areas where these institutions have not been established as yet or where the Comprehensive Rural Credit Scheme has not been implemented the People's Bank operates the New Agricultural Credit Scheme of 1967 through the Multi - purpose Cooperative Societies.

6. Ibid Page 24. Table 8.

7. Ibid Page 29. Table 12.

In addition, credit to the rural sector was provided by schemes operated by government departments for specific purposes and by specialized credit institutions.

Rural Savings Capacity

For the purpose of studying the mobilization of rural sector savings in Sri Lanka it is necessary to understand the capacity for savings in the rural sector. To discuss the savings capacity "the saving-income ratio" could be used as the factor to be determined. The Survey of Ceylon's Consumer Finances 1963⁸ and 1973⁹ give two months data per spending unit by major income groups on average income and average expenditure on selected items for the rural sector. These data have been analysed to derive the saving-income ratio of a spending unit for two months for major income groups. The saving-income ratio of a spending unit is one minus the ratio of total expenditure on consumption¹⁰ upon total income.¹¹

Though the treatment of consumer durables is subject to controversy, there are strong reasons for inclusion of consumer durables in savings. A consumer durable bought on a hire-purchase basis involves regular instalment payment and hence would be included in the measurement of savings. Therefore, an outright purchase of such an item should also be considered as a form of saving. In developing countries it can be argued that consumer durables often serve as a substitute for capital investment of the conventional type.¹² For instance, in rural areas a bicycle is often used for transporting agricultural inputs like fertilizer and agricultural outputs such as paddy (rice). Therefore, expenditure on consumer durables could be considered as capital expenditure because it helps to generate income in the same way as other capital goods and could

8. Central Bank of Ceylon - **Survey of Ceylon's Consumer Finances 1963**, Part II, Statistical Tables.

9. Central Bank of Ceylon - **Survey of Sri Lanka's Consumer Finances 1973**, Part II, Statistical Tables.

10. Expenditure on consumption includes cash and imputed value for goods consumed and services received.

11. Income includes cash and imputed value of all receipts of goods and services.

12. F. M. Tamagna, "Concepts and Methodology in Saving Estimation," *Proceedings of the Business and Economic Statistics Section, American Statistical Association*, 1959. p. 242.

TABLE 1
 Distribution of Average Income, Average Expenditure and Saving-Income Ratio of a Spending Unit, for Two Months by Major Income Groups of the Rural Sector, 1963 and 1973
 (Amount in Rupees)

Income Groups of Spending Units Rupees for Two Months	1963			1973		
	Average Income ¹	Average Expenditure on Selected Items ²	Saving-Income Ratio	Average Income ¹	Average Expenditure on Selected items ²	Saving-Income Ratio
0 - 50	33.33	153.45	- 3.60	35.00	38.86	- 0.11
51 - 100	76.74	186.62	- 1.43	82.60	114.95	- 0.39
101 - 200	153.25	223.74	- 0.46	159.45	169.72	- 0.06
201 - 400	291.37	321.30	- 0.10	309.98	322.81	- 0.04
401 - 800	539.10	448.11	0.17	561.66	553.90	0.01
801 - 1600	1053.63	659.55	0.37	1044.95	937.10	0.10
1601 - 2000	1786.37	1339.29	0.25	1759.94	1440.98	0.18
2001 - 3000	2476.82	944.01	0.62	2405.84	1811.81	0.25
3000 over	5362.61	1772.59	0.67	4485.80	2777.79	0.38
Total	331.18	323.85	0.02	582.14	548.64	0.06

1. Includes income in kind.

2. Excludes expenditure on consumer durables.

Sources: i. Survey of Ceylon's Consumer Finances, 1963, Part II, Statistical Tables, Central Bank of Ceylon, Department of Economic Research, Colombo

ii. Survey of Sri Lanka's Consumer Finances 1973, Part II, Statistical Tables. Central Bank of Ceylon, Department of Economic Research, Colombo.

therefore be treated as a form of savings. For the purpose of computing the saving-income ratio, expenditure on consumer durables has been excluded on the expenditure side.

Table 1 presents the distribution of average income, expenditure and saving-income ratio per spending unit for two months by major income groups of the rural sector in 1963 and 1973 respectively. It is observed from this table that the saving-income ratio of the rural spending unit is only 0.02 in 1963 whereas it amounts to 0.06 in 1973.

Table 1 discloses that the spending units which earned less than Rs. 400 for two months showed negative saving-income ratios for both 1963 and 1973. However, the 1973 saving-income ratios for these groups were less negative than in 1963. On the other hand, spending units in the high income brackets of more than Rs. 400 per two months showed positive saving-income ratios in 1963 and 1973. It is seen that except the income bracket of Rs. 400-800, all other higher income brackets showed higher saving-income ratios in 1963 than in 1973.

Table 2 presents the sectoral distribution of two months average income, average expenditure and the saving-income ratio per spending unit for 1963 and 1973.

TABLE 2

Two Months Average Income, Average Expenditure per Spending Unit and Saving-Income Ratio for 1963 and 1973

Sectors	1963			1973		
	Average ¹ Income Rs.	Average ² Expenditure Rs.	Saving- Income Ratio	Average ¹ Income Rs.	Average ² Expenditure Rs.	Saving- Income Ratio
Urban	631.97	550.19	0.129	794.71	728.16	0.084
Rural	331.19	323.85	0.022	582.14	548.64	0.058
Estate	354.08	495.23	-0.398	570.91	568.44	0.004

Sources: 1. Survey of Ceylon's Consumer Finances 1963, Part II Statistical Tables, Central Bank of Ceylon, Department of Economic Research, Colombo.

2. Survey of Sri Lanka's Consumer Finances 1973 Part II, Statistical Tables, Central Bank of Ceylon, Department of Economic Research, Colombo.

1. Includes income in kind.

2. Excludes expenditure on consumer durables.

It is seen from Table 2 that there is an improvement in the saving-income ratio of the rural spending units during the 10 year period 1963-1973, as against the decreasing trend in the saving-income ratio of the urban sector. It is also important to note that the rate of decrease in the saving-income ratio of the urban sector during the 10 year period from 1963 to 1973 is higher than the rate of increase in the saving-income ratio of the rural sector.

It is observed from the saving-income ratio of the rural sector that the rural savings capacity in Sri Lanka is much larger than expected. As there is no savings estimate for the rural sector it is only possible to estimate the volume of rural savings on the basis of the sectoral saving capacities of the household sector. Estimates of rural savings for the period 1960-1972 has been made later on this basis.

An Estimate of Savings of the Rural Sector

Savings of the rural sector is effected in the form of financial and tangible assets. Savings in the form financial assets can be divided into discretionary savings, contractual savings and compulsory savings.¹³

Discretionary savings are held in the form of financial assets of differing degrees of liquidity; they include claims on the banking system (currency and deposits), claims on the government sector (government securities) and claims on the corporate sector (stocks and bonds).

Contractual savings are long term savings involving a definite continuous commitment on the part of the savers. These savings comprise insurance premia, provident fund and pension fund contributions and principal payments on mortgage debt.

13. The government of Sri Lanka introduced a compulsory savings scheme to provide for the payment of compulsory contributions computed on the income of persons into a fund called "Compulsory Savings Fund". This scheme was in operation from January to December, 1971. There was a grace period of 3 months from January to March 1972, in which contributions were not expected. In 1972 the government introduced a law called "Ceiling on Income and Compulsory Savings Law" which was in operation from April, 1972 onwards. Subsequently, this scheme was discontinued in November, 1975.

As there was no estimate of savings for the rural sector, the volume of rural savings for the period 1960-1972 was derived by using the household savings data estimated earlier by the writer¹⁴. The household sector consists of urban, rural and estate sectors. For the purpose of deriving rural sector savings it is necessary to have weighted saving-income ratios for these three sectors.

As there were no time series data to derive yearly saving-income ratios for these three sectors from 1960-1972 it was decided to use income and expenditure data collected by the Survey of Ceylon Consumer Finances 1963 and 1973. The saving-income ratios derived for 1963 and 1973 showed that there were significant changes in these ratios during the period 1963 to 1973 and also an abnormally negative and inconsistent saving-income ratio for the estate sector for 1963. This negative saving-income ratio of 0.398 derived for the estate sector in 1963 seems to be inconsistent with other ratios derived for Urban and Rural sectors. As given in the Table II the average expenditure for two months per spending unit for the estate sector amounted to Rs. 495.23 while the income for two months amounted to Rs. 354.08. This means that an average expenditure for two months exceeded the average income by Rs. 141.15. Such a deficit seems abnormal and open to serious questions.

On the other hand, when these three saving-income ratios are weighted by the population of the three sectors for the purpose of deriving the sectoral savings from the total household savings, these three weighted ratios add up to a negative figure. This implies negative savings in the household sector. However, the earlier direct estimate done by the writer indicated positive household savings amounting to Rs. 637.8 million in 1963¹⁵. The residual estimates derived from the social accounts data also give a positive personal savings figure for 1963.

This unusually large negative saving-income ratio in the estate sector may be mainly due to the over statement of expenditure and under statement of income. The living conditions are very poor in the estate sector. Those living in this sector enjoy fewer facilities

14. S. Kahagalle, "An Estimate of Savings and its Determinants in the Sri Lanka Economy, 1960-72," Staff Studies, Vol. 5, No. 2 September, 1975. Page 62 Table 12, Economic Research Department, Central Bank of Ceylon, Colombo.

15. Ibid p. 62, Table 12.

than those living in the rural and urban sectors. Therefore, informants in the sample may have attempted to show that they were poorer than they really were, under the misconception that they would receive some kind of benefit from the government based on the findings of the survey. On the basis of this evidence it is not unreasonable to conclude that this ratio does not satisfactorily present actual saving-income ratio of the estate sector.

As there was no satisfactory saving - income ratio for the estate sector there was a problem of using the 1963 and 1973 savings-income ratios of the three sectors to derive estimates for the rural sector for 1963. Further more it is not satisfactory to use 1973 ratios as constant ratios as there were clear changes observed in the saving-income ratios of the urban and rural sectors during the ten year period 1963 to 1973. The following method has been used to overcome this problem.

It was decided to derive a new saving-income ratio for 1963 by assuming that the change took place in the saving-income ratio for the period 1963-1973 in the estate sector was the same as that which took place during this period in the rural sector. After deriving this new ratio for the estate sector it was possible to use the sectoral ratios for 1963 along with the 1973 ratios. For the purpose of applying this ratio to derive rural savings from the total household savings, weights should be given to these ratios. It was decided to use the number of spending units in the sample of each sector in the Consumer Finance Surveys 1963 and 1973 as weighting factors and these were applied to the respective saving-income ratios. After deriving weighted ratios for these three sectors for 1963 and 1973 a simple method of extrapolation was used to arrive at other ratios for the rest of the years from 1960-1972. These ratios were applied to savings of the household sector to arrive at the volume of savings of the rural sector.

The volume of rural savings and its significance in relation to savings of the household sector, total savings of Sri Lanka and Gross National Products at (1959) constant prices and current prices are given in the Tables 3 and 4 respectively. Figure I shows the movement in rural savings, household savings and total savings in Sri Lanka.

TABLE 3

**Volume of Rural Savings and Its Significance in Relation to Total Household Savings,
Total Savings And Gross National Product**

(At 1959 constant prices)

(Rs. Million)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Savings of the Rural Sector ..	206.1	205.0	277.6	294.6	381.4	332.9	328.8	501.3	425.7	705.3	729.9	811.9	778.8
Savings of the Household Sector ¹ ..	687.1	569.2	673.6	644.2	767.0	625.0	583.1	846.6	689.2	1,100.7	1,102.6	1,191.9	1,114.3
Savings of Sri Lanka ¹ ..	776.6	713.0	875.9	792.5	871.7	817.8	768.6	1,062.3	923.5	1,360.9	1,200.0	1,177.1	1,201.7
Gross National Product ² ..	6,288.5	6,424.7	6,709.9	6,899.7	7,363.3	7,550.6	7,818.3	8,210.4	8,901.0	9,301.1	9,686.4	9,724.9	10,029.7
Savings of the rural sector as a percentage of savings of the household sector ..	30.0	36.0	41.2	45.7	49.7	53.3	56.4	59.2	61.8	64.1	66.2	68.1	69.9
Savings of the rural sector as a percentage of savings of Sri Lanka ..	26.5	28.8	31.7	37.2	43.8	40.7	42.8	47.2	46.1	51.8	60.8	69.0	64.8
Savings of the rural sector as a percentage of the G.N.P. ..	3.3	3.2	4.1	4.3	5.2	4.4	4.2	6.1	4.8	7.6	7.5	8.3	7.8

Note : In this study, savings at current prices are converted to 1959 constant prices by using the national income implicit price index.

- Sources:** 1. S. Kahagalle "An Estimate of Savings and Its Determinants in the Sri Lanka Economy 1960-1972" Staff Studies, Economic Research Department of the Central Bank of Ceylon, Colombo-Vol. 5, No. 2, September 1975.
2. Central Bank of Ceylon - Annual Report for the year 1968, p. 39, Table 11 (A) 5.
3. Central Bank of Ceylon - Review of the Economy, 1975, Appendix I, Table 5.

Fig. 1

RURAL, HOUSEHOLD AND TOTAL SAVINGS
IN SRI LANKA 1960-1972

AT CONSTANT (1959) PRICES

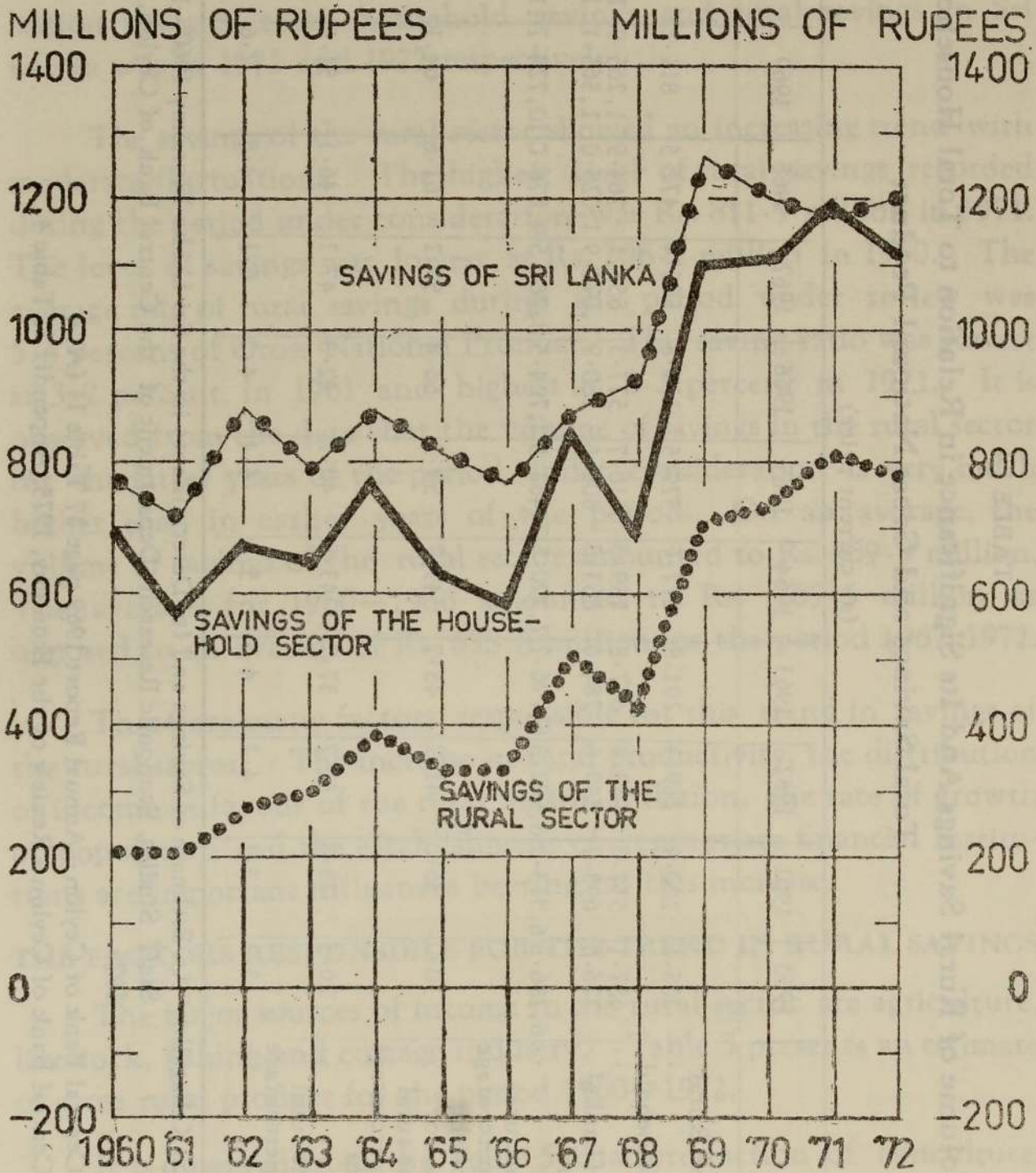


TABLE 4

**Volume of Rural Savings And Its Significance in Relation to Total Household Savings,
Total Savings and Gross National Product**

Rs. Million

(at current price)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Savings of the Rural Sector ..	206.1	200.9	269.3	291.8	377.6	329.5	325.6	506.4	472.5	811.2	868.5	982.4	981.4
Savings of Household Sector ¹ ..	687.1	557.8	653.4	637.8	759.3	618.7	577.3	855.1	764.9	1,265.9	1,312.1	1,442.2	1,404.2
Savings of Sri Lanka ² ..	776.6	698.7	849.6	784.6	863.0	809.6	760.9	1,072.9	1,025.0	1,565.1	1,428.0	1,424.3	1,514.1
Gross National Product ² ..	6,286.8	6,313.3	6,502.5	6,796.7	7,290.5	7,483.5	7,704.5	8,264.5	9,876.0	10,724.7	11,561.7	11,785.8	12,670.5
Savings of the rural sector as a percentage of savings of the household sector ..	30.0	36.0	41.2	45.7	49.7	53.3	56.4	59.2	61.8	64.1	66.2	68.1	69.9
Savings of the rural sector as a percentage of savings of Sri Lanka ..	26.5	28.8	31.7	37.2	43.8	40.7	42.8	47.2	46.1	51.8	60.8	69.0	64.8
Savings of the rural sector as a percentage of the G.N.P. ..	3.3	3.2	4.1	4.3	5.2	4.4	4.2	6.1	4.8	7.6	7.5	8.3	7.8

Sources : 1. S. Kahagalle "An Estimate of Savings and Its Determinants in the Sri Lanka Economy 1960—1972"

Staff Studies, Economic Research Department of the Central Bank of Ceylon, Vol. 5, No. 2, September 1975.

2. Central Bank of Ceylon - Annual Report 1969 page 37 Table 11 (A) 4

3. Central Bank of Ceylon - Review of the Economy, 1975, Appendix I, Table 4.

It is observed that the contribution of the rural savings towards total household savings and total savings of Sri Lanka for the period 1960—1972 were 54.0 percent and 45.5 percent respectively. The lowest contribution of rural savings towards total household savings and total savings for Sri Lanka was in 1960 and the highest contribution towards total household savings and total savings in Sri Lanka was in 1971 and 1972 respectively

The savings of the rural sector showed an increasing trend with moderate fluctuations. The highest level of rural savings recorded during the period under consideration was Rs. 811.9 million in 1971. The level of savings was lowest at Rs. 206.1 million in 1960. The average rate of rural savings during the period under review was 5.4 percent of Gross National Product. This saving ratio was lowest at 3.2 percent in 1961 and highest at 8.3 percent in 1971. It is observed from the data that the volume of savings in the rural sector for the latter years of the period under consideration is very much higher than in earlier years of the period. On an average, the volume of savings of the rural sector amounted to Rs. 459.9 million. The average for 1960—1966 amounted to Rs. 289.5 million as opposed to an average of Rs. 658.8 million for the period 1967—1972.

There are many factors responsible for this trend in savings of the rural sector. The increase in rural productivity, the distribution of income in favour of the rural sector, inflation, the rate of growth of population and the establishment of appropriate financial institutions are important influences bearing on this increase.

THE FACTORS RESPONSIBLE FOR THE TREND IN RURAL SAVINGS

The major sources of income to the rural sector are agriculture, livestock, fishing and cottage industry. Table 5 presents an estimate of gross rural product for the period 1960—1972.

It is observed from the Table 5 that production of agriculture, livestock, fishing and cottage industry has increased by 87.4 percent during the 13 year period. This increase is mainly due to the indirect incentives provided by the government by import restrictions, combined with a programme of import substitutions, non traditional

TABLE 5

An Estimate of Gross Rural Product* 1960—1972

(At 1959 Constant Prices)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Tea ..	97.4	104.0	108.9	115.3	121.5	128.3	127.2	127.8	132.5	131.0	128.8	133.6	131.7
Rubber ..	55.8	55.5	60.0	61.0	65.9	70.6	78.4	86.3	89.8	91.8	97.0	65.8	85.9
Coconut ..	191.4	228.4	246.3	223.7	263.4	235.3	216.6	212.6	228.6	214.2	220.9	229.8	260.1
Paddy ..	322.4	303.4	330.4	341.0	356.0	220.7	307.0	603.1	865.1	856.5	950.8	811.7	775.5
Subsidiary Food Crops ..	108.1	145.4	118.6	145.1	132.3	102.9	102.9	176.5	181.0	203.7	234.6	284.3	296.8
Fruits and Vegetables ..	176.4	181.3	186.3	191.0	195.5	196.3	201.2	213.6	201.4	230.2	235.0	245.8	244.9
Livestock..	129.1	143.0	139.8	178.7	188.4	189.9	193.6	213.3	214.3	218.6	222.6	232.8	276.9
Betel and Arecanuts ..	43.4	44.6	45.7	46.9	48.0	49.2	50.5	51.5	52.8	54.0	55.2	56.2	57.5
Minor Export Crops ..	22.0	21.4	21.6	21.0	24.9	24.8	19.6	20.4	26.9	24.2	25.0	25.6	24.4
Fishing ..	66.7	96.3	109.0	119.6	133.6	122.4	136.6	164.5	180.8	176.7	131.6	112.8	129.4
Medicinal Herbs ..	2.5	2.5	2.6	2.7	2.7	11.1	11.4	11.7	11.9	12.2	12.5	12.7	13.0
Spices ..	10.7	10.8	11.3	11.6	11.3	15.6	11.5	16.6	15.9	11.5	10.6	10.5	8.4
Cottage Industries ..	47.0	47.3	48.2	49.5	50.3	73.0	82.8	88.1	89.4	85.4	84.6	76.1	80.1
TOTAL	1,272.9	1,383.9	1,428.7	1,507.1	1,593.8	1,440.1	1,539.3	1,986.0	2,290.4	2,310.0	2,409.2	2,297.7	2,384.6

* Represent more than 80.0 percent of the rural production. Estimates are derived from the national income statistics. The yearly estimates of tea, rubber and coconut were derived by applying the yearly ratios of acreage under 10 acres to the total acreage of the country to the total production of the country. In the case of all the other items it was assumed that the total production belongs to the rural sector

export promotion schemes and increase in institutional facilities for marketing and credit. Income and wealth distribution measures adopted by the government have also had an impact¹⁶.

For instance, paddy production showed a significant increase during the period and contributed the highest proportion to the gross rural product. Paddy production increased from 43.0 million bushels in 1959/60 to 62.9 million bushels in 1971/72 representing an increase of about 46.28 percent during the period. This increase is mainly a result of the increase in yield per acre and in the area under cultivation. Yields rose from 36.38 bushels per acre in 1959/60 to 46.87 bushels in 1971/72. During the period 1959/60 to 1971/72 the acreage under paddy increased by 1,394,861 acres to 1,578,929 acres, during the two cropping seasons. The increase in productivity was mainly as a result of incentives provided by government. These include a guaranteed price, the subsidy on fertilizer, seed and other inputs and provision of more water to paddy farmers.

The proposition that the level of rural savings is a function of rural income can be judged by estimating the relationship between total rural savings and gross rural product by using linear regression analysis. To estimate the correlation between rural savings¹⁷ and gross rural product¹⁸ the following most commonly used saving function is used.

$$S_r = \alpha + \beta Y_r$$

Where

S_r = total rural savings

Y_r = gross rural product

β = constant marginal propensity to save.

This form is linear with a constant marginal propensity to save (MPS). Economic theory suggests that $\alpha < 0$ and $0 < \beta < 1$ so that as the level of income rises the average propensity to save (APS) will also increase. On the other hand, if the intercept (α) is positive or β (MPS) is negative then average propensity to save (APS) will decrease with increases in income.

16. See H. N. S. Karunatilake, "Income and Wealth Distribution Strategies in Sri Lanka." *Staff Studies*, Central Bank of Ceylon, Vol. 6 No. 1 April, 1976.

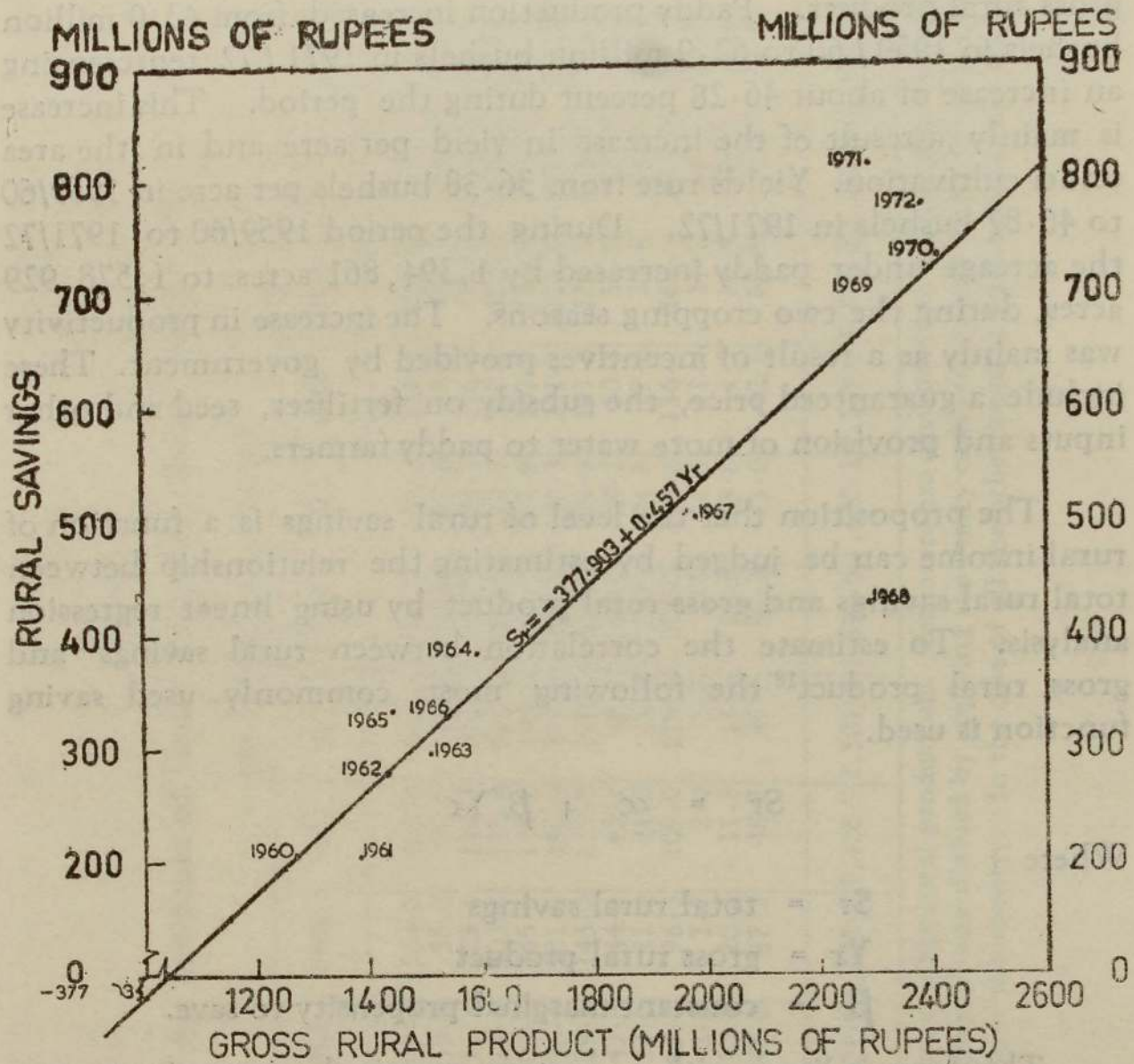
17. Relevant data are given in table 3.

18. Relevant data are given in table 5.

Fig. 11

RELATIONSHIP BETWEEN RURAL SAVINGS
AND GROSS RURAL PRODUCT

AT CONSTANT (1959) PRICES



The estimated equation is as follows :

$$S_r = -377.903 + 0.45681 Y_r$$

Figure II presents the scatter diagram and estimated regression line.

The regression analysis gives the coefficient of determination (R^2) as 0.84569. The estimated variance of marginal propensity to save (β) amounted to 0.00346 and the standard error amounted to 0.05883 approximately. To test whether β is significantly different from zero the t test has been applied. The t value is estimated at 7.76463 which is more than the critical t value of 1.8 for $n-2$ (where $n=13$) degrees of freedom at 5 per cent level of significance. Since the estimated t value is more than the critical t value the null hypothesis ($\beta = 0$) was rejected in favour of the alternative hypothesis ($\beta \neq 0$). It is observed that even at 0.005 level of significance the β value is significantly different from zero.

These results indicate that the changes in rural savings bear a close relationship with the movement in the gross product of the rural sector. It will be observed from the regression line that there was a rapid increasing trend in total rural savings.

TABLE 6

Gini Coefficients for Income Receivers by Sectors

Sector	Gini Coefficients	
	1963	1973
Urban	0.49	0.40
Rural	0.44	0.37
Estate	0.27	0.37
All Island	0.49	0.41

Source: Survey of Sri Lanka's
Consumer Finances 1973,
Central Bank of Ceylon,
Department of Economic Research,
Colombo 1974, Page 68 Table 53

The level of aggregate savings is also dependent on the level of income distribution. The change from unequal distribution of income towards equal distribution normally tends to retard the growth of savings by shifting incomes from people who tend to save a larger proportion of income to those who save a smaller proportion of their income. This is due to the fact that the lower income groups have a high marginal propensity to consume (or lower marginal propensity to save).

The Gini coefficients¹⁹ given in Table 6 display evidence of a more equal distribution of income in the rural sector during the ten years 1963 – 1973. It could also be seen from these ratios that the distribution of income was highly unequal during the early part of the period under review. However, the highly unequal distribution of income in favour of higher income groups that prevailed during the early years of the period under review did not lead to a higher level of savings in the rural sector mainly due to higher levels of consumption relative to income. It is commonly believed that during this period the higher income groups of the rural sector were highly influenced by the consumption pattern of higher income groups of the urban sector, while the lower income groups were influenced by higher income groups. In other words the usual phenomenon of a lower propensity to consume associated with higher income levels may have been offset by the “demonstration effect” or the “Duesenberry effect”.²⁰ On the other hand, the demand for consumer items of the higher income groups in the rural sector was catered mostly on items which were produced outside the rural economy. This type of expenditure weakened the village economy due to the outflow of funds from the village, thereby reducing the economic activity which leads to income and savings generation.

19. The Gini coefficient which is also known as the concentration ratio expressed the degree of inequality. The larger the ratio the greater the inequality of the distribution of income and vice versa. The main advantage of this measure is that it expresses the income inequality in a single figure. The main disadvantage is that it is not sensitive to small changes in income.

20. See – James S. Duesenberry, “Income, Savings and the Theory of Consumer Behaviour” Harvard University press, Cambridge, Mass 1949, Ragner Nurkse, “Pattern of Trade and Development,” Oxford University Press, Fair Lawn N. J. 1961.

It is also interesting to note that the movement of income distribution towards a greater equality in the rural sector during latter years did not tend to retard the growth of rural savings at the usual rate. The main underlying factor behind this is that the consumption pattern of the lower income groups did not change significantly with the increase in income because of consumer resistance to very high prices and unavailability of commodities which are generally consumed when income increases due to the strict import restrictions operating during the latter years of the period. The higher prices and some incentives given to the people by the government may have encouraged investment for production purposes and also may have discouraged the increase in consumption. On the other hand, the increase in income in the lower income classes due to income distribution towards greater equality is generally spent on items which are produced in the rural economy or produced with local raw materials. This lead to income generation within the rural economy which in turn may have lead to increased savings.

Inflation generally reduces savings owing to increased expenditure. This is one of the most important factors that have been responsible for the low levels in savings during the earlier years of the period. The adverse effect inflation has had on savings was strengthened by the less restricted import policy prevailing during this period. The increase in import restrictions during the latter years of the period combined with the effect of import substitution programmes, grow more food campaigns, non-traditional export promotion schemes and increase in institutional facilities for marketing and credit led to an increase in production of some agricultural and industrial goods which had been restricted or banned during the latter part of the period. The increase in income of the rural sector which has a relatively lower marginal propensity to consume may have partially offset the adverse effects of inflation on the rate of savings during the last years of the period under review.

The rate of growth of population affects per capita savings. The rate of growth of population in the country during the period under review showed a decreasing trend with moderate fluctuations. Table 7 represents the annual growth rates of the population in Sri Lanka from 1960 - 1972.

TABLE 7

Population Growth Rates from 1960 - 1972

Year	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Annual growth rate %	2.8	2.7	2.7	2.0	2.5	2.4	2.5	2.3	2.5	2.2	2.1	1.5	2.0

Source: Department of Census and Statistics.

The rate of increase in population in the rural sector is higher than in the urban sector. This is based on the statistics of population increase by districts. However, as a precise estimate of rural population growth is not available, we assume that the average rate of growth of population during the period 1960-1965 was as high as 2.5 per cent when compared to the average rate of growth of 2.2 per cent during the period 1966-1972. It is seen that in the rural sector, the rate of population growth has had a less adverse effect on the growth of per capita saving during the latter part of the period under review.

The other factor which is responsible for this trend in rural savings is the increase in savings institutions. For instance, the total number of commercial bank branches at the end of 1960 was 45. Their number has increased by 159 to 204 at the end of 1972. The majority of the branches newly established served the rural sector. The establishment of Co-operative Rural Banks is also a significant event in the mobilisation of rural savings. The total number of rural banks which stood at 8 at the end of 1965 increased to 242 at the end of 1972.

Rural Savings Outside the Organized Rural Financial Markets

When financial incentives are not attractive enough to mobilise savings a large share of savings tends to remain outside the organised financial markets. It is generally recognised that a substantial volume of rural savings in Sri Lanka remain outside the organised rural financial markets. Table 8 presents an estimate of the volume of credit in the rural sector in 1969 on the basis of the findings of the Survey on Rural Credit and Indebtedness 1969.

TABLE 8
Estimate of Rural Debt in 1969

Rs. Million

Source	Amount Outstanding	%	Amount Borrowed	%	Amount Currently Outstanding	%
Institutional Sources	100.8	15.8	167.9	24.7	209.9	19.1
Non-Institutional Sources	537.4	84.2	512.2	75.3	890.1	80.9
Total	638.2	100.0	680.1	100.0	1100.0	100.0

Notes: The survey period or the time taken for the field work was 15th October, 1969 to 3rd January, 1970. The amount of debt outstanding refers to the debt outstanding one year prior to the date on which the interviews were conducted. The amounts borrowed refer to those transactions that took place during the reference period i. e. a year preceding the date on which the household was interviewed. The amount currently outstanding shows the size of the debt at the time of the interview.

It is clear from the Table that Rs. 512.2 million worth of financial lending transactions have taken place outside the organized financial markets in 1969. The Table shows the magnitude of the financial transactions outside the organized financial system in the rural sector.

It is also important to note that there is a considerable amount of currency hoarded in the rural sector. This amount was slightly reduced after the demonetisation of Rs. 100 and Rs. 50 currency notes on 25th October, 1970²¹. As there was no data on the volume of currency demonetised from the rural sector, a rough idea of the volume of hoarded currency of the rural sector can be taken by looking at the movement of savings in the form of currency, demand, savings and time deposits and National Savings Certificates by the household sector, in 1970.

21 Between October 27, 1970 and November 2, 1970 (both days inclusive) any person who had currency notes of Rs. 50 and Rs. 100 had to present them to a bank and obtain new currency of the same denominations up to a maximum of Rs. 1000. (This limit was successively reduced to Rs. 250 and Rs. 100 subsequently.) Amounts in excess of this limit had to be surrendered to a bank. From November 3, 1970 to November 25, 1970 (both days inclusive) owners of currency notes of these denominations were able to deposit their holdings in a commercial bank or Post Office Savings Bank.

Table 9 presents claims on the banking system by the household sector, from 1969-1971.

TABLE 9
Claims on the Banking System by the Household Sector

(at current prices) Rs. million

	1969	1970	1971
(a) Currency	63.4	-98.6	83.8
(b) Demand deposits	13.5	129.4	-19.4
(c) Time and Savings Deposits & Savings Certificates	79.1	211.0	251.3
Total	155.9	241.8	315.7

Source: S. Kahagalle "An Estimate of Savings and Its Determinants in the Sri Lanka Economy 1960-1972" *o p. cit.* P.62 Table 12

It is important to note that the total volume of currency demonetised in the rural sector in 1970 cannot be considered as hoardings but it is not unreasonable to classify a major share of this as hoardings. On the other hand, even after the demonetisation in 1970, there has been no indication that hoarding has been reduced to a considerable extent. There is evidence to show that as a result of demonetisation of Rs. 50 and Rs. 100, people have become accustomed to hoarding currency in the form of small denominations of Rs. 10/- and below. Table 10 provides the currency composition by denominations.

TABLE 10
Currency Composition by Denominations of
Rs. 100, Rs. 50, Rs. 10 and Rs. 5 from 1969-1971

Denominations	1969	%	1970	%	1971	%
Rs 100	435.7	35.92	252.0	23.11	421.1	32.76
Rs 50	322.9	26.62	261.0	23.93	312.9	24.24
Rs 10	293.7	24.21	384.4	35.25	353.1	27.47
Rs 5	54.1	4.46	71.4	6.54	70.7	5.50
Currency Issues*	1212.7	100.0	1090.4	100.0	1285.1	100.0

Source: Central Bank of Ceylon.

* Includes notes of denominations of Rs. 2, Rs. 1 and all coins.

It is seen from the table above that in the composition of the currency held by public the value of the denominations below Rs. 10 has increased in 1970 when compared to 1969 and 1971 as a result of the demonetisation took place in October, 1970.

These evidence indicate that there is a considerable amount of currency hoarded in the rural sector. Since people are willing to retain currency notes which do not attract any interest, if proper institutional means are provided these could be absorbed into the organized financial markets. Financial incentives like attractive interest rates coupled with complete security and reasonable liquidity should succeed in mobilizing the quantum of hoardings into the institutional sector.

There are informal savings systems prevailing in Sri Lanka. One of which is most popular among the rural people. It is named "Cheetu"²². This is a kind of temporary informal financial organization which collects contributions from the participants and distributes the periodical collection among the participants, in order of selection. On the basis of the data on "cheetu" contributions given in the Survey of Sri Lanka's Consumer Finances 1973, the total annual contributions to "cheetu" by the rural sector works out to Rs. 60.8 million. This figure shows the importance and magnitude of the transactions outside the organized financial markets.

On the other hand, it is not unreasonable to think that if proper incentives are provided the saving-income ratio of the rural sector could be increased. It is observed from the data on the Survey of Consumer Finances that on an average, a spending unit in 1963 and 1973 spent 15.47 percent and 14.01 percent respectively on alcoholic and non-alcoholic beverages, Tobacco, Betel, Recreation, Entertainment, Ceremonies, Gifts, Laundry and Personal Spending from the average

22 "Cheetu" is a kind of informal financial pool organized among a limited number of persons (about 10 to 15) known to each other to which each consented person must contribute an equal share of money at an agreed interval of time, often every month. The general rule is that the organiser of this pool gets the total of the money pooled in the first round. The order in which the other persons in the organisation get the money pooled in the subsequent rounds is determined by drawing lots. Once the order of drawing of money contributed to the pool in each round is determined, every agreed upon person keeps on paying his periodical share until everyone in the organization gets the money of a round of collection. Though this is the common system of "Cheetu" there are many variations of it.

total expenditure²³. If attractive incentives are provided a major share of income devoted to such expenses could be absorbed into the organized financial markets.

The Rationale of Rural Savings Mobilization

It is clear from the foregoing discussion that a large share of savings remain outside the organized rural financial markets. Also a large proportion of savings in the rural sector is in the form of tangible assets.

It is difficult to say *a priori* whether a given level and composition of savings is desirable or appropriate. This has to be judged in the light of growth objectives and priorities of the country.

In the case of the rural sector a larger share of savings is invested in residential construction. For instance, in 1969/70, out of the total income of Rs. 4,792.8²⁴ million for all the rural households Rs. 285²⁵ million is estimated to have been invested in residential construction. This amounts to 5.9 per cent of rural income having invested in residential construction. According to the Survey of private investment 1966/67²⁶, the main sources of finance for housing investment are household savings (65.7 per cent) described as 'own funds' and Loans (22.9 per cent).

It is observed that a major share of savings in the rural sector is spent on residential construction which is a desirable investment in the light of the growth objectives of Sri Lanka as indicated in the five year plan 1972-1976, as follows:

"The rural housing programme has high priority. It is a means of mobilising savings and diverting a portion of the increase in rural incomes to investment on housing in the rural sector".²⁷

23 See "Survey of Sri Lanka's Consumer Finances 1973". part II Statistical tables, op. cit p. 504. and Survey of Ceylon's Consumer Finances 1973. Part II Statistical tables. op. cit. p. 264 Table S U E 1.02.

24. **Socio-Economic Survey 1969/70** Table 30.0 (monthly income multiplied by 12)

25. **Survey of Private investment 1966/67** - Central Bank of Ceylon, table 29, Investment figure projected to 1969/70 with a 5 per cent increase per annum corresponding to growth of G. N. P.

26. Ibid Table No. 29.

27. The Five Year Plan, 1972 - 1976. November 1971, published by the Ministry of Planning and Employment, Ceylon, Page 126.

The savings in the form of gold, jewellery etc. are not appropriate investments in the light of the country's growth objectives as these do not contribute to the enhancement of the country's productive capacity. Hence, it may become necessary to curtail such investment activities. This would involve a programme aimed at changing the composition of rural savings.

On the other hand, in the context of economic development, the success of an investment programme is more dependent upon increased domestic savings which would make possible the release of domestic resources for investment and involves a policy of curtailing consumption without affecting production. Mobilization of savings in this sense would therefore imply policy programmes aimed at increasing capital formation. The accent of policy programmes in this respect will have to be one promoting the propensity to save.

It is clear from the foregoing discussion that there are two major tasks of mobilization of rural savings.

- (a) To increase rural savings by promoting the propensity to save.
- (b) To change the composition of rural savings.

In the following sections we discuss the institutional network interest rates, inflation and socio-cultural factors bearing on rural savings mobilization. This discussion, however, concentrates on the first two of these factors.

Institutional Net-work and Rural Savings

One of the factors that determines the composition of rural savings is the availability of savings institutions and savings media. Lack of savings institutions leads to higher share of currency in the composition of savings.

The savings facilities to the rural sector is provided primarily by the commercial banks,²⁸ cooperative rural banks, and the National Savings Bank. The contractual savings facilities to the rural sector is provided mainly by the Insurance Corporation of Ceylon.

28. Includes Bank of Ceylon sub-offices at Agricultural Service Centres

Banking in Sri Lanka follows the branch banking system rather than one of unit banks. The commercial banking system consists of five local banks, and seven foreign banks. Out of these commercial banks, two banks viz. Bank of Ceylon²⁹ and People's Bank³⁰ have been mainly responsible for expanded services to the rural sector.

By the end of April, 1977 the People's Bank had 198 branches of which majority of the branches served the rural sector. The major contribution from the People's Bank towards mobilization of rural savings is not only through its own branches in the rural sector but also through inaugurating the co-operative rural bank scheme, in 1964. It provided a combination of financial and managerial aids to establish co-operative rural banks.

The Bank of Ceylon and People's Bank accept time and savings deposits. The only commercial bank which offers a contractual savings account scheme to its customers is the People's Bank which introduced a scheme known as the investment savings account³¹ in February, 1970.

The cooperative Rural Bank Scheme was inaugurated by the People's Bank in 1964. As at end of April, 1977 there were 521 rural banking institutions under this scheme.³²

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29. The Bank of Ceylon was established in 1939 with part government and part private local capital. This Bank was nationalised in 1961.
 30. The People's Bank was established in 1961, replacing the Cooperative Federal Bank.
 31. It is a contractual form of saving where the depositor undertakes to save a specified sum of money monthly or quarterly over a period of 5 years. The minimum sum that may be deposited in such an account is Rs. 5 per month. Interest is paid at the rate of 7.5 per cent but only if the depositor has maintained an unbroken record of deposits on the due dates over a period of 5 years. Should a depositor fail to maintain regular payments he will only be entitled to interest at the ordinary savings deposit rate. As an added inducement to join the scheme, loan facilities are available against such deposits.
 32. A registered Co-operative Society which has established a rural banking division will have only one Co-operative Rural Bank. The Credit and Marketing Manager at the Head Office of the Society will manage the affairs of the Co-operative Rural Bank. A Co-operative Rural Bank can establish special branches and approved branches.

TABLE 11
Deposits and Advances of Rural Banks, 1965 - 1975

End of Year	No. of Banks		Fixed and Savings Deposits			Advances			Difference between Deposits and Advances
	Rural Banks	Special Branches	No. of Accounts	Amount	Average	No. of Accounts	Amount	Average	
1965	8	—	2,933	496,360	169	—	1,167,295	—	670,935
1966	13	—	4,651	725,748	156	6,005	1,753,586	292	1,027,838
1967	27	—	8,833	1,371,227	155	9,495	2,662,689	280	1,291,462
1968	44	—	17,646	3,333,190	189	15,093	4,716,344	312	1,383,154
1969	68	—	29,350	6,173,061	210	22,218	7,095,927	319	922,866
1970	90	—	50,831	16,908,405	333	28,109	9,102,279	324	7,806,126
1971	111	—	61,209	17,864,403	292	31,769	9,316,647	293	8,547,756
1972	242	—	103,634	23,320,586	225	72,250	15,184,913	210	8,135,673
1973	341	—	207,718	45,154,536	217	170,666	38,912,146	228	6,242,390
1974	332	71	367,474	62,735,361	171	261,934	67,406,770	257	4,671,409
1975	338	109	499,969	74,213,971	148	333,635	87,285,572	262	13,071,601
1976	345	158	633,248	116,289,020	184	348,886	101,792,546	292	14,496,474

Source: People's Bank

The main functions of these institutions are:

- (a) Mobilization of deposits,
- (b) Pawn broking and
- (c) Extention of Credit facilities for approved purposes.

In the case of deposits media both the savings and fixed deposits were available. The deposit rates paid varied from 4-6 per cent per annum. Table 11 presents data on deposits and advances of Rural Banks, 1965-1976.

It is observed from Table 11 that the number of co-operative rural banking institutions which stood at 8 at the end of 1965 increased to 503 at the end of 1976. The total deposits (fixed and savings) which stood at Rs. 0.5 million in 2,933 accounts at the end of 1965 increased to 116.3 million in 633,248 accounts at the end of 1976. This sharp increase in deposits is mainly due to the increase in banking institutions under the co-operative rural bank scheme. In addition to the increase in institutions under the co-operative rural bank scheme the savings habit was promoted in the rural sector as a result of increased savings facilities and savings promotion schemes, which contributed to the increase in fixed and savings deposits of the co-operative rural banks. For instance, the average volume of savings in the form of fixed and savings deposits per bank and per account showed a moderate improvement during the period 1965 to 1976. These two averages per account and per bank on an average for the period 1965 to 1970 amounted to Rs. 202 and Rs. 87,177 when compared to Rs. 206 and Rs. 157,102 for the period 1971 to 1976 respectively. The highest average rate of savings of Rs. 333/- per account observed in 1970 was mainly due to an increase in deposits as a result of demonetisation in 1970.³³

In the case of deposit mobilization, co-operative rural banks have an advantage over other savings institutions. The rural bank is located in the village staffed by known persons and offers a personalised and unsophisticated service. From the point of view of the rural clientele the provision of even limited banking functions by a local and familiar institution may be preferable to a more imposing but less comprehensible type of institution.³⁴ In fact the traditional

33. See footnote No. 21.

34. See - Nimal Sanderatne "The Role of Rural Banks" in People's Bank Special Publication, 1968. p. 23.

TABLE 12
Deposits & Advances of Bank of Ceylon Sub-offices at Agricultural Service Centres, 1973-1976

(Amount in Rupees)

End of Year	No. of Sub-offices	• Deposits			Advances			Difference between Total Deposits and Advances
		No. of Accounts	Amount	Average	No. of Accounts	Amount	Average	
1973	79	14,972	5,410,050	361	3,932	1,865,199	474	+ 3,544,851
1974	202	41,431	21,564,370	520	6,398	8,071,436	1,261	+ 13,492,934
1975	299	83,934	42,104,537	502	18,359	30,156,291	1,642	+ 11,948,246
1976	341	128,202	67,797,729	529	36,245	62,719,954	1,730	+ 5,077,775

Source: Bank of Ceylon.

• Includes Current Accounts as well.

banking procedures and the impressive buildings often intimidate the less sophisticated villager. Therefore, the rural bank is capable of spreading banking habits among the rural villagers more efficiently than other savings institutions which are located far away and much more bureaucratized. The main disadvantage is that as it is a department of the multi-purpose co-operative society, people are not confident about the solvency of the institution.

By the end of April, 1977 the Bank of Ceylon had 72 main branches. Most of these branches served the rural areas. In addition to the contribution towards mobilization of savings through its main branches, the establishment of its sub-offices at Agricultural Service Centres constituted a major contribution towards mobilization of rural savings in Sri Lanka.

The Agricultural Productivity Law of 1972 which sought to ensure maximum productivity in agriculture provided for the eventual establishment of 438 Agricultural Service Centres to roughly coincide with each village committee area. At each of these centres, the Bank of Ceylon was to provide banking facilities.³⁵ The first Bank of Ceylon sub-office at an Agricultural Service Centre was established in February, 1973. Deposit facilities in the form of current accounts, savings and fixed deposit accounts, and special savings accounts (with the facility of withdrawal by cheque) are available. Table 12 presents data on deposits and advances of Bank of Ceylon sub-offices at Agricultural Service Centres.

As at end of 1976 there were 341 Bank of Ceylon sub-offices at Agricultural Service Centres with 128,202 accounts having total deposits (including current accounts) amounting to Rs. 67.8 million. The average volume of deposits per account and per sub-office which stood at Rs. 361 and Rs. 68,482 as at end of December, 1973 increased to Rs. 529 and Rs. 198,820 at the end of 1976, respectively. Although the operations of Bank of Ceylon sub-offices at Agricultural Service Centres are still comparatively small in the overall monetary and banking system of the country, their progress in the last four years is impressive.

35. See - Central Bank of Ceylon, **Annual Report 1973** page 49.

Initially, the government operated the Post Office Savings Bank established in 1885, the Ceylon Savings Bank established in 1832, and the Savings Certificate Fund. The National Savings Bank took over the assets and liabilities of these three savings institutions with effect from 1st April, 1972 and thereafter these three savings institutions ceased to exist.

There were 23 branches as at the end of August, 1977. A majority of these branches serve the rural sector. The National Savings Bank is an institution with an island wide network. Approximately 320 post offices and 2500 sub-post offices situated in almost all villages throughout the country, acted as agents of this institution. Savings media in the form of fixed and savings deposits and savings certificates are available to the savers. The Bank has provided for "save as you earn" (SAYE) Scheme³⁶ for wage earners and the School Savings Bank Scheme³⁷ for school children and it also issues gift tokens³⁸.

The bank also provides joint account facilities as well as facilities for the opening and operation of accounts for minors. The National Savings Bank is the only bank in Sri Lanka where the applicants do not have to affix a -/15 cts. stamp on withdrawals of sums exceeding Rs. 20/-. The bank computes interest on the balance standing at the end of each calendar month. The repayment of all deposits and interest there on is guaranteed by the Government of Sri Lanka. Interest up to Rs. 1000/- per individual up to a maximum of Rs. 6000/- for family unit of 6 is completely free of income tax.

Table 13 and 14 present the deposit rates from 1960 - 1976 and the deposit position (1965 - 1976) of the Post Office Savings Bank, Ceylon Savings Bank, Savings Certificate Fund and the National Savings Bank. It is seen from the table 14 that after establishment of the National Savings Bank the total deposits (including savings certificates) has increased much faster than before.

36. This is a savings scheme for wage earners. It provides for the monthly instalment as decided by the saver, to be deducted by the employer from the pay sheet and remitted to the bank to be credited to an account in his name. This instalment should be in multiples of Rs. 10/-.

37. This is a scheme to promote money management techniques amongst the school children. The unique feature of this scheme will be that the children themselves manage the affairs of their own banks.

38. Gift tokens are issued by the National Savings Bank under Section 39 (2) of the National Savings Bank Act No. 30 of 1971. They are printed on special security paper. The donee of a gift token is entitled to interest at 7.2 per cent per annum. The token earns interest from the date of purchase.

There is a research and development division and a separate savings promotion department in the National Savings Bank. The savings promotion department has employed savings promotion officers to promote savings activities in the rural sector. They are supposed to undertake house to house canvassing for the purpose of savings promotion in the rural sector. The other savings promotion method used by this savings promotion department is the Public Relations Approach in which (a) Publications, (b) Publicity through News Papers, (c) Films and (d) Publicity through radio could be considered very important.

It is deemed necessary that the present research division of the bank in collaboration with savings promotion department should conduct field research for the purpose of more efficient mobilization of rural savings.

So far our discussion has been concerned primarily with voluntary or discretionary savings by rural households. We may now also examine the role of contractual savings institutions in mobilization of rural savings. Contractual savings in Sri Lanka include insurance policies, employees provident fund, pension fund contributions and principal payments on mortgage debt. In the case of the rural sector contractual savings in the form of employees provident fund and pension funds are not very significant. Savings in the form of life insurance, while still modest, have been growing steadily in the rural sector in recent years.

With the nationalization of life insurance business in 1961 the Insurance Corporation of Ceylon was established³⁹. This started functioning in January, 1972 as the sole insurer transacting life business in the island. The sole right of transacting general insurance was vested in the corporation as from January, 1964⁴⁰. The total number of life policies and the amount insured as at end of December, 1976 were estimated at 219,841 and Rs. 1612.7 million⁴¹ respectively.

Although there are no data to indicate the number of life policies in the rural sector, it is not unreasonable to assume that a significant proportion of life policies belongs to the rural sector.

39. Insurance Corporation Act No. 2 of 1961.

40. The finance Act No. 11 of 1963.

41. **Central Bank of Ceylon, Review of the Economy 1976**, page 77 Table II (D)15.

For the purpose of efficient mobilization of savings, tax relief for insurance premium, was granted by the government. Tax concessions as an incentive for mobilization of rural savings is not very effective because in the rural sector income tax payers are very small in number. To make life insurance more attractive the loss of value due to a higher rate of inflation should be minimised by using some monetary compensatory adjustments on the capital invested on insurance policies. However, life insurance could be made an important measure of mobilizing rural savings if intensive promotional measures are taken to make life insurance a common practice in this sector. Life insurance could be made attractive especially as this sector lacks other institutional measures to cope with old age, sickness and death.

The savings invested in residential construction is desirable and appropriate in the context of the rural sector in Sri Lanka. The rural population of nearly 9.9 million persons occupy nearly 1.8 million housing units. Only 30.0 per cent of rural houses are permanent units, most of the stock being semi permanent in construction.⁴² Therefore, residential construction is an important aspect of necessary rural development. Home ownership stimulates financial savings. If home ownership is an attainable goal, potential home owners will save to accumulate the down payment rather than spend for other purposes. The regular repayment of mortgage loans is itself a form of financial savings and is likely to induce additional savings.

For these and other reasons the Sri Lanka government has introduced various forms of incentives and subsidies for encouragement of housing construction. Several tax incentives have been provided under the National Housing (Amendment) Act, No. 36 of 1966. It is important to note that since there are very limited number of income tax payers in the rural sector, tax concessions are not very effective for the mobilization of rural savings.

42. See Marga publications, "Housing in Sri Lanka", Marga Research Studies - 6 Colombo 5. P. 70

At present the housing loan facilities from institutional sources in the rural sector are provided mainly by the Department of National Housing⁴³, Commercial Banks, Rural Banks and National Savings Bank. It is observed that the urban sector has benefitted much more from the loans given by the Department of National Housing than the rural sector. The rural banks and the commercial banks provided the major share of the institutional credit for residential construction to the rural sector in the recent past.

Facilitating home ownership enlarges and improves rural capital market flows. The existence of large mortgage lending and repayment flows gives rise to competition among rural institutions to participate in these activities and in turn well functioning rural capital markets.

Interest Rates and Rural Savings Mobilization

While most economists agree that the composition of financial savings can be altered by changes in the differential among interest rates, a number of economists on the basis of Keynesian and post Keynesian analysis have concluded that savings behaviour is insensitive to financial incentives such as interest rates. Evidence from studies recently completed, indicate that rural savings behaviour in underdeveloped countries tends to become sensitive to various forms of economic incentives.

In this part of the paper an attempt is made to examine the savings behaviour in rural Sri Lanka in response to the rate of interest paid on savings deposits.

It is observed from table 13 that the percent savings and fixed deposits rates paid by the commercial banks and savings institutions range from 5.5 per cent to 7.5 per cent per annum. Some commercial banks offer 8.5 per cent for special deposits and the National Savings Bank pays 8.0 per cent for fixed deposits over Rs. 100,000 and 11.0 per cent per 10 year National Savings Certificates. The savings and fixed deposits rates which range from 5.5 per cent to 7.5 per cent could be considered as the operative institutional deposit rate in the rural sector. In the non-institutional sector, it is generally known that some rural savers deposit funds with individuals for safe keeping.

43. The department of National Housing established under the National Housing Act. No. 37 of 1945 as amended by the Acts, Nos. 42 of 1958 and 36 of 1966 grants loans from the National Housing Fund.

TABLE 13
Table of the Interest Rates on Fixed and Savings Deposits of Commercial Banks and the National Savings Bank(d)

End of Period	Commercial Banks' Deposit Rates (Maximum)						Savings Deposits	Post Office Savings Bank (a)	Savings Certificates (b)	Ceylon Savings Bank	
	Fixed Deposits									Savings Deposits (a)	Fixed Deposits (c)
	3 Months	6 Months	12 Months	24 Months	36 Months	48 Months					
1960 December	2½	2½	2½	2½	2½	2½	2	5.0	2.5	—	
1961 "	2½	2½	2½	2½	2½	2½	2	5.0	2.5	—	
1962 "	2½	2½	2½	2½	2½	2½	2½	5.0	3	—	
1963 "	2½	2½	2½	2½	2½	2½	2½	5.0	3	—	
1964 "	2½	2½	2½	2½	2½	2½	2.4	5.0	3	—	
1965 "	2½	2½	2½	2½	2½	2½	2.4	5.0	3	—	
1966 "	3½	3½	3½	3½	3 5/8	3 5/8	3	5.0	3	—	
1967 "	3½	3½	3½	3½	3 5/8	3 5/8	3	5.0	3	—	
1968 "	3½	3½	3½	3½	3 7/8	3 7/8	3	5.0	3	—	
1969 "	4	4	4	4	4	4	3½	5.0	3.5	4.5	
1970 "	4	4	4	4	4	4	3½	5.0	3.5	4.5	
1971 "	4	4	4	4	4	4	4	5.0	4	4.5	
1972 "	4	4	4	4	4	4	4	5.0	4	4.5	
1973 "	4	4	4	4	4	4	4	5.0	7	7.5	
1974 "	4	4	4	4	4	4	4	11.0(d)	7.2(d)	7.5(d)	
1975 "	6	7	7	7	7	7	4	11.0	7.2	7.5	
1976 "	6	7	7	7	7	7	5	11.0	7.2	7.5	
							5	11.0	7.2	7.5	
							5	11.0	7.2	7.5	
							7½	11.0	7.2	7.5	
							7½	11.0	7.2	7.5	
							7½	11.0	7.2	7.5	

Source: Central Bank of Ceylon.

(a) Compound interest on savings deposits.

(b) Rate on the ten year certificates.

(c) Rate on deposits for 12 months. The rate on fixed deposits of Rs. 100,000 and over is 8% with effect from 27 May, 1975.

(d) The National Savings bank took over the assets and liabilities of the Post Office Savings bank, the Ceylon Savings Bank and the Savings Certificates Fund with effect from 1st April, 1972. Interest rates shown before that date are those of the Ceylon Savings Certificates Fund, Ceylon Savings Bank and the post Office Savings Bank.

However, such deposits do not attract any interest. In contrast non-institutional lending rates are very high. According to the finding of the Survey of Rural Credit and Indebtedness 1969⁴⁴, out of the total amounts borrowed by households on positive rates of interest, 47.1 per cent had been borrowed at rates of interest of more than 12 per cent per annum. For instance there was evidence of rates as high as 175 per cent per annum being charged in the rural sector, although it is possible that these may have been confined to particular areas and to particular types of transactions. Out of the amounts borrowed on positive interest rates of less than 11 per cent per annum amounted to 52.8 per cent of the total household borrowings. It should also be noted that out of the total borrowings at rates less than 11 per cent per annum, 71.9 per cent had been borrowed from institutional sources.

It is obvious from the above facts that the present deposit rates are not realistic rates of return on savings. When the financial systems offer negative or low real rates of interest for financial savings there is very little incentive for the rural household to save. As a result the ability of the financial institutions to mobilize rural savings is constrained and a large share of savings tends to remain outside the organized financial markets.

However, there are indications to show that the savings behaviour in rural Sri Lanka is sensitive to higher interest rates. This could be demonstrated by the experiences of the Post Office Savings Bank, Ceylon Savings Bank, Savings Certificates Fund and the National Savings Bank⁴⁵ in mobilizing of savings during the recent past. In 1969, the rate on savings deposits and fixed deposits of the Ceylon Savings Bank stood at 3.5 per cent and 4.5 per cent respectively. The Post Office Savings Bank offered 3.0 per cent for its savings deposits, while the National Savings Fund offered 5.0 per cent for its Savings Certificates. In 1970, the rates on savings deposits of the Ceylon Savings Bank and Post Office Savings Bank were revised upwards rather sharply in 1971 to reach 7.0 per cent and 7.2 per cent respectively and fixed deposits rate of the Ceylon

44. **Report of the Survey of Rural Credit and Indebtedness 1969.** Department of Economic Research, Central Bank of Ceylon,

45. The National Savings Bank took over the assets and liabilities of the Post Office Savings Bank, Ceylon Savings Bank and the Savings Certificates fund with effect from 1st April, 1972.

Savings Bank to 7.5 per cent. The rate on savings certificates which remained constant at 5.0 per cent since the inception of the scheme was increased to 11.0 per cent in April 1972.

Table 14 presents the growth of fixed and savings deposits of Post Office Savings Bank, Ceylon Savings Bank, Savings Certificate Fund and the National Savings Bank from 1965-1976.

TABLE 14
Fixed and Savings Deposits of the Public with the Post Office Savings Bank, Ceylon Savings Bank, Saving Certificate Fund and the National Savings Bank, 1965-1975.

Rs. Million

Year	P.O.S.B and C.S.B		Savings Certificate Fund		Total	
	Amount	Change	Amount	Change	Amount	Change
1965	513.7	29.8	41.8	4.4	555.5	34.2
1966	529.6	15.9	56.5	14.7	586.1	30.6
1967	543.8	14.2	78.7	22.2	622.5	36.4
1968	573.5	29.7	91.3	12.6	664.8	42.3
1969	592.5	19.0	86.3	- 5.0	678.8	14.0
1970	707.2	114.7	73.1	-13.2	780.3	101.5
1971	832.2	125.0	65.3	- 7.8	897.5	117.2
			National Savings Bank (a)			
1972	968.6	136.4	79.1	13.8	1047.7	150.2
1973	1146.9	178.3	115.6	36.5	1262.5	214.8
1974	1416.5	269.6	125.5	9.9	1542.0	279.5
1975	1663.4	246.9	135.8	10.3	1799.2	257.2
1976 (b)	1887.9	224.5	137.8	2.0	2025.7	226.5

Source: Central Bank of Ceylon.

(a) The National Savings Bank took over the assets and liabilities of the Post Office Savings Bank, Ceylon Savings Bank and the Savings Certificates Fund with effect from 1st April, 1972.

(b) Provisional

It is observed from the Table 14 that during the five year period 1965-1969, in which comparatively lower deposit rates prevailed, the total deposits of the Post Office Savings Bank and Ceylon Savings Bank increased by an annual average of Rs. 21.7 million. In the next five year period 1971 to 1975, in which comparatively higher interest rates prevailed, the total deposits increased by an annual average of Rs. 191.2 million. On the other hand, the volume of savings in the savings certificate fund which stood at Rs. 91.3 million as at end of 1968 decreased to Rs. 65.3 million as at end of 1971. In 1972 the year in which the rate of return on savings certificates increased to 11.0 per cent, this decreasing trend was reversed to an up-trend. As at the end of 1976 the volume of savings in the form of savings certificates stood at Rs. 137.8 million.

Thus, it is seen that the savings of these institutions have increased after the upward revision of the deposit rates. Presumably, a substantial amount of funds that had been circulating previously in the unorganized financial markets was transferred to organized financial markets in response to the higher rate of return on deposits. Apart from the higher deposit rates the demonetisation of the currency notes of the denomination of Rs. 50 and Rs. 100 in 1970, the branch expansion of the National Savings Bank and commercial banks, increase in number of co-operative rural banking institutions and the development of banking habits among the rural villagers are responsible for these increases in deposits.

The seminar on "Mobilization of Private Savings in the ESCAP Region concluded:

"In Sri Lanka an increase in the rate of interest had not been found to have any appreciable effect on commercial bank time deposits although all savings deposits had registered an increase in line with changes in interest rates. On the whole, a clear and positive relationship had been found to exist between changes in interest rates and increases in total savings deposits⁴⁶".

46 "Mobilization of Private Savings in ESCAP REGION". Documentation of the Seminar on the Mobilization of Private savings under the auspices of ESCAP in co-operation with SIDA and ISBI, 26 August to 6 September, 1974. Bangkok, United Nations 1975, page 6.

TABLE 15
Nominal and Real Rate of Interest (Per cent) 1973-1976

End of Period	Change in Cost of Living Index	COMMERCIAL BANKS				NATIONAL SAVINGS BANK			
		Fixed Deposits (a)		Savings Deposits		Fixed Deposits (a)		Savings Deposits	
		Nominal Rate	Real Rate	Nominal Rate	Real Rate	Nominal Rate	Real Rate	Nominal Rate	Real Rate
1973	+ 22.1	4.75	-17.35	4.5	-17.6	7.5	-14.6	7.2	-14.9
1974	+ 18.8	4.75	-14.05	4.5	-14.3	7.5	-11.3	7.2	-11.6
1975	+ 5.2	7.5	+ 2.3	5.5	+ 0.3	7.5	+ 2.3	7.2	+ 2.0
1976	+ 1.9	7.5	+ 5.6	5.5	+ 3.6	7.5	+ 5.6	7.2	+ 5.3

(a) Maximum rate on deposits for 12 months,

It is evident from the foregoing discussion that higher interest rates play a significant role in the mobilization of rural savings. However, the present level of deposit rates still appear to be too low to make significant changes in the composition of rural savings or to increase rural savings by promoting the saving-income ratio or the propensity to save.

For instance, when deposit rates are deflated by the Colombo Consumer's Price index, which is supposed to indicate the change in purchasing power of money, the resultant rates are negative by significant margins, in 1973 and 1974. Positive rates of interest were registered in 1975 and 1976 and these too could be considered very low. These observations can be gauged from Table 15.

The maintenance of positive and realistic rates of interest on bank deposits and other financial savings media is a prime means of mobilizing savings. The present deposit rates in Sri Lanka do not provide an adequate return to the depositors and therefore, are not very effective in either making significant changes in the composition of rural savings or in increasing the volume.

Low deposit rates provide little incentive for rural household to save in a financial form. This leads to low volume of savings deposited in financial institutions. The low volume of rural savings, provides little incentive for financial institutions to aggressively promote savings mobilization programmes and does not induce them to spread their facilities more broadly in rural areas. On the other hand, only the rich in most cases, can avoid the low interest rate ceilings placed on financial deposits. They can usually buy assets whose value increases with inflation or lend money in the unorganized financial market where attractive rates of return are paid.

The Impact of Inflation on Rural Savings

Inflation affects not only the volume of savings but also the form that savings will take. High rates of increases erode the purchasing power of money and reduce the propensity to save of individuals. On the other hand, inflation discourages the holding of financial assets. In times of inflation, people are inclined to retain their savings in physical assets, such as land or jewellery rather than take the risk of transferring them into financial assets which are likely to lose their value. In a situation like this it is extremely difficult to induce people to keep their savings in financial assets.

In the recent past a rapid price inflation was observed in Sri Lanka. As a result rural savers found the return on financial savings often negative in real terms. Table 15 presents nominal and the real rates of interest on savings deposits of the commercial banks and the National Savings Bank.

Therefore, a further increase in the deposit rate will help to protect the real value against loss from inflation and provide an adequate return to the depositors. A marginal increase in the deposit rates is unlikely to affect the level of savings to any significant level. However, shifting to a higher level of interest rates is not without problems⁴⁷. Some countries have used interest rate adjustments on savings deposits as an anti-inflationary technique and obtained increases in rural voluntary savings. Korea and Taiwan aggressively used interest rate adjustments on financial savings and gained huge increases in financial savings⁴⁸. Another solution to this problem which was tried in Brazil with an impressive degree of success, is to introduce a range of inflation adjustment measures. For instance capital can be adjusted from time to time by the co-efficient for inflation which may be a cost of living index or wholesale price index which ever is suitable to revalue the savings for the purpose of conserving the real value. This would ensure that people are not penalized for holding financial assets in time of inflation. This coupled with a policy of high interest rates should greatly increase the amount of savings mobilized. Without a provision for such monetary corrections, savings programmes may not be very successful.

Socio-Cultural Factors Bearing on Rural Savings

While some social and cultural factors in Sri Lanka adversely affect the mobilization of rural savings others favour the hoarding of wealth in traditional forms such as gold and jewellery. For instance, in traditional wedding ceremonies in rural Sri Lanka golden wedding rings are exchanged and a golden necklace tied around the

47. Wimal Hettiarachchi "Interest Rate in Sri Lanka", *Staff Studies*, Central Bank of Ceylon, Vol. 6, No. 1 April, 1976. pp. 149—172.

48. Irvine, R. J. and R. F. Emery, "Interest Rates as an Anti-Inflationary Instrument in Taiwan" *The National Bank Review*, Vol. 4 No. 1 September 1966, pp. 29—39 and Brown Gilbert T. *Korean Pricing Policies and Economic Development in the 1960's* (Baltimore John Hopkins Press 1973).

bride's neck by the bridegroom. These items can be very expensive and are certainly not an insignificant proportion of rural incomes. A large residential house and ownership of large extents of land are some of the supporting factors of acquiring social status and leadership in the rural villages of Sri Lanka. The social attitudes of this nature divert savings away from long term productive investments. This problem was solved to a certain extent with the introduction of the land reform law of 1972⁴⁹ and the legal enforcement of ceiling on the floor area of a residential building⁵⁰.

The traditions upheld by the rural community such as the observance of extravagant ceremonies (such as the ceremonies on attaining puberty, weddings, pirith chanting, alms givings and New Year etc.) affect the family's allocation of earnings and therefore, its potential for savings. The high priority for these ceremonies produces a lopsided allocation of family earnings to a celebration of a short duration in proportion to what is spent for the rest of the year. These are clearly inhibitory factors to the mobilization of savings.

For the purpose of mobilization of savings this sort of social and cultural practices should be discouraged. Intensive campaigns will have to be waged to educate the rural population in the thrift habit and the unsuitability of some traditional activities under the present social and economic situation of the country.

In rural Sri Lanka nearly 28.0 percent of the rural population is illiterate.⁵¹ Mobilization of savings of this group is difficult mainly because they do not read and write and therefore unable to understand to use the facilities offered by these institutions. As the rate of literacy in the country improves as a result of the free education policy in Sri Lanka this obstacle would be removed. Meanwhile facilities to the illiterate people should be provided by the existing financial institutions to encourage them to open and operate accounts without any difficulty.

49. Under the Land Reform Law of 1972 privately owned agricultural land above a ceiling of 50 acres (except in the case of paddy where the ceiling was 25 acres) was deemed vested in the Land Reform Commission.

50. The floor area of a residential building was restricted to 2000 square feet.

51. **Survey of Sri Lanka's Consumer Finances 1973**. op. cit. p. 29 Table 12.

Summary and Conclusions

The rural savings capacity in Sri Lanka is much larger than expected. The saving-income ratio of a rural spending unit which stood at 0.02 in 1963 increased to 0.06 in 1973. The volume of rural savings in Sri Lanka showed an increasing trend during the period 1960-1972. There was a marked increase in the level of rural savings after the year 1967. On an average the volume of annual savings of the rural sector amounted to Rs. 459.9 million. This average for the period 1960-66 was Rs. 289.5 million when compared to an average of Rs. 658.8 million for the period 1967-1972. The highest level of rural savings recorded during the period under consideration was Rs. 811.9 million in 1971. The level of savings was lowest at Rs. 206 million in 1960.

The contribution of rural savings towards total household savings and total savings of Sri Lanka was 54.0 percent and 45.5 percent respectively. The average rate of rural savings during the period 1960-1972 has been 5.4 percent of Gross National Product. This saving ratio was lowest at 3.2 percent in 1961 and highest at 8.3 percent in 1971.

There is evidence of substantial rural savings outside the organized rural financial markets. Some of these have no doubt been mobilized by the establishment of rural savings institutions such as Co-operative Rural Banks, Bank of Ceylon Sub-offices at Agricultural Service Centres, Bank of Ceylon and People's Bank branches in the rural sector and the establishment of National Savings Bank. The expansion of these institutions has proved to be a very successful strategy in the mobilization of rural savings.

The most pronounced factors which influenced the level of rural savings in Sri Lanka are income and its distribution, inflation, the rate of population growth and the success of rural financial institutions.

Rural savings are sensitive to the rate of interest and can be used as an incentive to increased savings. But the present nominal rates of interest paid on deposits are sometimes negative or very low in real terms. Therefore, an upward revision of rates of interest will help to protect the real value against loss of value from inflation

and provide an adequate return to the depositors. However, a marginal increase in the deposit rates is unlikely to affect the level of rural savings to any significant level.

Social and cultural factors in Sri Lanka which encourage investment in gold, jewellery etc. do not contribute to the enhancement of the country's productive capacity. Therefore a change in social attitudes which hinder economic development is required. Modernisation and improvements in literacy and education are likely to assist in removing these obstacles in future years.

Given the importance of the rural sector in the economy of Sri Lanka, the evidence of higher savings capacity and unproductive hoardings and the recent experience of significant increases in rural savings consequent to the expansion of rural financial institutions, this study underscores the need to develop incentive-oriented programmes for savings mobilization implemented through institutions suited to operate in the rural context.

The factors which should be considered in rural savings mobilization programmes are convenience of savings deposits, liquidity, security, confidence in financial institutions, interest, availability and costs of associated credit services.

The linking of deposit schemes with insurance, lending, old age provisions, bequests and other banking services would encourage more savings and financial deposits.

The future savings must be mobilized largely through the efficient use of surplus manpower.

TOWARDS A THEORY OF MULTIPLE EXCHANGE RATES*

WIMAL WICKRAMASINGHE

Perusal of the economic literature on multiple exchange rate management has convinced the present writer more often than not that there is no theory of multiple exchange rates.¹ More than half of the countries in the world have used multiple currency practices in one form or another or at one stage or another. Still more than thirty member countries of the International Monetary Fund *officially* use multiple currency practices in one form or another. It has been said that the problem of multiple exchange rates may never be entirely solved. There are many arguments in economic literature for various types of rigid and flexible exchange rates but the issue of multiple exchange rates has not attracted the attention it deserves. It seems that economists have considered multiple exchange rates as an abnormal or temporary affair in the exchange rate management² and therefore they have not paid much attention to the development of a theory as such. Hence the discussion on multiple rates has been largely confined to the writings of the Fund's

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1. In view of this deficiency, the present writer has presented some outlines for a theory of multiple exchange rates in his Ph D thesis, *A Theory of Multiple Exchange Rates and Exchange Rate Management in Sri Lanka*, submitted to the University of Exeter in May 1973. In the first part of this thesis, he has examined the origin and characteristics of multiple exchange rate systems, defined their objectives and evaluated the theory of multiple exchange rates in relation to theories of exchange control, second best and protection. The second part is an argument for a dual exchange rate. This is where he has related the theory of exchange rates to the theory of innovations. Against the perspective of the balance of payments and the Sri Lanka rupee, the final part would apply this dual exchange rate policy to Sri Lanka's recent experience.
2. Some economists are not in favour of exchange rate management at all. For example, Milton Friedman, "The Case for Flexible Exchange Rates", *Essays in Positive Economics*, (University of Chicago Press, 1953), pp. 157-203; and Egon Sohmen, *Flexible Exchange Rates: Theory and Controversy*, (Chicago University Press, 1961). The revised version of this book appeared in 1969 under the title, *Flexible Exchange Rates*, (University of Chicago Press). Also see footnote 19.

officials.³ To lead the line of argument a little further, although the question of tariffs and subsidies has been disaggregated in greater detail against the background of a theory of protection, the role of multiple exchange rates as a tariff-subsidy scheme or as an instrument of protection has not been evaluated.⁴

Apart from the officials of the Fund, there are only a few other economists who have examined both theoretically and practically the working of multiple exchange practices.⁵ However, all permutations and combinations relevant to a theory of multiple exchange rates have not been discussed; the origin and characteristics and various systems of multiple rates and their objectives have also not been examined

3. For example, E M Bernstein, "Some Economic Aspects of Multiple Exchange Rates", *IMF Staff Papers*, September 1950, pp. 224-237; Magaret G de Vries, "Multiple Exchange Rates: Expectations and Experiences", *Ibid.*, Vol. XII, 1965, pp. 282-311; "The Decline of Multiple Exchange Rates 1947-1967", *Finance and Development*, December 1967, pp. 297-303; and "Multiple Exchange Rates", in J Keith Horsefield (ed.), *The International Monetary Fund 1945-1965: Twenty Years of International Monetary Cooperation*, (Washington: IMF, 1969), Vol. II, Ch V; Francis H Schott, *The Evolution of the Latin American Exchange-Rate Policies Since World War II*, *Essays in International Finance*, No 32, (Princeton University Press, January 1959); W John R Woodley, "The Use of Special Exchange Rates for Transactions with Foreign Companies", *IMF Staff Papers*, Vol. III, October 1953, pp. 254-269; Joyce Sherwood, "Revenue Features of the Multiple Exchange Rate System: Some Case Studies" *Ibid.*, Vol. V, February 1956, pp. 74-107; Samir Makdisi, "Restrictions of the Movement of Funds Within Latin America", *Ibid.*, Vol. X, March 1963, pp. 185-217; S Kanesa—Thasan, "Multiple Exchange Rates: The Indonesian Experience", *Ibid.*, Vol. XIII, July 1966, pp. 354-368; F d'A Collings, "Recent Progress in Latin America Toward Eliminating Exchange Restrictions", *Ibid.*, Vol. VIII, May 1961, pp. 274-286; W John R Woodley, "What Does It Really Mean? - Multiple Currency Practices", *Finance and Development*, June 1966, pp. 113-119; and Josef Swidrowski, "Exchange Rates at the Beginning of 1970", *Finance and Development*, December 1970, pp. 20-21.

4. An attempt has been made by the present writer in the work referred to above to reinterpret the theory of protection in relation to multiple exchange rates.

5. Eugene Richard Schlesinger, *Multiple Exchange Rates and Economic Development*, Princeton Studies in International Finance, No 2, (Princeton University Press, 1952); S C Yang, *A Multiple Exchange Rate System: An Appraisal of Thailand's Experience 1946-1955*, (University of Winconsin Press, 1957); Alexander Rubner, *A Multiple Exchange Rate System: Israel's Experience*, a Ph D thesis submitted to the University of London, 1958; Victor Gradin, "Effects of Multiple Exchange Rates", *Weltwirtschaftliches Archiv.*, 18, 1958; Werner Baer and Michel E A Herve, "Multiple Exchange Rates and the Attainment of Multiple Policy Objectives", *Economica*, May 1962, pp. 176-181; United Nations, "The Application of Multiple Exchange Rates in Selected Asian Countries", *Economic Bulletin for Asia and the Far East*, Vol. 3, No 3, November 1954, pp. 19-38; Michael Michaely, *Israel's Foreign Exchange Rate System*, (Jerusalem: Falk Institute, 1971) and S R Oluwole Dixon-Fyle, "Multiple Exchange Rates: African currencies and multiple exchange rates", *International Currency Review*, March-April 1975, 11-14.

in detail. This paper is an attempt to present outlines for a theory of multiple exchange rates but it should be made clear at the outset that it is not our purpose to argue for or against the use of such rates. The present writer has earlier argued that while a single rate of exchange may not be suitable for some countries, there is a case for a dual exchange rate policy for a dual economy in which factor use is different between the two sectors.⁶

Origin & Characteristics

The question of multiple exchange rates constitutes one of the most important issues of international monetary management not only in the present period but also in the foreseeable future. This is so although the extent and the complexity of such rates has been on the decrease now when compared with the past. This may be due to (a) the continuous pressure for a uniform rate by the International Monetary Fund over the last two decades, (b) the apparent failure of their use and (c) the successive devaluations that have been effected by the countries *per se*. When countries find it difficult, politically or otherwise, to alleviate the strain on the balance of payments by resort to devaluation of the currency, multiple rates have temporarily enabled them to get round this problem and effect a disguised or *pseudo*-devaluation.

A multiple exchange rate system can be described as a technique of exchange rate management consisting of more than one legal buying or selling rate, the spread of which exceeds the accepted margin between the buying and selling rates of exchange on the spot exchange market. The Fund issued a Communication to member countries on multiple currency practices on December 12, 1947; it defined that "an effective buying or selling rate which, as the result of official action, e. g., the imposition of an exchange tax, differs from parity by more than one per cent, constitutes a multiple currency practice".⁷ While the spread beyond the stipulated buying and selling

6. Wimal Wickramasinghe, "The Case for a Dual Exchange Rate Policy: A Marriage Between Theory of Exchange Rates and Theory of Innovations", *World Development*, Vol 4, No 5, May 1976, pp. 427-434. This dual exchange rate which is based on the principle of optimum utilization of employable factor resources is, however, construed only as an in-between policy for some developing countries.

7. International Monetary Fund, *Annual Report for 1948*, p. 72.

rates is a *sine qua non* for the existence of multiple exchange rates, having more than one rate is the other prerequisite, without which there might arise a floating or flexible exchange rate.

Usually the origin of multiple exchange rates has been referred to the German experience with such practices in the 1930s. However, this paper goes back further to find its crude origin in bimetallism which the United States, some European and Asian countries used during the 17th and 18th centuries. The views on multiple exchange rates could also be found in the so-called "Gresham's Law" of the 16th century. The crux of the Gresham Law is that "bad money drives good money out of circulation" and this so happened during the period of bimetallism when silver displaced gold from circulation. Experience of multiple exchange rates in various countries indicates that there is possibly no country which has reverted to a single rate at a higher level than the original single rate. So, as Gresham's Law has indicated, the depreciated rate or rates have ultimately driven out the basic rate of exchange.

The second phase of multiple exchange rates also has two parts. One was the start by Germany in the 1930s followed by others, mainly Latin American countries, and the other, their intensification or resurrection after the Second World War. In a period mainly dominated by the world-wide depression, Germany resorted to a system of exchange controls which came to be characterised as multiple exchange rates.⁸ The impact of the German experience on some European and Latin American countries is hardly discernible. While some European countries such as Austria, Hungary, Rumania and Yugoslavia chose partial depreciation in preference to once-and-for-all devaluation, Latin American countries adopted them due to diverse reasons.

8. Howard Ellis, *Exchange Control in Central Europe*, (Harvard University Press, 1941, p. 158) referred to the German system as a totalitarian system but Charles P Kindleberger, *International Economics*, Third Edition, (Richard D Irwin Inc., 1963, p. 297) characterized it as 'origin in German necessity and ingenuity'. For a description of the German and other experience with multiple rates, see, Margaret S Gordon, *Barriers to World Trade: A Study of Recent Commercial Policy*, (New York: Macmillan, 1941), Chs. V and VIII; League of Nations, *International Currency Experience: Lessons of the Inter-war Period*, (Geneva, 1944), pp. 162—189, and Frank C Child, *The Theory and Practice of Exchange Control in Germany*, (The Hague: Martinus Nijhoff, 1958).

The existence of discriminatory exchange practices is incompatible with the objectives of the IMF as set out in the Articles of Agreement.⁹ The Fund in its first Annual Report itself made it clear that its attitude towards the use of multiple currency practices could not be doctrinaire.¹⁰ Therefore, it agreed to the use of such practices for an undefined short period. The Communication referred to above required the member countries to consult the Fund 'before introducing a multiple currency practice, before making a change in any of the multiple rates of exchange, and before making any other types of significant change in their exchange systems'.¹¹ The Fund expressed the view that member countries should take early steps towards the removal of such practices which have been used for purposes other than balance of payments considerations. In the case of the latter, it was expected that member countries would do away with them not later than the end of the transitional period.¹² The Fund considered this question again on June 26, 1957 and concluded that unification of the exchange rates in multiple rate systems was a basic objective of the Fund.¹³

9. Article VIII, Section 3 and Article XIV, Sections 2 and 4.

Gold argues that although the concept of a fixed par value is of fundamental importance under the Articles of Agreement, provision is also made for the retention, adaptation and introduction of multiple currency practices in certain circumstances. Joseph Gold, *The Fund Agreement in the Courts*, (Washington: IMF, 1962), p. 2.

10. Triffin refers to the Ecuadorian exchange reform of 1947 in support of the fact that the Fund was not doctrinaire in this regard although such instances are very few in number. Robert Triffin, *Europe and Money Muddle*, (Yale University Press, 1957), p. 125.

11. Gold says that the Fund indicated in this memorandum that its jurisdiction applied to a currency whether or not an initial par value had been established. Joseph Gold, *Membership and Nonmembership in the International Monetary Fund: A Study in International Law and Organization*, (Washington: IMF, 1974), p. 196.

12. The Fund does not impose obligations on non-members. But Article XI of the Agreement requires the members not to engage in any transactions with them or not to co-operate with them in practices which would be contrary to the provisions of the Agreement or the purposes of the Fund. The 'Special Exchange Agreement' which is prescribed under the GATT also imposes similar obligations on its members. For more details about both these types of obligations, see Joseph Gold, *The Fund and Non-Member States: Some Legal Effects*, (Washington: IMF, 1966). Also see, Hans Aufricht, *The Fund Agreement: Living Law and Emerging Practice*, Princeton Studies in International Finance, No. 23, (Princeton University Press, 1969).

13. 'Decision on Multiple Currency Practices', in IMF, *Annual Report for 1957*, Appendix 1, pp. 161—162.

Forms of multiple currency practices are many.¹⁴ Therefore, any generalisation from the experience of one or more countries could be far from the real position. Empirical evaluation of any system of such practices needs to be made against the background of a country that has used a particular type of multiple exchange practice.¹⁵

Multiple exchange rates are a restrictive method by which a country's foreign exchange is rationed between international receipts and payments, and the immediate purpose for such allocational function is to ease difficulties in the balance of payments. However, the characteristics of multiple rates are diverse, in the sense that they directly or indirectly embrace most other aspects or control devices, i.e. monetary, fiscal, import, export and exchange policies. Multiple rates may be an extension or a relaxation of exchange controls. But imposing cost restrictions appears to be an indispensable feature of this system. The Fund has classified restrictions on international transactions as quantitative, cost and composite.¹⁶ It seems that the Fund has examined such practices mainly from the viewpoint of cost restrictions. But our analysis is extended to cover the inducement or subsidy aspect of multiple rates, because a system of multiple exchange rates is, *inter alia*, a method of subsidisation too. Experience in the past indicates that allocation of foreign exchange by the use of multiple exchange practices has been more akin to *ad hoc* decisions than to well-planned programmes.

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14. Among them are fixed multiple rates, penalty buying and selling rates, mixed multiple rates, exchange tax, exchange surcharges, mixing rates, multiple and floating free rates, controlled 'free' rates, exchange auction rates, export retention quotas, export bonus rates, multiple or differential rates for invisible or financial transactions, advance deposits on import payments, import entitlement schemes or certificates, disparate cross rates, export or import premia, exchange quotas, convertible currency schemes and partial or selective devaluations.
15. Not only developing countries but developed countries also resort to discriminatory or multiple exchange practices which may not be apparent at once. Machlup lists such concealed selective devaluations effected by the United States and Britain in the past. Fritz Machlup, *The Alignment of Foreign Exchange Rates: The Horowitz Lectures*, (New York: Praeger Publishers, 1972), pp. 12—14. Although developed countries have reduced the use of tariffs, non-tariff restrictions have become a general phenomenon. See Robert E Baldwin, *Non-tariff Distortions of International Trade*, (Washington: The Brookings Institutions), 1971.
16. International Monetary Fund, *First Annual Report on Exchange Restrictions 1950*, pp. 1—8.

Fixed Multiple Exchange Rates

One of the main reasons underlying the application of differential fixed exchange rates is the need to exploit the monopolistic gains from exportables or monopsonistic gains from importables. Fixed multiple rates are in a way preferable to fluctuating multiple rates; the uncertainty about the frequent changes in rates is substantially less in fixed rates although the discriminatory feature may persist. While fixed rates are pegged by arbitrary administrative decisions, they could be changed after sometime if some sort of reality in terms of the shadow price of foreign exchange is required to be infused to such rates. The fact that fixed multiple rates are not determined daily by market forces does not indicate that they remain fixed too long. Necessity might arise to fix them again either way depending upon the changes in the cost of living, the balance of payments, exchange reserve position and other variables such as price, demand and supply with respect to commodities.

In a fixed multiple rate system, rates for receipts and payments can be classified into a number of groups according to the degree of essentiality or similarity. Whether or not such rates constitute a penalty or a subsidy would depend upon the extent of the deviation on either side of the average rate. The concept of average or equilibrium rate of exchange is a chimera. However, provided that it could be known approximately, any fixed selling rate which lies above the average rate constitutes a penalty; otherwise it would amount to a subsidy. On the other hand, if the situation is *vice versa*, then it constitutes a subsidy; if not, it would amount to a penalty. It is sometimes argued that *fixed* multiple rates are not preferable to multiple rate systems with one or more free market rates. When fixed rates are frozen into the economic structure, gradual elimination or transformation of them into a unified rate structure tends to become difficult. Hence, transformation to a unified rate has taken place mostly via flexible rates. This has been a significant feature in many Latin American countries.¹⁷ It has been said that fixed multiple rates do less damage to international

17. See F d 'A. Collings, 'Recent Progress in Latin America Toward Eliminating Exchange Restrictions', *IMF Staff Papers*, Vol. XIII, May 1961, pp. 274—286; and W Konig, 'Multiple Exchange Rate Policies in Latin America', *Journal of Inter-American Studies*, January 1968.

trade and investment than fluctuating multiple rates.¹⁸ This should be argued on the assumption that these rates are not administratively fixed at prohibitive levels. When there is speculation that fixed rates would be changed downward, this might lead to stockpiling of imports to reap windfall profits.

Multiple Floating Rates

The normal characteristics associated with fluctuating or floating exchange rates are also seen in multiple floating or free rates.¹⁹ The most significant feature is the existence of more than one exchange rate, the official or basic rate being perhaps applied to basic cost of living or essential imports such as foodstuffs, raw materials and machinery, and the free market rates to semi-luxury and luxury goods, invisibles and other transactions. Importation of essential goods at the official rate is encouraged if that exchange rate is *de facto* overvalued. If the rate of exchange is overvalued, it is not possible for the government to maintain a long list of imports on the official market on account of the drain in foreign exchange. Therefore, items are frequently shifted from the official category to other free categories as well as between free categories. Fear of re-classification of some commodities under more depreciated rates would naturally encourage importers to stockpile.

18. However, there are arguments to support that 'managed floating' does not necessarily impede the growth of international trade and that managed floating of exchange rates is preferable to fixed or freely fluctuating exchange rates. This view has also been expressed in the *Annual Report of the Fund for 1975*, p. 33. For a brilliant account of the recent changes in the international monetary system with special reference to managed floating, see Samuel I. Katz, '“Managed Floating” as an Interim International Exchange Rate Regime, 1973—1975', *The Bulletin*, New York University, 1975—3. Also see, J Marcus Fleming, 'Floating Exchange Rates, Asymmetrical Intervention, and the Management of International Liquidity', *IMF Staff Papers*, July 1975, pp. 263—283.

19. Other well-known economists who have argued for various types of exchange rate flexibility are Friedrich A Lutz, 'The Case for Flexible Exchange Rates', *Banca Nazionale del Lavoro Quarterly Review*, December 1954, pp. 175-185; J E Meade, 'The Case for Variable Exchange Rates', *The Three Banks Review*, September 1955, pp. 3-27; Charles P Kindleberger, 'Flexible Exchange Rates' in Commission on Money and Credit, *Monetary Management*, (New York: Prentice-Hall Inc., 1963); Richard Caves, 'Flexible Exchange Rates', *American Economic Review*, May 1963, pp. 120-129; Leland B Yeager, *International Monetary Relations*, (New York: Harper & Row, 1966), Ch. 12; Harry G Johnson, 'The Case for Flexible Exchange Rates 1969', in Harry G Johnson and John E Holbart, *UK and Floating Exchanges*, Hobart Papers 46, (London: The Institute of Economic Affairs, 1969), pp. 11-42 and; Fritz Machlup, 'Exchange Rate Flexibility', *Banca Nazionale del Lavoro Quarterly Review*, September 1973, pp. 3-25.

Whenever a free market is instituted to deal with all merchandise and financial transactions that have been excluded from the official market in which the currency is supposed to be overvalued, it is contended that such a partial free market would provide an 'automatic' trade balancing mechanism; this mechanism would eliminate exchange and trade controls and other disruptive adjustments of national levels of prices, incomes and employment. Despite this theoretical reasoning, experience has not confirmed the view that partial free markets in a system of multiple rates function without any exchange and trade controls. If transactions in the official exchange market do not constitute a substantial strain on the country's balance of payments, the partial free market with one or more fluctuating rates would become the simplest balance of payments equilibrators. Then the monetary policy would be relieved of the painstaking role it has to play to ensure external balance in the economy. In a way partial free market would perform as a safety valve - a valve which would ease strain on the balance of payments. The price of foreign exchange in the partial free market is generally determined at a level that clears the market. Introduction of partial free markets along with official or other multiple exchange rates means that such practices are preferred to devaluation.

Arguments for the partial free market are that it would (a) make the adjustment in the balance of payments continuous, (b) eliminate prolonged disequilibrium in the balance of payments, (c) avoid sudden shocks to the economy caused by large and infrequent changes in the exchange rate, and (d) reduce the dampening effect on international trade and investment if accompanied with relaxation of controls. In the case of developing countries where there is no full-fledged foreign exchange market or stock exchange in which inflow and outflow of speculative capital take place in sensitivity with the changes in the exchange rate or interest rates, movement of rates in the partial free market tends to be one-sided; that is, free rates tend to be depreciating most of the time. Theoretically multiple exchange rates could be regarded as a partial *de facto* depreciation or appreciation. But it is hardly possible to find any country, having deviated from a unified exchange rate to a system of multiple rates, that has later reverted to an appreciated fixed rate. Experience has also demonstrated that monetary authorities have been forced either to

discard the pure concept of multi-lateral free markets or to frequently intervene in the partial free market in order to avoid pressure being exerted on the official rate of exchange.

It is seen that sometimes a fluctuating rate has been applied to financial transactions. First, insulation of capital transfers to and from the country concerned means that the price of trade transactions would not be affected by capital transfers. Secondly, it may perhaps discourage the outflow of capital. Thirdly, if conversion is allowed at a fluctuating rate which is depreciated, it would provide an incentive to prospective foreign investors. Finally, classification under two types of exchange rates would reduce the rigidity normally associated with a single fixed rate of exchange. Some of these arguments have some relevance and others could be disputed.

The tendency in a free market is for the existence of a single rate of exchange while the effect of a controlled partial market would be mainly two-fold. One is the result of a number of implicit and explicit exchange rates depending upon the magnitude and differential application of controls to international transactions in the controlled market, and the other is the incentive that is generally given to the nourishment of the black market operations. If partial surrender of foreign exchange is possible, the price of foreign exchange that any exporter would get in terms of domestic currency is the effective average of prices in both official and controlled free markets.

In a structure of multiple exchange rates, some floating rates may take multiple forms, applicable to various categories of imports and exports. Depending upon the degree of essentiality of imports, several multiple floating rates could be applied. On the export side, multiple floating rates have been designed to boost certain 'export oriented' industries or selected export commodities. According to Egon Sohmen, a freely fluctuating exchange rate is the first best solution, the 'multiflex' system the second best and the single pegged rate the third or the least best solution. Although he points to some of the inherent weaknesses of multiple rates, he suggests to developing countries a freely fluctuating rate for capital transfers that could work in conjunction with a pegged rate for all commercial

transactions.²⁰ If maladjustment in the balance of payments has resulted from operations on the capital account and not from trade transactions on the current account, Sohmen's argument has some relevance. But the basic payments problem with which most developing countries are confronted is different in origin and character. To put it another way, the problem of the balance of payments in most developing countries is their inability to meet all import requirements from the proceeds of exports. Therefore, it is doubtful whether an introduction of a partial free market only for capital transactions would be effective in adjusting the balance of payments.

Exchange Auction System

Introduction of an auction system of foreign exchange applicable either to all imports that are not on the official or preferred list or to such goods with different rates is also another aspect of the multiple exchange rate system. An exchange auction system is a method of cost restrictions on the procurement of exchange. Supply of foreign exchange to this market could take two different forms. One is to make exchange available without any limit upto a point that would satiate the demand for foreign exchange. This is an unusual method but it is applied when the real price of foreign exchange cannot be pre-determined in the face of an overvaluation (or rather a misvaluation) in the official rate of exchange. It is unusual in the sense that the idea behind the introduction of an auction system could be the rationing of the available amount of foreign exchange.

20. Egon Sohmen, *Flexible Exchange Rates*, Revised Edition, (University of Chicago Press, 1959), pp. 203-205. Among others who argued for separate or dual exchange markets for capital and trade transactions are J Marcus Fleming, 'Dual Exchange Rate for Current and Capital Transactions: A Theoretical Examination', in *Essays in International Economics*, (Harvard University Press, 1971), pp. 296-325; and 'Dual Exchange Markets and Other Remedies for Disruptive Capital Flows', *IMF Staff Papers*, Vol. 21, March 1974, pp. 1-27; Vittorio Barattieri and Giorgio Ragazzi, 'An Analysis of the Two-Tier Foreign Exchange Market', *Banca Nazionale del Lavoro Quarterly Review*, December 1971, pp. 354-372; B Decaluwe, 'Two-Tier Exchange Markets and Other Systems: A Comparison', *Tijdschrift voor Economie*, Vol. 19, No. 1, 1974, pp. 55-79; and Anthony Lanyi, 'Separate Exchange Markets for Capital and Current Transactions', *IMF Staff Papers*, Vol. XXII, No. 3, November 1975, pp. 714-749. The argument for a dual exchange rate by the present writer (see footnote 6) is different from these.

The other method for the supply of foreign exchange is an auction market of limited scope: that is, the use of the method of exchange auction as an instrument of rationing exchange which is supposed to be limited in terms of the entire demand for foreign exchange. Therefore, it provides foreign exchange for the importation of goods placed on the auction list only to the highest bidders. In the simplest form of auction market there could exist only one auction rate. But if the authorities apply several rates depending upon the degree of essentiality or the revenue that could be derived by applying discriminatory rates to different imports, then the auction market would become a multitude of implicit and explicit exchange rates.

Exchange auctioning is preferable to quantitative restrictions that either weaken or eliminate free interaction of supply and demand. For example, the Brazilian exchange auction system introduced in 1953 was regarded as an enormous improvement over the previously existing licence system.²¹ Furthermore, the sale of exchange in the auction market would provide the authorities with a substantial amount of revenue. This entails a disinflationary effect on the economy. If exchange auctioning reinforces the competition among importers, competitive bidding would erode the windfall profits which holders of import licences have so far enjoyed owing to the artificial scarcity of imports. If auctioning cuts down the proportion of imports consumed, the impact effect would be to encourage import substitution industries in the domestic economy. Further, the exchange rate or rates determined in the auction market would be much closer to reality in terms of domestic and international costs and prices.

Triffin argues for an exchange system where exchange is "freely obtainable at the normal exchange rates for payment of all essential urgent imports and services and the balance of foreign exchange is sold through the functioning of one, or a few, auction markets. In other words, the limited supply would be distributed among the buyers, not by administrative decision, but as a result of an imper-

21. Gudin pinpoints several special reasons that justified the adoption of the auction system in Brazil. See E Gudin, 'Multiple Exchange Rates: The Brazilian Experience', *Economica Internazionale*, Vol. IX, 1956, pp. 503-506.

sonal mechanism."²² Triffin claims that such a system would eliminate arbitrary and discriminatory allocations of exchange, drastically simplify the administrative machinery, red tape and delays and bar most of the possibilities for graft or favouritism in the distribution of exchange permits. Further, the auction and free market premia are completely flexible, and do not introduce any effective restrictions on exchange transactions except the inevitable allocation of a limited quota of exchange. Triffin's line of argument has been criticised by many other economists²³ but it is a definite improvement over any other system of exchange and trade controls.

Against a theoretical background of adjusting the international balance of payments by various means such as trade, import restrictions, tariffs and devaluation, Bhagwati has argued the case for exchange auctions in India in preference to the then existing system of restrictions.²⁴ According to Bhagwati, the system of exchange auctions would secure greater efficiency in the allocation of exchange than the current system by making the users bid for foreign exchange; by leading to better allocation of resources and generating higher income, it would lead to a reduction in the price level as compared with the present system; it is disinflationary in so far it generates considerable revenue; it would increase efficiency by making raw materials and capital available for the elimination of excess capacity in the productive sectors. Earlier, the Fund took a somewhat different view: "the fewer the transactions subject to the auction rate, and the less essential the goods, the better".²⁵

22 Robert Triffin, 'National Central Banking and the International Economy', *International Monetary Policies*, Postwar Economic Study No 7, September 1947, Board of Governors of the Federal Reserve System, Washington, pp. 46-81. Also see, 'Exchange Control and Equilibrium', in S E Harris (ed.), *Foreign Economic Policy for the United States*, (Harvard University Press, 1948), pp. 413-425.

23 G Haberler, Comments on 'National Central Banking and the International Economy', *International Monetary Policies*, *op. cit.*, pp. 82-102. When Triffin's paper appeared in *The Review of Economic Studies*, 1946-47, pp. 53-75, it was supplemented with a few comments by some other economists: H D Henderson, 'The International Economy', pp. 76-81; Thomas Balogh, 'A New View of the Economics of International Adjustment', pp. 82-94; and R F Harrod, 'A Comment', p. 95.

24 J Bhagwati, 'Indian Balance of Payments Policy and Exchange Auctions', *Oxford Economic Papers*, February 1962, pp. 51-67.

25 Communication sent by the Fund to Members on Multiple Currency Practices, International Monetary Fund, *Annual Report for 1948*, p. 68

However, the exchange auction system is not without disadvantages. It is not superior to a freely fluctuating rate as a method of finding the realistic price of foreign exchange at which the exchange rate could be fixed at a subsequent time. Since the auction market does not cover all the goods and services that enter into trade, it would not reflect a true representative rate for all international transactions. Also it cannot do away with exchange controls and other quantitative restrictions to the same extent as a freely fluctuating rate. The exchange auction system may give rise to disparate exchange rates if the demand for certain currency is preferred to or discriminated against another currency or currencies. Collusion or monopolistic practices among those who bid for foreign exchange could depress the price of exchange in the auction market; such practices may oust small bidders from the market. If registered firms have access to the auction market, this system would effectively exclude private persons from foreign trade.²⁶ The premium on exchange in the auction market is liable to wide fluctuations, and as a result, some sort of uncertainty may enter into trade. Premium may also vary according to the foreign currency demanded; for example, convertible and stable currencies may command a higher premium. If importers in the official market anticipate rightly or wrongly a transfer of some commodities to the auction market where the price of exchange is high, they may attempt to stockpile imports, thereby giving rise to unnecessary disbursement of foreign exchange. This could be checked by a licence system but the latter would provide windfall profits to those who obtain licence. Further, if the country is threatened with inflationary pressure, the possible depreciation of the rates in the auction market would widen the gap between the official rate and auction rates.

Exchange Certificate Market

In a discussion of the theory of multiple exchange rates the other characteristic that is important is the exchange certificate market or the bonus voucher market. The main objectives of this are both to encourage foreign exchange earnings and to discourage foreign exchange disbursement. The certificates could be issued to those who surrender foreign exchange earnings to the authority, and these

²⁶ For example, see Alexandre Kafka, 'The Brazilian Exchange Auction System', *Review of Economics and Statistics*, Vol. XXXVIII, August 1956, pp. 308-322. Also see, Victor Gradin, 'Effects of Multiple Exchange Rates', *Weltwirtschaftliches Archiv*, 81, 1958, pp. 206-207.

certificates sold in the free or controlled free market stand at a premium. Generally these are used for the import of certain specified goods that are placed on the open general licence. In other words, these are the goods for which foreign exchange is not normally released by the authorities. The price of certificates is determined by the demand for and supply of certificates on the market. In the alternative, the monetary authorities could fix the rate at which the certificates should be sold or bought. This could be done in two ways. One is to determine the rate arbitrarily in contrast with the overvalued rate and in consideration with other factors such as the magnitude of the deficit in the balance of payments, etc. The other method would be to let the rate in the certificate market 'float' for sometime, so that the authorities would be able to stabilise it on the basis of an average rate. As most of the characteristics of this market are similar to those of the exchange auction system, we do not propose to go into details.

The percentage of foreign exchange entitled for certificates could vary and this percentage would again depend upon the amount of foreign exchange required to be surrendered, i. e. whether partial or full. If the certificate market scheme is only one of multiple exchange rate devices, coverage of international payments and receipts would be generally limited.²⁷ Issue of bonus vouchers in respect of some foreign exchange earnings is similar to that of certificates. The bonus voucher scheme is also introduced as an effective step towards the alleviation of balance of payments difficulties and compensation of some earnings against the overvaluation of currency.

27. For example, Columbia had a complex system of multiple exchange rates in which an auction rate, a fixed certificate rate and a free rate functioned for respective international transactions. Samir Makdisi, 'Restrictions of the Movement of Funds Within Latin America', *IMF Staff Papers*, 10, 1963, p. 202. Other countries which have had various certificates were Peru, Nicaragua, Indonesia, Iran, Taiwan, Uruguay and Sri Lanka.

It may represent the first step in substituting the cost restrictions for direct quantitative restrictions. Another aim of this scheme may be an attempt at export diversification.²⁸

Objectives of Multiple Exchange Rates

The foregoing section is a theoretical analysis of the characteristics of multiple rates and other major multiple rate systems. Let us now turn to an assessment of the objectives of multiple exchange rates. Multiple exchange rates are used for the attainment of multiple policy objectives, the chief of which is the alleviation of difficulties in the balance of payments of a country. The objectives of these rates could be multiple; it is more correct to say that when exchange rates are multiple, their differential application could be directed at attaining different policy objectives. The use of multiple policy instruments for the attainment of multiple policy goals is known as the 'Tinbergen Principle' in economic literature.²⁹ We are more concerned here with the attainment of multiple policy objectives by multiple exchange rates. We shall call this the 'Baer-Herve Principle'.³⁰ When one considers the various types of objectives associated with multiple rates disregarding the rationality or the attainment of such objectives, one may be unable to imagine any other policy instrument that is so inextricably associated with so many objectives.

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28. Pakistan had an export bonus voucher scheme from January 1958 to May 1972. For a detailed account of this scheme, see Rashid Ahmad, *Export Incentives and Export Bonus Scheme (An Analysis)*, (Lahore: National Institute of Public Administration, n. d.); M M Junaid, *Review of the Export Bonus Scheme*, (Rawalpindi: Government of Pakistan, 1962); Henry J Bruton and Swadesh R Bose, *The Pakistan Export Bonus Scheme*, Monographs in the Economics of Development, No. 11, Pakistan Institute of Development Economics, April 1963; Syed N Alam, 'The Rate Adjustment of the Pakistan Currency 1959 - 64', *Yale Economic Essays*, Vol. II, Nos 1 & 2 1971, Spring - fall, pp. 53 - 96. (This essay is reported to be a condensation of chapters 1, 2, 3, and 4 of this writer's Ph D Dissertation, *The Experience of an Overvalued Currency: The Case of Pakistan*, (Yale University, 1968); Stephen R Lewis, Jr., *Pakistan: Industrialisation and Trade Policies*, (Oxford University Press, 1970), Chs 2 & 4; and Stephen R Lewis and Stephen E Guisinger, 'The Structure of Protection in Pakistan', in Bela Balassa and Associates, *The Structure of Protection in Developing Countries*, (The Johns Hopkins Press, 1971), Ch. 10. *The Pakistan Development Review* has also carried a number of articles on the operation and impact of this scheme.
29. Randall Hinshaw, 'Elasticity Pessimism, Absorption and Flexible Exchange Rates', in Willy Sellekaerts (ed.), *International Trade and Finance: Essays in Honour of Jan Tinbergen*, (London: The Macmillan Press Ltd., 1974), p. 55.
30. Werner Baer and Michel E A Herve, 'Multiple Exchange Rates and the Attainment of Multiple Policy Objectives', *Economica*, May 1962, pp. 176 - 181.

Since the origin of multiple exchange practices could more often be sought in the balance of payments considerations, multiple rates are treated as an instrument of the balance of payments policy too. Introduction of these rates may act not as a supplement to a single rate of exchange but as a substitute – a substitute in the sense that a single rate of exchange or the existing rate structure is replaced by two or more. Multiple rates seem to be a useful instrument to support domestic development efforts, particularly in the economic and international environment of developing countries.³¹ Equally important and more sound is the objective of promoting a specific structure of imports and exports as part of a general development programme devised to bring about the desired change in the economic structure of a country.³² This objective is more important because the majority of developing countries depend mostly on one or very few agricultural commodities for foreign exchange earnings required for the importation of foodstuffs, raw materials, capital and manufactured goods.

Multiple exchange rates are not objectives or ends to be achieved but means to a particular end. Therefore, their existence is justifiable only to the extent that the ends are accomplished. Not only should the ends be rational but the withdrawal of the use of multiple exchange rates should be assured as soon as their original justification has disappeared. Application of cost restrictions in the form of multiple rates does not eliminate the market forces in the exchange market and therefore it is said to be superior to a system of rigid quantitative restrictions. Multiple rates can perform both these tasks simultaneously, depending on where the degree of discrimination is most needed and where the magnitude of cost restrictions is most preferable. However, desirability and suitability of multiple rates for any economy would primarily depend on the market conditions that are appropriate for such rates and the mobility of factor resources in response to incentives given by changes in such rates.

One of the objectives of these rates is to provide a certain amount of protection to particular sectors of the economy. This protection may take the form of either subsidy to some sectors or

31. J K Horsefield (ed.), *The International Monetary Fund 1945 – 1965: Twenty Years of International Monetary Cooperation*, (Washington: IMF, 1969), p. 122.

32. Werner Baer and Michel E A Herve, *op. cit.*, p. 176.

commodities or penalty to some international payments. As regards the use of differential rates, it is the effective rate of protection that is more important than the nominal rate of protection. In a way the objectives of a system of import tariffs and export subsidies could well be achieved by multiple rates. The objectives of protection to be achieved by multiple exchange rates need to be disaggregated in the context of a *re-interpreted* theory of protection relevant to the conditions of developing countries. The more important arguments for protection marshalled in favour of either multiple exchange rates or a system of tariffs and subsidies may emanate from the 'infant industry argument'. Some tend to justify the existence of multiple rates as an objective of protecting the infant economy or the infant industries in the economy. But this question has hardly been viewed in the context of multiple exchange rates. These rates have received scant attention from both proponents and opponents of protection.

Multiple rates could provide the fillip needed to vitalize the export sector of the economy, specially at a time when overvaluation has become both a problem and a threat to the smooth functioning of the exchange rate. Another co-related objective is to arrest the drain in foreign exchange on account of import surplus, largely resulting from overvaluation which makes imports comparatively cheaper than domestic products. Stimulation of foreign exchange receipts and discouragement of payments by means of these rates would, on the one hand, reduce or eliminate the strain on the country's payments balance, and on the other, boost domestic production. Stemming of inflationary pressure that is prevailing or gaining momentum in the domestic economy is another widely used and important objective of multiple rates. Apart from the absorption of a certain amount of purchasing power of importers and exporters, collection of revenue by the application of different buying and selling rates has been a prime objective of multiple exchange rates. This has been very important in those countries where other revenue raising measures have not been so developed. Furthermore, multiple rates have often proved to be administratively easier and more effective than other fiscal devices in developing countries.

Multiple rates could influence not only the composition of trade but also the direction of trade. By providing the basic overvalued rate for essential imports, they could hold down the prices of these goods in the home market where the checking of the rising cost of living is important specially from a political point of view. As regards invisible payments, multiple rates could be applied in such a manner as to either discourage certain outward remittances such as profits, dividends, investment capital and other miscellaneous payments or to encourage the inflow of certain types of capital and other receipts. They could also be used with a view to isolating capital movements from trade transactions; for this purpose some countries use special exchange rates in transactions with foreign companies. It is often pointed out that multiple rates can be used to exploit monopolistic and monopsonistic market potentials of a country. If an outright devaluation is not likely to generate favourable effects that would ultimately adjust the imbalance in the balance of payments, a selective devaluation by means of multiple exchange rates would be more suitable. It has a political advantage too because the over-all impact on the cost of living is comparatively less as compared with that of an outright devaluation.

One could argue that the use of fixed multiple rates with a partial free market is a better compromise between the rigidity for fixed exchange rates and the undue flexibility of floating exchange rates. Introduction of multiple exchange rates may imply the existence of operations in the black market; it makes inroads to the already existing black market by providing more attractive rates for the surrender of foreign exchange to the monetary authorities. Theoretically speaking, all these objectives are of paramount importance. But too many objectives would necessarily be conflicting and contradictory; hence all or the majority of objectives cannot be achieved simultaneously. One can of course argue that if a country's environment is so conducive for the achievement of all these objectives, then a single rate of exchange is most suitable for that country. Ironically, it only indicates that for the successful operation of a system of multiple exchange rates, there should be many prerequisites. But the presence of many of these would obviously liquidate even the need for such rates. So in the absence of such prerequisite conditions such as a reasonable degree of domestic monetary stability, realistic exchange rates, etc., multiple rates are unable to function

effectively and satisfactorily. On the one hand, multiple rates are introduced to deal with these problems. On the other hand, the presence of these conditions is necessary for the smooth and effective functioning of multiple rates. Multiple exchange rates alone cannot bring about the desired changes in the economy; nor can they be used to overcome all the economic ills of the country. Until they become complementary to other policy measures coupled with a certain amount of monetary stability, multiple rates cannot go very far towards the achievement of the objectives outlined above.

Effects on Balance of Payments

In a discussion of objectives relevant to a theory of multiple exchange rates, the effects of these rates on the balance of payments, employment and revenue should receive a little more attention. It can be argued that multiple rates would not remove the disequilibrating causes of the balance of payments. Instead, they would suppress the disequilibrium by artificially and discriminately rationing or restricting the use of foreign exchange. Whatever the reason or reasons that have caused a maladjustment, the basic reason for introduction and continuing use of multiple currency practices could be traced to the balance of payments considerations. However, a country can do little if it is confronted with severe balance of payments pressures resulting from a cyclical fall in demand for their major exports coupled with rising prices in manufactured products.³³

From a theoretical standpoint, multiple rates as an instrument of the balance of payments policy ease the strain on the payments balance in a number of ways. By providing a system of differential exchange rates not only does it encourage foreign exchange earnings but it also cuts down exchange disbursement. Both these effects may tend to accentuate inflationary forces unless the 'pent up demand' is diverted to saving channels and restriction of imports compensated by increased domestic production. Stringent trade and exchange controls may make multiple rates an indispensable feature in the exchange rate structure. On the one hand, multiple rates are a result of the payments imbalance. On the other hand, the

33. Eugene Richard Schlesinger, *Multiple Exchange Rates and Economic Development*, Princeton Studies in International Finance, No. 2, (Princeton University Press, 1952), p. 12n.

existence of these cannot be liquidated until and unless inflationary forces are sterilised or eliminated. If so, multiple rates are really in a dilemma.

When looked at from the viewpoint of the absorption approach³⁴, multiple rates could perform both expenditure-reducing and expenditure-switching functions.³⁵ While unfavourable selling rates applicable to payments for imports reduce the absorption, a certain amount of expenditure that is switched can be reduced by means of exchange profits and revenue. The impact effect would depend upon the state of employment of the resources in the economy, expenditure-reducing and *production inducing* measures and ability to meet increased expenditure that is switched. In addition to expenditure-switching and expenditure-reducing functions, the present writer would argue that multiple exchange rates perform production-inducing functions as well.³⁶ If these rates are oriented towards more utilisation of factor resources in the economy by way of either import substitution or allocation of resources into more profitable use, it is the production-inducing effect that is at work.

34. S Alexander, 'The Effects of a Devaluation on a Trade Balance', *IMF Staff Papers*, April 1952, pp. 263—278; and 'Effects of a Devaluation: A Simplified Synthesis of Elasticities and Absorption Approaches', *The American Economic Review*, March 1959, pp. 22—42. However, original formulation of this approach is to be found in J E Meade, *The Theory of International Economic Policy: Vol. I The Balance of Payments*, (Oxford University Press, 1951) and J Tinbergen, *On the Theory of Economic Policy*, (Amsterdam: North-Holland Publishing Co., 1952). Fritz Machlup, *International Monetary Economics*, (London: Allen & Unwin, 1966, p. 175) says that the term, absorption, was first used by K E Boulding, *Economic Analysis*, (New York, rev. ed., 1948), pp. 402—428.

35. For a discussion of these functions in the context of the balance of payments, see Harry G Johnson, 'Towards a General Theory of the Balance of Payments', in *International Trade and Economic Growth: Studies in Pure Theory*, (Allen & Unwin, 1958), ch. VI, pp. 153—168.

36. While arguing that the increase in domestic output involves effecting a switch of expenditure from foreign output to domestic output, Harry Johnson identifies both output increasing and expenditure-switching as the same (pp. 161—162). But in our opinion the expenditure-switching policies do not necessarily lead to an increase in output. For example, if the economy is in a state of full employment and the 'spillover expenditure' is not reduced by the same proportion, the effect would be inflationary. Given that resources are under-employed, if expenditure-switching effects are unable to mobilise resources for increased production due to institutional rigidities and immobility of resources from one sector to another, the effect would be again to accelerate or accentuate inflationary forces. This is why the production-inducing effect is differentiated from the expenditure-switching effect.

Expenditure-switching effects should be offset by expenditure-reducing and production-inducing effects, without which the impact effect would be not only to accentuate inflationary pressures but also to impose distortions on the production pattern and the price level.

In an analysis of the effects of multiple rates on the balance of payments, overvaluation of the rate of exchange is an issue that should not be overlooked. The crux of the balance of payments problem and subsequent introduction of multiple rates could be attributed to the overvaluation of currency. However, the definition of the valuation of the currency is an issue on which there is no unanimity. Many economists defined 'overvaluation' and 'undervaluation' in terms of exogenous factors that influence the currency via the balance of payments. Fred Meyer argued that such "approach is correct if the currency is viewed from outside but obscures the causes of the rise or fall of the currency" and suggests that the value of the currency be determined by reference to the domestic situation of the economy such as domestic employment, state of development, intensity of factor use, etc. Therefore, he states that the currency is *overvalued* if the economy does not produce enough and *undervalued* if it does not produce efficiently enough.³⁷

Whatever the reason or reasons for maintaining an overvalued rate, if countries prefer to resist devaluation to the last ditch, overvaluation needs to be supplemented with quantitative and cost restrictions. This has frequently led to the introduction of multiple exchange practices in one form or another.³⁸ It is sometimes

37. F V Meyer, *The Functions of Sterling*, (London: Croom Helm, 1973), pp. 20—21 and pp. 30—31. In either definition, the term 'overvaluation' is correct when we say that the reasons for payments problems and introduction of multiple rates are largely associated with the overvaluation of the currency. According to the former view, the currency is obviously overvalued. On the other hand, the problem of developing countries is that they do not produce enough although there are ample possibilities. Therefore, in terms of the domestic situation where factors are unemployed, the currency can be overvalued.

38. S C Yang who made an empirical study of multiple exchange rates in Thailand during 1946-1955 remarked that "To maintain the overvalued rate, Thailand first established a system of strict control over trade and exchange, but because of smuggling, ineffectiveness in the administrative machinery and growth in black market operations, Thailand resorted to a system of multiple exchange rates." S C Yang, *A Multiple Exchange Rate System: An Appraisal of Thailand's Experience 1946-1955*, (University of Wisconsin Press, 1957), p. 41. A similar view is expressed in G A Marzouk, *Economic Development and Policies: Case Study of Thailand*, (Rotterdam University Press, 1972), p. 284.

argued that multiple rates are preferable to devaluation and other control measures for the alleviation of difficulties in the balance of payments that result from overvaluation. Although overvaluation affects the internal production pattern and the balance of payments adversely, some economists have seen some justification in it.³⁹ The bias against exports caused by overvaluation is offset by providing multiple or rather subsidy rates of exchange. Maintenance of an overvalued basic exchange rate in conjunction with differential depreciated rates for some exports and imports is not an easy task. Not only does it make the exchange rate structure complex and complicated but it may also result in a mis-allocation of resources. Overvaluation may discourage production of domestic goods when import substitutes become relatively cheaper. If such imports are made expensive by application of higher selling rates, then there is a possibility of such goods being produced domestically. However, this could also lead to the channelling of scarce resources into production of luxury and non-essential goods.

Effects on Employment

Before we relate the theory of multiple exchange rates to other relevant theories in economics, a word ought to be said about the consequential effects of multiple rates on employment and revenue. It should be stressed at the outset that expansion of employment opportunities has not been the direct preoccupation of multiple rates but their operation tends to exert some effects on

39. Bruce Glassburner ('Aspects of the Problem of Foreign Exchange Pricing in Pakistan', *Economic Development and Cultural Change*, July 1968, pp. 517-38) says that in an attempt to bring about diversification in the structure of production, overvaluation has come to mean a stimulant. Again in the context of Pakistan, Renold Soligo ('Real and Illusory Aspects of an Overvalued Exchange Rate: The Pakistan's Case', *Oxford Economic Papers*, March 1971, pp. 90-109) says that it enables the government to conceal the value of foreign aid received. Although shortcomings are well appreciated, Soligo also emphasises the advantages that are accorded by overvaluation in the context of Pakistan. It is also argued that by means of an overvalued exchange rate a country is able to improve its income terms of trade. In Ian Little, Tibor Scitovsky and Maurice Scott, *Industry and Trade in Some Developing Countries*, (Oxford University Press, 1970, p. 67), it has been argued that another reason for overvaluing the currency is that import licensing and other forms of import restrictions prove a convenient and effective way for governments to control economic activity. Also see, Robert Baldwin, 'Exchange Rate Policy and Economic Development', *Economic Development and Cultural Change*, July 1961, pp. 598-603.

employment. In developing countries there is emphasis on employment rather than on output⁴⁰ but here we are concerned with the impact of exchange rates on employment via expansion of output. This is discernible in two broad sectors: viz. export sector and import substitution sector. While the effects on employment are both primary and secondary, these can be explained in relation to trade, inter-industry dependence, demand and supply, and consumption.⁴¹ However, the difficulty lies in the differentiation of such effects of exchange rates from those of other policy measures.

A system of multiple exchange rates can be made to impart a direct contribution to the expansion of both export and domestic sectors by giving subsidies to exports and imposing penalties on imports. This may result in an expansion of employment opportunities; so in this sense employment policy would assume to be one of discriminatory nature. As a result of application of multiple exchange rates to various sectors, the economy would become 'compartmentalised'. Whether the 'compartmentalisation' of the economy by means of differential exchange rates⁴² would cause an expansion in employment opportunities would however depend upon the extent to which productive resources could be used. As for employment, it is not proposed that the exchange rate policy should take care of

40. As indicated by Stewart and Streeten, there are reasons for preferring employment to output in developing countries. However, their conclusion is that "in many cases, the path which maximises the growth in output is also that which maximises the growth of employment". See Francis Stewart and Paul Streeten, 'Conflicts between Output and Employment Objectives in Developing Countries', *The Bangladesh Economic Review*, January 1973, pp. 1-24. Also see, Gerald M Meier, 'Development without Employment', *Banca Nazionale del Lavoro Quarterly Review*, September 1969, pp. 309-319.

41. The likely effects on employment of an increase in exports (resulting from application of differential exchange rates) may take different forms although the effects inevitably depend on the special characteristics of the economy. An ILO study identifies four types of effects as a result of an increase in exports: initial effects, linkage effects, multiplier effects and expenditure effects. See H F Lydall, *Trade and Employment: A study of the effects of trade expansion on employment in developing and developed countries*, (Geneva: ILO, 1975).

42. The 'compartmentalisation hypothesis' mentioned in the text is somewhat similar to McKinnon's fragmentation hypothesis, developed with respect to markets for land, labour, capital and produced commodities. While the former mainly refers to the compartmentalisation by differential exchange rates, it does not imply that compartmentalisation is a feasible approach from the economic point of view. See Ronald I McKinnon, *Money & Capital in Economic Development*, (Washington: The Brookings Institution, 1973), p. 8 and pp. 22-29.

employment. It is mainly the responsibility of any employment or production policy of the country although the choice of the exchange rate may determine those policies.⁴³

Effects on Revenue

Whatever the objective to which a system of multiple rates has been directed, some countries seem to have heavily relied upon differential exchange rates for revenue purposes. Thus, in the sphere of public finance these rates appear to be an important tool of fiscal policy. Apart from the possibility of collecting more revenue through sales and purchases of foreign exchange, the flexibility and easiness associated with the manoeuvring of such rates is also well noted. Even from the viewpoint of enforceability, multiple exchange rates have sometimes the quality of being preferred to other fiscal devices. Although the origin of multiple rates cannot be traced to revenue considerations, some countries, as noted earlier, have seen some sort of justification in the continued use of such rates. Two conditions are necessary for the exchange authorities to gain a net revenue from sales and purchases of foreign exchange. One is that the selling rates should be higher than buying rates and the other is that the amount of international transactions that come under selling rates should be considerably greater in value than those under buying rates. So the amount of revenue any government could derive would depend upon the degree of spread between buying and selling rates.

Exchange profits or revenue depend upon a number of factors of which the following are considered to be most important: magnitude of transactions that come under each exchange rate category, spread between buying and selling rates, elasticity of demand for exports and of supply of imports in the world market and elasticity of supply of exports and of demand for imports in the home market. Again the magnitude of trade transactions and the spread would largely depend upon the magnitude of disequilibrium in the balance of payments, the amount of foreign exchange reserves in hand and the degree of overvaluation of the basic rate of exchange. Although

3. "We cannot emphasise too strongly the case for determining the exchange rate according to the needs of employment strategy and not according to mistaken ideas of prestige, or short-term fluctuations in trade", International Labour Office, *Towards Full Employment: A Programme for Columbia*, (Geneva: ILO, 1970), p. 178.

the exchange authorities act as a discriminatory monopolist in the sale of foreign exchange and as a discriminatory monopsonist in the purchase of foreign exchange, their ability to widen the spread between buying and selling rates has its limitations. The most important implication of multiple rates as a revenue measure is that they entail an anti-inflationary effect. However, it is somewhat difficult to provide an economic justification for the use of multiple rates as a tax device.

Up to now we have been able (a) to examine the characteristics and various systems of multiple exchange rates and (b) to define the objectives of multiple rates in relation to both their experience and the probable tasks to which they could be directed. This is the last section of our study which presents outlines for a theory of multiple exchange rates. This section takes another step forward first by examining multiple rates as a technique of exchange control. There is no economic theory of exchange control as such.⁴⁴ We shall also define multiple rates in relation to theories of second best and protection. We propose to evaluate the role and significance of these rates as a tax-subsidy scheme in the context of the theory of protection.

Multiple Rates & Exchange Control

The introduction of exchange control which represents the government domination over receipts and payments in the foreign exchange market is a discriminatory method of eliminating the *ex-ante* deficit in the balance of payments. Thus its roots lie in the difficulties in the balance of payments. This administrative weapon of rationing the use of foreign exchange or of discriminating against certain types of international transactions has now come to be a permanent feature in the government armoury. Multiple exchange rates are closely associated with exchange control; this is how these rates are also associated as part of the exchange control system. It may also be possible that sometimes multiple rates give rise to liberalisation of exchange controls. However, there seems to be some sort

44. The present writer has made an attempt elsewhere to discuss the theoretical points relevant to a theory of exchange control. Wimal Wickramasinghe, *Towards a Theory of Exchange Control in relation to Sri Lanka's Context*, (mimeographed), a paper presented at the thirty second annual sessions of the Sri Lanka Association for the Advancement of Science, Section F: Social Sciences, December 7—11, 1976.

of co-relation between the intensification of controls and the deterioration in the terms of trade in general and the balance of payments in particular. In many countries the payments and trade control system which incorporates various policy measures such as discriminatory exchange controls, multiple rates and other quantitative and procedural trade controls, has come to mean a prerequisite not only for the elimination of the foreign exchange gap but also for planned development.⁴⁵

The deficiency of economic theory in the context of developing countries is well noted in the sphere of exchange control and exchange rate policies. The vast amount of literature on the rigidity and flexibility of exchange rates shows that the arguments in both ways have been largely directed to the conditions of developed countries.⁴⁶ Even the question of multiple exchange rates did not crop up in these long discussions. Apart from the absence of a theory of control, even the issue of faked foreign trade declarations has been

45 As Child aptly pointed out, exchange control 'has become a part of a comprehensive system of control over international transactions whose primary purpose is to promote savings, investment and growth by (1) controlling the volume, composition and terms of international transactions within the limits imposed by market conditions — and (2) altering the domestic structure of prices, allocation of resources, composition of output, and the distribution of income'. Frank C Child, 'Reform of a Trade and Payments Control System: The Case of Pakistan', *Economic Development and Cultural Change*, July 1968, p. 539. Also see, Paul Einzig, *Exchange Control*, (London: Macmillan & Co, 1934), Irvin S Friedman, *Foreign Exchange Control and the Evolution of International Payments System*, (August 1959), and H J Witheridge, *The Finance of Foreign Trade with Special Reference to Exchange Control*, (London: The Institute of Bankers, 1950).

46 The statement signed by twenty-seven economists on the limited flexibility of exchange rates went on to say that their exchange proposals are not suited for the developing countries 'which need stronger medicine'. William Fellner, 'On Limited Exchange Rate Flexibility' in William Fellner, et. al., *Maintaining and Restoring Balance in International Payments*, (Princeton University Press, 1966), pp. 111—122. Even Machlup who discussed various terms, concepts and strategies in the discussion of greater flexibility of exchange rates did not define or clarify the terms and concepts associated with multiple exchange rates which have been frequently used by developing countries for the alleviation of balance of payments difficulties. See Fritz Mach'up, 'On Terms, Concepts and Strategies in the Discussions of Greater Flexibility of Exchange Rates', *Banca Nazionale del Lavoro Quarterly Review*, March 1970, pp. 3—12. As regards the issue of multiple rates, this line of argument is applicable to many other studies dealing with the role and flexibility in exchange rates. For example, see IMF, *The Role of Exchange Rates in the Adjustment of International Payments*, (Washington: IMF, 1970); *Report of the International Monetary System*, (Washington: IMF, 1972) and Gerald M Meier, *International Problems of a World Monetary Order*, (Oxford University Press, 1974).

completely a neglected area of study until recent times.⁴⁷ Our line of argument is that since multiple exchange controls are an extension or a relaxation of exchange controls, the theory of multiple exchange rates should become a part of the theory of exchange control; the theory of faked foreign trade declarations (or the theory of under-invoicing and over-invoicing) is another part only.

Multiple Rates & Theory of Protection

Perusal of literature points to two main characteristics. One is that the question of tariffs and subsidies has been disaggregated at length either independently or against the background of the theory of protection⁴⁸, but the role of multiple exchange rates as a tariff-subsidy scheme or as an instrument of protection has not been evaluated. The other characteristic is that although the theory of protection has been sufficiently explained in the writings of Johnson, Balassa, Corden and others, a re-interpretation of some points relating to the conditions of developing countries would be needed in the light of the recent experience and second best measures of these countries.

Introduction of multiple exchange rates in the form of tax-subsidy or protection means a deviation from the Paretian optimum equilibrium. So in this sense multiple exchange rates are a second best measure. While the theory of second best has been applied to various fields of economic analysis, among which the most important is the theory of customs unions, it is proposed here to explore how

47 Recent studies on this subject are Jagdish Bhagwati, 'On the Underinvoicing of Imports', *Bulletin of the Oxford University Institute of Economics and Statistics*, November 1964, pp. 389-397; 'Fiscal Policies, the Faking of Foreign Trade Declarations and the Balance of Payments', *ibid.*, February 1967, pp. 61-67; and Wimal Wickramasinghe, 'The Faking of Foreign Trade Declarations', *Staff Studies*, Central Bank of Ceylon, April 1974, pp. 45-56.

48 To quote Johnson, "Economists generally use this word (i. e. protection) in a very loose sense, which carries the connotation of a tariff on imports but also lends itself to extension to any policy that raises the price received by domestic producers of an importable commodity above the world market price. Not only can the effect of a tariff be achieved in the modern world by other devices, such as import restrictions, exchange controls, and multiple exchange rates..... but the domestic price received by producers of importable goods can be raised above the world price....." Harry G Johnson, 'Optimal Trade Intervention in the Presence of Domestic Distortions', in Robert E Baldwin, et. al., *Trade, Growth and the Balance of Payments: Essays in Honor of Gottfried Haberler*, (Chicago: Rand McNally, 1965), p. 6. It is true that some economists like Johnson have said that the effect of a tariff could be achieved by other devices such as multiple exchange rates but many economists have not examined these rates against the theory of protection.

the theory of multiple exchange rates could benefit from the concept of second best. Since many developing countries which have resorted to multiple currency practices are unable to do away with all trade and other restrictions and conform to the conditions of a first best solution, they normally hinge on the concept of the second best or the least best. Let us presume that apart from the constraints that are associated with multiple rates, there are no other constraints which could be described as either behavioural or environmental.⁴⁹ Therefore, we shall consider only subsidisation and taxation as introduced by multiple rates and not by a tariff—subsidy policy.

It seems that many developing countries are unable to enter into international trade conforming to the conditions of the first best strategy. If they do so, the foreign exchange crisis would be very much more severe. Therefore, occasional devaluations and some second best measures such as tariffs, subsidies, bilateral agreements, exchange controls, import restrictions and multiple exchange rates have been supplemented in varying degrees as 'control devices' of international trade.⁵⁰ Imposition of restrictions has however not been unilateral because even the advanced countries have resorted to trade-distorting measures or non tariff distortions of international trade.⁵¹ Considering the multiple currency practices in this regard, it can be stated that the rationing of foreign exchange between international receipts and payments by the use of multiple rates and other controls is a second best measure; so is the protection of the infant industries or the infant economy. However, the use of such

49. See Jagdish Bhagwati, 'The Pure Theory of International Trade: A Survey', *Surveys of Economic Theory: Growth and Development*, Vol. II, (London: Macmillan & Co., 1956), pp. 211-212n.

50. If these control devices are placed against the perspective of an ideal exchange rate structure, they will no doubt directly or indirectly represent departures from unified exchange rates. See Jagdish Bhagwati, *The Theory and Practice of Commercial Policy: Departures from Unified Exchange Rates*, Special Papers in International Economics, No. 8, (Princeton University Press, January 1968).

51. See Robert E Baldwin, *Non-tariff Distortions of International Trade*, (Washington: The Brookings Institution, 1971). Arguments could also be found in Bela Balassa, 'The Structure of Protection in Industrial Countries and its Effects on the Exports of Processed Goods from Developing Countries', *The Kennedy Round: Estimated Effects on Tariff Barriers*, (Geneva: UNCTAD, 1968); Hal B Lary, *Imports of Manufactures from Developing Countries*, (New York: NBER, 1968); and Ingo Walter, 'Nontariff Barriers and the Export Performance of Developing Economies', *The American Economic Review*, May 1971, pp. 195—205.

practices in support of infant industries should not be the mere question of import substitution; these industries should be able to pass the 'Mill-Bastable test' at least in the long run.⁵²

Let us examine the multiple pricing system for foreign exchange as an instrument of taxation and subsidisation in the context of protection. In other words, the role of multiple rates as a tax-subsidy scheme is considered as a substitute for currency devaluation.⁵³ While the effects of these are more or less similar to those of tariffs and subsidies, protection is here accorded through the availability of foreign exchange at the payment or receipt point of international transactions. The protective aspect of multiple rates can be broadly identified as two-fold. On the export side, by providing a monetary incentive to some exporters, specially industrial and minor agricultural producers who can now cover themselves against the increased cost of production, depreciated exchange rates essentially give a selective encouragement to them. On the import side, by requiring importers to pay a higher price through penalty selling rates of exchange, home products or import substitution industries would be somewhat protected.

The task of providing protection to domestic sectors of the economy by multiple exchange rates has been rarely identified in the economic literature. Therefore, the theory of protection has been formulated and nourished against the background of tariffs (and

52. M C Kemp, 'The Mill-Bastable Infant Industry Dogma', *Journal of Political Economy*, February 1960, pp. 65—66.

53. The seeds for a system of subsidies and tariffs could be traced back to the 1930s. See, Addendum I, *Report of the Committee on Finance & Industry*, (London: H M Stationary Office, 1931), pp. 190—209; Also see, J R Hicks, 'Free Trade and Modern Economics', reprinted in *Essays in World Economics*, (Oxford: Clarendon Press, 1959), pp. 63—64; Robert Triffin, 'National Central Banking and the International Economy', in *International Monetary Policies*, op. cit., 46—81; Gottfried Haberler, 'Import Taxes and Export Subsidies: A Substitute for Realignment of Exchange Rates', *Kyklos*, Vol. 20, 1967, pp. 17—23; and 'Appendix: Taxes on Imports and Subsidies on Exports as a Tool of Adjustment', in Robert A Mundell and Alexander K Swoboda (eds.), *Monetary Problems of the International Economy*, (University of Chicago Press, 1969), pp. 173—179; and R Z Aliber 'Improving the Bretton Woods System', *Ibid.*, pp. 130—133.

subsidies).⁵⁴ The theory of multiple exchange rates has many dimensions. While the theory of tariff structure is generally preoccupied with the effects of tariffs and other taxes on trade and non-trade goods, the theory of multiple exchange rates should examine in this respect the impact effects of taxes and subsidies resulting from the application of differential exchange rates to international trade transactions in general and the domestic production structure in particular. These effects can be classified as protection. It creates a divergence between the relative prices of commodities to domestic consumers and producers and their relative price in world markets. Any general definition of the effective protective rate indicates that protection is something normally associated with the structure of tariffs.⁵⁵

A penalty rate applicable to payments for imports may encourage the increased use of domestic resources in the import-competing activities that now receive protection.⁵⁶ The protective effect resulting from the use of a penalty rate of exchange may or may not arise. It is not only the exchange rate that determines the resource

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54. Even W M Corden's *Theory of Protection* (Oxford: Clarendon Press, 1971) mentioned about multiple exchange rates in passing. Although he said that the protective structure may result from such rates, his analysis has been confined only to five or six pages (pp. 87—92). Some types of multiple currency practices have been examined in Bela Balassa and Associates, *The Structure of Protection in Developing Countries*, (The Johns Hopkins Press, 1971) to ascertain the extent and effects of protection, particularly in Pakistan but these studies were largely concerned with the effects of protection resulting from tariffs and subsidies. Harry G Johnson's *Aspects of the Theory of Tariffs*, (Allen & Unwin, 1971) is a more representative and specific title because it examines the theory and effects of tariffs independently as well as against the theory of protection. Also see, Jagdish Bhagwati, *Trade Tariffs and Growth*, (London: Weidenfeld & Nicolson, 1969).
55. See W M Corden, 'The Structure of a Tariff System and the Effective Protective Rate', *Journal of Political Economy*, June 1966, p. 222. Also see his *The Theory of Protection*, *op. cit.*, Ch. 3, pp. 28—64.
56. For a discussion of this issue in the context of tariffs, see H G Johnson, 'The Theory of Tariff Structure with Special Reference to World Trade Development', *Trade and Development*, (Geneva, 1965); W M Corden, 'The Structure of a Tariff System and the Effective Protective Rate', *op. cit.*, p. 291; and *The Theory of Protection*, p. 41; V K Ramaswami and T N Sirinivasan, 'Tariff Structure and Resource Allocation in the Presence of Factor Substitution', in Jagdish Bhagwati, et. al., (eds.), *Trade, Balance of Payments and Growth: In Honour of Charles P Kindleberger*, (Amsterdam & London: North-Holland, 1971), Ch. 13, pp. 291—299; Bela Balassa, *Effective Protection: A Summary Appraisal*, IBRD/IDA, Economic Staff Working Paper No. 101, 22 March, 1971, p. 14; and Jaroslav Vanek and Trent J Bertrand, 'Effective Protection and Resource Allocation', in Willy Sellekaerts (ed.), *International Trade and Finance: Essays in Honour of Jan Tinbergen*, (London: The Macmillan Press Ltd., 1974), pp. 263—276.

pull or the activities of a particular industry. Further, it is not easy to ascertain the protective effect from the spread between the official or basic rate and the unfavourable selling rate. A depreciated selling rate affecting consumption or production in the domestic economy would create a divergence between the relative prices of commodities in the domestic market and their relative prices in the world market. The extent of divergence or in this sense the degree of protection is a function of the exchange rate. A small spread should not necessarily indicate that the protective effect is minimal because it could drive out the marginal imports that would have been otherwise competitive in the domestic economy. However, in many developing countries, the equalisation of cost at home and abroad has not been the calculated attempt of multiple rates; they have been merely introduced as *ad hoc* measures for the alleviation of difficulties in the balance of payments. The success of providing protection to local entrepreneurs by way of multiple rates would depend upon (a) the degree of penalty constituted in the selling rate of exchange, (b) the extent of the coverage of production inputs under each exchange rate and (c) the monetary discipline that could be maintained by the government.

Any protection by way of tariffs and subsidies or multiple exchange rates entails some cost to the economy, the most important of which is the production of wrong outputs or the use of wrong inputs. Any concept of optimum multiple exchange rates cannot be thought of in the context of protection because such rates might induce optimum utilisation of resources in the economy by way of providing incentives but not give rise to optimum efficiency in the use of resources. It is possible to talk of an optimum rate of exchange in any country if such rate happens to be the equilibrium rate. Theoretically it is easier to discuss optimum adjustments or the optimum stability of exchange rates than optimum exchange rates for a single country.⁵⁷

It has been found that some sort of protection in the form of production subsidy or export subsidy is necessary for the diversification of the export sector. To achieve this end multiple

57. For some theoretical arguments relevant to the former, see H G Grubel, 'The Optimum Stability of Exchange Rates', *Economic Bulletin for Asia and the Far East*, Vol. XXIV, No. 2/3, September/December 1973. This paper is reprinted in H G Grubel and T Morgan (eds.), *Exchange Rate Policy in Southeast Asia*, (Lexington, Mass: D C Heath & Co., 1972).

exchange rates have been used by some countries. How far the inducement given by the exchange rate has been able to contribute to the dynamic expansion of these minor exports is however open to some doubts. The sluggishness of the export sector is not only a result of the lack of monetary inducement; it may be of minor importance. External market conditions and the export orientated supply conditions are also important in this regard. It is necessary to ensure that too many multiple rates do not appear in the exchange structure. This is applicable even if both the conditions under which goods are produced and the gains from exploiting monopoly and monopsony power in international trade⁵⁸ are remarkably different.

A country having resorted to a system of multiple rates should ensure that the exchange rate policy is not excessively burdened with too many objectives which require too many rates. As for the expansion of production and exports, the task of the exchange rate policy is fairly limited. Still, along with the other measures such as financing of exports or production, export credit insurance schemes, tax concessions, selective credit accommodation and a fair degree of monetary stability, multiple exchange rates (say, a dual exchange rate policy) could play a dynamic role in increasing the real output of the economy. A single rate of exchange would not be suitable for the maintaining of an equilibrium between domestic costs of production and the prices, or the levels of costs prevailing in foreign markets. It should be reiterated that we have not made an attempt in the foregoing analysis to argue the case for or against multiple exchange rates. The absence of a single rate of exchange that would ensure optimum utilisation of resources and contribute to the external payments position poses a challenge. Elsewhere the present writer has gone a little further to argue the case for a dual exchange rate but this has been suggested to a dual economy in which factor use is different between the two sectors.⁵⁹

58. See Harry G Johnson, 'The Gains from Exploiting Monopoly or Monopsony Power in International Trade', *Economica*, May 1959, pp. 151—158.

59. Wimal Wickramasinghe, 'The Case for a Dual Exchange Rate Policy: A Marriage Between Theory of Exchange Rates and Theory of Innovations', *World Development*, Vol. 4, No 5, May 1976, pp. 427—434. Also see, Nicholas Kaldor, 'Dual Exchange Rates and Economic Development', *Economic Bulletin for Latin America*, March 1964; (reprinted in Nicholas Kaldor, *Essays on Economic Policy*, London: Gerald Duckworth & Co., 1964, Vol. II ch. 19); and Paul Streeten, 'The Developing Countries in a World of Flexible Exchange Rates', *International Currency Review*, January—February 1971, pp. 21—27.

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28. See Harry G. Johnson, 'The Gain from Exploring Monopoly or Monopsony Power in International Trade', *Economics*, May 1957, pp. 151-158.

29. 'What? What? What? The Case for a Dual Exchange Rate Policy: A Re-examination of the Theory of Exchange Rates and Theory of International Trade', *World Development*, Vol. 1, No. 2, May 1973, pp. 47-51. Also see Nicholas Kaldor, 'Dual Exchange Rates and Economic Development', *Economic Journal*, 1970, pp. 100-105. Also see Nicholas Kaldor, 'The Development of a World of Trade', *Journal of International Money and Finance*, February 1971, pp. 11-17.

DEVELOPMENT: DEFINITIONS AND MEASUREMENTS-A REVIEW

A. A. JUSTIN DIAS

Authors writing on the subject of economic development seldom mean the same thing by the term "Economic Development". It is important to sort out and distinguish the difference between economic growth and economic development.

Growth is different from development even though the two terms are sometimes used synonymously in economic literature. Growth relates to national income, and hence can be defined as an increase in aggregate output. Development goes beyond this to include changes in sectoral allocation of resources, changes in social and organisational structure and changes in patterns of distribution. Therefore, it deals both with growth and social welfare. These components of development have been identified by various economists, although the precise definition of development has been a matter of debate.

Definitions

Kindleberger (1965) suggested that economic development means "more output and changes in the technical and institutional arrangements by which it is produced". For Brenner (1966) economic development was consciously stimulated growth. Adelman (1967) and Meier (1970) defined economic development as the process whereby the real per capita income increases steadily over a long period of time. According to Adelman a significant and permanent increase in per capita income is a necessary feature of the development process. Seers (1972) gave a definition which was entirely different from the other definitions above. He defined development on the basis of reduction of poverty and income inequality, as well as the increase of employment opportunities. According to this definition, growth is a necessary, but not a sufficient condition for development. Recently, Myrdal (1974) defined development as an upward movement of the entire social system. In his concept this social system includes economic and non-economic factors related to social satisfaction.

Many writers and theorists insist on growth as a pre-condition to development. Significant growth is explicit in the definitions of Kindleberger, Brenner, Adelman and Meier and is implicit in those of Seers and Myrdal. The economists in the first group above, with the exception of Kindleberger, followed the growth theory of Rostow and defined development as a long-term process of growth. This growth depends mainly on levels of investment and profitability of investment plans. Following this idea, one could argue that the main parameters of development should be a high rate of investment and favourable trade. However, some less-developed countries (I. d. cs.) in South East Asia and Latin America experienced very rapid growth during the latter part of the nineteenth century yet failed to achieve a successful take-off for development (Hayami and Ruttan, 1971). This would suggest that continuous growth is not sufficient to achieve development. Thus, the definitions of Brenner, Adelman, and Meier do not cover fully all essential components of the concept of development.

Seers defined development in social welfare terms. As mentioned earlier, his definition is based on increased employment, income equality and a reduction of poverty. Although these are important elements of development, Seers did not make it clear how these goals could be achieved. It has been argued by some economists that a major problem in I. d. cs. is not the lack of employment but rather the low productivity of labour (Flanders, 1969; Sundrum 1974). These economists emphasised the need to increase labour productivity as an essential part of development strategy. But the need to raise the productivity of labour is not explicit in Seers' definition. His definition can also be criticised for its emphasis on reducing poverty by decreasing the inequality of incomes. According to Seers, "poverty could never be eliminated except perhaps by making the distribution of income more equal". However, as Sundrum (1974) has pointed out, inequality and poverty are two distinct features of any economy. Poverty may be widespread in a country with a relatively uniform distribution of income if the country as a whole is poor. Similarly, an increase in quality is not necessarily synonymous with a reduction of poverty. Nevertheless, as Seers argues the reduction of inequality can be justified as an end in itself since wide differences in wealth or status can be socially degrading for the privileged as well as for the underprivileged.

Economic development as it has occurred in some western capitalist countries, has involved major changes in the structure of the economy (Kuznets, 1965; Robinson 1972). Changes in the way resources are organised for production are vital for achieving its rapid growth necessary for development. Hence, the definitions of Myrdal and Kindleberger seem to be more appropriate than the definitions of Brenner Adelman and Meier. Myrdal's upward movement of the social system implies growth coupled with social and economic changes, more equality of income and less poverty. Likewise, Kindleberger's idea of more output and changes in institutional arrangements may also involve similar welfare considerations. However in defining development the definitions of these economists have to be used with caution, since welfare elements are not explicit in their definitions.

It seems from the above discussion that none of the definitions of development reviewed is entirely satisfactory in the sense of capturing the modern interpretation of the term. Nevertheless, it is possible to combine the ideas of Kindleberger, Seers and Myrdal in formulating a definition. Development can be defined here as "a secular improvement in a social system, with sustained growth, leading to advances in the standards of living of the majority of the population and, in particular, to a reduction in absolute and relative poverty". Clearly, according to this definition, the ultimate goal of development is a social one; the improvement of human welfare in all sectors of a country. It follows that development is a complex concept.

The social system is a complex of both economic factors and non-economic factors. It includes all sorts of consumption provided collectively; mainly education and health. Such a system may stay stagnant, or it may move upward or downward. The dynamics of a social system is determined by the process itself. If one factor changes, others will change in response, and these secondary changes in their turn cause new changes all round, and so forth. Thus, the economic and non economic activities are interdependent in any economy, in the process of development.

This is why all economic and non-economic factors must be taken into account when considering the changes in human welfare. One important characteristic is that a change of any social system either

upward or downward be determined by the fact that what contributions are made to development process. To give an example, improved nutrition will raise productivity of labour and human well-being while higher quality of labour tend to increase the opportunity to improve nutrition.

Human welfare or level of living is concerned with the consumption of goods and services. The concept of level of living, at least as the term is used in contemporary studies, intends beyond bare physical needs to include social needs. These are related to the established customs of a community even though such needs are not essential for comfortable living. For example, a person could wear shoes although he lives in a climate in which this is not essential. However, it should be made clear that there is no logical way of resolving differences of opinion as to what should and what should not be regarded as social or conventional necessities of any community in different circumstances. But conceptually the nature of level of living seems to be related to that of basic human needs such as food, clothing, housing, education, health, entertainment, etc.

Measurement of Development

It is estimated that about two-third of the world's population presently live in countries which can be described as economically backward or less developed.¹ For their administrative purposes, the United Nations Organisation and its related agencies group countries according to their development level. It is also necessary to have a commonly accepted measure or a level, which represents some numerical value for individual countries future development planning which has to be shared with the general public and particularly the government of each country.

In recent years, there has been a flood of literature on measurements of development. The writers can generally be classified into two major schools of thought. One school advocates the conventional measure which is Gross National Product (GNP) per capita. Another group proposes a system of indicators to supplement the conventional measure.

1. Following Hagen and Olihawrylyshyn (1969) the countries classified as less-developed or developed by using the dividing line as US \$ 600 per capita per year. The total of 162 countries, only 43 countries or 27 per cent are having more than US \$ 600 per capita per year at 1965 prices.

The National Income Measure

This is used commonly to compare the economic activities in countries although the concept has been a matter of theoretical discussion at least from the time of classical economists. As seen earlier, development is not simply growth. It is a long term process which requires social changes and continuous growth. This definition agrees with the GNP when it is used to measure development provided it represents the social welfare of the persons in a given country. This may be the reason why Seers has not rejected this method totally. Furthermore, he accepts that it has some significance as a measure of development potentials (Seers, 1972).

Although the GNP is used to separate the countries into developed and less-developed it has some limitations in measuring development level. The first question is whether GNP measures the development at all. Major criticism came from United Nations Research Institute and Social Development (UNRISD, 1970) and Drewnowsky (1970). They argued that as an aggregative concept, GNP does not measure the structural and distributional effect; hence the social welfare. Since social welfare is not represented in GNP, as it is product oriented, various economists proposed some adjustments to the concept of GNP. Sametz (1960) is the first economist who claimed that GNP has to be adjusted upward for improvements in the quality of life, and increase of leisure, on the one hand, and downward for pollution and the increase of costs caused by urbanisation and industrialisation on the other. These ideas, however, were presented as a concept known as "Measurement of Economic Welfare" (MEW) by Nordhaus and Tobin (1970) in their paper entitled "Is Growth Obsolete"??

Having accepted the importance of GNP measure they introduced a welfare measure by rearranging the items of national accounts including the kinds of welfare producing activities both positive and negative.

The measure of economic welfare is constructed by incorporating three major adjustments into the GNP estimate. They are as follows.

2. This paper was presented to the fifth anniversary colloquium of the National Bureau of Economic Research in San Francisco; subsequently published as a book entitled "Economic Growth".

(1) A re-classification of GNP:

Subtracting the items that are more of an intermediate and instrumental nature than a final output; and allocating the remaining items between consumption and net investment.

(2) Imputation for capital services, leisure, and non-market activities: Values are imputed for leisure, consumption which are omitted in national product estimate.

(3) Adjustments are made for some disamenities and urbanisation: Many of the disutilities or negative externalities of economic growth are defined and valued to adjust the GNP estimate.

As such MEW attempted to adjust GNP estimate to represent the social welfare of the people. Although the constructors of NEW believed that it represents economic welfare, some economists have not accepted this as a measuring rod of development. Professor Mathew (1972) of Oxford University and some follows like Denison and Okun (1972) at Brookings Institute, Washington, criticized this measure saying that "MEW attempted only to measure consumption by adjusting the national income estimate rather than measuring economic welfare". Professor Mathew further argued that economic welfare and development depend not only on the size of the national product but on its distribution. However, MEW was welcomed by economists like Moses (1972) of Stanford University and Paul Samuelson (1973) who has popularised it as "Net Measurement of Economic Welfare (NEW)".

The GNP concept was designed to measure the annual flow of goods and services. The first task is to get data to estimate the aggregate product or income. There are difficulties due to lack of data and the reliability of sources of data, especially in l.d.cs. It is a fact that in most developing countries a considerable part of total production is carried on in a subsistence sector. There is very little information available officially and even if information is available, there is no set of actual market prices which can be used to value production. The standard procedure recommended by the United Nations involves valuing the subsistence sector production at prices in the nearest market where the produce can be sold (The System of

National Accounts, 1968), The valuation at the nearest market price, however, would give only a small value for subsistence products and it tends to introduce a downward bias. So that the use of GNP to measure development is less valid in those countries where the subsistence sector is contributing a significant proportion to the process of development. This is why economist like Fisk (1974) directed the attention of national income statisticians and development economists to the importance of improvements in the measurement of subsistence products before any research on measuring development in these countries.

Apart from the above limitations it has to be mentioned that the problem of international comparison arises whenever the GNP measure is used. Even where reasonably reliable national account estimates are available in national prices, these are not adequate as a basis for comparison of relative real incomes because of the problem of selecting a proper exchange rate which has to be a good indicator to measure the internal purchasing powers of the currencies. The reason for this, of course, is fairly obvious because in many l. d. cs. multiple exchange rates are used or the free market rate differs from the official rate. In addition, many problems are encountered when countries with different economic systems are compared. The basic question which arises is whether the comparison should be based, in principle, on a System of National Accounts (SNA) or Material Product System (MPS) or on both. Countries which follow the SNA take into account all the material and non-material activities whereas the other countries with MPS account only for material activities in the compilation of National Accounts. Therefore the comparison of development level on the basis of GNP is meaningless since there is inconsistency in the framework of national income estimates.

The above-mentioned limitations which are conceptual and statistical, by nature, reduces the value of GNP as a measure of development. Until about 1960, the tendency was to measure development in terms of per capita output or per capita real income, particularly in studies using quantitative analysis and model-building. Presently, most writers on development economies and international agencies use national income measure as one indicator in their selected set of indicators particularly in ranking countries according to their development level.

Other Indicators of Development

Since some conceptual and statistical problems arise in the GNP measure, some economists and international agencies have taken considerable interest in formulating better measures than the GNP. These newly developed measures are known as socio-economic indicators. These indicators are used very often in development studies and research even though no one has developed a set of indicators which are accepted internationally.

There is no common literary definition of socio-economic indicators. In fact, a review of the literature shows considerable difference of opinion as to what the term "indicator" means.

Baster (1972) classified indicators as disaggregative, compositive (aggregative) or representative. In the first case, indicators are selected to represent a number of elements in a complex phenomenon. In the second case, a single indicator is constructed by combining homogeneous components. For meaningful representation, aggregation requires application of an appropriate system of weights. In the third case, an indicator is selected for a particular phenomenon on the basis of criteria such as its degree of correlation with other indicators of the same phenomenon. Here, the selected indicator represents a complex set of elements. However, as Baster pointed out, in all three cases the validity of an indicator depends on its reliability, sensitivity, and accuracy and on the consistency of its relation to other indicators of the phenomenon of interest.

Baster's view has been expanded by some economists to explain the main characteristics of indicators. Cazes (1972) claimed that an indicator is a measurement of a normative character and thus provides the opportunity of assessing progress towards some goal or objective. This notion has been accepted by Moser (1973) who states "indicators are normative in the sense that movement in a particular direction could be said to be good or bad". However, this characteristic may not be necessary for every indicator. Sometimes the normative aspect is not clear since a particular movement may be interpreted by one person as good and by another as bad. The possibility of such different interpretations reduces the value of an indicator in quantitative analysis.

In developing socio-economic indicators to measure development the first attempt was made by Bennet (1951) who used some non-monetary indicators such as calories consumed, infant mortality rates, stock of physician, cement consumption, etc. Following the work of Bennet, Phillip Hauser (1959) has suggested various vital statistics like birth and death rates which provide some indirect indices of economic development. In addition, various refinements to the non-monetary indicators were made in the early sixties by David McClelland (1961) who used electrical output as an indicator of growth. However, these different indicators were not accepted fully as the weighting pattern used in the various indices had no theoretical justification, or even clear representation.

In 1966, Beckerman and Bacon illustrated a method which was based on some non-monetary indicators to measure development for the purpose of making international comparisons and future planning. This was the first comprehensive study in this field in which they sought to discover which non-monetary indicators are highly correlated with real private consumption per head (per annum). Five equations were formed such as linear, double log, semi log and inverse and then tested. The best relationship turned out to variants of the double log equation.³

The authors of this study, however, did not question the validity of the national income measure as a tool of measuring development. The selected indicators are highly arbitrary and of no independent significance. They are simply indicators of consumption in situations where income data are not available. In fact, one of Beckerman's studies he himself identified the problem of selecting indicators

3. $\text{Log } X_1 = b_1 + b_2 \text{ Log } X_2 + \dots + b_8 \text{ Log } X_8$
 where X_1 = real private consumption per head relative to the USA
 (on geometric average of USA and national price weight)
 X_2 = Annual apparent crude steel consumption per head
 X_3 = Annual cement production per head (metric ton X 10)
 X_4 = Annual number of domestic letters sent per head
 X_5 = Stock of radio receivers per head X 10
 X_6 = Stock of telephones per head X 10
 X_7 = Stock of road vehicles per head X 100
 X_8 = Annual meat consumption per head (kg)

which are not linked with national income accounting measures (OECD, 1966).

Adelman and Morris (1967), in their study made an attempt to throw light on the interdependence between the social and political variables and the level of economic development. In their study, 74 developing countries were grouped according to 41 variables (Appendix 1). These variables are selected with the intention of providing semi-quantitative insights into the behavioural pattern of a range of variables in the early stages of development. The indicators are purely qualitative in nature and are based on published statistics.

The main feature of Adelman and Morris study is that it used factor analysis by using scores or factor loadings in grouping the countries into three categories on the basis of socio-economic level; countries at the lowest level, intermediate level, and the highest level. The importance of factor analysis in this kind of study was explored by the same authors in one of their later publications (Adelman and Morris, 1971).

The study sponsored by the UNRISD was the other comprehensive study on development. It was concerned with the selection of appropriate indicators of socio-economic development. This study started with 73 variables which were eventually reduced to 42 and then to 18. Table 1 shows the 18 core indicators which were selected from development groups such as, health and demographic, nutrition, education, housing, communication, transport and services, agriculture, industry, trade and others.

The main task of this study was to form a general index or a synthetic indicator of development as mentioned by the authors. The method of best fitting curves were used to combine the 18 indicators at different levels of development, on the basis of cross-national comparison. The construction of a general index is followed using a system of shifting weights derived from the degree of correlation of each indicator with other indicators at different levels of development. The authors of this study expected the resulting index to be correlated more with the socio-economic indicators than the conventional index of per capita GNP.

In 1970, Harbison and his colleagues at Princeton University made a quantitative study using human resources indicators in

TABLE I

The List of core indicators of development

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1. Expectation of life at birth
 2. % Population in localities of 20,000 and over
 3. Consumption of animal protein, per capita per day
 4. Combined primary and secondary school enrolment
 5. Vocational enrolment ratio
 6. Average number of person per room
 7. Newspaper circulation per 1000 population
 8. Telephones per 100,000 population
 9. Radio receivers per 1000 population
 10. % E. A. P. in electricity, gas, water etc.
 11. Agriculture production per male agricultural worker
 12. % Adult male labour in agriculture
 13. Electricity consumption, kwh, per capita
 14. Steel consumption, k.g. per capita
 15. Energy consumption, k.g. of coal equivalent per capita
 16. % GDP. derived from manufacturing
 17. Foreign trade per capita, in 1960 U.S. dollars
 18. % Salaries and wage earners to total E.A.P.
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Source: UNRISD Report
1970 Page 77.

classifying and comparing countries on their development level. The analysis was based on 40 variables selected for their reliability, and relevance to human resource development, with a major emphasis on indicators of educational development, such as number of teachers/10,000 and engineers and scientists/10,000 and so on. One year later Richard Stone (1971) developed a system of social statistics which began with matrix tabulations of the flows of people through the educational system. This work has been extended later to propose some social indicators which may be used for assessing progress in development and model building (OECD, 1971).

Finally, a brief comment has to be made on the ideas put forward by Seers in measuring development. As seen earlier, he has taken the position that "the evaluation of development must take into account three linked economic criteria; whether there has been a

reduction of poverty, unemployment and inequality". Further, he suggested that poverty should be defined by some standard of nutrition and comfort. Seer's measure in simplified form is an index which has to be constructed using the three components, poverty, unemployment and inequality.

By accepting the Seer's ideas, of course partially, Hollis Chenery and his colleagues (1973) at the World Bank, made an attempt to adjust the GNP method using the set of weights given to the different quantiles of income groups.

The relationship which formed the social welfare function is written as follows:

$$G = w_1 g_1 + w_2 g_2 + w_3 g_3 \dots \dots w_{10} g_{10} \text{ for quantiles}$$

Where G is an index of total social welfare. w_1 is the weight assigned to group 1, and g_1 is the growth recorded in group 1. The weights are allocated on the assumption that there would be more equal distribution of income, as such in a situation where there is fully equal distribution of income, the final index turns out to be a compound of the GNP index. According to Sundrum (1974) the main defect of this index is that it assumed the equal distribution of income at the time of applying the weights. The index implies the measurement of development on the basis of flow of goods and services which does not necessarily depend on the equal distribution of income.

The above-mentioned studies are all concerned with quantitative analysis of the relation between socio-economic indicators and the level of development. But they are very different in approach and method of analysis as in their purposes. The studies of Adelman and Morris and UNRISD were more comprehensive than others and caught the attention of development economists. These two studies brought the discussion of definition and measurement of development to a crucial level among economists and sociologists. They all agreed the use of indicators is more meaningful than the conventional GNP as a measure of development even though no one was able to suggest a set of indicators, which is totally accepted today. Thus the concept of indicators is currently at the same stage that GNP measure was some 30 or 40 years ago. This does not mean that prospects are remote and that it will take a long time to develop a good set of indicators or an index to measure development.

It is a difficult task to develop a set of variable or an index which represents the actual situation of a given country. Many problems arise in weighting and comparing different indicators; a major indicator problem. In additions the conceptual problems of development indicators do not seem to be less formidable than those of the national income measure. As Seers pointed out "the practical problems are the same as those that face the national income estimator". He agreed that to construct final indicators of any of the elements of development required supplementary information, "to measure unemployment one needs to know what jobs people would be prepared to take and what hours they work".

Conclusion

In the foregoing discussion an attempt was made to review the literature in measuring development by examining two methods; GNP per capita index and other indicators. The main defect with GNP measure is inadequate representation of social welfare which is one of the major components of development. The solution suggested by Nordhaus and Tobin to adjust the GNP was not accepted by development economists as their MEW has excluded the distributional effect. It appears that the problem with the GNP measure is highly conceptual rather than statistical in nature.

The inverse is true in the case of the other method. The problem of fair representation of developmental parameters cannot be avoided in selecting the indicators. Furthermore, the computation of a final index is also difficult due to the problem of weighting. The index computed by UNRISD may be a good approximation to a development index if the qualitative data are available and accurate. Such an index may be recommended for developed countries but not for the l. d. cs as in the latter countries qualitative data are lacking.

Because of these defects in the GNP and in other indicators the use of these methods is limited in application to measure development. However, the conventional method could be used in rough analysis of development particularly for cross national comparison provided the statistical data are in good shape and consistent over the reference period. The use of GNP, however, can be justified only on the ground of value judgements which again depend on the user.

APPENDIX I

1. Size of the traditional agricultural sector
2. Extent of dualism
3. Extent of urbanization
4. Character of basic social organization
5. Importance of the indigenous middle class
6. Extent of social mobility
7. Extent of literacy
8. Extent of mass communication
9. Degree of cultural and ethnic homogeneity
10. Degree of social tension
11. Crude fertility rate
12. Degree of modernization of outlook
13. Degree of national integration and sense of national unity
14. Extent of centralization of political power
15. Strength of democratic institutions
16. Degree of freedom of political opposition and press
17. Degree of competitiveness of political parties
18. Predominant basis of the political party system
19. Strength of the labour movement
20. Political strength of the traditional elite
21. Political strength of the military
22. Degree of Administrative efficiency
23. Extent of leadership commitment to economic development
24. Extent of political stability
25. Per capita GNP in 1961
26. Rate of Growth of real per capita GNP 1950/51
27. Abundance of natural resources 1963/64
28. Gross investment rate
29. Level of Modernization of industry
30. Changes in degree of industrialization since 1950
31. Character of agricultural organization
32. Level of modernization of techniques in agriculture
33. Degree of improvement in agricultural productivity since 1950
34. Level of adequacy of physical overhead capital
35. Degree of improvement in physical overhead capital since 1950
36. Level of effectiveness of the tax system
37. Degree of improvement in the tax system since 1950
38. Level of effectiveness of financial institutions
39. Degree of improvement in human resources
40. Structure of foreign trade

Source: Adelman and Morris
1967, pp. 16, 17.

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